

Jon Azua Mendia

Bizkaia 2050

Bilbao-Bizkaia-Basque Country



CÁMARABILBAO



Jon Azua Mendia

With a large academic basis in **engineering, corporate governance and public administration**, Bilbao has been driving and co-leading the intense transformation of Bilbao, Bizkaia and the Basque Country while contributing to similar and complementary developments throughout the world. This always concerns understanding the context, seeking to anticipate the future, and to imagine and make it possible.

With professional experience of **over 40 years** working in the world of **ideas, strategy, competitiveness and regional socio-economic development**, Jon Azua has combined his whole experience of responsibilities in the public field (**Vice Lehendakari-vice-president of the Basque Government and Chief Adviser of different departments such as Industry, Commerce and Energy, Health, Employment and Social Security, in addition to Secretariat of the Presidency, and Management of Economic Planning in Transport, Communication and Maritime Affairs at the start of the first Basque Government and the appointment of the Department of Promotion and Economic Development of Bizkaia**). In the world of consultancy, (as the **Managing Partner of companies such as Arthur Andersen, Bearing Point and Enovatinglab** of which he is the founder, and where he has been conducting his main activities for 20 years now), advising international companies in a large variety of industries and countries throughout the world. In the academic field, he has been operating from the foundation of the Harvard University Network of Microeconomics of Competitiveness as professor and researcher, by promoting institutions for competitiveness in different countries throughout the world, and is present in many companies, organisations and institutions from their Advisory Councils and/or Administration or management of hundreds of consulting projects. Jon Azua is also the author of different publications with special emphasis on the clusterisation of the economy, co-opetitive strategies and models of inclusive regional development, industrial and technological policies, health strategies and life sciences, in addition to his extensive experience in interactions between businesses, governments and regions.

His renowned participation in leading initiatives for the Basque Country, and interaction with spaces in the global avant-garde have enabled him to acquire the knowledge and experience necessary for tackling this exciting job. An optimistic commitment that is also demanding for building a desirable space of prosperity, well-being and inclusive development for the **Bizkaia of 2050 (Bilbao-Bizkaia-Basque Country)**.

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Acknowledgements

My first words of thanks have to go to the Bilbao Chamber of Commerce, with special thanks to the president, and my friend, José Ángel Corres Abásolo. His call, which seems a long time ago now in June 2020, when he suggested me to write a book encouraging our society think in the long term, while at the same time celebrating the double anniversary of the constitution of the Chamber of Commerce 135 years ago and the 540th anniversary of the Bilbao Consulate, led me to propose the focus and contents of this book.

Writing it has given me the opportunity to share everything I have had the privilege of learning and receiving from so many hundreds of people, friends and partners with whom I have been able to go on this long journey, starting in the last few decades of the previous century until today. An extraordinary privilege of commitment and construction, with its errors, faults and absences, this city-nation that makes us feel, live and grow, and in relation to which we strive to leave a better world for future generations. Thank you to everybody.

A special thanks also in relation to this project for a group of individuals that generously and selflessly gave up their time to 'make up the Contrast Group', conversing with me in depth, in open sessions, with complete trust, sharing their initial diagnosis, their vision of a desirable future for our land, as well as their emotions and views, in order for this work to lead us think, to explore solutions and new pathways in relation to the complexity and challenges we will have to face. Their extraordinary and valuable experience, their recognised careers and proven responsibility make this such an enriching task. I hope to have neither harmed or misinterpreted their contributions (**Annex 2 Contrast Group**).

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And of course, to all the true protagonists who, along with the ideas and strategy, throughout this process have built a better world, a Bizkaia, and an Euskadi (Basque Country). This book has been written for all of them. The achievements to get to this point are theirs, as well as the efforts to make a Bizkaia 2050 possible.

It will only be possible if together, with the involvement of all our varying roles, we build it.

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Presentation

Forty years ago, coinciding with the transition to democracy in Spain, the Bilbao Chamber of Commerce undertook a process of reflecting on the infrastructural needs of the Biscay province. This reflection resulted in a book that, over the intervening years, has served as a road map for bringing about notable improvements in our territory. Today, fortunately, those concerns have been duly addressed, and all of the responses are currently working to the full satisfaction of the city's citizens.

In 2021, coinciding with the 510th anniversary of the Bilbao Consulate and the 135th anniversary of the Bilbao Chamber of Commerce, we find ourselves faced with a global pandemic. In light of this situation, we considered it appropriate to look once more to the future. In an attempt to look beyond the day-to-day, we have sought to determine the keys to bringing our territory to a more prosperous 2050 with a greater wealth of opportunities for future generations.

We are undoubtedly living through an era of unprecedented changes for humankind. Having overcome the Covid-19 pandemic and still having to deal with its consequences, we are now faced with a war in Europe: the dimensions and repercussions of which are truly unimaginable. It is hoped that this book, Bilbao Bizkaia Basque Country 2050, can prove helpful for all those who need to make decisions in search of future prosperity and opportunities.

We at the Bilbao Consulate are fortunate to be able to rely on people of the stature of Jon Azua. His knowledge and wealth of experiences accumulated throughout his life of responsibilities in the public and private spheres, and his ability to exchange opinions and speeches with other local political and business leaders, have allowed us to produce a book that will try to shed light on and facilitate the transition to a medium-to-long-term future that is better than the one we found ourselves in.

José Ángel Corres
President of the Bilbao Chamber of Commerce

Bilbao, Bizkaia, Basque Country, actually make up, political- administration territorialisation aside, a nucleus, a city- region base of 2.4 million inhabitants which, with its progressive extension including Navarra and the French Basque Country, make up Euskal-Hiria, or the Basque City, with 3 million inhabitants¹.

Its size is both sufficient and relevant to meet the challenges of a changing future, which will require a scale and size sufficient enough to be able to offer essential tools, as well as the necessary capacity of management and control that well-being and competitiveness require. In addition, the observable world trends advise shared processes in order to provide infrastructures, financing, policies and solutions that in general terms, transcend specific areas, preferring alliances, which are initially territorial, with a vocation and natural or homogeneous proximity, suitable for these new shared solutions. It's connectivity with the main areas at the forefront, innovation, knowledge, talent and initiatives that are significant for it, and the society as a whole, the inevitability of a cooperative commitment with third parties and the real capacity to take hold of its own future, that can be shared with others, but can be managed efficiently and controlled using democratic tools, requires the generation of additional areas, basically associated to their availability, caused by and agreed upon, the "Territorial Diamonds", capable of accepting a headlining benchmark, providing increased meaning as a whole. Thus, the natural widening, on one side, towards the New Aquitaine, on the French horizon towards European centrality and towards the "Atlantic seaboard" in the north of the peninsular with the successive Santander Poles, the Avilés-Gijón-Oviedo, A Coruña-Santiago-Vigo-Porto triangle, make possible the area that will strengthen synergies respectfully with journeys and wishes, in benefit and with a vocation of a future that can be shared. A "basic" territorial nucleus upon which a great deal more than "a base area" will be constructed, in and from which the desired BIZKAIA 2050 is to be shaped.

If today the territorial innovation, technologies and collaborative models, and personal and collective behaviours and attitudes allow and require the generation of new converging areas, a basic nucleus starting point, has to consider the progressive incorporation of other areas. So we propose the stimulation of associative movements, of a very different order, towards/from the "Baltic area", already in clear development throughout its history and future vocation, strengthening in recent years a large and relevant transnational and trans-regional window from which we can see ever more clearly and in a sense of convergence, the "inevitable decomposition of the post Brexit United Kingdom", the multi-reconfiguration of synergistic areas, that go beyond "supra State" exclusivities via it's belonging to the European Union under different political- administrative formats, with a commercial or economic preference, in relation to the Nordic countries (Scandinavia), sharing regional and country and/or cities-State strategies, irrespective of it is a member of the European Union, and its interconnection to new emerging areas towards Asia, now and in the future. **We therefore, advance towards new mentalities and practical translations under the icon of a recovered geography and poly national area, in line with the old conceptual history of the Bizkaia Bay. Historic references, updated from the present realism and promising a future purpose, fully in line with the evolution of time and the foreseeable meta and mega trends that will have to define new scenarios of the future.**

¹ Bizkaia 2050: Bilbao-Bizkaia-Basque Country Is an indissoluble base unit. Throughout this book, we will use various "denominations", that respond to a shareable identity. The policies, strategies and political actions of each of the pieces that make up this city- region (in classical terminology), address the set of interventions from its origins until today

It is this reference, united with the history of the Bilbao Consulate, the Bizkaia Bay or Gulf, as a starting point of the story of globalisation, of opening up, its navigability and richness of ideas, initiatives, projects and legacies, which have been with us throughout history, and that we aim to use when focusing on Bizkaia 2050. This does not mean having improvised dreams or granting protagonists licences to either Bilbao, current day Bizkaia, or even to territorial Euskadi and the Basque Country, which today is still politically and administratively spineless. It does aim to bring about an innovative and collaborative future, that makes complete sense, that is natural, possible and capable of generating a competitive, prosperous and inclusive area, to be its own place and protagonist in a future world, which will make the cities-nation its reference point, to convert, along with all types of platforms and areas, that are at the forefront, are innovative and collaborative, the nuclei of knowledge and generation of shareable wealth, essential for a new future. **This Bizkaia 2050 that is wished for, does not aim to prejudge the decisions that, future generations determine, peacefully and democratically, in order to satisfy their future political vocation.** New social demands, different types of wishes and desires, levels of commitment and future commitments that lead to different decisions that, as will be seen throughout this book, and which can be foreseen, will be conditioned by multiple events and decisions that are adopted by third parties.

The choice of the iconic Bizkaia Bay image enables, in relation to this future challenging endeavour, the historical link with the innovative movement that meant reaching, from here, the New Bizkaia Bay in the north-east of America and its reach, as a result of having travelled and in search of new horizons throughout all of America, as well as the indispensable world collectively means today and above all tomorrow, in order to build an area that is at the forefront of knowledge and development, which takes those who live in the possible future Bizkaia 2050, individuals, companies and institutions, to feel comfortable in order to carry out their vital professional projects in and from here, connected to the whole world.

It is for this small, and at the same time limited land, that we propose this journey into the future. A progressively changing “liquid” area, with unimagined geopolitical and administrative reach.

Bizkaia in 2021 in this sense, is today an area of relative success (in comparison with its surrounding areas and within the framework of a small nucleus of observable prosperity within the world), even though it is replete with problems, difficulties and above all, facing new challenges that challenge the possibility of its progress. It faces challenges that will impact on all (demographical changes, climate change and challenges for a planet with serious symptoms of danger, disruptive technological waves that require deep transformations, a disappearance of structural paradigms will have to give way to new thinking and social economical models, to the concept and availability of work and employment, the mitigation and/or abolition of inequality and of course, the response to a growing disaffection with, if not the destruction of democracy itself). That being said, it does so not only using its real and current strengths, but with its historical experience, which has allowed it to respond to and overcome all types of adversities and complexities. It also does so with a society in transition, with values, principles, behaviours and attributes that are different from those which, in one way or another have shaped the area where we live today, and from which we start this journey towards 2050.

With this resilience and strength, with a perceivable reality, is where we face a

desirable and possible future. But this is not a question of dreams and spontaneous results, but one of effort, dedication, commitment and work aimed towards a long-term aim. We will be the ones who, over the years, will build it.

It's about proposing the type of society we want to be a part of and undertaking our corresponding co-leading roles.

Bilbao-Bizkaia-Basque Country of 2050 is on the way. It's not about re-inventing or criticising what has been done, nor about the ongoing journey. On the contrary, it's about speeding up its transformation process, about motivating our commitment with a desirable result.

There are multiple ongoing initiatives and projects, innumerable medium-term plans, and we have all types of thoughts, "future-proof dreams" and mega trends that are explorable for all types of thinkers, governments and institutions. **This proposal is not a Strategic Plan for a government, country or institution (that's not my job, and I won't be addressing it here). It is a potential desirable scenario, in which I would like to live and of which I believe those who form part of it would like to live as well.** It is to encourage a future that is not given, but one we have been able to build, in the short term as of today until 2050. We have time, but we cannot waste it. We have to face the challenges, turn off the red lights that represent real barriers to our achievements, and we have to mitigate problems and above all, together enjoy and build a world of opportunities made available to us.

This future depends on all of us. We have to take hold of our future and undertake and accept the hard work and implicit risk contained therein. It is at the same time, a reason to support decisions, undertake risks and take on real revolutions, disruptive changes and uncomfortable transformations. But above all, a clarion call of hope and motivation for the younger generations, for them to believe and trust in themselves and in their future. **It is also a strengthening of expectations (and possibilities) for the intermediate generations that will have to live for another 50 years, and who cannot simply let time pass them by and accept what comes their way.** It is a demanding call for all, from one place or another, and especially those in the responsibility forums, to think about others as well as working for others, undertaking risks and taking (and carrying out) decisions. **Decisions that, in general terms, will be demanding, complex and above all, uncomfortable.**

We have a large number of signs that appear to warn us of various roads to be travelled. We need to choose without being worried about getting it wrong. To evaluate their direct impact on us and choose from what is on offer. And then to go and get it. To create and make available tools, resources and dreams that will make it possible.

This is the purpose of this book. It's not a magic recipe or a closed document, nor is it a single plan. It is a personal contribution, underpinned by hard work, reflection, achievements and commitments by many towards a desired direction. Reaching the goal will be up to each and every one of us.

The 2050 future started some time ago and is moving at great speed.

We have managed a successful journey, meeting complex challenges, overcoming uncertainties and generating initiatives and solutions with and extraordinary human and social capital. Today, as in many critical moments, we have been able

to respond, strengthening appropriate foundations to convert them into our strategic assets that will allow ours to get closer to our desired objectives. We start from an extraordinary base, to accomplish new and demanding challenges which, will have to take us towards a proud society that is comfortable with the new desired area, of which we are a part. Not everything that shines as gold. We will face many barriers, obstacles and weaknesses during this journey which, are not our own that we will have to overcome. This is our commitment for Bizkaia 2050. It won't be given to us; we will have to build it and make it ours. We must make an effort to achieve it in a changing world that is radically and urgently looking for new paradigms (economic, social, technological, political...), that come into view, despite the fact that, if they aren't already certain, and that allow us to have options, to evaluate their potential impact on our lives and above all, to anticipate their consequences in line with that which we would like to achieve as a society.

This new world to be achieved does not unfortunately involve either a paradise or, above all a pleasurable path in order to achieve it. We have to be conscious that the journey will neither be continuous, homogeneous, or comfortable in the same measure for all and that, on the contrary, it will involve costs, hard work, sacrifices and decisions that will not satisfy everybody equally. The sociable transitions (towards a green planet saving economy, towards an anti-catastrophe territory, towards employability for all within a framework of social well-being and sustainable inclusive prosperity, towards a world of shared values, towards governance and full democracies, towards new collaborative areas throughout the world, towards the mitigation/overcoming of inequality, towards universal health...), will not be without difficulties and will demand profound transformations and tearing up the status quo. All these transitions will be manageable, but will require clarity, honesty and steadfastness in their approach along with responsible execution. And in one way or another, involve us all. It is above all, an intense journey from the inevitable trade-off between rights, but also and above all, obligations.

It is not just a question of public policies or of business or social leaders, nor is it an issue for "others". It depends on each and every one of us.

The reward will be worth the effort. We have before us a world full of opportunities. We have the necessary foundations to achieve it.

To bring about this journey, I have not attempted to foresee a specific scenario that comes to us at a predetermined time, nor have I tried to analyse multiple possible scenarios or catastrophes but, on the contrary, I've tried to imagine that which addresses the aspirations of those who wish to live this Bizkaia 2050 here, enjoying an area, a territory, a model and a way of life in which they feel they are a part of and a protagonist, fully integrated, comfortable and capable of completing their vital, personal and professional goal, and satisfied with their sense of belonging.

This exercise is dedicated, as I mentioned earlier, principally to the young people who will live the majority of their life in the future, as of Bizkaia 2050, and wishing to give reason to their self-esteem, to illicit their active commitment and trust in a possible future, that is satisfactory but where they will not simply be passive spectators but active transforming agents, protagonists of their own construction. Their future will not be given to them. It is and will be an extraordinary future, full

of opportunities. They need to ask themselves how they would like to see themselves in 2050 and as a consequence, what part of the journey they are prepared to embark upon. It is also dedicated to the generations that have made arriving at this point possible, and who have provided us with the essential pillars to accomplish a successful future. It is not a question of recognition and thanks for the hard work and achievements made, but also a new call for their active participation in a new journey to be taken step-by-step. And of course, dedicated to all those whose hard work, effort, attitude, decisions and co-responsibility in the next 30 years, will take part in the building of the Bizkaia 2050 that we propose. A special call to the embryonic trinomial base: Bilbao-Bizkaia-Basque Country. **It is an exercise that focuses its aim on a vision of “abundance” (Peter Diamandis. Singularity University)²** to get near to a world mobilised by solutions and not by problems, a world of unlimited and unrestricted opportunities, a world of equity and not of inequality, a world that has known how to become friendly, with tools and constructive ideas, that can be shared socially, understanding and managing the advantages and virtues of disruptive and exponential technologies. In short, an inclusive and sustainable world, that can be shared, where we feel like protagonists, equally responsible, true players in its transformation and owners of our own destiny.

Achieving it will not be a question of luck or chance, or individual moments of success. It is a process that cannot be finished, the result of a joint and collective effort, built day-to-day, a continuous and integrating link in the immense chain made up by an infinity of initiatives, projects and attitudes. A process that starts with the search for solutions to problems we see today, dismantling worry via the assurance of innovation along a long road, by not only doing things better, but differently under the spotlight of a new society. It's about building that future that we would like to live, where this journey requires a first step that is none other than starting with the existing status, analysing the various challenges that we face today, exploring the observable mega trends, that will have to take place one way or another, to a lesser or larger degree, in a relatively uncertain time, at different speeds, that we will have to evaluate in terms of “specific” risk/opportunity and impact on our vision, aim and future projects, standing before them and establishing the appropriate strategies to turn them into our objectives and achievements.

This analysis, its contrast with our current situation, with our strengths and weaknesses, with the competitive advantages that we wish to take hold of, and those that would appear necessary to continue to be so in the chosen scenario, will allow us to build a new future, comfortable and desired area. In this sense, in this book we are analysing all those areas that constitute what we could call the true pillars or blocks of the challenge, whose positive response will have to lead us to the best solutions and areas we are looking for. Inasmuch as this is possible, we will be in a position to respond to the creation of a new system of well-being that is not a consequence of chance, but as the result of collective and egalitarian effort, that is sustainable, and the result of the interrelated strategies that allow appropriate management of the indispensable energy for our growth, development and activity model.

It is about motivating and inducing the design of comprehensive and cohesive strategies for our new education systems and models, prepared not only for general knowledge, or to develop skills and capabilities necessary to build and

² Peter H. Diamandis. How to go Big, create Wealth and Impact the world

achieve that which we are searching for, but also to provide us with access to the work of the future. A society that is capable of developing a new creative and entrepreneurial thinking, of fraternisation, based on a demanding attitude for adventurous solutions in a regime of liberty, peace and democratic governance, in which the public and private live together in these areas, with their varying levels of responsibility and interaction, in order to achieve all the objectives and challenges, however hard they may be. A project that allows us to apply science for sustainable development, that provides and is able to design, construct and maintain all those infrastructures, both physical and intelligent, that allow the implementation of new initiatives and of new channels of connectivity and communication.

In short, a Territory-Region-Society-Project, that enables us to rethink and redefine their support institutions, overcoming periods and short-termist commitments and individual wishes. Which enables the strengthening of the irreplaceable prominence of our companies, of our economic and social agents, of our intermediary and enabling institutions, of our rich and varied human capital.

It is a process that neither aims to start from scratch or convert the “New” concept into the simplistic disqualification of that which exists and has been done. The aforementioned chain enables us to start from a reality that we must qualify as successful. Recent history that has allowed us to reach this point by evaluating those positive aspects that explain in one way or another the current status of well-being from where we start. It is not just about analysing the enormous difficulties that we face, and which we must correct, but also asking ourselves if we are properly prepared for the change that is necessary and above all, what is the role that each and every one of us must play in the various roles we play throughout our lives. A process that considers what the geopolitical make-up of the territory may be where we live and hope to live.

What will the area we see today be like in 2050? Bizkaia 2050 as an active and voluntary part of an area to be reconfigured along with the essential pieces of its political, economic, social, cultural and natural hinterland, adapting those models based on their own decisions?

In this book, when I refer to Bizkaia, it cannot be understood without its integrated reference with Bilbao, Euskadi, Euskal Hiria or the Basque city, Euskadi that we know today in geopolitical and administrative terms, and the possible future Bizkaia-Euskadi, to be built, determined and as a result of the internal changes to be undertaken, at the will of our citizens as well as the will and capacity for the transformation of Europe. We will without doubt live in a different framework that will demand different professional competencies and qualifications for this future of work, a new social contract, new interactions and frameworks for the prevention, protection and Social Security that we will have to define in order to ensure a proper income for each and every one of us, irrespective of whether we have the possibility of carrying out a job or not. It is about considering a new Bizkaia for the year 2050, redefining a new proposition of value that is the differentiating factor of this territory, that allows us to feel comfortable and proud of belonging to it, satisfied with the highest levels of collectivism that is offered to us via the vanguard of knowledge, of human rights, peace, democracy and governance at the service of all.

Getting closer to these dreams leads us to leave today and move towards tomorrow,

undertaking a series of commitments, policies, behaviours and interconnected actions, that define a scenario we can see today, but which above all, we should construct constantly under a long-term view. A demanding commitment that is a constant at all times.

It is a hopeful, optimistic and dreamy but realistic journey. It is a realistic diagnosis, created from experience, qualified and expert information from a great many sources, with a prospective observation that has a long reach, including a contrast with qualified voices and individuals that wish to take part in the creation of their own future, and who are currently “sad to see” their own country, they trust in it and want to make it better. It involves a dream that is both possible and desired.

It is neither an academic document or a type of institution plan. It does use education, public strategies and policies, strategies by business, intermediary and enabling institutions, that are appropriate and explore multiple sources in which inspiration was taken. It also includes the privileged experience of a long professional career in the world of ideas and strategy in different places throughout the world, while always searching for applicable references in this country. It is of course experience learned and shared with millions of travel companions and colleagues who, in one way or another will be acknowledged in this document.

The sole aim of this process is none other than to achieve your double acceptance: *“I wish to live and form part of Bizkaia 2050, which is proposed as an aspirational arrival point and, I am prepared to commit to and undertake this exhilarating journey that will take me there”.*

Are we prepared as a society, as individuals, in our role as generating agents of wealth, employment, well-being and prosperity in a possible future area to be built: Bilbao-Bizkaia-Basque Country 2050?

Welcome to this exhilarating journey!

Introduction

Ask us to ask ourselves about a future, that is far in the distance, would seem a futile exercise if what we aim to do is to correctly guess its exact shape, as if we would be able to manage and control the enormous number of changes or events that will take place, being considered as passive spectators or, in some cases, main protagonists, either due to a conscious or intentioned intervention, or by omission, a voluntary or non-voluntary one.

However, the best way of reaching a given future, that is not wished for, is actually the shared process in the exercise, letting ourselves go or trusting in those who are shaping it. The strategy is an indispensable art to “*imagine the unimaginable and making it possible*”, thinking about and explaining the long-term potential, managing the present and putting all of this at the service of an aim that commits us all and gives a purpose to our lives.

Bizkaia 2050: Bilbao-Bizkaia-Basque Country is a proposal for reflection, for the joint, intergenerational, challenging and possible commitment. A great challenge, that is guided, step-by-step, piece by piece. A changing process, that can be modified by the society to which it is addressed, by their aspirations and decisions throughout the journey.

It's first difficulty arises from the start in its title: What are we talking about when we refer to Bizkaia? Definitely not to the current physical territory. ***It seems to understand that if today this territory can't be understood on its own,*** that what occurs or is decided here requires a minimum context of belonging (real and current of a city-region, Bilbao, Bizkaia, the Basque Country, and future vocational context, of its aspirations of future identity, policies, economic and social), let alone understanding something different from a scenario that is aimed for here. I have chosen to caption it with reference to the three inseparable pillars that shape it and give it sense: Bilbao, Bizkaia, Basque Country, choosing in addition, the use of the three languages that not only provide us with the three planned initial editions (Spanish, Euskera, English), but to the chosen projection. I do aim to address all those who have to make possible our future in this beloved land, but at the same time, to enable and encourage shared actions all over the world, as we shall see in this book. It is a book that does not aim to simply get things right, but to encourage and ask us to rethink the future, and to commit to both decisions and responsibilities. A book that generates “by-products”. In other words, it leads to others (experts, specialists, challenged individuals) to work with these concepts, ideas, opinions and information included here.

With this objective in mind, ***the book is structured around a journey that will alternate between the “imaginative” narrative, with the objective reality of the observable information and data.***

Thus, after these introductory chapters, chapter three includes, in storytelling format, a desired view, along with an imaginary Bilbao Chamber of Commerce President in the year 2050. It is a “desired view” and I'm not looking for alternative scenarios, but that in which I would like the population to live in. The president embarks upon a “journey” throughout the Bilbao Estuary, observing up to 50 specific points that create a contrast between its current situation, thanks to its rich history of economic and social development, and the “foreseeable evolution” for that chosen time. *(Its description is supported in Annex 1 with explanatory notes*

for those who are not familiar with the Bilbao Estuary and with the various chosen parts), as well as with the map illustration of said estuary that provides the backbone for its history, the present and future of our land and development.

Imagining this arrival point in chapter 4, the aim is to return to the present. It includes what I have called “a successful journey up to 2020”. From the reference to the access to self-governance for the Basque Country (and as a consequence, the recovery of the foral powers of Bizkaia), in the 1980s after the end of the dictatorship. I mention that which has brought us here (2020), under different strategies that have meant a (relative) recognised success, always one finisher will and insufficient. I use the framework of a “Competitive joint strategy for sustainable human development”, recognised by academic and professional literature as a “underlying Basque model”. Here I do not look for complacency, but simply as an example warning of decisions and models in complex situations in order to build areas of well-being. I am looking towards a triple objective: 1) To raise awareness in the population (especially the youth), or the fact that, in complexity, replete with difficulties, the undertaken strategy from capabilities and real strengths (existing or induced) allows us to move forwards. 2) give value to the completed commitments. 3) The need for adaptation and permanent transformation in relation to demanding and changing social circumstances and context.

After this, I present a special section as a turning point: The Pandemic Crash that we have lived through in incomplete change. Going further than its brief analysis, I also aim to draw attention to the lessons learned and the urgent requirement to review timetables that we had considered as appropriate at that time. I analyse that which has been put into motion, the timetables to be amended and the necessary interaction between urgent undertakings in the immediate future, but also setting out the future flightpath. What we do in the following years, up to 2026- 2030, will be key in reaching, in one way or another, 2050.

In chapter 5, different transitions are allowed to be moved from urgent to necessary. This step came with the “world expert” option, which would seem to suggest certain changes (I include a selection of generalised observations and recommendations I consider relevant), and above all, a rich contrast with top-level individuals (up to 25), that have generously given up their time to speak with me to analyse the situation, the world in which we live, of that which will be Bizkaia in 2050, and above all, the barriers to overcome and the commitments to be made. These observations I have put into context in the light of the observable mega and matter trends. To what extent can they impact upon us, and which future options today leave us with? This double external and internal spectrum of analysis allows us to understand the critical elements upon which we have to act.

In this way, with the long journey that we have to complete to build a future “possible” set out, that answers my “desire”, I start on this journey towards 2050. Chapter 6 gets us closer to viewing the future we will have to face up to. I reimagine a unique value commitment or proposition. Once formulated, the first issue requires us to review the base area: **“The Bizkaia 2050 area- territory” with a new footprint that has to be built along with multiple travel companions. The past (The Bay of Bizkaia), the present (Bilbao-Bizkaia-Basque Country of today) and the future (the network of networks) which we will have to generate and of which we will have to be a part of from the embryo stage during the long journey of the Balticum Pact that is implemented and interconnected with knowledge, innovation and entrepreneurship throughout the world. It is a complete process.**

The “magic of the process” will make the initial proposition possible or not. I consider how to transform problems into opportunities, to make technology and innovation available to society, to bring together social movements and dynamics, the economic thought that accompanies our “favourable seas of the future”, and the way to create alliances and networks in order to achieve it. This aims to highlight commitments in the terms of favourable seas in which we have to intervene.

Finally, the return of imagination. Chapter 7 leads us towards a possible dream.

Again, with the imaginative narrative or storytelling, our initial protagonist, the President of the Bilbao Chamber of Commerce, on this occasion also leading an international consortium that will have generated the connected networks platforms, asks: *What will we have done to reach this point?* One hundred connections between the initial journey along the Bilbao Estuary and this final completed vision, Bizkaia 2050, would explain the immense task that as a society we would have implemented between 2020, and the start of this book, until 2050. We will have completed an enormous task, *that will have allowed us to have earned the future. The timeline will show the long and intense process that has been followed until we reach the dreamed about 2050.*

In addition, to highlight the fact that this book includes a long series of diagrams, charts and graphs that aim to enable comprehension of the text. Specifically, we use a series of drop-down charts in the attached booklet that comes with this book. Drop-down charts referred to in the text itself and in specific figures.

In summary, a journey towards 2050, hand-in-hand with an integral guide that we will share with you, being developed and imagined throughout this book. A journey building a Bilbao-Bizkaia-Basque Country, reinventing a prosperous and inclusive area that is full of opportunity. A demanding yet possible journey.

NODE CONNECTORS OF AN INTEGRAL VISION

1

Bizkaia in 2050
"A desired vision"

2

Back to the start. Building a scenario desirable and possible since 2021

- A successful journey until 2020.
- The pandemic crash. More than just a temporary setback.
- The timetable to review new models and attitudes of growth and inclusive development.
- Amongst that which is urgent, towards a desired long-term scenario (2050)

BIZKAIA 2050

3

A society in transition

...with a wide range of demands and challenges along the way.
...in light of the observable mega trends and it's foreseeable impact on our future

4

Our journey towards 2050

...And the principal critical points that will have to guide us on the journey.

5

Summarising what we will have accomplished throughout this journey.

- The magic of the process sailing over favourable seas, mitigating risks and optimising opportunities.
- Redesigning, encouraging, re-imagining our principal "Transformation Maps".
- Creating collaborative strategic networks and alliances.
- Generating the talent required, the emotion associated to the desired commitment and aim.
- Acknowledgement of our governance, its tools and our business, socio economic, institutional and academic models.
- Strengthening a true SOCIETY and the common good.
- Re conceiving the new area: BIZKAIA 2050.

We are in spring in 2050. The swearing-in of the new President of the Bilbao Chamber of Commerce represented a new and rewarding milestone in the long history of this organisation. A few months away from the 165th anniversary of its foundation¹, the 540th of the Bilbao Consulate² and the first 15 of the Constitution of the Bay of Bizkaia-Atlantic-Baltic Space Chambers Confederation³, *Aitziber Itxasmendi* prepared herself for a new step in her highly successful personal and professional career, contemplating the reward for her hard work and dedication.

When preparing her inauguration speech, she had read over a prospective document, "*Bizkaia 2050*", which her predecessor at the Bilbao Chamber of Commerce 30 years ago had promoted in order to rethink and imagine Bilbao-Bizkaia-Basque Country in 2050⁴, with the intention of seeing a future of prosperity and inclusiveness and above all, mobilising the various initiatives that would lead to transiting from the situation at the time until the desirable scenario. Aitziber recalled how at the time, with brilliant and qualified academic training, with a degree in engineering and business management, her postgraduate studies and specialisation in what was known as "*the world of exponential technologies⁵ at the service of progressive humanism and employment of the future*", and with her first steps and work experience in prestigious Bilbao companies, she saw a worrying and uncertain panorama, slightly confused about the future, made more important by the climate of generalised pessimism of her friends who, irrespective of their chosen careers and professions, and in accordance with their important commitments, felt somewhat empty in respect of their first professional steps, imbued by general perceived messages and a reality that made normalised access to satisfactory employability difficult, and to a larger extent, a climate of dissatisfaction and disaffection in respect of the future that seemed predetermined and removable. It was a complex, uncertain and unknown year. The SARS-CoV-2 (COVID-19) pandemic⁶ barged into her life, she lived through the unknown experience of confinements, isolation and quarantines, that took place, between one thing and another, over two years, and left a constant reminder of 4,700 deaths in Euskadi (almost 5 million throughout the world), and the so-called "*general impoverishment and a lost decade*", in terms of employment, economic activity and the regular image and discussions regarding an inevitable "*reinvention and recovery*" of the economic models, social behaviour and of interaction or interdependence, as well as a questioning of healthcare systems and models. A small but timid smile emerged: Not without great frustrations and feelings she had that led her to considering moving abroad in a "search for opportunities" in the face of the "*stolen future*", which seemed to frustrate the expectations of her generation. However, she overcame her doubts, she put faith in her career, her region and trusted her capabilities, and today she is here, looking over a territory, a community, a prosperous, vibrant and expectant society, proud of her belonging and participation in important projects such as the one she will preside over on merit. She went over the important careers and experiences undertaken and/or implemented by her then team and colleagues, and found, in general terms, success and satisfaction as

time went by. So much effort, sacrifice and permanent training, full of challenges, risks and commitments seem to have paid off.

It was a really special day, with the timetable, itinerary, contents and times programmed down to the last detail. **She was sure about the route she would take from her home in Getxo, a residential municipality on the outskirts of Bilbao, to the San Antón Bridge⁷, a landmark of the birth of the old Puebla, which was the origin of the subsequent Villa de Bilbao, and where the naming of the new Bilbao Consuls would take place**, retaining the historical and traditional path, and the driving force behind the region's innovation and progress. The navigable Getxo-San Antón route that she had travelled on so many times, using various modes of transport had become a constant on the occasions she received foreign visitors, as a living lesson of the *"basic history of the Bizkaia and Basque economy"*⁸.

Today, Aitziber took public transport at the regular passenger terminal at the Arriluze Getxo docks, an intermodal area integrated with the modernised terminal for cruise liners, ferries using the southern England route and the main port capitals in the Bizkaia-Nueva Aquitaine-Baltic area. Within the shared framework of a new marina, whose architectural reformation had revitalised the lost harmony with the historic façade and cultural heritage of the old and original Old Algorta Port, constituting a single port to receive foreign visitors and a feeling of identity and belonging for the residents, of which they were proud. The modern Argia Hovercraft⁹, recently delivered from the Basque electric self-driving vehicles platforms plant, a world leader in passenger and freight transport, would choose the "long" route, with a first stop at Abra, as a start point on the left-hand side of the River Nervión in Santurtzi. This additional time along the journey, while not frequent during her regular commute, would allow her to look out towards the Port of Bilbao estuary, to enjoy its extraordinary infrastructures and mentally go over the rich logistical- industrial tapestry of the area. The two imposing Petronor refineries¹⁰, where she completed her first university internships when the inevitable energy transition towards a *"green economy"* took place in 2021, which committed to the combination of the successful productivity of fossil hydrocarbons, along with the first pioneering commitments that opened the door towards the discovery and real applications that seem to be offered by green hydrogen. Petronor along with a business and institutional cluster chose to commit to the so-called *"hydrogen green corridor"*¹¹ that grouped together more than 70 interrelated companies, and which gave rise to today's relevant Meatzaldea Technological Park¹², that today houses one of the leading collaborative research centres in conservation, savings, energy efficiency and new energies throughout the world. Those that were the first designs of *"the 2050 refinery"*, re imagined the future we have today, along with a special transforming spirit, turning urban, industrial and environmental waste, within the framework of the Circular Economy, into a leader and driving force behind our transport and port activities, creating a focus of wealth for our region and prosperity for the Basque country. He would have clearly thought, that the strategic commitment in converting the region into the foremost NET ZERO European region¹³ in the 1930s involved a high-level driving force, driving the powerful local industry as a producer and irreplaceable

provider of comprehensive needs and solutions in the wide-ranging framework of what was conceived as the “*Green Vector*” of the industrial, economic and social transformation in the face of the permanent challenge of climate change and the defence and salvation of the planet that the central pillars of public and private agendas had been creating in recent decades. “*Grow from and with climate change*” then became a vision that today offers a singular and successful reality. Pillars of its complex transformation, today as a model benchmark railway/port and leader of the Atlantic seaboard, interconnected with the principal ports in the “*Bizkaia Bay New Worlds*” area¹⁴ of which Bilbao-Bizkaia-Euskadi form an essential part. She looked towards the horizon, losing herself in the sea which, faithful to our story, has enabled the development of our so-called “*Blue Economy*”¹⁵ and which not only increases our global interaction towards the successive marine areas or to the new maritime- economic- energy offshore industries that make up a good deal of the intelligent installations and terminals of the Port-City¹⁶, now open and that today we enjoy, without those “*Arctic Routes*”¹⁷ that 30 years ago seemed an illusion, and that today a new line of differentiation for our region, turning Bilbao into one of the connection ports for the new alternative shipping lines, which are still quite recent, evermore towards commercial Suez traffic, and which has strengthened commercial and industrial relations with China, ASEAN, the middle east corridor and the variety of “*emerging countries and regions*” that are connected, via different modes in direct relation with the Intermodal ONE BELT GREEN ROAD route.

Now in Santurtzi, Aitziber observed three iconic areas, intimately linked to our present and future development. The constantly evolving innovative shipyards¹⁸ at the vanguard of the “*autonomous vessels*”, that have become a reality thanks to the professional industrial and cultural framework of the region, that has enabled the complete transformation, not only of the fleet (maritime and fishing), but of their components (batteries, motors, infrastructures, cruise, support services, construction and repair), led by the second reference “*the reinvented Portugalete Sailing School*”¹⁹, made up by new professionals that have proven themselves as creative transformation innovators. She also observed the vital work of the Ibaizabal Tugboats, in permanent transformation, international pride of our brand Bilbao, and a reminder and tribute of those practical individuals that lived in the main Asian ports centuries ago. Actually, the relevant history of Portugalete, the irreplaceable driving force of our economic history, today continues to be an essential part of the expected future.

She could only feel pride when looking at the Suspension Bridge²⁰, a great deal more than just a work of art or a connecting node of the two sides of the estuary, who for many would lead them into the mistake of thinking they are separate and not an indivisible part of our entrepreneurial and hard-working culture, as well as the social interaction that is so characteristic of our way of life.

Slightly further on, the noise of the public entering the Benedicta terminal announced another great self-confirmation area of the achievement and future commitments and decisions taken at the time. The industrial area of Sestao²¹, inseparable from Lamiako-Erandio “*on the other side*”, witness not only to the

launching of the great vessels that set out from those historic shipyards, which today are their “own” re floated shipyards in their historic journey from Murueta²², it’s benchmark steel lighthouse or the world leading manufacturers of marine food webs or aeronautical companies, along with the intelligent logistics park, allowed it to evaluate the “*already old*” compact steel mill, today powered by green hydrogen, and part of the intelligent electricity networks, a result of the live laboratory that provides our region with a world-renowned reference for the electric industry, it’s digitalised and intelligent networks, and which took place along with the centenary is of the *Altos Hornos de Vizcaya Ironworks*, which were the pioneers in technological innovation, the ever present Basque steelworks and our capabilities and industrial culture, a key part in the succession of clustered areas that so well reflect the power of this estuary: a port and its essential maritime activities, the development of the world of commerce and insurance, the driving force and investment capacity in the world of mining, steelworks, metal- mechanic works, energy, logistics and solutions and services (education, training, transport, etc), integrated into integral intelligent services and specialisation for manufacturing at the service of the society as a whole²³. She thought about some of her professors who had explained *how the clustering of the economy is not a result of spontaneous generation, but innovative growth from a natural foundation and its own culture, moving towards new interlinked activities, leading to its progress and supplementary diversification towards new industries and activities*. The industrial culture, “*the flavour of and taste for the fat*”, we used to say, “*is the essence of the industrial culture that enables true differentiated innovation*” What better scenario than this to test it out! Today, the permanent industrial culture and innovative character of this small area counts on business leaders in the exciting world of offshore business, it’s floating platforms and essential support of renewable energies and the development of new materials, the driving force behind a new business and industrial emporium.

During the following few minutes of the journey, it showcased an exciting film: a leading electric steel mill, a naval construction platform on both sides of the estuary, as if it was a single platform, integrated into a top-level logistic complex, accompanied by additional modern industrial platforms, in an extraordinary symbiosis with the residential and recreational areas on both sides of the estuary itself.

It also looked upon the extraordinary accompaniment to the road and transport infrastructures that ran alongside on land in relation to their journey. If the Metropolitan moved along both banks, interconnected throughout the journey along with the motorways and dual carriageways that could be seen on both sides, the connection with the Lamaiko tunnel, the revamped Róntegi Bridge and the radial connections towards inland Bizkaia and its districts, could only explain and determine the strength of the region²⁴.

Getting back to the itinerary, she couldn’t help but thinking, in admiration and acknowledgement when reaching Carmen and the Galindo Marshlands. What an extraordinary urban transformation has taken place! Sestao, Barakaldo, Lutxana, Erandio, were a unique example of urban, intelligent and creative regeneration

with a spirit for change²⁵. The special commitment to “*reinvention*” of these municipalities, returning to them the views of the estuary and its interconnected life, was an exceptional reflection of our companies and their capabilities, of the hard work and institutional quality, along with the strategic commitment shown, in accordance with the spirit of its people. Even though she couldn't see this from her seat, in her mind she went over the whole immense logistic, business and services related world that was being played out to her left, linked via the various infrastructures, the Super South, which enabled communications (towards the end of the estuary and to Zornotza and the remainder of the region as a natural channel of its connection with its sister region Gipuzkoa, with its guiding corridor along the Basque coast and its natural inter-connectedness with the Atlantic seaboard, essential in regards to the trans-European character that characterises our unusual and thriving City-State), along with the Port and outlet towards Cantabria and the integration with Araba and its connected area towards the peninsular plains. Aitziber recalled her role in the recent signings of a renewed inter-institutional agreement within the framework of the region, with the Bizkaia Bay being a protagonist, regarding the “special districts” that enable placement of various initiatives throughout various administrative regions under the support of financial/tax related programs and a shared governance²⁶.

And what about the BE (Bilbao Exhibition Centre)²⁷? She was also able to visit and experience it during its first few years. She recalled the first Biannual Machinery/Tools and *Ferro* exhibitions that one of her cherished and best remembered professors taught her about during her first engineering courses, she carried them with her. (“*Mandatory for approval. You will thank me later when you check the importance of being aware of our rich industrial tapestry*”) Over the years, throughout the lifetime of her various companies and the work she has carried out, she has had innumerable visits.

Having gone past the BEC and without leaving Barakaldo-Gurutzeta, “*a great first course*”, which would later be backed up when she arrived at Basurto-Olabega: The Cruces Bio-Healthcare complex²⁸. Aitziber couldn't fail to remember that he was born at that hospital. For years she was the go-to person when a delicate intervention was required. With time, and due to other reasons, she experienced first-hand knowledge of its medical and clinical excellence, as well as its considerable research area and business centre for multiple businesses in the area of biosciences and health care sciences. One of the great symbols of the extraordinary healthcare system that we enjoy today. She cracked another smile when thinking about the people watching her, and it's probable that they wouldn't be aware of the reason why.

And now, at Zornotza Point, a special image was lit up. She could barely remember that abandoned and depressed area in 2010, and the news, which at the time seemed to her like “*smoke and mirrors*”, the Zorrotxaurre Island rose up, referred to by some as the “*Manhattan of Bilbao*”, which to her, at the time and when she travelled to New York with her parents she thought it was something that was quite typical of Bilbao²⁹. Today, when family and friends live there, when she gives classes at one of the main international universities that are located there,

when she sees films on a global platform with headquarters of one of its principal production companies at the (still today) new “*Urban Discontinuous Technological Park*”³⁰ that is spread over the island, and reaches towards Zorrotza Point on one side, and towards Deusto-Elorrieta on the other, she admires the imaginative and transformative capacity that has accompanied the different generations of people from the region. This area, conceived for regenerative and innovative expansion at the start of the century, makes up an integrating, multi-use, residential, work-related, academic and recreational area without comparison, which allows the well-earned urban reputation of Bilbao-Bizkaia-Euskadi to maintain its permanent advance and improvement.

Zorrotzaurre, “*island of knowledge*”, as some would say, is a large residential-economic- educational mixed centre that has incorporated all types of innovations, reconfiguring the region’s driving heart. Its “*car free area*” features, “*the circular and integrated handling of urban waste*”, “*the electric and autonomous mobility*”, the “*university district*” where a great variety of public and private universities have their interconnected centres, institutes or campus, it’s entrepreneurial area, its interaction with the Basurto-Olabega-Deusto Healthcare Sciences and Polo Sanitario, the Bio-IT, Data and Apps Centre in Zorrotza, add up to a powerful driving force and offers high value in relation to knowledge and the consequential wealth for the society, financing and promoting prosperity for the region’s people, as well as its talent and high level of knowledge. The green richness of the parks and gardens that surround it where people can enjoy agreeable recreational areas, open to the estuary, full of nautical activities and recreation, as well as the surrounding mountains which make up this much loved “*botxo*”, with one of the greatest belts and circuits available in its hinterland, reflecting the high level of life available in this much-loved area.

At the end of the island, the stop at the new Euskalduna urban- river area allows us to create a picture out of the passing of time. That historical shipyard (she does not believe that she remembers it, but she had heard of the trade union struggles during the 1980s during the “*Industrial Reconversion*”, about which she had read so much and “*seen in black and white photos*”, along with the memory of those strikes and meetings regarding the closure of the shipyard), where an intense regeneration gave way to a complete top-level urban redefinition (Abando-Ybarra)³¹. Over time, today the accredited and prestigious Euskalduna Palace (for music and congresses), the destination for one of the principal Opera seasons at the fabulous European music lovers’ area, the new Maritime Museum, (she never visited it until the new one was inaugurated), which is open today, this new terminal, the marina in the heart of Bilbao, replacing an old building (“*the Transport Department*” she thinks it was called, and that it was “*completely out of place*” with the iconic Bilbao that she witnessed being built), lighting up the city and a brand-new building by the architect Zaha Hadid (*how much of his great work as she had the opportunity to enjoy all over the world*), which according to her knowledge, had been designed along with the Development Master plan that was proposed for Zorrotzaurre around 2008- 2010, and which had finally turned into the great icon of the island, home to the powerful new exponential technologies

industrial solutions entrepreneurial innovation international strategy technological – industrial consortium, an example of public – private corporations with international collaboration associations. Today, the “Bizkaia Lighthouse 2050”³².

Continuing along the journey was an endearing reminder with emotional fondness. She couldn't miss out on observing the San Mamés Stadium (she is an Athletic Bilbao season-ticket holder)³³ and then during the great sporting successes (she remembers when she was young there results were not so great, placing more value on its history and singular nature), the result of a valiant and innovative updating of its philosophy, focusing on the Basques and their youth teams, developing what was known as “*extended Lezama*”, which gave way to the generation of the Athletic Bilbao Training and Excellence Preparation Centres all over the world, linked to development cooperation programmes and sports preparation, it has allowed the “*exporting*” of values and a professional training Basque model to thousands of children and youths who acquire integral training and preparation, opening new doors in their local development, while at the same time enjoying talent all over the world in its professional teams that compete, both in the Basque league as well as in the main leagues throughout the world, (in her case, his children are fully fledged fans of the Champions League e-sport, where the team is involved with a long list of followers all over the world), as well as the business driving force capacity and new entrepreneurial initiatives in the well-known cluster of gaming, both serious as well as entertainment related, which has taken place in the region. Next to it, the Bilbao Engineering School (Aitziber studied there) and further on, now in the Abando Ybarra area, the Deusto University³⁴ where she studied for some of her postgraduate degrees. Today, she is still linked to the prestigious ongoing education and In Company courses which, along with the multiple disciplines and prestigious international institutions offer an ever more prestigious, internationalised and diverse university district. Deusto, essential in the training and management of the processes, companies and institutions of the region since its foundation (first in the State business schools, a benchmark in law, philosophy, sociology and fine arts), now extending from Bilbao to its wide-ranging and prestigious international network, leading the valuable and renowned Jesuit world that has led the training and commitment to society to all corners of the globe.

Today the Deusto University plays an important role in the Jesuit Universities Global Consortium all over the world, with many of its campus and research centres of this prestigious international network located in the region, a focus of attraction for professors, researchers and students that generate plurality and wealth in our region. The Engineering School, a pioneer in engineering higher education, a synergetic driving force behind the powerful basic industry, and of the historic communication and dual University- business training, a foundation for a large part of the technological nucleus, created over the years. She says farewell to the “*Literary contingent*”, home of so many law professionals and who, along with other standout faculties and international institutes, contains the Obieta Institute, a world benchmark in international law and Foral law, and exclusive and differentiating piece of the Basque country, whose update and transfer to key

fields such as mercantile and labour law amongst others, includes the new dominating wave in labour relations and participative models in companies, with the Bilbao Chamber of Commerce, over which she will preside, being a proud active participant. She continues to look out over the historic Deusto Bridge, which on some occasions she had checked that in the past it stood as the “*elevated bridge*” as the estuary, which could be navigated towards the once port sheds and a beach of tracks, containers and an old wood factory, which she saw in the pre-Guggenheim “*black-and-white photos*”, which she would have looked at on various occasions and which, today look like they cover another three great symbols of the region’s history and progress: The “*Iberdrola Tower*”, an architectural piece by Cesar Pelli, and which today is solely used for management tasks related to the leading international electric and green energy company, captaining the stock exchange capitalisation, which has turned the powerful International London-Zürich-Bilbao stock exchange triangle into the great European economic area stock exchange platform, distinguished by the so-called “*special operations*” that dominate the modern financial market and a model financial boutique centre, a base for the blockchain and Fintech area, re-converting its hundred-year old trading and stock contracting centres into agile and reliable invisible innovations, which could be the bartering of the 21st century, and which has again converted Bilbao into the financial plaza par excellence in southern Europe, thanks to hundreds of generated innovative financial companies, along with the high quality of professional services on offer there, which make this area something unique and different, and turn it into a world leader. Returning to the countryside, she looked out at the Tower flanked by two buildings (both representative of modern architecture from the end of the last century by Rafael Moneo and Álvaro Siza), and which reflect the talent and solidity of its university: The CRAI great Research Centre and the Deusto University library, along with the UPV- EHU Hall, in complete public-private convergent and collaborative symbiosis, nurture our main initiatives³⁵.

Along with the must-see Guggenheim Bilbao Museum³⁶. She remembered her first visit, when she was a child and those “*learning through art*” programs and courses, and how proud she felt when one of her drawings (what her temporary guardian called “*a very special collage*”) was shown at the museum, at the arts-educational campaigns promoted by the Guggenheim to motivate and train the new generations. Today, she is not only an international friend of the museum, forming part of the GUGGENHEIM COMMUNITY, but she actively takes part in its running, dedicating considerable time to the artistic and educational development programmes at the Guggenheim Gernika-Urdaibai World Wide Experience³⁷. Guggenheim Bilbao was the “20th-century museum”, and its ongoing expansion in Urdaibai is the key museum for the 21st century, a vital benchmark in the world of art and culture and of course, a differentiating example of a driving force of urban regeneration and regional economic development. Without a shadow of a doubt, the world benchmark for the art- economy- regional cluster. Today the world cannot speak with authority of these matters without a specific reference to the Guggenheim, Bilbao, Bizkaia, Euskadi. That initiative, much more than just a museum, as the chronicles recount, meant the “*recovery of self-esteem for our*

people”, and a starting point, with no going back, towards innovation, awakening or recovering a positive mindset, a pride in our collective capabilities, being aware that “everything is possible”. A unique musical network with the powerful trilogy made up of Chillida Leku and the Oteiza Museum, backed up by Balenciaga and the singular “Côte Basque”, as well as the historical Bilbao Fine Arts museum, and the ever more famous Women’s Museum³⁸, iconic in its recognition of creative women, vital in order to understand their extraordinary and unique role in the history of art, enriching this particular artistic base of the Bay of Bizkaia’s nucleus’ driving force. A musical and cultural base that has strengthened and nurtured the hundred or so museums that make up a specialist network of museums that can be found all over our region, sharing collections, projects, innovative initiatives, restoration and conservation centres, along with programming, education and management models, patronage, sponsorship and financing, as well as its or enormous catalogue of contents of every type of means and its wide network of strategic alliances with the best museums and cultural institutions throughout the world, starting with the collaborative network that the various configurator nodes of Bizkaia 2015 make up. In the background, continuing her journey, Aitziber sees the upper stories of what was called the BBVA Tower³⁹, which would later become the embryo of a “*International Entrepreneurship Centre*”, which would grow during the decade of 2030, and which would light up hundreds of new companies, a real melting pot of first-tier entrepreneurial initiatives, making up the intra-entrepreneurial commitment of the companies that are the driving force of the region, the institutions and the “coordination of the global entrepreneurship network”, which integrated and focused the work of the world centres network system (30 formal ally platforms within singular collaborative frameworks, sharing objectives, key principles, co-financing and co-governance), of entrepreneurship and innovation, of which Bizkaia is a part. Today focusing on an initiative, they are a part of, mainly with the Israeli and Boston groups, in a supplementary integration with other similar groups, with a relevant association and Asiatic and Scandinavian orientation, that is spread out along the length of the estuary up to the end of Bolueta, to link up with the industrial axis of the Zornotza-Durangoaldea and its connection with Gipuzkoa, weaving a continuous corridor along both sides of the renewed highway and high-speed train superstructure, at as made real the generation of an authentic city- region-state⁴⁰.

This centre has been moved a few metres back, occupying part of the new additional urban areas of the new Abando high-speed train station⁴¹, generating a “*new broadening*” and a new shared public area that enriches the city, avoiding the once physically distanced areas between zones separated by their old uses, giving way to the Bizkaia Tower, current headquarters of the Bizkaia Open Administration, which incorporates the principal automation, robotics, artificial intelligence and Fintech funds and payment systems technologies along with paperless administrative management and the service of all the regions taxpayers. Not only physical headquarters, but also the emblem of a vital reinvention of the Public Administration, its governance, citizens assistance areas along with the efficient management of public services. An ongoing effort, disruptive and radical in equal measure, which has enabled the creation of this Bilbao-Bizkaia-Euskadi area, a

true “Intelligent City- Region”, at the service of society. A result of the firm transformative commitment that has been coming since 2020, a leader in new ways of bringing renewed government officials work to society. Thus, Euskal Hiria⁴² when referred to by the old regional planning directives that placed value on clusters of excellence and the development of urban nuclei extended throughout the country, which today is a reality. If the firm commitment to provide Bilbao with an underground train system⁴³, in the 1990s, and what she had read and heard in various discussions was highly criticised, as it was considered a “*millimetre project*”, an embryo of a wide-ranging network that, including the various railways, modes of transport, autonomous electric buses and the powerful network of infrastructures and vehicles that interconnected the whole region (inwards), is one of the principal high-value external nodes, in its journey towards central Europe (from the New Aquitaine), the South Mediterranean corridor, the Spanish planes (once a limit on development that required non-competitive radiality, and distant from the natural movement of people and goods), or the fluid connectivity with Nafarroa and the varied infrastructure which, via the tunnel, enabled the scaling of the Pyrenees, in complete sustainable respect of the marvellous and unique inherited nature. A complete infrastructure that has enabled profound change sociologically and in how people live, allowing the population to have a clear improvement in their way of life. This is without mentioning its economic wealth generating effect, increasing the competitiveness of our economic framework, commencing with the starting point of her journey this morning, the Port of Bilbao, a prominent leading railway port in the area, while looking over the Atlantic seaboard and Bay of Bizkaia. Without doubt, the dense network of infrastructure that the region enjoys is unique (road networks, waterways, transport, railways, transport and intelligent telecommunications, underwater cables, intelligent electricity and energy networks, training centres and infrastructure), along with in addition, the social tools, creating an integrated and differentiated area, with high added value.

And once past the Bilbao Town Hall and the Arenal (without forgetting the value that the old stock exchange, which is today the extraordinary Bilbao Financial Plaza platform, a singular benchmark for the world in the new symbiosis of finance and technology, that blockchain managed to take advantage of, Fintech, the crypto currencies (Eusko money, which today has become a widely used virtual currency), the new generations of financing payment systems and mechanisms. An area that moves money, previously on the stock exchange, as well as its distinguished role of trust, specialist technological and tax -related efficiency, at the service of the world of capital risk, of the entrepreneurship and scalability of start-ups, as well as the benchmark “Financial Plaza Stock exchange”, on the European stage. From a financing and banking culture, from our Plaza, a co-protagonist of the new global finance world, which today it is a protagonist. A base for or result of the financial culture in this country and region. In perfect symbiosis with the old BBVA building that we mentioned previously, which is close to reaching its 200th anniversary since its founding in 1857, a stone’s throw away from the San Nicolás Square, where today a unique building stands, winner of the special architecture award, designed by Peio and Aintzane Aramburuzabala, who had recently been awarded the Prizker Award. A building that represents an urban setting with various global

headquarters such as the bank itself, its DATA & AI Innovation Centre and the permanent headquarters of “Frontiers of Knowledge”, a leading movement in the generation, financing and promotion of knowledge related to science and society, recognised throughout the world, a pioneer in the characteristics of its awards that include the residency and visiting prestigious researchers and professors, in the science- technology- humanities living lab, in open collaboration with the Basque science- technology system, a pioneering and world benchmark academic nucleus.

Looking back and remembering the old town, the Intelligent Shopping Centre⁴⁴ in La Villa, birthplace of what is today this City- Region and its economy, she nears the end of today’s journey: the San Antón Bridge and Church, to welcome the future Bilbao Consuls. The final few miles invite her to think about the Marzana docks (a busy residential area, where young professionals, art galleries, innovative recreational areas and university buildings are located, such as the new Fine Art Faculty, an example of public and private universities integration, of the region’s museums, of the artistic wealth of the surroundings and the location for biannual cultural events that have gained international recognition as the live cultural, artistic and economic think tank. Today a hotbed of cultures, languages (although it seems incredible, 180 different languages are spoken in La Villa), and nationalities that make up this rich Bizkaia of 2050. The docks and public areas, providing access to Bilbao Zaharra⁴⁵, proud of its status as a campus integrating a world-class cultural- economic- academic area, which attracts students and professors from all over the world, leaving a positive mark on the permanent reshaping of our Villa and its people. If we go on this journey from the Bilbao Foundation and its overseas connection, the present could not be more exciting and attractive, as well as a reasonable door of hope for a promising future, that is attractive and full of opportunities.

So, Aitziber Itxasmendi this embarks and will begin the day’s ceremonies. The Bilbao Consuls will be sworn in and they will walk their traditional route, behind the Bilbao Municipal Band, through the seven streets until reaching the prestigious new Basque Ethnography and Archaeology Museum⁴⁶, the pride of our region which, as a true witness of history, strengthens our feeling of belonging, of learning for the renewed efforts and future commitments, a world-renowned centre of research and training, a beacon of intellectuality of the region and a living witness of our identity. At the museum, in accordance with tradition, she will have two preside over the special acts planned for today.

Ready to meet the Head of the Basque Regional Government, the Bizkaia Government Representative, the Bilbao Mayoress, the Presidents of the Bizkaia General Boards and the presidents and representatives of the other Foral regions, the President of New Aquitaine, its sister and neighbouring region, to the vanguard in France and the driving force behind European development, to the high-level representatives that would have to attend the act, as well as to the other authorities and personalities, amongst which we could highlight the corresponding heads of the various regions that make up this new Bizkaia-Baltic-Atlantic area⁴⁷ of which the Chamber is a part, along with an innumerable amount

of other bodies and institutions that make up a new area of economic, business, educational, social, cultural, political and institutional relations. The great expanse from Porto to Bordeaux, and the interconnection with this rich consortium of platforms, allied with the iconic epicentre of Bilbao, interconnected throughout the world via the spirit and practical vanguard reality of the spirit of the Bay of Bizkaia that sustains this area of progress and wellness, as a benchmark brand, it receives the high level institutional business and academic representatives, along with the enormous spider's web of facilitating bodies that weave this shared network. From its area of responsibility, the Chamber extends its co-participation in the decision-making bodies of the multiple areas all throughout the world, interlinking the new competitive and inclusive interdependence model, which has reached the far corners of this shareable forefront, playing a determining role in the vital enabling task of agreements and alliances, which go further than the models and forms of government, political- administrative areas and of course, their own differentiated projects.

Aitziber checked and ratified her convictions Today, as before, Bilbao is a world benchmark of a powerful crossroads of the interconnected multiple routes towards the new "*illustrated renaissance*" four front. A new way of integrating the complexity at the service of shared interests and aims (Aitziber believed, convinced of the unequal value that it offered), shaped over time as a consequence of the transformations and changes that the geopolitical world, the redefined geo-economy, the willingness of the people, rewriting new democratic mechanisms had decided to promote. Essential cooperative parts which today, under the umbrella of the *Confederation of Special Areas of Innovation and Inclusive Development*⁴⁸, enable harmonious development, and shared with the interaction of natural areas, of neighbourliness, economic and socio-political areas, and the differentiated wealth that multiply the sense of belonging and multilateralism of each and every one in their own geographical- administrative, political and institutional areas. An area that has accelerated the commitment to infrastructures, a unique university area, a common labour framework and the cluster of work related to the various economic activities appropriate for the differentiation of the framework of each region, building an area of progress and prosperity with wide-ranging competitiveness and solidarity. A confederation that for five years had, after the first decade of successive progress, more informal tools, a model of governance that integrates the institutional, business and academic representatives, along with their multiple facilitating institutions (collaborating institutions), under a framework of governance, which strengthens its connectivity throughout the world.

Today's important acts will be completed with the inauguration of the new institutional headquarters in the heart of La Villa, conceived as a multiple area of new global business initiatives, the International University Chancellorship, ran by the Chamber⁴⁹, now transformed from the incipient school of commerce and business and marketing studies during the 1990s, the Basque node in the network of strategy, intelligence, innovation and entrepreneurship, integrated with the remaining base nodes, extended all over the world (while they all hold their inau-

4

Back to the start.

The construction of a desired scenario and possible from the observable view in 2021

4.1 - A successful journey until 2020

Let's take as a starting point and reference the year 1980, in which Bizkaia and the Basque Country Autonomous Region as a whole) joins the Autonomous Statute and prepares its recovery of the Economic Agreement (effective in 1981), a pillar of its financial and tax system, committing to self-governance principles after the terrible parenthesis of the dictatorship, the civil war and post-war conditions. This period of recovery involves an intense process of institutional provision, the organisation of various levels of government and an unfinished permanent transfer of powers relationship from the Central Administration to the Basque Institutions, and amongst these, within the framework of a Relations Law between the common institutions of the Autonomous Region and the Foral bodies of its historic regions, making up a confederate, unique and differentiated area upon which a new institutional framework is built, where a new path to be trodden, still uncertain if the agreement will be met regarding the reform and democratic transition process. An intense process in a complex economic and social context, immersed in a deep crisis, requiring the generation and sharing of collective hope and dreams of the Basque society and its economic, political and social agents.

A delicate time, accentuated the crisis in which our economy found itself, with a profound negative impact on the autarkic progress of international isolation, lack of aligned decisions, stigmatisation for internationalisation, limited competitive financing, isolation from Europe at this time, along with the world economic, energy and industrial crises that battered our "*industrial monoculture*", characterised by the intensity of sectoral changes, and all closely linked to the State public agencies. In addition, a context of social conflict, sky high unemployment, business crises and new trade union movement in dynamic change, which were uncertain after the vertical organisations of the previous regime.

Furthermore, Euskadi suffered terrorism on multiple fronts (the various organisations related to E.T.A., right-wing and extreme right-wing terrorism, police and/or State terrorism), as well as the terrible confrontation between the reform options versus the rupture options, questioning the model of transition chosen by the State.

Within this context, the first steps of what would be an economic and social development strategy would be framed which, to a larger or lesser degree, would be stable, coherent and in the main committed to, the "*industrial core*", which had been rolled out with sufficient coherence over the years, until present day and offering successful and differentiating results.

During the 1980s, the Basque economy went through a process of integral restructuring after the recession

1980: Start of the Basque self-governance recovery

Severe economic, political and social crisis

- High unemployment (25%)
- Collapse of basic industries
- Obsolete infrastructures

Triumph of the neo-liberal focus within a world context:

"The best industrial policy is one that does not exist"

TODAY, EUSKADI IS A NEW REGION.

From a decadent and absolute economy, it has turned into a powerful, entrepreneurial.

- The GDP in recent decades has grown above that of Spain and the EU
- Exports account for three quarters of production (50% in products with a medium/high technological content)
- Unemployment has been reduced drastically (from 25% to 11.5%)
- It leads Spain in available income and income per capita
- Above the European average in rent per capita

The chart summarises critical points that defines the "black" starting point and the lights are a result of the transformation seen after access to self-governance and the commitment to its own, disruptive, against the tide strategies, built from endogenous strength and within a framework aimed towards a changing world order.

An example of radical transformation, from the roots of an industrial culture towards reforms and new actions with a natural base, belonging to a society, and who made the call for a new future world their own, overcoming the difficulties during times of change.

The country knew how to understand the new rules of the game that impacted both key industries upon which it depended, as well as the required international connection which it must favour, the strengths of its self-governance and its potential role, with its own voice, moving under the pressure of violence and being battered by incessant terrorism.

A STRATEGY OF MODERNISATION AND INTERNALISATION OF A COUNTRY AND ITS ECONOMY

Understanding this period of transformation and observable success during the period 1980-2020 is essential in order to propose a hopeful journey towards the long term.

In 1980, after approval of the autonomy statute for the Basque country, and the creation of the first Basque government after the dictatorship, Euskadi-Basque Country lived through an authentic process of economic, political and social decline, where on one side there was the hope of building a future that could overcome the crisis we were suffering, along with the confrontation between those who were committed to the rupture after the end of the dictatorship and those who committed to reform under the protection of or indirect patronage of the international community, moving from the terrorism of any alternative to a peaceful democracy, however incipient it may turn out to be. The existing terrorism worsened a deep economic and social crisis with levels of unemployment around 26% of its active population, an intense socio-political- trade union- business confrontation at a critical moment of world post crisis, immersed in the negative consequences of the last (at the time) energy crisis. Within this context, a government was created, which still had limited powers in respect of the expectations that the Basque society initially had, starting a long and complex journey towards the highest level of self-determination capabilities.

A long constitutional process within a complex negotiation process with the central state administration apparatus for the transfer of powers contained in the regional statute, as well as the assets, services, personnel and corresponding financing associated to them in a real effort to recompose and establish an industrial policy that would enable the region to stop the wide reaching economic downturn, the disappearance of its business network (especially industrial), and the serious social and health care conditioning factors and consequences (in one of the terrible eras of drug addiction in the region). From that point on, the focus on re-floating, rescuing and restructuring and/or saving businesses became an essential priority. Right from the start an economic policy focused on the manufacturing industrial policy which, was swimming against the tide in the face of the academics' thesis and the governments that saw them as problem elements of the simplified and simplistic market theory, separator of business and the public sector, conceiving its interaction as a negative current for the progress of each other. Public intervention considered as perverse, even more so when the existence of trade union powers, who also learned how to play democracy, went further than specific demands or ideological platform possibilities with a high demand content, which furthermore, found itself with an absence of business leaders dialogue, capable of generating the minimum agreements necessary to resolve the difficult times and problems suffered by our industry. Furthermore, Euskadi-Basque Country suffered from what we could call an industrial monoculture, and specifically the steel industry monoculture, while at the same time the sectoral industrial reconversion processes that started throughout Europe and the world after the energy crisis in the 1970s, which forced an absolute radical transformation of its economy. A situation which put into crisis the survival of the deteriorated state of employment, creating a lack of businesses, investment disappeared, not only international but national, of which the country complained, as a consequence of its deteriorated social

and political climate, given the elevated situation of instability. Thus, the young Basque administration, the enthusiasm and motivation that accompanied it, supported by its population, hopeful in their commitment to their region, (and to a larger degree, by the context and circumstances they suffered), generated a Basque government and institutions totally committed to the population's problems, of its businesses, and created from a market social policy its source of inspiration in a Europe that was still exclusively made up by "the group of 16"³, which became the great North Star, a spotlight and hope for the future, not only for the economic and social possibilities they could contain, or the principles, character and vocation in relation to Europe that this government held, but also for the fear of returning to the dictatorship, to the coup d'états, to centralised State impositions, strengthened by two "mini coup d'états", whose initiator and director continues to be hidden in "classified official documents", which gave rise to a halt in the roll-out of autonomous powers, "agreed" by the political powers that were obedient to the state along with their support tools, believing "that the commitment to autonomy had gone too far". Euskadi and its institutions, in full creation, recovery and reinvention, saw in the hopeful Europe an area to be reached, in the expectation that its minimum guarantees would be sufficient enough to prevent these regressive steps. We could say that, from the first moment, the Basque government took vital steps in order to take forward a complete strategy, that to a greater or lesser degree signified *"moving towards the modernisation and internationalisation of the economy and the region", taking full advantage of the spirit and can-do attitude hoped for in its Statute, the Economic Agreement and the renewed ongoing foral and inter-institutional framework*". A general framework and umbrella for an extremely long process which, over time, in one way or another has included new pieces, adjustments, orientations and vectors of a new activity linked to a general framework, that has allowed the development of different industrial political strategies, as a core of the economic and budgetary policy of the region, of the government and the remaining Basque institutions and economic and social agents, creating a differentiated and singular public – private map, which defines, to a greater or lesser degree, the Basque inclusive economic and social model. The following chart shows, synthetically, the content of these first bases/strength, that led to the configuration of a political, economic and social strategy, as described previously.

It is important to highlight, as can be observed that, from the first moment this "new economic – industrial policy" was not conceived as a political base that differed from social policies or additional development, and which was vital, as time has shown, for the generation of a network of communal well-being, in agreement with the principles that have inspired the baseline and policies that the Basque country has been able to follow throughout these 40 years. The region, faithful to its history and inspirational principles of its economic and social behaviour, has made the permanent additional strategies its own, along with its economic and social policies, in the search for full social and regional cohesion, which has a specific economic policy at its service. This base philosophy has been and continues to be the difference of our success model. An economic and social policy which has been inseparable, aiming for the highest level of solidarity possible, was guided these actions until today.

³ Group of 16. Nucleus of the founding States of the C.E.C.A. And the European Economic Community, existing at the time after successive entries with that of Denmark, Ireland, United Kingdom and Greece. Spain would be admitted in 1986.

A SUCCESSFUL RESULT OF A COMPLETE STRATEGY

A "COMPLETE" Strategy

"Strategy for the MODERNISATION and Internationalisation of our Economy and our COUNTRY"

CLUSTERING THE ECONOMY

...from the Manufacturing Industry towards all interrelated activities.

Revitalisation of Cities and Regions Strategy (BILBAO)

...Specialised regional development.

INFRASTRUCTURES (Physical and Intelligent)

CULTURE

- GUGGENHEIM
- LANGUAGE
- INFRASTRUCTURE AND MANAGEMENT

Network of WELL-BEING and SOCIAL COHESION

- Education, Health, Social Income Social Services FOR ALL.

Science and Technology

- Quality
- R+D+i
- Education and Industry
- Universities
- Technological Agents

PUBLIC- PUBLIC AND PUBLIC- PRIVATE PARTNERSHIPS

CONFEDERATION OF THE REGION AND PUBLIC POWER

TAX, BUDGETARY INSTITUTIONAL ARCHITECTURE

THREE PILLARS MAKING UP THE NEW POLITICAL- ADMINISTRATIVE- FINANCIAL STRUCTURE

In this way, the new autonomous process that involved the start of the Basque government, is based on the need to organise and build (let's say ex-novo) an institutional framework, even if it is limited by the general framework that the Spanish state and its constitution configured:

1. An AUTONOMY STATUTE, a general constitutional base for a new area of democratic will and commitment, trusting in its FULL, COLLABORATIVE, and BILATERAL implementation, open to amendment or change in relation to the changing demands over time of the Basque society.

AUTONOMY STATUTE OF THE BASQUE COUNTRY

Approved by an absolute majority in the Basque parliament, and endorsed by its population, the Autonomy Statute recognised, as an expression of its nationality, and in order to gain self-governance, the constitution of the Basque region or Euskal Herria as an Autonomous Region, under the name Euskadi or the Basque Country, becoming a basic institutional rule.

The Foral regions of Araba, Gipuzkoa, Bizkaia and Nafarroa rights were established, in case they decided to become a part of it. This Statute became the fundamental rights and duties of citizens, its basic self-governance institutions, its “own powers”, (exclusive, of legislative, implementation, of execution or compatible), ring fencing the reserve of the “powers” of the State Central Administration and the full capacity both for political – administrative organisation, as well as the updating of the Foral Regime, which came before the Spanish constitution. Equally, the way of “devolving powers” in relation to the State was established, the transfer of personal, material and economic assets associated to the various competencies, powers and services to be transferred from the Central Administration.

Of special relevance, three key items that differentiate it from other statutory rules:

- Acceptance of the autonomous regime does not imply the Basque Country rejecting the rights they would have had in virtue of their history, which could be updated in accordance with the law.
- For proper exercising and financing of its powers, the Basque Country would have its own autonomous tax department. Tax related relations between the State and the Basque Country would be regulated via the traditional Foral system and operated in parity and bilaterally.
- The Confederate conception of the Basque regions, now considered as areas (current or future), in order for, should the democratic decision decide, would create a collaboration with the regions and Foral and cultural communities, whether this be Nafarroa and/or a cross-border European Euro region, addressing current geopolitical – administrative conditions.

2. And ECONOMIC AGREEMENT, as a singular tool with which self-governance taxation and financing is to be established.

THE ECONOMIC AGREEMENT

The Economic Agreement Law 12/19881, with the Autonomous Region of the Basque Country, enabled the updating and return of the Foral system that was abolished, after successive phases during the Civil War and the triumph of the uprising, which gave rise to the dictatorship in 1937. Thus, the Foral regions of Bizkaia and Gipuzkoa re-integrated its own model and agreed a bilateral relationship with the Spanish State, strengthening the conditions, which were being exercised in Araba, and reconfigured a taxation and finance agreement model for the Basque Country and its government institutions.

This law, which was updated over time, enshrined the powers of the historical Basque regional institutions, regulated levies, management, payment, inspection, review and collecting of taxes from and in the Foral Government Departments (Government Bodies for each Basque region), setting the principles of solidarity, the basic taxation structure, its coordination and tax harmonisation between the various tax authorities, the regime relationship with the international agreements and its relationship with local Basque tax authorities.

As a differential and significant part, it regulated the “quota” concept. The Basque Country’s contribution to the State, consists in a global quota, made up by those corresponding to each of its historical regions, as a contribution for all the State’s outgoings that the Basque Autonomous Region is not liable for. It constitutes a Quota Commission, made up by a representative from each Foral Government Department and others from the Basque Government, and in addition, an equal number of representatives from the State Central Administration.

This Bilateral Agreement constitutes an essential pillar for the real operation of self-governance, under the principle of tax and financial co-responsibility, which grants sovereignty and confederate status to Basque self-governance.

This updated system widens the regimes vision and tax relationships to include the scope of the financial relationship via a single regime, based on the unilateral risk of the Economic Agreement, and the contribution capacity of the Basque Country, via the QUOTA to the State. Based on the aforementioned capacity, the Basque institutions finance its institutional bodies (functions and services) in relation to (including but not limited to) agriculture, farming and regulation of the fishing sector, the countryside; administration of justice, culture, tourism and sport; the Basque Public Revenue Department, planning, promotion and economic development and the finance sector; statistics; education; industry and commerce; Regional Police; social communication; regional regulation, housing and urban planning; public works, roads and highways; railways and other means of transport that do not extend beyond the Basque region; healthcare; social care, management of Social Security; employment and the work-related arena. Powers that are not undertaken by the Basque Autonomous Region correspond to the State in accordance with

the constitution. Foreign Affairs, Defence and the Armed Forces, the Royal Family, the Customs and Excise Regime, general transport, railways and land transport at passes through more than one autonomous region as well as public works that affect more than one autonomous region...

As a consequence, the Basque Country contributes a Global Quota, made up by those corresponding to each of the Foral Regions, to sustain the outgoings of the State, not undertaken by the autonomous.

Prepared by the authors/Financing of the Basque Country's Autonomous Region's Institutions The Economic Agreement- The Quota. José Luis Larrea/Carlos Lambarri. IVAP-Basque Government

3. An "INTERNAL CONSTITUTION", the Relations Law between the various institutions and foral bodies and the autonomous regions government, **ensuring the distribution and management of internal power, distributed amongst the various institutional levels and their scope of powers and control.**

LAW ON RELATIONS BETWEEN THE COMMON INSTITUTIONS OF THE AUTONOMOUS REGION AND THE FORAL BODIES OF ITS HISTORICAL REGIONS

As the third pillar or basic piece of the institutionalisation of the Basque self-governance, the Law 27/1983 on Relations between Foral Institutions and the Common Institutions of the Basque Country, creates the political backbone of the region, re-establishing foral regulations and how it acts within the new statutory, political, tax related, financial and competency related framework. In relation to respect of historical rights, the political – democratic will is updated, reorganising power reserves, setting competency boundaries between the various legislative and government areas under the principles of collaboration, solidarity and administrative efficiency.

This law ensures the planning, control and close inspection of the Basque government, the procedure for the delegation of, execution or internal transfer of powers, the budgetary and financial autonomy of each of the foral bodies and of governance, and the mechanisms necessary for consolidation of the Basque public sector. Equally, the mechanisms and bodies of coordination and distribution of resources are established, along with their operation, interrelated with the various institutions of each political – administrative area.

Finally, the structuring of the Foral Tax Department, the financial guardianship of the municipalities and ordinary budgetary powers they require are given to the Foral Bodies.

It set boundaries for the powers of each competency level, regulating its Institutional Bodies (General Departments – Regional Parliament; Government – Foral Government)

4.1.1. The guiding base framework of the triggered changes developing a City-Region in order to tackle a long and complex challenge.

International literature on many occasions has used, from various sources and areas of interest, different analysis in relation to the so-called Basque Case⁴. It is useful in this section to use, in summarised format, various reports and publications by the World Economic Forum⁵, to be used as a reference case when studying the competitiveness of the various cities and regions, the cities of the future or models of human development at different times in which the various work trends and thinking are moving towards models of prosperity and inclusiveness.

If we rely on one of these that included a significant step on the road towards the redefinition of the “determinants of competitiveness in the Cities – Regions, aiming to highlight as permanent analysis, up to that point, the macroeconomic competitiveness of the States that went even further than a differential reality, to the limitations or focus of the statistical data and the published sources, generally centralised and not separated into regionalised areas in which, in truth, the social and economic differentiation is played out...”

Its analysis reveals the key elements to achieve sustainable (inclusive) competitiveness in a City – Region, and highlights the critical learning ingredients, and which would be applicable all throughout the world.

The “Determinants of the Competitiveness of Cities and Regions” framework proposed by the Global Competitiveness Council at the WEF allows us to understand cities’ progress in their real ambitious creation of a specific geographical or administrative area, implementing a natural scope, protagonist of its regional strategies, as well as the appropriate route map in order to build a shared vision, essential for the sought-after competitiveness.

According to this framework, the Bilbao-Bizkaia-Euskadi case offers a series of singular characteristics that are worth highlighting: Bilbao-Bizkaia-Euskadi found itself immersed in a deep industrial decline (based on traditional sectors around the iron and steel monoculture, whose nuclear development in aligned sectors also entered into crisis at the same time), with growing marginalisation towards the periphery of European regions that had potential growth in the 1980s and 1990s, concentrated in what was then called the “blue banana”, in the London – Milan corridor, made worse by high unemployment (26%), along with pessimism of its population, with a low feeling of self-esteem and a loss of influence in the principal decisions that would affect its future. Furthermore, it was hindered by multiple economic, political, institutional and financial problems, as well as violence and terrorism, at the doors of a complex transformation, it needed to come out of the immense shadow of the dictatorship which, for more than 40 years had negatively affected the region, in the middle of a depressed context of decline and profound international isolation, it got hold of the first reigns of self-governance, with a society that in the main wanted to consider new horizons, even though a part of it either clung to the status quo of the past or looked to a break with the reformation movement that had begun.

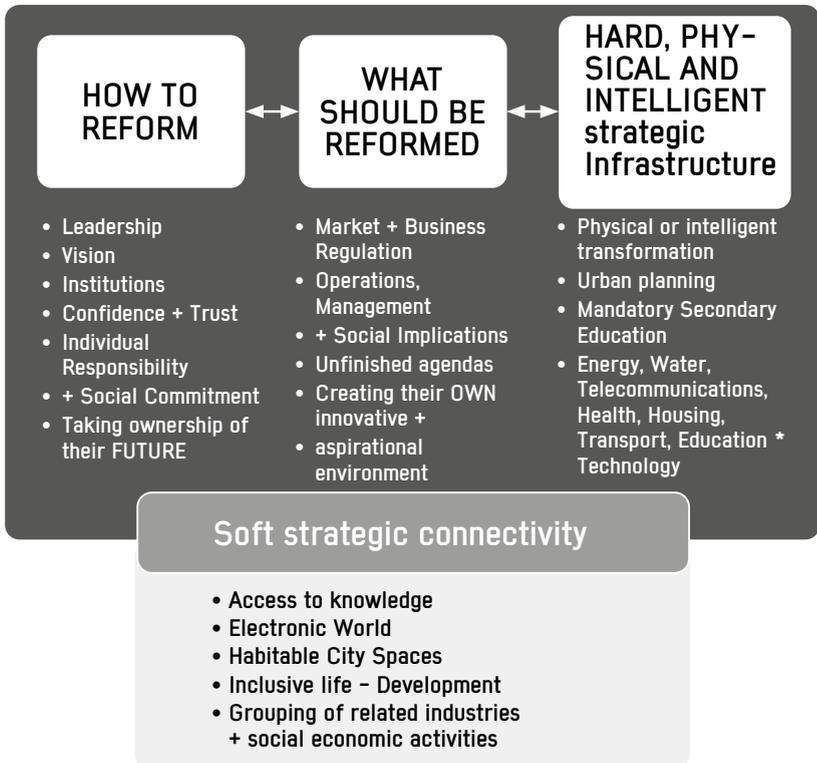
⁴ Various internationally renowned institutions have created multiple reports and studies that include in the “Basque Case”, in reference to its various economic development strategies (used as a base for the compared study in industrial policy matters, urban recovery, sustainable human development, innovation, linguistic recovery and normalisation, confederate political organisation and public financing.

⁵ World Economic Forum. Determinants for Citi-Region Competitiveness. The Bilbao-Basque Country Case.

THE DETERMINANTS OF COMPETITIVENESS IN THE DESIGN OF THE CITIES - REGIONS

USING STRATEGY

“A proposal of value in response to the observed mega trends. Turning problems + social demands into sources of employment, wealth and prosperity”



CO-CREATION OF VALUE PROCESSES

- Shared Business Value + Government + Society
- Social Progress + Prosperity
- Innovation in the process of policy creation

• Bilbao-Bizkaia-Basque Country designed its own strategy: “in/from the new dreamt about area to be built”. In other words, a dual strategy guided at it’s opening and connectivity abroad, while “ looking inwards”, to the service of its people, businesses and local agents, while at the same time urgently needing its own institutions and administration.

This strategy is synthesised in the formulation of its explicit aim: “To modernise and internationalise the region and its economy, in the service of well-being”.

- The proposed strategy is based around the four key pillars mentioned in the “determinants for competitiveness”, addressing a guided taxonomy, acting in relation to the stand out barriers and limiting factors in what we could call “the pending matter” in the four critical factors: Institutions (how to reform and, above all, in this case, reinvent a new institutional framework, and the role that each has to play within this new framework), Market Regulation and the area of socio economic competitiveness and well-being (what to reform and in which direction), “Hard” Connectivity (physical, structural and regional cohesion infrastructures), and “Soft” Connectivity (intelligent and in relation to social cohesion). These key elements should define (and answer) in function of a specific and unique vision, or a proposal of unique value. (Each City – Region is unique, it has its own aims and undertakes a differentiated commitment, within a specific strategy over various stages, addressing its own development, as well as in the context in which it is being played out).

1. 1. The taxonomy of the four pillars and its strategic coherence.

1.1. How to reform?

A) Vision

The vision set out in its strategy led to its own model, both in the definition as well as in the participation of its political, economic and social representations, strengthening the democratic system, the citizen management mechanisms and the generation of ad hoc instruments for the management of the various lines of action.

Its commitment to a confederation, away from the relational complexity that this may require, not only linked its history and “historical sovereignty background”, with the new one to be built, based on its aspirational and future vocational commitment to self-governance, but the definition of a natural regionalised area, with a cultural identity and democratic will, based on the respect of political – administrative frameworks, levels of economic development, differentiated industrial and social frameworks, that can be shared over time in function of the respective democratically expressed will, provided from the start control and counter powers, a participative politics and culture, a necessary permanent dialogue between the various protagonists involved, and the best practice of those that are governing, committed to society (from where their mandate and representation arises), to whom they serve, from their temporary positions.

B) Leadership

A shared public – public leadership, between the various institutional and public organisational levels at a municipal and regional level, (as well as the central governments and the European Union), and the public – private leadership, (under public directives and strategy, under the country’s strategic guidelines, but with the private participation and implementation), based on shared complicity and commitment in converging terms, at the service of the common good, from their legitimate interests, differentiated roles and temporary requirements.

An effort to create their own model, with the aim of accessing and reinstalling (process of de-concentration, the return of or generation of maximum self-governance of their own and differentiated areas, along with possible decision

making powers), from the essential democratic bases that they have at the time, with a new Autonomy Statute, to be implemented and whose process of the undertaking of powers and transfer from other areas of the State were both complex and slow, the recovery of the Economic Agreement, the top-level tax and financial instrument, enabling the differentiated exercising of strategies that are defined, to be designed and implemented, along with an internal confederate organisation, establishing shared leadership, being naturally created in order to address their vision and strategic roll-out. Even though with a common framework each city – region has its own specific strengths, a specific and different “state of development”, a culture, priorities, motivations and unique aims, needing different timetables, strategies and resources, in relation to which their strategies, policies and instruments have to be adapted.

C) Institutions

The use of the formal governance institutions (Government, Parliament, Foral and Municipal Institutions), allowed the Basque City- Region to redefine an ad hoc “institutional framework” to the principal vectors of the ongoing radical transformation, paying attention to: a) multiple programs and tools for competitiveness, with progressive progress that addresses current demands, the innovative clustering of its economy, driving its re-orientated recovery, moving forward with a radical transformation of its economy; b) A science and technology network (under the shared guardianship of Industry- Education and all its implicated agents); c) Specific tools for innovation, integrators of business and social participation; d) Planning and infrastructure public- private bodies; e) A “Well-being Network” at the service of its society in matters of education, healthcare and social well-being, both in relation to the principles of equality as a key factor in competitiveness as well as the generation of wealth and employment.

In addition to a (public) budgetary framework supporting the principle initiatives that drive transformation, with an innumerable amount of tools aligned with the aims to be achieved, from an enabling tax program, not in relation to its tax collecting function, but in relation to the strategic and long-term development of the Country- City- Region, which resulted in and that are essential in the application of a shared value proposal.

The institutional system, the credibility of the government, the business culture and shared vision, as well as democratic control and transparency support a high level of trust and collaboration. This present represents more than just a “culture of leadership and management”, the real fuel for a sustainable model. All these parts, present throughout the process, allow governments and society the chance to create a successful path in order to carry out the necessary reforms.

1.2. What should be reformed?

Even though the general regulatory framework tend to be the aim of supranational bodies, and these “agree plans, policies and macroeconomic agreements” (which are clearly relevant, although the real difference can be seen in the microeconomics decisions and tools, in which the local impact is a determinant and differentiating), the focus of the continued strategy concentrated on the micro economic focus towards the operations, management and their social implications, making the social economic pairing the main vector of

transformation, based on the regional and economic pairing. Always observing the world context and the impact that this would have on the decisions and policies to be implemented, while at the same time, looking for maximum co-protagonism in the worldwide changes and decisions, despite the size, political limitations or relationship and influence capabilities. The area related to these interventions advised a micro, sub-national concentration with specific adherence for controllable areas, with clear results in relation to our ongoing strategy.

The Basque strategy has been successful against the tide of thoughts and dominating execution, redefining general policies at the service of its own path, hand-in-hand with competitiveness, social well-being, social economic progress and inclusive prosperity, all from a unique platform of self-governance. Thus, its priority and never-ending reforms, which in one way or another have been implemented during this radical and successful time, recognised throughout the world, and has been focused on a series of reference vectors:

- Clustering its economy, breaking classic silos and sectors, interrelating companies, technological and research centres, universities, financial institutions and governments, generating bodies that enable competitiveness and innovation. More than 4000 leaders working every day at their various institutions on shared multi-agent projects, under the umbrella of specifically constituted bodies to encourage their shared work on strategy, going further than the specific objectives of each of the various agencies, under the umbrella of strategic projects and initiatives, using common base infrastructures, which create high added value results.
- Globalising its business framework and ecosystem (attracting foreign investment and supplementary businesses in relation to the ongoing strategy), favouring foreign production and/or services (Europe, USA, Japan and emerging nations), enabling students and researchers to work abroad and then coming back, attracting talent to the country, strengthening all types of strategic global alliances, facilitating shared platforms amongst the aims of the region and all the related City- Region agents.
- Modernising and reinventing public administrations, installing an entrepreneurial philosophy, as an accompaniment to and driving force behind economic activity, a development model and quality and efficient public service, in which the exponential new technologies play a dominant role.
- Committing to special strategic initiatives and projects, integrating economic, tax-related, industrial, technological and budgetary policies, at the service of their objectives.
- Driving the physical transformation of cities and urban and rural nuclei all over the region, providing each with a special and interconnected plan, along with ad hoc specific tools (corporate, financial and developmental management) for each case, with expert international and local support, encouraging new areas of knowledge, creativity and achievement. Redefining a unique social and economic ecosystem in order for all strategies to have an integrated and systematic interaction in order to work within a complete converging context, creating the “Basque Model” of competitiveness, well-being and human development.

1.3. Strategies for connectivity and magnetism.

Hard Infrastructures

A) The principal Hard Infrastructures and Connectivity Solutions can be summarised as follows:

Successive infrastructure plans (physical and intelligent, favouring internal and external connection (Spain, Europe, the world, with a noted presence in our target area around the Bay of Space concept⁶). Railways, Ports, Airports, roads, Logistics, Transports, Municipal Services Centres (Education, Healthcare, Sports, Culture, Entertainment etc), Energy, Telecommunications. Shared infrastructure in technological, collectivity, IT, AI and robotics specialisation. Training and re-qualification encouragement activities, up scaling for new jobs that are forecast for the future, dual education for employment – training at the various levels of unemployment.

- Overcoming the lack of pre-existing equipment and infrastructures before acquiring self-governance (the great infrastructural problems

1980 – 1986), guided the first and principal investments, programming and planning commitments, along with their scope throughout the whole region, with immediate action for urban and rural nuclei, leaving the deep, integrated and renewing interventions of the three capital cities and their metropolitan or conurbations for the following phase, aiming to alleviate the lack of public and private instruments at the service of this essential support system, deepening the marginalisation and peripheral effect of the dictatorship.

- Now after recently joining the “European Community in 1986, “Euskadi-Europe 93”, anticipating the creation of the local market (1987 – 1993). A long-term public – private multilevel government in order to establish a new infrastructure (called “physical and intelligent”) to prepare the country, to avoid the ongoing marginalisation process that the “ new single market” would concentrate on the so-called aforementioned “ blue banana”, on the north south London Brussels Milan axis”. This principal plan was developed along with the Social and Cohesion Development Initiative, aimed at preventing poverty, inequality and social isolation.

- The 2010 infrastructure programme (1996 – 2001), strengthening the previous budgetary initiatives, progressing the development options, creating bases upon which they continue to promote the support of the target development (logistical areas, business and technological parks), with the double objective of enabling the modernisation of businesses and the industrial framework, while facilitating the moving of installations from the urban neighbourhoods, creating quality public areas that benefit the community, while at the same time contributing to the revitalising image of the region in relation to the promotion of employability and in order to attract investment.

- Sustainable investments over 30 years.

B) Innovation Programs and Plans in key areas of the economic and social strategy:

- Well-being Infrastructures Network (Public Health care for all, Education - at all levels -, for all, Social Services for all), and equipment for public areas and a cultural infrastructure.

⁶ The aforementioned model and concept, apart from the geolocation of the Bay of Bizkaia, generating an open area connected with close near neighbours and in relation to their presence throughout the world.

- The Cities – Region strategy, under the strategic umbrella of the City – Nation – State which, in coherence with the regional strategy, not only uses each capital as a City – Region micro-area, but it also incorporates a couple of supplementary approximations: a) the different areas of strategic opportunity that make up the “ clusters excellence and singular development in the various “internal” areas of the City Region, but interconnect the rest of the region included in the shared and converging strategy, and b) those shared areas and initiatives that could implement key parts for the shared benefit, from the critical support to the key part that a specific city has to provide. For example, the generation of “special districts”, infrastructures- region, etc that create cooperative areas.

- Thus, Bilbao, Donostia-San Sebastián, Vitoria-Gasteiz rolled out their own strategies, not as non-functional cities as in the past, but complete ones.

- The case of Bilbao’s transformation deserves highlighting in this section, conceived by many as a benchmark of urban rehabilitation and transformation, which tends to be presented as the result of a specific intervention, the building of the Bilbao Guggenheim Museum, as if this caused the Bilbao effect without addressing the underlying strategy.

- Bilbao, because of the weight of its population, its geo-strategic positioning and economic, industrial and financial roles, is the clear head of the Bilbao-Bizkaia, Bilbao-Euskadi, Bilbao- Atlantic Seaboard, Bilbao-New Aquitaine axis, in as much as it plays a cooperative role in a converging area as a City- Region. Needing an additional area outside of its physical limits, an applicant and offeror of synergetic services and solutions with third parties, a reference for others who, required by the conditioning forces of certain shared networks or areas, may facilitate and/ or favour other development. Relevant examples are, to name but a few, Bilbao-Rioja, the world capitals of wine, the Port City of Bilbao, supra municipal and regional infrastructures such as their airport (in Loiu, outside of Bilbao), its International Exhibition Hall, BEC (in Barakaldo), and so on and so forth.

- The aforementioned example of the Guggenheim in Bilbao, may be understood by turning the argument around: its successful urban transformation was precisely that which made possible the success of the Bilbao Guggenheim, a result of cooperative strategies, that differed from that of the Solomon Guggenheim Foundation, with the aim of earning its leading position on the New York Museum scene in both Europe and abroad, Bilbao in search of its urban renewal strategy, for specific areas that needed urban redefinition and rehabilitation, of the need to strengthen their, at the time, insufficient provisions of cultural infrastructure and the necessary knowledge and agents for the development of the art – economy – regional cluster, the Basque Country needed to attract and promote foreign investment, to develop talent in areas of the future, to foster clusters that were underdeveloped (tourism), to promote innovation, to strengthen the image and positive narrative of the region (both inwards and outward), via a regional strategy that generates wealth and employment. The cooperative strategies, their best practice and the supplementary nature in relation to a complete strategy enabled the individual, singular and shared success.

- A simplified way of referring to this process, is by analysing **Bilbao 25+(1)⁷**, whose projects are included below, and which reflect the tremendous transformative effort that has been made, prior to and/or in line with the aforementioned project. **Twenty-five Strategic Projects, strengthening the physical transformation (and the contents) of the region, (from sanitation, the home, the advancement of economic development, transport and mobility, the incubating entrepreneurial centres and cultural and tourism-related infrastructures), with the aim of strengthening the ongoing general framework and strategy.**

25+ BILBAO-BIZKAIA

On the occasion of the 2010 Universal Expo, held in Shanghai, Bilbao presented an extraordinary way of providing an intense and comprehensive transformation, along with 25 initiatives or projects that had a real impact in the creation of a new City – Region. And also the generalised image that a specific infrastructure and isolated project, however iconic it may be, is the heart of innovation and global change, all transformations, not only urban ones are the result of a strategically coherent chain of interactions that terminated in a real “unique and differentiated area”, at the service of the proposal, at the service of society. This is the case of Bilbao- Shanghai 25+, which allows us to view a strategic commitment, identified via its history and essence, incorporating a complex, sustainable and planned collective effort.

The 25 foundation initiatives of the transformation, are listed below:

1. The **Rehabilitation of the Historical Old Town.**
2. Extension of the Port. The “Exterior Abra”.
3. The liberation of the Port and of the industrial areas along the estuary.
4. Development of the Bilbao Estuary 2000. The public – private partnership.
5. The Estuary sanitation. The great environmental operation.
6. Bilbao and the Estuary. The Estuary of renewal and innovation.
7. Old and new bridges connect the city.
8. The Bilbao Metro. Metropolitan connection.
9. The airport. External connection mode.
10. The **Guggenheim Museum. The symbol of the transformation process.**
11. Museums and art institutions (Museum of Fine Arts, Bilbao Art Museum,...).
12. Abandoibarra.
13. Transformation of the Expansion.
14. Removal of railway barriers.
15. The new tram.
16. Important installations: Euskalduna, BEC, Alhóndiga, the Cruise Liners’ Terminal
17. New hotels.
18. The Bizkaia Technological Park.
19. Micro-areas for social integration. Developing life in the urban neighbourhoods.
20. Old Bilbao.
21. The recovery of traditional architecture.
22. The architecture of new Bilbao.
23. Art in the city.
24. International recognition.
25. **The revolution of knowledge.**

BILBAO GUGGENHEIM ++
Shanghai World Expo 2010

25 OPERATIONS IN 25 YEARS• 1 CITY PROJECT

The urban revolution Bilbao is the result of a wide-ranging group of projects integrated with an intelligent vision.

The Guggenheim Museum represented the symbol of transformation and the visualisation of the new City Project.

⁷ On the occasion of the participation of Bilbao, as a City – Region invited to the Shanghai Expo (2010, Bilbao-Bizkaia (Bilbao Regional Government and the Bizkaia Foral Regional Government), with the support of the Metrópoli Foundation, they presented Bilbao 25+, bringing together 25 key projects in its transformation, using + as “ the ongoing process, to which many other projects would be added in time, and many of which are already underway.

C) **An intensive investment in the Science, Technology and Innovation strategy**, applied to an interconnected, inter-institutional and public – private base, that involves all fields, disciplines and budgets within a coherent model aligned to the grouped ongoing “New Economy” at the time, that encouraged the industrial policy for the Country and the City – Region.

1.4. Strategic: soft infrastructure and connectivity

With the contents associated to culture, values, inclusion, talent, training, education and connectivity and innovative access to new sources of employment and well-being being of vital importance for the HARD Connectivity, and the Bilbao-Bizkaia-Euskadi strategy vectors making up the Soft connectivity.

The principal strategic lines that have been developed can be summarised as follows:

- Wide-ranging digitalisation and technological of digital literacy providing universal access (IT4 ALL, PCs at school, SPRITEL for Internet access in public areas, introduction to microelectronics and -IMI-, CONNECT, KZ-GUNE - Information Systems, training centres network and access to the TICs throughout all the BIZKAITIK regions- for local administrations and 100% of citizens, along with the Foundation for the information society). All examples incarnated within a strategic process that has favoured participative knowledge indispensable in order to take hold of the future. Social innovation, its transformative spectrum that goes further than just technology, with a human face in the search for collaborative areas within all its actions have been the lifeblood key that has been able to impregnate all strategic actions in the construction of this transformative area, in the service of which all types of enabling agents and have been generated.
- Even though it is not about singling out any instrument that has played an important role, we should recall how the generation of a public – private instrument, initially constituted to provide quality, concept and practical application to the business and public administrations frameworks, with the idea of encouraging permanence and proposed change; Euskalit, its own development took it to the world of health, educational, well-being and social services organisations... training the trainers, creating protocols for areas of change and adding complicity within an unstoppable process.
- A movement for quality (public and private agents), with the sharing of knowledge, training and ensuring quality at all levels. Rationalisation and modernisation of Public Administrations at all levels, creating an entrepreneurial culture and attitude in all public servants' and government actions, aiming to go further than just technology, fostering the spirit of service for society, of personal and collective training progress, in the face of successive changing demands of the administration, and with the firm aim of enabling efforts that drive towards permanent adaptation of the public service to which it belongs.
- Constant progress in equality and inclusiveness, from pioneering and brave policies, such as at the time, the implementation of a guaranteed living wage for those without income, with a minimum amount considered as insufficient for a dignified minimum level of life, and meeting their essential needs. No economic change could be carried out without a prior social well-being network, in a permanent attempt to prevent marginalisation or non-adherence to the region's objectives.

- A tax architecture and permanent administration contributions relationship, along with the design and control, based on a key driver: “Taxes for a sustainable project, and not only to raise taxes for the government”. Individuals have to be implicated in the taxation process, understanding how and what we need to finance our vision and future. Going further than specific initiatives and programmes, the strategic work of SOFT Connectivity, has been supported by a social movement. The social capital is permanently strengthened, moving towards an “appropriation objective”, with the aim of committing individuals to build their own future. This explains an ongoing innovative process. An inconclusive process to redefine, on a daily basis, how to reform, what to reform, as well as the necessary soft earth and connectivity.
- Universal access to a minimum income and social insertion. The Basque country was the first local government in Spain, and one of the pioneers in Europe to introduce this guaranteed living wage.
- Science – Technology Network. Technological Centres, Basic Research Network, Excellence Network. More than 8000 networked researchers with a coordinated strategy.
- Wide-ranging programs of social innovation with ad hoc tools for innovative alliances throughout the region (INNOBASQUE), TO CREATE AND SHARE THE “CULTURE OF INNOVATION” all throughout the region. Cultural infrastructures and their essential and differentiating contents, that mark a clear uniqueness in the undertaken commitments. Cultural infrastructures, their training and educational contents, their generating capacity of social capital, of knowledge and creative capacity, of an open and critical spirit, in the search for and exploration of new horizons, a generator of varied attitudes, as well as their generating capacity of associated economic and employability related actions, in addition to new social changes and behaviours, that go further than the enormous importance in line with a clear strategy, converting intervention into a real strategic asset, regenerating the public area and its use and how it is enjoyed, as well as the recovery of cultural heritage and its driving effect for development, which are essential in order to understand the Basque case.
- The overlapping of these infrastructures in networks of international networks, sharing values and supplementary parts, opening doors to creative exchange, to the permanent transfer of knowledge, to innovative and challenging learning at all times. Bilbao-Euskadi has taken a great deal from the shared talent and models of government and has known how to provide itself with assets and infrastructures at the service of its own strategy. Museums, Congress and Music Halls, Higher Education for dance, plastic arts and of course music libraries, creative spaces, contents businesses and a growing creative industry that are unrivalled contributions, and which are an intangible, soft and intelligent part of the completed transformation.
- Identity, a live language, culture, humanism...that constitute a part of the DNA of the Cities, difficult to identify and specify, but which is underpinned in the transformative behaviour, process and capacity – commitment.

There are many voices that, when the causes and underlying driving forces are explained in relation to a “complete” transformative strategy, highlight the essential value of human and social capital, which has allowed their development. Always understood as one of the key conditioning parts of shared behaviour and

attitudes, enshrined in the essence of popular culture, extended to areas of the shared economy between different groups and social cohesion, as well as the differentiating parts of this identity, or the “DNA” which, invisible, can be seen in the spirit and operational will that culminates in the impregnation in structures, organisational models and of ad hoc governance and institutions.

- **In the case of the Basque Country, it's City – Region base, Bilbao-Bizkaia-Euskadi, cannot forget the unique effort (and splendid results) in relation to the recovery of Euskera, its normalisation and use, which was essential in the strategy that was followed.** If the initial commitment to and effort towards making it co-official, during moments of enormous linguistic weakness and low use, a consequence, amongst other factors, of the prohibition during the dark days of the dictatorship, it meant a clear differential commitment, introducing it via normal channels, at all levels of education and specialisms, irrespective of how complex they are, normalised in their full educational system, advancing progressively in the media, institutional policy and public administrations. A bilingual society, which progressively increases its richness and unique value naturally. A bilingual society, proud of its base language that is relevant, of its multilingualism and first-rate values for future journeys.

- **Recovery and normalisation of Euskera**

Within this strategic framework, we cannot forget to mention the singular effort made in the recovery and normalisation of Euskera, its use and essential role in the configuration of the new area created.

If the initial commitment to granting and recognising, with all its consequences, the official bilingualism of Castilian Spanish and Euskera, it involves a differential commitment, the work carried out in its full inclusion in daily life, to the educational system at all levels, to business, the media and to the Public Administration and in life itself in general, they mark a high-level differentiating area. A bilingual society, proud of its base languages that are relevant, of its multilingualism and first-rate values for future journeys.

EUSKERA (THE BASQUE LANGUAGE): RECOVERY AND NORMALISATION. PRIDE OF THE LANGUAGE AND BALANCED BILINGUALISM

According to the foresight exercise carried out by staff at the Basque Government Culture and Linguistic Policy, it is reasonable to deduce that in 2036 of the Basque population will understand and be able to use Euskera.

Data from the 2016 sociolinguistic survey showed that 33.9% of men and women in Euskadi had this linguistic ability.

This difference of 20% in 20 years is a reflection of the considerable increase in number of Euskadi speakers that has occurred ever more widely since, as of the last few years of the Franco dictatorship, the Euskera revitalisation process began.

The approval of the Gernika Statute in 1979, the progressive implementation of teaching in Euskera in the educational system at all levels, the transfer that occurs naturally and conscientiously within families and the conversion of adults into Euskera speakers, in this order, are some of the principal levers, although not the only ones, that have caused the growth of the Basque speaking community, and have progressively made clear the presence of Euskera in various human activities within our region. It is therefore, reasonable to conclude that if these and other factors are maintained, the number of individuals that will be able to communicate in Euskera will reach of the population within the next 30 years.

The evolution of the languages that exist in a community is intimately linked to the circumstances in which its inhabitants move. The social and linguistic context, the standardisation of the language itself, the political drive, its implementation within the world of education, business and universities, its presence within the social economic arena, as well as in the media or its use in social, cultural, sporting and recreational activities, are determinants for the use and development of a language. This reality is even more evident in the case of Euskera, a language that is only spoken in our region, (and by a small amount of people, within the Basque diaspora, and in limited linguistic academic areas internationally), with only a few more than 800,000 speakers. This has been the sustained drive of policies that have favoured progressive normalisation of Euskera during the last half of the century, after policies of abandonment and prohibition that the various public administrations applied in relation to Euskera for decades. We could therefore, deduce that the balanced maintaining of these variables, within a democratic context and respectful of the majority will of society, in which the right of all citizens to use the language they choose and to be served in that language is ensured, will encourage that Euskera as well as Castilian Spanish is the language of ever more Basque men and women.

The objective of reaching a bilingual society in which its citizens may understand and use without distinction the two official languages of our region, going further than those that are necessary for their professional or vital activities, has been and is a shared aim of the Basque society, which since the approval in 1982 of the Normalisation and Use of Euskera Law advances towards reaching a balanced bilingualism, and considers as enrichment the multilingual status in which our lives are played out.

It is also reasonable to think that this process of recovery and expansion of Euskera will occur in equal measure, although at another speed, within the other regions of the Basque Country, both in the Foral Region of Navarra, as well as in the Iparralde Association.

This is without a doubt a clear case of social and cultural innovation, that our society has been and is a part of and is a model of study and reference for other regions with non-hegemonic languages, and who are certain in their desire to prevent its disappearance.

It was a minority who, after the political crises of the 19th century that brought with them the Foral abolition, believed that Euskera could survive. It was even fewer after the Civil War and during the Franco dictatorship that committed to it. The Basque society at the time lived through a profound process of change, as a consequence of the socio-economic transformation and the important migratory movements that took place, and which until 1979 did not have access to specific political resources to promote the recovery of the language, although it did have a notable non-institutional cultural and social initiative. Koldo Michelena wrote that the authentic miracle of the Basque language was not its origin, but the fact of it had remained alive until the 20th century. Clearly the main reason for its survival in which, at all times, even during recent times, was that there was a community of men and women that Euskera served, yes as a means of communication, but which had remained alive in their hearts, of which they were proud, and which had made possible the use and transfer of the language itself. In as much as this pride in the language and identity remains, and continues to be fed by the collective and community spirit, in as much as this transformative action is promoted by internal and external recognition, because of its use and its capacity to create quality content and communication, and comes with the transformative encouragement of a community committed to its future, the survival of Euskera in 2050 will be ensured, and will continue to be a element that binds our human, cultural and political identity.

The revitalisation process of the oldest spoken language in Europe will have allowed us to be the pioneers before the whole world of a social and progressive transformation. The promotion of a small and non-hegemonic language will have helped us to build a more inclusive and innovative society.

Source: Bingen Zupiria. Councillor for Culture and Linguistic Policy of the Basque Government. Autumn 2021.

2. Process of co-creation of internal value

A key lesson in the case of Bilbao is the putting into operation of the strategy at the service of the Co-creation of Value, from and for the City – Region.

The international connectivity, the economic modernisation and its global commitment, the attraction of talent and the generation of a competitive economy is the priority service of the Basque citizens and society. This endeavour does not aim to transform a city in order to create external admiration or pleasure, it does so to improve inclusive and sustainable competitiveness, at the service of its economic agents, and above all, for the well-being of the Basque people who live there, who make it liveable and enjoyable, increasing their sense of belonging. The key question is here: *What is the strategy for? Why is there a competitive City – Region type? Why make the effort to carry out reforms?*

At the end, a CO-CREATION of Value process in relation to a series of key pillars:

1. **A shared, long-term vision** under the public leadership implemented in relation to multiple strategies, specific management and financing tools along with constant evaluation.
2. **Public – Public and Public** – Private Associations, generating cooperative alliances for a shareable asset.
3. **A social economic vector that directs the integrated process in order to generate an area of competitiveness and well-being.**
4. **Self-governance.** To appropriate our own future and provide it with the strategies, tools and resources that make it possible.

3. Are we learning from Bilbao-Bizkaia-Basque Country?

Is there something different in the Bilbao-Bizkaia-Basque Country narrative that can be applied to other cities throughout the world? Yes.

If we go back to the start of the “TRANSFORMATION of BILBAO”, we will see an old manufacturing and port city, similar to all those with progressive development based on an interrelated and historical chain of a group of industries that move from a strategic geographical position, of initial commercial needs, of pre-maritime navigation industries, foreign trade and the comparative advantage provided by traditional manufacturing industries. We can see successful times, declining into a deep common crisis. We can find similar examples to overcome such a crisis, even with the same protagonists (methods, consultants, initiatives, multilocation businesses...), but only a few are successful. Why?: “Co-create a unique value proposal, aligned with its own identity, culture and needs”. A long journey towards a competitive city – region.

Bilbao-Bizkaia-Basque Country accepted the crisis, they understood the need for a new (unique) path, they redefined their own value proposal, they went down the road of connectivity towards a changing world, and turned the new trends into their own strengths and culture, learning from others, but without copying any single model, leading a permanent public – private association, assigning resources and enabling frameworks and route maps, along with the time to achieve this. This

strategy is based on an integral and complete model, not just defined, but implemented via the economic, institutional and social policies of the time, redefining the tools of governance. The so-called “Basque Model” has been built based on the sustainable hard work and commitment during a long process (40 years), and everybody knows that, by definition, the competitiveness of cities and regions is a never-ending journey. There will be new demands, new needs, new agents, new objective. And ad hoc evolve strategies must be implemented at all times.

4.1.2. A long journey weaving multiple complexities, learning and generating a differentiated advantage, configuring a ‘basque sustainable human development model’, based on fair competition and inclusiveness.

The academic world tends to dissect strategies, application times and moments to a larger or lesser degree in relation to the policies applied, as well as the subsequent conceptual recommendations, that will impact (improve) the methodology, practice and decisions that have been with this over the years, from a start point to the current state of events.

My ongoing dialogue or debates with many colleagues lead me to a discrepancy, more a clarification in essence, regarding our trajectory during 40 years of transformation. While they insist in general terms, in highlighting differentiating phases and periods as if the strategy in question for example, at the start point would have been “exclusive and excluding” saving and restructuring, at another time it would have committed to innovating and giving relevance to technology, and even later, to the world of knowledge, and that, in the light of current methodologies and practices, they would be processes and plans that could be criticised which, “took place and arrived from top to bottom”, with the consequential limited participation that will lead to the mandatory investment in a process “by all”. I sustain that the strategy that has led us here aimed for, during every stage and at all times, to be the most comprehensive possible, and during each stage, it acted, in one way or another, in relation to every part that would make it possible. The level of interaction and participation is determined by the climate and context at each moment, the level of possible implication of its agents, specific wills and a generating trust. In all cases, the responsibility for whoever has to decide can never be delegated or renounced and, has to act at all times in accordance with the circumstances, needs and social demands, including the risks and opportunities that the common good pursues. Equally, the “active committed participation is one thing, and the passive informative stage another”.

The base strengths from which we start today to face the future are not the result of chance, but a collective effort (many times in relation to the limited participation and commitment), which have been able to respond to the times, to anticipate changes and to basically maintain a coherent and sustained path.

Thus, when consulting a recent research document published by the Basque Competitiveness Orkes Institute, analysing the “ long-term regional strategy for inclusive competitiveness 2008-2020”⁸, under the guardianship and methodology of Prof Kevin Morgan, within the framework of a series of “ cases of success”, monitored and proposed by the European Union, it states “*The Basque Country is one of the few regions throughout the world that can claim to have built a consistent, successful, industrial – regional, focused and sustainable strategy for*

⁸ “Long-term regional strategy for inclusive competitiveness: The Basque Country case, 2008 – 2020”.

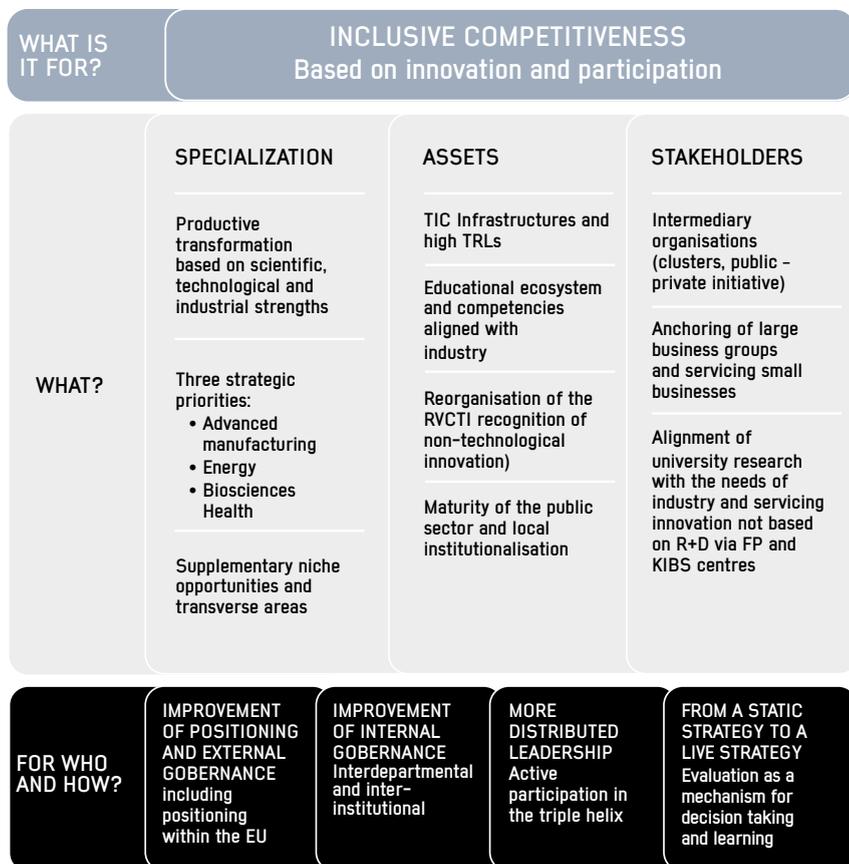
Orkestra-IVC 2021/05 • Mari Jose Aranguren, Mikel Navarro, James Ralph Wilson, Edurne Magro, Patricia Canto, Jesús María Valdalisó

decades. A strategy that has shown to be resilient, sustainable and successfully navigating the various financial crises, generating ongoing improvements in results along with economic and social policies. A strategy that continues to be at the forefront of inclusive competitiveness and is a clear benchmark of learning for other regions throughout the world”.

We should highlight that this document and the community assignment has as its aim the enabling of a route for possible commitments that encourage the various European regions in the redefinition of their future commitments, in relation to their industrial and intelligent specialisation strategies proposal. Strategies that the European union demand as a mandatory base in order to address its transformation and participation processes in relation to the hoped-for European funds, that we shall study in the next section.

This report summarises the aforementioned strategy in the chart below:

SUMMARY OF THE BASQUE COUNTRY STRATEGY (2008-2020)



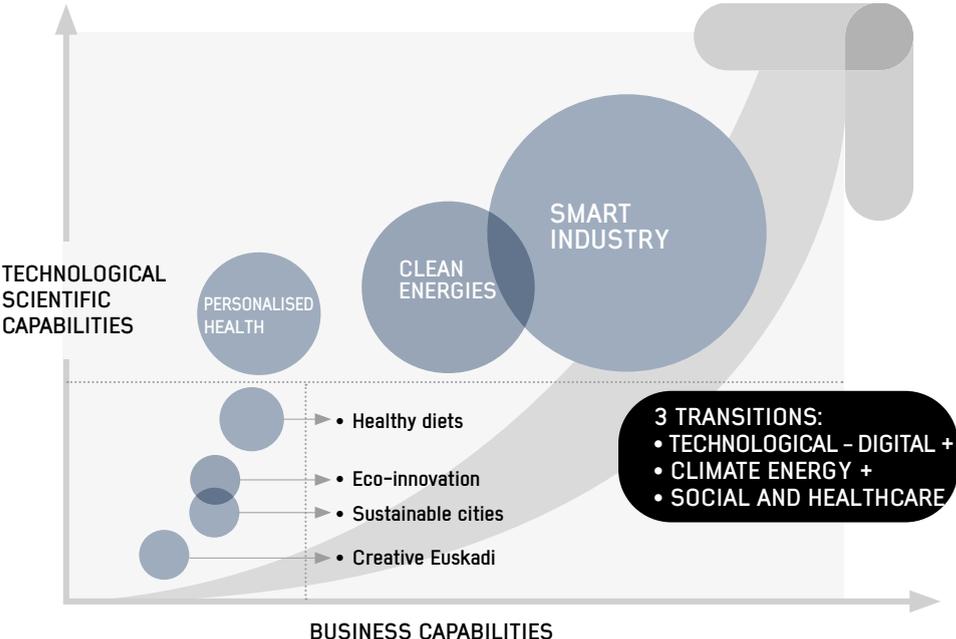
In its executive summary, it highlights “its notable transformative process, its quality growth with one of the best GDP per capita rates in Europe and the lowest percentages of population at risk of poverty or social exclusion”. It summarises its differentiating characteristics that would have allowed it to respond to and overcome financial crises and world economic recessions, generating resilience and ongoing improvements in economic and social results. It highlights:

- The commitment to strategic priorities and niche opportunities via an explicit intelligent specialisation strategy.
- The reorganisation of the Basque Network of Science, Technology and Innovation, and the alignment of the capabilities ecosystem with industrial needs.
- The change in focus towards non-technological innovation as an addition to technology.
- The improvement of governance mechanisms to promote more distributed types of regional leadership, as well as improving external connectivity.

Without doubt, wide-ranging international recognition that, along the same line it has expanded all over the world, via business, academic and government leaders. Strategy, competitiveness and inclusive human development highlight and consider as positive the journey made so far and the results that have been achieved.

An “Intelligent specialisation strategy for Euskadi” which, in its latest guise published in 2021, on the eve of new post Covid-19 pandemic transformative actions, which we have highlighted below in the following chart.

**EUSKADI AND ITS INTELLIGENT SPECIALISATION.
A REGIONAL STRATEGY FOR THE RIS3 PERIOD: EUSKADI
2030 SMART REGIONAL STRATEGY**



A relevant chart, which will accompany us throughout the book, also highlighting the future lines in the priority pass towards 2050.

4.1.3. And how have we got here? Our journey towards competitiveness

As mentioned previously, our commitment to providing ourselves **with our own development strategy, being committed to the challenging objective, not only of overcoming an initial crisis, but a future of prosperity that has been moulded over time.**

Our journey towards, what time has led us to calling the “Model of Competitiveness, Well-being and Inclusive Human Development” has been occurring, via permanent learning, commitments and successive “strategic attempts”, commitments that generate multiple instruments, weaving alliances and complicity, along with hard work and effort, confronting difficulties, taking on risks and a solid transformative will at the service of our society.

As our region of Bilbao-Bizkaia-Euskadi did with its people over time, converting challenges into opportunities, expectant by the search for solutions to its needs, going through multiple, new and pioneering associative initiatives and shareable solutions, observing the world and bringing home ideas and travel companions in order to embark upon interesting unknown journeys, this non-stop journey has known how to include progressive changes, parts and plans, which have created a “coherent strategy”.

As mentioned above, the starting point in 1980, as at all times, both complex and exciting, meant that those who had the privilege to be a part of this commitment, interpreting (by the strength of our analysis, as well as due to the will of making possible our hopes and dreams), the principal keys that would explain the state of the world economy, the main trends of change and its foreseeable impact on the Basque economy (“What the world economy showed us”), we would get busy with the task of defining what we would then call, “A strategy of modernisation and globalisation of our economy and region”, aiming to make sense of the foreseeable role of the new stakeholders (States, cities – regions, territories...), the role in which our small region, with city – regional characteristics, a sub-national entity, an invertebrate area on both sides of the Pyrenees, could undertake a co-leadership role and offer the society a prosperous future. We also needed the desirable framework and tools to carry out this successful strategy. We identified the existing gap between the needs that the new paradigms would generate, and the tools that our current political – economic framework offered (contents, competencies, potential developments), accompanied by our own strategy for the country, with considerable focus on the initiatives and critical factors or vectors that our society would require, as well as its aspirations of well-being and development. It is impossible to highlight the extenuating and extraordinary work, in the main anonymous, of the thousands of individuals that have made this journey possible, responding to the shared demand of a society as a whole, from their various areas of responsibility. **True choral work!**

The first five-year term required a firm answer, to the multiple pending necessities and needs, one by one, while at the same time preparing the minimum foundations for a future supporting structure. Preventing the fall, one by one of the dominoes, our industrial and business capabilities, responding to the serious consequential social problems and aiming, whenever possible, to highlighting the first lines and areas of the future. A period rich in generation

of institutional frameworks, the initiation of Foral tax agencies, taking control of the recovered economy, planning the future Basque health service along with its social services, building the basic vital infrastructures, and unknown Public Administration, the creation of a technological base, a new encounter, to put it gently, with a public university, earning the trust of businesses and the minimum level of trade union support, a mild exposure abroad, a new encounter and recognition of the role of our diaspora and a long list of other items.

Later with the encouragement of the Basque Country, it was understood that going further was vital, along with redefining a more structured strategy, and furthermore, sorting out our aim, which would also answer our wishes, principles and *raison d'être*, from our clear aspirations of self-governance, and being fully aware of our size, passion and exit route.

We would find our travel companion in those ideas and work that inspired new answers to what was then called the “new economy”, to be aimed at new observable signs, with the possibility of exploring our “Competitive Advantage”⁹. From that point on, over time, together we have learned (in both directions) the wealth of a changing world. The Basque strategy has been nurtured by multiple stakeholders, new references and an innumerable amount of contributions, strengthening and shaping our journey, responding to all types of challenges and new economic and social hardships.

1. Competitiveness and Prosperity for inclusive development. In the face of a new challenge for the economy and society.

Throughout the last three decades, the concept of COMPETITIVENESS has marked the horizon and aim of practically all the strategic agendas of governments and the economy in general, even though it has not always been properly understood, nor sufficiently analysed, and even less so applied. On everybody's lips, highlighted in all types of texts, and disseminated throughout the main schools of economy, business and public management, it has been and is the subject of debate, proliferating all types of “accompanying” adjectives to the term base, which aims to “incorporate or qualify” those parts with which there is a discrepancy, or which seem to “perfect” the base model that it defines.

In relation to this concept, with a greater or lesser degree of real or accommodating discrepancy from the academic world, the prevalence of the model and concepts of competitiveness cannot be questioned, and which are shared all round the world by Michael E Porter. His model, based on a Basic Framework, “Determinants of Competitiveness”, aligned with its definition (“a nation or region is competitive in the measure in which the companies that operate there are capable of successfully competing in the local and global economy, while at the same time maintaining or increasing salaries and the standard of life of its citizens, generating an integrated and properly aligned area around a unique and differentiated strategy”, he explains in terms of productivity, of the macro and micro economy combination (above all), generating a spatial ecosystem, where the economic and social strategies have to be applied, in a converging and simultaneous manner, in clustered areas, overcoming silos or sectors that are not directly related, going further than the simplified

⁹ Michael E. Porter, Harvard Business School Investigated clustering and competitive strategies. Years later, prior to the publication of his well-known book: “The competitive Advantage of Nations”, Euskadi was the first region – nation within the world to apply a complete strategy based on these concepts.

conversion into “chains of productivity or value”. A real complex process, over the years which could not be any other way, demanding multiple initiatives and commitments to the involvement of various protagonists from both public and private fields. To this conceptual chart, many tools have been applied, designed in an ad hoc fashion, in order to achieve its aim: the chain of value, the competitive diamond, the five strengths, the clustering... (All classics in the world of the economy, business, public policies and the Academy), and the most recent, the co-creation of business – society value movement, making up, in one way or another, the conceptual and contextual ABC of the process expanded throughout the world. So, competitiveness, competitiveness and sustainability, innovative competitiveness, social competitiveness, shared competitiveness, inclusive competitiveness...are “corrective or progressive” terms that impregnate strategic literature and economic development.

Today, from Euskadi, it would seem more than reasonable to move towards the future hand in hand with this solid, conceptual and practical base, which has served as the strategic direction and design of public policies and economic and industrial promotion programmes, which have enabled clear progress in our level of development and generation of wealth and well-being. A model, which today is sufficiently implemented throughout the region, and which enjoys clear international recognition and prestige. A model, which in one way or another, receives the validation and interest of governments, academia and international institutions, concerned about economic and regional development. The Basque Case and its sustainable human development model is the subject of analysis, study and international recognition, and as a consequence, a good reference point upon which new steps towards the future can be considered, as we have reiterated.

In line with this, we should also mention the source, Michael E. Porter, who asks: *Why are some nations and regions more prosperous than others? Which conditions enable innovation and growth of global or local businesses? Which framework and type of elements, policies and contents allow the sustainable achievement of new and better jobs, better salaries and raising the standard of the lives of the population in a certain area? Why is COMPETITIVENESS, which is rarely understood, the response to this great economic development challenge?, and which asks us to provide a coherent and complete support framework, which starts with defining the “determinants of competitiveness”, remembering that even though in terms of competitiveness “everything is important”, it is no less true that the true difference is marked by the micro economic approach, the clustering, the interaction between the economy and society, and the cooperation amongst businesses and governments, acting within the same region or territory.*

With the aforementioned framework set, it is clear that both recent changes in the behaviour of the various economies throughout the world, the emerging arrival of new stakeholders, and the varied globalisation of the economy, overcoming globalisation in its initial definitions, with the consequential paradox of globalisation, which creates an ever more local strength as the wave of globalisation extends, the multi-lateralism opposed to its uniform extension, the shortcomings and inequality, amplified by the crisis of recent years, the voices that question the economic and business models (even the company itself), along with the blame for (in addition to banks and governments) this serious

crisis, a generalised disaffection with politics and undervaluing, in my opinion, the relevant role of governments in the performance of the economy, as well as the call for a new inclusive economic development model, advising a return to the ongoing competitiveness model, in order to “highlight it” and review (and/or redefine) its key parts in order to return the competitiveness at the service of the prosperity and well-being of the people. A journey in which, as we will see further on, the role of governments and the society itself, as well as the inevitable transformation of businesses, is vital and determinant in relation to the success in achieving or failing with this policy. Therefore, this is the road that we propose in reconsidering, with the aim of identifying the new tools that Euskadi needs, in order to achieve success. In other words, we propose:

“The Unblocking of Competitiveness: opening up its essential concepts and elements towards the true inclusive development” A complex challenge that, at a time such as this, in which the widespread and proclaimed disaffection with politics, retracting and returning to the old affirmations of the past, which made the case for the inhibition of governments, in favour of a supposedly free, efficient and transparent market, a driving force for well-being, in the long term, specifically requiring more than ever, a solid policy with public leadership and commitment. An area where the role of a “good citizen” is given to business, a responsible creator of employment, necessary for its traditional business model.

The world confronts the “homogenous” models that have been propagated as “unique”, from the same majority of international institutions and centralised governments, supported by a type of multinational business barely committed to the regions in which they operate, (and less and less so with its origin or parent company), against the options of progress and well-being, wishing for areas that are different to the ones being offered. And it does so creating new alternative routes: the federalisation and regionalisation of strategies and economies, the “return home” of multinational businesses from their “multi-local concentration” in low-cost salary areas and strategies, towards areas of real and sustainable competitiveness, the “democratisation of the economy”, the clustering of economic activity, the “micro-economisation” of differentiated strategies at the service of different societies and communities, the growing currents of shared value, or the co-creation of the business – society value, with the social needs and demands being at the heart of the business model of leading companies in the various industries and markets, with ever more globalised dependency, the redefinition of global value chains under the smart plugin intelligence collectivity of businesses, countries and knowledge, and the ever increasing relevance of talent and its management, optimising its proper use and application of relevant technologies. An explosion of ideas, new paradigms, in an ever more interrelated economy, more committed to politics in a new business – business, region – region, business – government and economy – society cooperative area.

The various current of opinion that furthers current economic debate is strong. From those who proclaims the need to “reinvent capitalism”, in addition to those who highlight inequalities that the same system generates in a growing and recurring fashion, or those who go further towards the foundations that for decades have explained a separation, at least temporarily, between the economic and social challenges, or the relevance of growth without the direct

accompaniment of social progress, or the new current of a shared business – society value. This new wind that blows in favour of the requested social change. The countries and businesses capable of unblocking the competitiveness model (whose formulation and contents will remain valid, even though they have to be correctly understood and applied), will earn the so desired inclusive development: economic and social, for all. And when talking about business today, we're not talking about exclusive independent private units, but new socio-economic entities within their contexts, the environments in which they operate, and the policies and strategies of the government, at all levels, that explain a large part of their results. These are the social needs and demands, the new generating vectors of the new and successful future business models.

Thus, our old colleague, collaborative competitiveness requires a new station along its long and travelled journey. From the Basque Country, and with it, everybody, accompanied by Michael Lee Porter and its reference framework, his academic thoroughness and collaboration in application of new and different policies, appropriate for each strategy and country, we learned about all the parts that were determinants for prosperity, we found out that the “network of well-being” could not wait for a specific economic growth, but it must be undertaken jointly, we learned and confirmed that the real economy was not an illusion but the source of progress, innovation and the future. We understand the value of the business and its strategy, we moved away from the ideas of the past to understand the strength of the “extended organisation and change of value”, relativising the weight of the autonomous physical dimension”, and we strengthened the respectful internationalisation, aligned with our regional strategy (for ourselves and for others, in relation to who we would be operating). We understood that the world had changed, and the old economic sectors were just prisoners of statistics and public accounts, clusterising our actions in accordance with the markets. We understood that the markets and countries want SOLUTIONS, and not products, they want long-term partners and not short-term salesman, and that the public – private relationship is an area of cooperative commitments (competing and collaborating at the same time), from the differentiated professional thoroughness, and not simply a shortcut of influences. We are learning that the circle has to close, moving on to the following stage of the co-creation of value with and for society, which demands to be an active part and real stakeholder of the proposed project. All this is competitiveness. All this forms part of the old model, and all the renewed and redefined parts may be part of the new model. We knew that the true, venture, innovative, strategic and competitive by definition, does not understand incremental improvements, but demands a reinvention of things, redefining business models, thinking big and taking hold of its own future. All these parts that have been a part of our learning, constitute our particular journey towards competitiveness. A long journey all over the world which, in our case, Euskadi, we have been on for the last four decades, and which today has become second nature.

A journey that has provided us with analysis and study frameworks, which today they are not only valid, but essential for any approach or understanding of business, industries and the market in which they operate, as well as their various interactions as mentioned by it previously, such as global industries and firms.

What today are called the “business ecosystems”, highlighting the enormous importance and influence of governments and their policies, the vital collaborative economy, the organisations that go beyond that of business, the clustering of economies with its essential local prevalence as an irreplaceable platform of the differentiated and prosperous results that seem to be its nature. During this journey, we have learnt to consider the various levels of government, with a mixed but relevant record in relation to the end result for business. Euskadi however, “built a network of well-being, not only for justice and equality, but also as a determinant factor of competitiveness and cohesion, which were always a vital part. Our strategy did not distinguish to the temporal planes (first the economy and then social assets), but a single strategy.

In Euskadi we have learned. We have strengthened the role to be played by governments via different stable public – private and public – public cooperation models; we have understood the true roll and permanent organisation of clustering the economy, moving away from the classicism of the industrial sector, determined by market and product concepts of the past, giving way to diverse, multidisciplinary, multi-industry concepts, that differentiate from market to market; we have understood the competitive impact of the identity and sense of belonging; we have gone into detail and developed together, as well as in relation to policies and well-being networks (education, health care, social services...), along with economic networks and the importance of not separating its temporary execution, leaving the sharing of wealth to the positive results of “ economic” best practice; we have understood the true sense of the defined business dimensions and size, not in relation to each business economic unit, but in relation to the value of a network with which it interacts, also overcoming the transition from analogue concepts to digital dynamics; and we have been able to get ahead of the difficult balance between an ever more globalised economy with the differential effect of its location in the complex local dialogue, meeting real and legitimate demands of governments, countries and regions, for a more important role in their own strategies, without the issue of those who assimilate protectionism and reductionism, with a differentiation of suitable policies for different situations, at the service of prosperity for society.

In Euskadi, we believe we understand and know why nations, as well as businesses, industries, institutions and societies prosper. The journey is long and complex, but we know the route. We have the ideas, resources and commitments necessary to “unlock” all those keys, padlocks and obstacles that block our competitiveness. It is now time to open them and redouble the commitment to “building a prosperous country and society. A complete model of shared competitiveness”

Today, the EU, the main international bodies and a certain “generalised and globalised” consensus recognises as a strength and vectors of success, the principal pillars upon which the aforementioned “change” has been built. (Pillars already highlighted in the IVC-Orchestra First Report on Competitiveness, in their first Report on Competitiveness in Euskadi, laying the foundations for interpretation and entering into detail in the key elements in the transformation of the economy of our region, after approval of the Gernika Statute).

It is time to review those keys that the concession of the Lee Kuan Yew Award to the best city – region in the world to Bilbao-Bizkaia-Euskadi by the jury.

EUSKADI: BILBAO-BIZKAIA-BASQUE COUNTRY DIFFERENTIATING KEYS OF ITS SUCCESS

- 1 A relatively defined vision, towards the creation of an area of well-being, with its own voice, within a new Europe that is being built.
- 2 A public – public and public – private commitment and complicity. From Public leadership and implication within a “ shared” planning framework.
- 3 A commitment to the DRIVING NUCLEUS: INDUSTRY, valuing it’s long-term wealth generating capacity.
- 4 Unifying micro economic and social strategies and solutions towards an area which is being understood as “ Shared Competitiveness”.
- 5 Conviction in relation to a global need/reality.
- 6 Self-governance: Our ability to decide.
- 7 From A COOPERATIVE CONFEDERATE MODEL: Basque Government + Foral Local Authorities + Municipal Authorities.

Fuente: Prepared by the authors: contrast with OECD reports and EU regions, Kuan Yew. Jon Azua – Enovatinglab (www.enovatinglab.com)

Key differentiating success factors, which recommends “inclusive industrial thinking”. Euskadi is en route to this, at the forefront of the heavily requested “Industrial Renaissance”, which inspires the new European policies that can be generalised all throughout the world.

2. Towards a new area of prosperity, wealth and employment.

Are there new needs, tools and aspirations of our economy?

Irrespective of the fact that all regional development and strategy models have to count on the promotion, decision and significant proposals by institutions, their legitimately elected representatives at all times will have to interpret the society’s aspirations that they represent, addressing the situation, the times, determinants of scenarios and changing policies, and it seems clear that the Basque horizon and scenario for the next two or three decades will be determined by a set of actions that involve the need to design a “Complete Regional Strategy”.

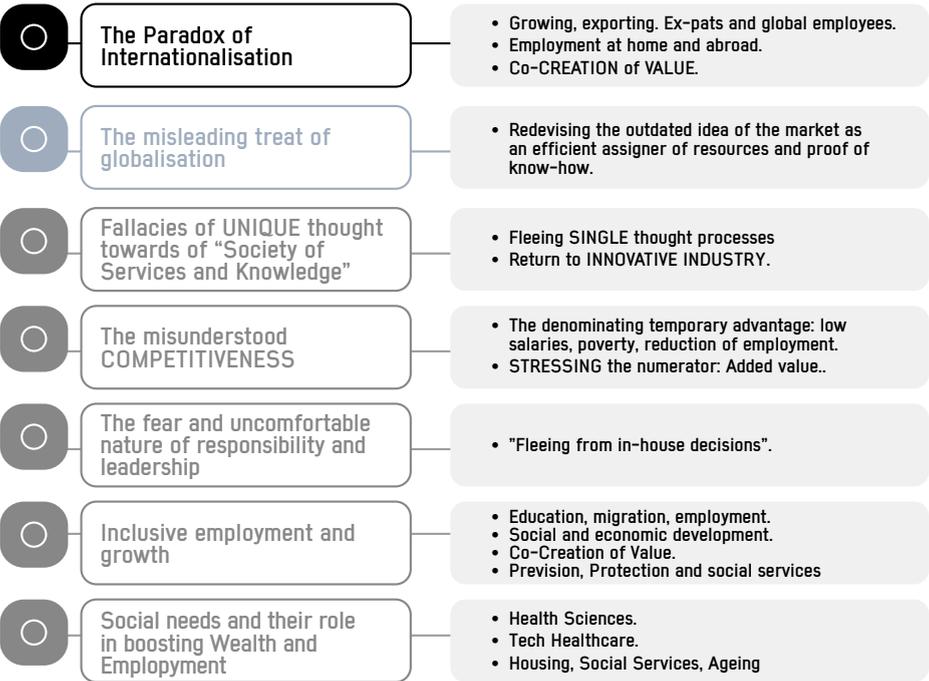
This strategy has been endorsed through a lengthy working process, with some successes and some failures, with greater and lesser intensity of resources, willingness, policies and programmes, meaning proposals have been made, encouraged and controlled from within the Basque Government and Parliament with the invaluable assistance of the Foral institutions in accordance with the

competence and skills distribution of each one of these. Undoubtedly, the levels of modernisation, economic development, progress and social cohesion achieved by Euskadi may be rated positively. That said, past successes (supposing, for the time being, that we agree that these can be viewed as such) are not enough, nor do they serve as guarantees for the future.

Successful processes, no doubt, which do not mean however that their former relevance allows us to feel at ease vis-à-vis the future, that do not demand changes to overcome the new challenges around the corner.

Consequently, as with any strategy (whether personal, entrepreneurial, territorial, governmental), we need to take charge of our future and create a differentiated, desirable and shareable scenario with our Society. A strategy that responds to the tests that new challenges, Megatrends and economic, social and political attitudes offer. This general framework must be equipped with the key instruments to tackle and overcome the changing hurdles and hindrances (and also opportunities) that are before us. In this way, what can be called “the main paradigms associable with the new reality, opportunities and demands of the economy” can be identified. New paradigms and paradoxes that merges the dichotomy opportunity – challenges that are listed in the diagram: “Adapting to new Concepts and Paradigms”. Reviewing former paradigms that were taken as valid and unique as part of the prevailing ethos.

ADAPTING TO NEW CONCEPTS AND PARADIGMS



Source: Jon Azua-Enovatinglab (www.enovatinglab.com)

New inputs to be incorporated into the conceptual model, with a view to configuring this stage of the competitive advantage that each nation pursues. From our extraordinary and privileged position (while not devoid of risks, dangers and weaknesses) we must turn our problems into opportunities and sources of wealth, employment and well-being. Beyond the labels that may seem similar to the challenges faced by any other country worldwide, the socio-economic, territorial, human and institutional capital and starting point enjoyed by Euskadi, guide its own growth and well-being vectors. It is precisely the social demands, a mirror of the difficulties and issues that afflict us, along with the new sources for solutions, wealth and employment upon which we must generate our space of opportunity. We must contemplate, with a genuine spirit and commitment to innovation, the changes and opportunities that the future lays before us.

A reachable framework and scenario, adapted to the social challenge of responding to needs, and under principles and models of inclusive development. This model is solely possible by aligning objective commitments and responses via companies – society – governments. A lengthy and complex process that demands from all of us a genuine attitude shift (individual, solidarity and collective, at the same time) starting with the actual company, and through each one of us who must work towards “designing our Framework to take charge of our future.”

A wholly ground-breaking framework that allows for the creation in Euskadi, of a space embracing competitiveness and well-being, in line with the models of City – Region that have already emerged as spearheading spaces of well-being and sustainable development. Spaces of Progress and Development, Co-creating Corporate and Social Value. In a world in which Cities – Regions emerge forcefully, and which are the new players, alongside standout meeting points between the global and the local, demanding to be equipped with a series of key pillars to ensure their differentiated advantage in hard-fought world.

3. The keys to the new Basque (...and world) economy

The economic downturn of recent years, the aid and deep-rooted scars that the current pandemic will leave behind, and, above all, the widespread disruptive changes in the coming years, with the dismal backdrop of growing inequality, force us to seek out new paths. Alternative thoughts, paths and (also) dreams towards a new desirable space.

If, for example, the message and mantra of Innovation seems to have been instilled as if it were the magic label that solves everything. If innovation, entrepreneurship, competitiveness and internationalisation, as well as the construction of “Specialist and smart regions” appear to be the interchangeable strands of any successful economy, then it would seem more than reasonable to open up to the contents and principles that inspire them to shift them from the entrepreneurial world to the social and political world and to back shaping new spaces of innovation, competitiveness, well-being and governance that respond to the changing challenges and trials faced by the economy, politics and society, and make it possible to achieve a successful future at the service of their communities, populace and people. We need to overcome the fixed frameworks that were commonplace in the past and adapt them, permanently, to the shifting demands of any given time. If we call for creativity and innovation, to break down barriers, to reinvent the future, to overcome immobility, to think “from outside the box” to society, to the different groups and stakeholders of the business, trade union, university world... *Why not apply this*

attitude towards the inevitable search for new frameworks that respond to new social agendas and demands, facing the new directions that competitiveness calls for?

The Basque Country needs a new manner of responding to a series of impacts that will shape our future:

- **We are, in fact, living in an increasingly Glocalized NEW ECONOMY.** Its profile is determined by an increasing globalisation and internationalisation of goods and services, the increase in world trade, conceptual simplification and management on the one hand; and, on the other, the resurgence of the local factor as a differentiating element of competitiveness and in which speed (from idea to market), technology (especially information technologies and their use), the convergence between industries, technology and knowledge and the generation of new spaces towards the so-called “creative or idea or knowledge economies”, with an urban population and a growing prominence of Cities-Regions demanding new social behavioural patterns, better governance and inclusive development.

- **A new economy that requires cooperative attitudes and actions.** No company, region, government, person, is able to face the future alone. This requires articulating “schizophrenic” strategies that allow for it to compete and cooperate (most of the time with them) in unison. Frameworks and types of relationships throughout the entire “value chains constellation” (in the case of companies), worldwide. Internationalisation has changed dogmas and paradigms, and requires generous and multi direction collaborative competition, and not simply an “old market” or a market in which there are winners and losers.

- **New communities, networked, connected at the forefront of knowledge, while properly settled in their original or own spaces.**

- **A growing duality of developed and developing worlds, these increasingly inter-related that require shared strategies and commitments for the eradication of poverty, the fostering or transformation of “inclusive capitalism”, active attention to climate change and its impact, a commitment to sustainability demanding shared strategies, in a double global yet local space.**

New spaces and times that demand, on a daily basis, new ad-hoc instruments to plan, manage and control the new spaces to come. Governance fully rooted in a real and duly legitimised participatory democracy.

Thus, obviously, if the “expected benefit” seems obvious, its distribution is not so clear. The “global benefit” is only achievable region by region, company by company, person by person. These are the times of the microeconomics that allow committing agents (in that cooperative model already mentioned) at the service of a strategy of their own, desired by the people involved, territory to territory, space to space.

This is the economy that is approaching. Not an economy erroneously described as global, antithetical to natural local development, moreover at the first and last service of people. We live in an economy in crisis, indeed, while full of opportunities, there is a gloomy backdrop of growing inequalities and unsustainable unemployment. Both require, of course, global solutions, though, above all, local and ground based: “regionalised and/or local and specialise strategies”, microeconomic, based on a true interpersonal, public-private, inter-institutional commitment, in close coexistence with radical changes in the educational, demographic, fiscal and social world.

New challenges, unequal, with their own and differentiated responses.

Along these lines, if we look at the leading countries in the world rankings of human development, competitiveness, innovation... we will find a series of shared features:

- **Highly decentralised countries with models of government of con-federal use and cut with complete “schemes and policies”,** coordinated and of measurable and directly controllable implementation and not at a sizable “statistical distance”.
- **Sufficiently stable policies and strategies, the result of a direct interaction between the different institutional levels and companies, in long-term projections.**
- **Regionalised spaces supported in their own institutional framework, adapted to the sociological reality. With a clustered and specialised economy, enabling its connection both to the forefront of knowledge as well as in relation to the principle global value chains.**

New Players - New Solutions.

Upon every changing moment we need to adapt to a desired and induced reality. This does not entail waiving any principle and aspiration, or “perennial pragmatism” or paralysing accommodation or “possibilism”.

Nowadays, the open and globalised context strengthens, in turn, local communities in a new order of relationship, conducive to economic interdependence, from free decision and accession, where appropriate, makes it essential to devise new shared frameworks, promotes and demands new management instruments and political and administrative frameworks beyond the historical and existing structures, advises new forms of administrative innovation and government and new modes of political participation, and makes it possible to redesign new small companies perfectly viable from an economic and welfare outlook.

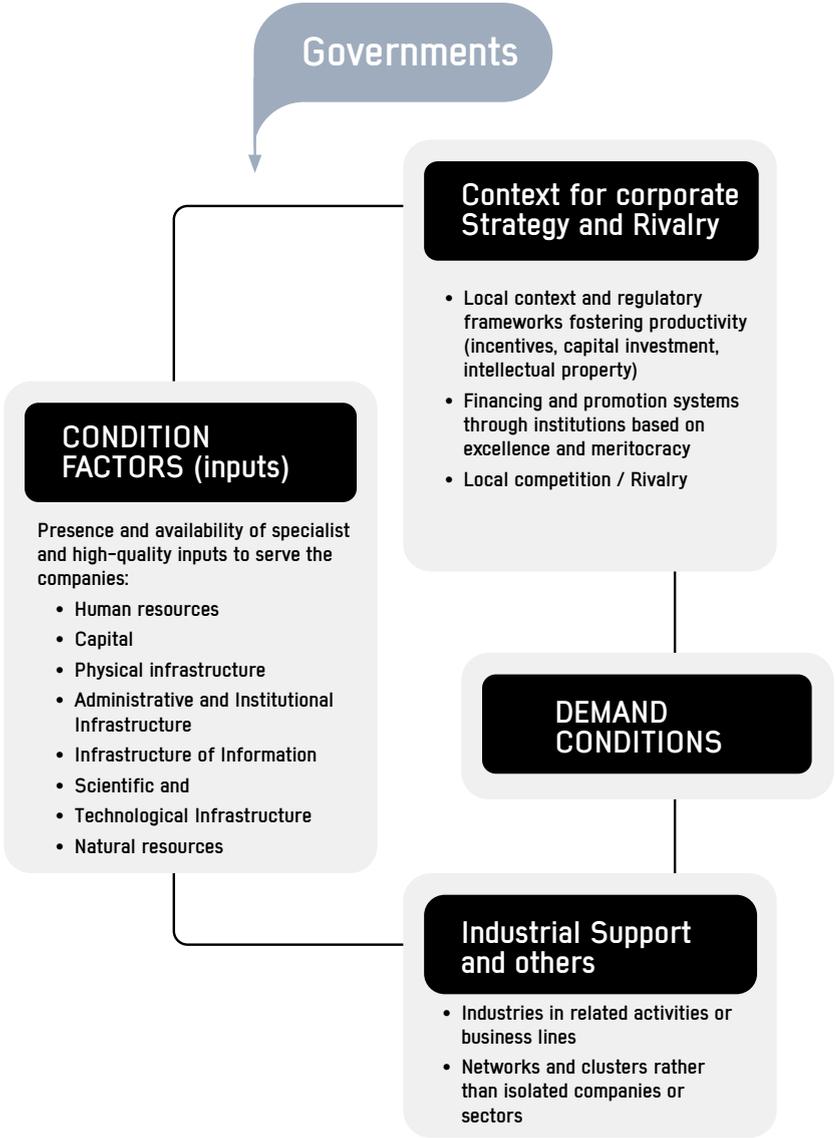
4. And a new season

In this way, we must foster a new stage in this long journey towards competitiveness. This is not an alternative path rather, on the contrary, the complementary phase that allows the circle to be closed while returning to the origin. It commences by seeking the prosperity of people and their territories by addressing the challenges of Competitiveness and we return to people. The Shared Value and Social Progress initiative and the multiple participatory movements, from the proposals of a “Stakeholder Capitalism” or the “ESG new deal”, or new initiatives in progressive advancement and development of collaborative, participatory and inclusive alternative growth models, shape new ideas leading an unstoppable, without turning back that bolsters the gamble, endorsed, by the initial gamble. Value can be found in co-creation, company-society, the essence of competitiveness, prosperity. It is precisely companies that are the best trained firms, turning the needs and demands of society into their business models. Models that require, for their success, redefining the products and solutions to be offered to the market (and, above all, to society), rethinking their extended organisation (their entire value chain) and promoting ad hoc clusters to ensure that, with the different and specialist participation of each player, establish co-optive and global strategies, guaranteeing the success of the model. Process and station that force to endow value to multiple players, weaving public-private alliances, public-public, incorporate the invaluable value of NGOs, the educational world and academia and, of course, through a

clear effort of local, community commitment, facilitating endogenous development throughout the world. This is, plainly and simply, competitiveness.

We have been on an exciting journey that has allowed us to transform our region, and to improve the prosperity of our people and the competitiveness of our businesses, governments and regions.

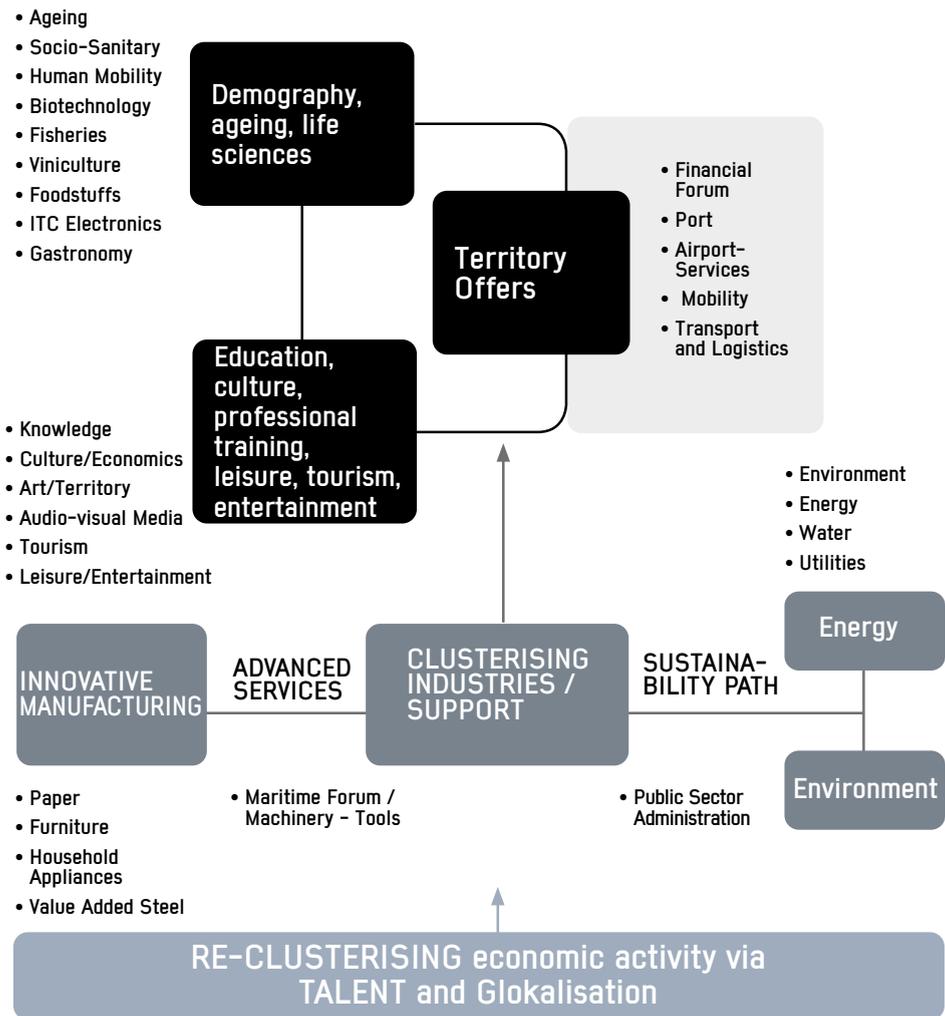
We have reached this station. The time has come to regain strength and face a new and challenging stage. The pre-existing characteristics will make it possible to work on everything necessary to equip ourselves with a “Diamond of Competitiveness” grounding upon which to build our future, under a broad perspective, acting, at the same time, on everything that matters and explains the competitiveness, as this is properly understood, of a territory. (In this case, ours).



The Diamond and the capacities (and shortfalls that accompanied them), allowed for the backing of a strategy that decided to enhance the clustering of our economy, bolstering and realigning our “natural” industries and being aware of how to enact its evolution creating new future spaces, breaking down barriers and boundaries, incorporating whatever would make it possible to convert needs and difficulties into information – data through which our future guidance lines could be transformed.

Here, the so-called “Territorial Competitiveness Diamond”, a key instrument in the chosen conceptual world, entailed working with intensity, at the same time, on all essential elements for a space containing competitiveness and sustainable human development.

THE FUTURE IN CLUSTERS. BREAKING BOUNDARIES



*Cluster vectors or principles integration/Reconfiguration of clusters along with current and new initiatives
Source: Jon Azua. E-novatinglab*

In this way, it is understood that everything we identified as a limiting issue on our development would be considered, precisely, as a source of wealth, employment and well-being marking the way forward. The deep demographic concerns with their seemingly inevitable economic decline, ageing and its consequences on employability and the excessive demand for resources and social services, health and public insurance/protection, will necessarily endow us with a new pathway of opportunities. Conflicting industry-energy-environment convergence allowed for innovative convergence towards the green economy, and the actual manufacturing, would be the driving force behind employability, social contracts, formal work, technological development and the differential element, the vector, of our future.

4.1.4. Any inclusive competitive strategy is endless by definition.

However, the resulting situation that positions us in terms of privilege in the comparative environment does not fail to point out red lights or no-go areas, affecting scope, which already invite (rather, force) us to address a “radical and disruptive revolution” in the face of the innumerable challenges whose impact will condition our future. Beyond the circumstantial aspects that have been receiving responses from the dynamics of continuous improvement and interaction in the critical observable patterns, step by step, they find a generalised overview that seems to cry out for a renewed impulse to overcome the condition of “comfortable prosperity” in which, at times, we would seem to be installed in a widespread climate of demanding individual or corporate demand, which drags with it multiple challenges to assume the arrival of a different world. A growing social duality begins to occupy the fulcrum of the debate, of the restlessness of those who feel most harmed and, above all, before the intensity of movements of detachment from authority (political, social, business, institutional), which we observe at critical moments, in a context, furthermore at times, an unequal and discriminatory globalisation, which tends to promote the belief that the professional future and life project, is only achievable in projects abroad, or reserved for scant lucky or selected parties.

For reflections specific to this work, we have carried out a sizeable number of interviews, surveys and contrast sessions, gathering different opinions on the current situation and expectations for the future. Obviously, this is not a study offering statistical certainty, nor is it a sociological document. Yes, it is the result of intense work, counting on the analysis of different demographic studies of companies, technological and research centres, universities, think tanks and countless people, of different profiles, with whom I have been honoured to share reflections, forums, study councils and relationships. Many spontaneous opinions, others structured in the professional areas, as well as qualified individuals who are aware of the state the region is in, because of the roles they hold. Many of them are not expressly stated for this book, but in frameworks of all kinds (business, political, international forums...) that allow us to notice differences, in this case negative in comparative terms, with other areas of interest to be incorporated here, such as “red lights”, alerts that will lead us to their consideration either to discard them for subtracting limited weight or generalisable value, or to understand that they are outdated and/or in the process of being overcome or that they must constitute, on the contrary, an element of

in-depth work for their mitigation or elimination. The world does not stand still. Nor do we.

In any event, we wish to challenge our space/oasis of prosperity and wealth, always in relative terms. As always, “past successes do not guarantee success for the future”, and the red lights pointed out, would be critical points of attention, on which to act, to build a desirable future.

Thus, in order to set out on a path towards the future, to face the trials and challenges that await us, we must bear in mind a whole number of concerns, barriers, hindrances and that would seem to occupy, also, the “collective thinking” that accompanies us and allows us to “rethink” our starting point. From my personal experience and permeability to multiple forums, councils, initiatives and decision-making centres of the country, the formal surveys that we have carried out for this work, numerous personal contrast interviews, reflections from hundreds of studies and prospective and strategy reports formulated by companies, universities, public, private, social and institutional organisations in this country, alongside the responses received by potential foreign or local investors that would facilitate, foster or bolster the basis of wealth generation and employment in our territory, all of those indicated here are part of a determined discourse instilled amongst us. Thus, we can summarise a lengthy set of “concerns, limitations or impediments” for the bet of the future that we will discuss in the forthcoming sections.

Achieving the desired future entails overcoming, from the outset, a series of critical issues. *Do we assume that the different points we pick up below constitute real impediments to be removed in order to facilitate a transition to the proposed scenario? Are we willing to make the commitments required of each and every one of us to overcome them?* Let’s think about them and set a starting position. Each and every one of from our corresponding part of responsibility and capacity to contribute or respond to its possible solution.

Listed here, without filters. Further on, in the corresponding section in order to propose the strategic lines in the route to the desired 2050 horizon, they are associated with their main areas of impact, means of solution (in case of considering them real, beyond more or less generalised perceptions) and are considered in the light, above all, of the megatrends observable that will necessarily condition their bearing, potential improvement and spaces of opportunity in the future. Here it suffices merely to point them out, to reflect on them. We have explained, at this departure point, what the long journey has been like, over the years, on which we have built a clearly better world. We have not done so to rejoice, nor to send the wrong messages under the syndrome that “those times were better.” Quite the opposite. It is about acknowledging ourselves in overcoming difficulties and complexity, at all times according to their circumstances, in the confidence of having before us, a whole world of opportunities. The world towards which we strive to put it at the service of the common good.

We must insist. Progress, the path to prosperity (and, above all, towards true inclusive development) is endless. A demanding journey, demanding a permanent effort to imagine and desire a better future, overcoming “the red lights” and existing barriers. These are also incentives to intensify our efforts and challenges.

RED LIGHTS: Obstacles, concerns, barriers to overcome to move towards a more desirable future.

- What would appear a generalisation when an ideal world is proposed during an overly long Agenda of disruptive transformation.
- A generation of disillusionment that views its possibilities and opportunities as normal. It feels as if the pandemic suffered has brought with it, certain worldwide impoverishment, reduced expectations of increased living standards compared to other generations and does not allow for professional and entrepreneurial initiatives to be seen as sufficiently attractive.
- Younger generations feel scantily engaged in the long-term. Savings, investment solidarity or collective efforts give rise to individualised and of the moment outings.
- Fear of a “Welfare State” they see as jeopardised.
- Executives, time-served professionals perceive a “state of drowsiness” in leaders (politicians, entrepreneurs and civil servants).
- Scant strengthening of our university system, with little contact with the exterior cutting-edge environment.
- Reduced entrepreneurial size and connections to the leading exterior.
- Not satisfied with the educational system that was seen as endogamic and aimed at the service of its own structure and not of the society of tomorrow, which seemed to request new capabilities.
- We have too many administrators and few governing leaders.
- The political – trade union – civil servant model, and this not being duly explained
- We have lost the “main trains to take advantage of new technologies.”
- We view ourselves as the ones who didn’t win. Where are we with the regard to those at the top of the pile?
- Excessive quagmire of enterprise more geared towards subsidising youthful self-employment than generating wealth and employment.
- Weak infrastructures and connectivity with the exterior. Others do not have this and that stresses the difference.
- Mistrust of the justice system, employability and above all, a feeling of not getting the most out of life, a democracy with scant or little intensity.
- Is anyone at the controls of all this?
- A fake world at the benefit of extremists and winning over the means of communication at the service of their audience and ideologies.
- We are using up what resources we have left. The inheritance is running out.
- Terrorist violence is no longer a threat, yet we still suffer the destructive influence of what ETA left behind...

4.1.5. An entire learning curve to project disruptive leaps.

As I have said, referencing this section does not mean any joy in self-indulgence, much less advising a return to the past or applying the same policies. What it does intend is to bring to the mind of the reader who has to face the construction of its own future, who has to face the responsibility and commitment to build that future of the sought after Bizkaia 2050, the understanding of the difficulties and complexity of other times, in circumstances of change and unsuspected transformations, with an accumulation of adversities ahead and in the face of the scarcity of resources and “instruction manuals” to “be future winners”, and stride forwards.

Our Society, our people, companies, collective stakeholders, and Institutions have the necessary capabilities to build a desirable future. We enjoy a basic heritage on which to build a space of prosperity. It depends, above all, on us. Though it must be said: nobody gives anything away. The opportunity is there. It is us who must make it come into being.

The starting point was delicate and complex. Learning took place along the way, learning from abroad, projects and plans were shared, a different future was believed in, risks were taken, potential failure or error was tolerated, a commitment was made to the complexity and complicating our lives in order to achieve a better future, we believed in responsibility, commitment and in ourselves. We knew that the world is a huge ocean in which we are an insignificant point, but we knew, and we know that we are able to create spaces that are major players and leaders from our smallness and associative capacity, collaborative, in accordance with the times, their challenges, and possibilities.

In the past, a large number of people with a strong sense of belonging and commitment to the country, from academic, business, professional, trade union, personal, diverse, assuming unsuspected political and social roles and responsibilities, faced observable changes. It was necessary to produce pioneering initiatives, take risks and make highly complex decisions, taking into account the changing future that lay ahead, backing a “diffuse” reference, Europe, then distant, distant and different from what was desired or expected. We lived in a world of autarchy and internationalisation that was torn between chimera and fear of the unknown and its consequences in our lives, we suffered an atrocious and destructive terrorism, pessimism and psychology of low self-esteem pervading, between the demanding transformation processes required and we had to reinvent our economy, our education, our health and social services, our language in accelerated process of extinction, the non-existent public administration and replace the deficit of infrastructures generated in the face of the neglect of previous periods.

Of course, all of this is incomplete and there remains a long road ahead. These are endless issues, Changes, circumstances, challenges and shifting priorities of the Society, in this case the Basque, will demand new paths, new solutions, new ways of doing things.

It is not a question of rejoicing or assuming complacent positions of the past, but on the contrary, of reflecting and bringing to our mindset the individual and collective capacity to face the complex wholly disruptive and invisible transformations that will occur in the next 30 years. Nor is it a question of “flogging” ourselves in a long line of adverse opinions or signals. Transmitting and bolstering the importance and relevance of taking on the complexity and accepting the difficulties

and the sorrow that we will have to face to be able to convince us of the possibilities, the strengths, the capabilities, that this country boasts, that our society has to achieve a desired project. A future that we must build through the efforts of each and every one of us. That will be the Bizkaia of the year 2050, desirable, in which we will feel comfortable and co-star in our life project and decisions.

4.2. The pandemic crash. More than just a temporary setback.

When in June 2020 I received the proposal to write this book, only three months had passed since the World Health Organization qualified the Covid-19 or Corona Virus as a pandemic, occupying and prioritising all types of agendas throughout the world, demanding special measures that turned our lives upside down, and which was the key focus on decision taking related to the world of healthcare. The essential purpose was to preserve health, prevent, treat and contain the infectious spread of this new viral attack and allow its treatment alongside the non-saturation and collapse of the different health systems and models available. The reinforced containment scenario in which the entire world was in one way or another forced the introduction of drastic and restrictive measures on the free movement of people and goods, led to border closures, altered people's ordinary lives, brought about accelerated upheaval to their working, educational and social lives and generated extreme isolation. The health authorities became particularly relevant and governments, global governance institutions, companies, subordinated any decision or activity to the maximum good of health, adopting, with greater or lesser will, the recommendations and guidelines that health demanded. Inevitable essential measures accompanied by the need to maintain, insofar as is possible, the economic activity seriously impacted.

The social debate agreed on a shared thought and attitude, from the international affirmation of a well-known "we will do everything that is necessary" (in the case of developed countries, as in our case after the guidance of the European Union), or of "we will do everything within our grasp" (developing countries, depending on their particular starting situation and the expected international cooperation) with the need to generate social supports of well-being (or survival), giving priority to the backing to postpone, sine die and in the long term, pending imaginative solutions that are to come, financing schemes and/or fiscal architecture geared towards an immediate solution. Those traditional economic and financial indicators that made it impossible to project a certain or minimally illusory projection were, of course, dispensed with. Unfortunately, the simplistic debate that involved choosing between health or economy as antithetical viewpoints flooded and distracted the relevance of the socio-economic conditions of health, forgetting its inevitable interdependence, initiating a precipitous confrontation around the scope and speed of the "de-escalated" calls that aimed to "coexist with the pandemic", "transition to a new normality" or "recover a path of economic-social development."

The debate that arose, at all levels, starting with the strictly sanitary one (assuming that it could be a specific, autonomous, shared knowledge), gave rise to different decisions, behavioural aspects, times. Step-by-step, in one way or another, they gave way to relatively homogeneous or similar measures, even if the "implementing models" could not be counted.

In one way or another, without any doubt, the priority has been to place the onus on the field of health (with capital letters and in its broad sense beyond the absence of disease or health systems in terms of its property, structure or resources that determine it, or the employment status of its professionals) and act accordingly. To preserve this, while mitigating the negative consequences, protecting and restoring it, multiple initiatives were derived, beyond health care, which, there were, and still will be, implemented. The generalised state of social alert-alarm is confused with the severity-mortality of the contagion and the proliferation of disinformation (innocent or interested) generates a further issue. As it could not be otherwise, in one way or another, we all access all kinds of information that, far from facilitating decision-making and guaranteeing the necessary truthfulness and trust, undermine the credibility of the authorities, experts and managers in each area of action, affecting the growing ignorance and fear of the population, triggering a state of alertness and all kinds of confrontational behaviour in the populace.

Today, at the end of December 2021, a still provisional balance, already stands at almost 400 million cases infected, with proven information and according to protocols dictated by the who for the SARS-CoV-2 CORONAVIRUS (in its different variants), with diagnostic test (meaning that the existence of a multiple of cases, globally, not registered) is considered certain. If it took a year to reach the first 100 million, just 5 more months to accumulate another 100 million and weeks to overflow the contagion and transmission statistics with the latest viral variant (Omicron) in progress, accentuating the pandemic era, its final duration and scope are unknown. The incidence of the variants of the initially detected virus proliferates, accelerates its transmission, complicates its control and, at the same time, confirms an active response of the virus. Although it seems to have lower lethality or severity rates, its scope and duration are still unknown, especially when the “original animal” is still an unknown, not exempt from supra epidemiological and health controversy.

Almost 5.7 million people have already died from COVID-19. Its geographical distribution is also a causal unknown, with unequal distribution, concentrating in the United States (910,000), Brazil (630,000) and India (500,000), Mexico with 3000,000, Peru with 210,000 and the United Kingdom with 149,000 leading the intermediate group and Colombia, France and Italy count in the order of 140,000 each. Spain is in the band between the countries with 90,000-140,000 dead and Euskadi-Navarre with 6,500.

A total of 10 billion vaccine doses have been administered with unequal distribution and excessive concentration in the so-called “wealthy countries”. The mortality by country is equally disproportionate between 0.9% (dead/100,000 inhabitants) in South Korea or Mexico (7.6%), the USA (1.5%), Brazil (2.8%), Spain (1.5%), for example.

The WHO calls for a “moratorium” on the application of third doses of vaccination in “rich countries”, faced with unequal distribution and application of vaccines, recalling that however long immunity is not “global”, global openness and movement prevent its control. However, a third dose (not booster, but key support for recognisable immune needs in immunocompromised individuals with specific morbidities) is being applied in those countries with available vaccines and resources and some countries have initiated a fourth intake. Laboratories and vaccine manufacturing industry, under the intense work of research and science,

continue to advance, providing new reinforcements, ground-breaking vaccines and treatments. At the same time, new “variants of the virus” continue their contagious deployment.

Although restrictive travel and mobility measures continue or are reproduced, it seemed that we are opening new “free spaces” conditioned by tests and vaccination levels, reduction of accumulated incidences and release of spaces in ICU in the different health systems (in the Basque Country, for example, we have already cancelled the “State of Alarm and Healthcare Emergency” to shift to a “State of Surveillance”). The limitation of meetings and number of congregations is relaxed, it is recommended to maintain the use of masks, some selective confinements are suggested, mandatory vaccination (in full debate rights-obligation), public health individual freedoms and hybrid work-schooling is encouraged: face-to-face or at home. Its commitment to accelerate an essential economic recovery, despite the precaution, prevention and alerts essential to potential adverse incidents.

In the meantime, diagnostic tests, screening, accelerated reinvention of health equipment, accelerated fraction of health professionals, demand for increases in public staff in health systems, public interventionism in private health, increase in technology, tele-consultation, specialist centres for the treatment of sequelae -especially chronic- post-Covid agency centralised protection equipment, leading intellectual property in vaccines and, speeding up and provoking processes of technology transfer-production for the production of vaccines throughout the world, especially in third and emerging countries and that were a constant in the height of the pandemic, will have to be incorporated into the ordinary debate of the usual activities, as in pre-COVID times. We have been left with a complete chain of proposals, which would not only be applicable in relation to the pandemic we have gone through, but also permanently necessary in light of the announced emergencies, infections and pandemics that arise, where we have to potentially live with all types of viruses in the future and, above all, “rethinking the healthcare systems and models”, and the long-term impact associated with the economy, governance and values, along with social behaviour.

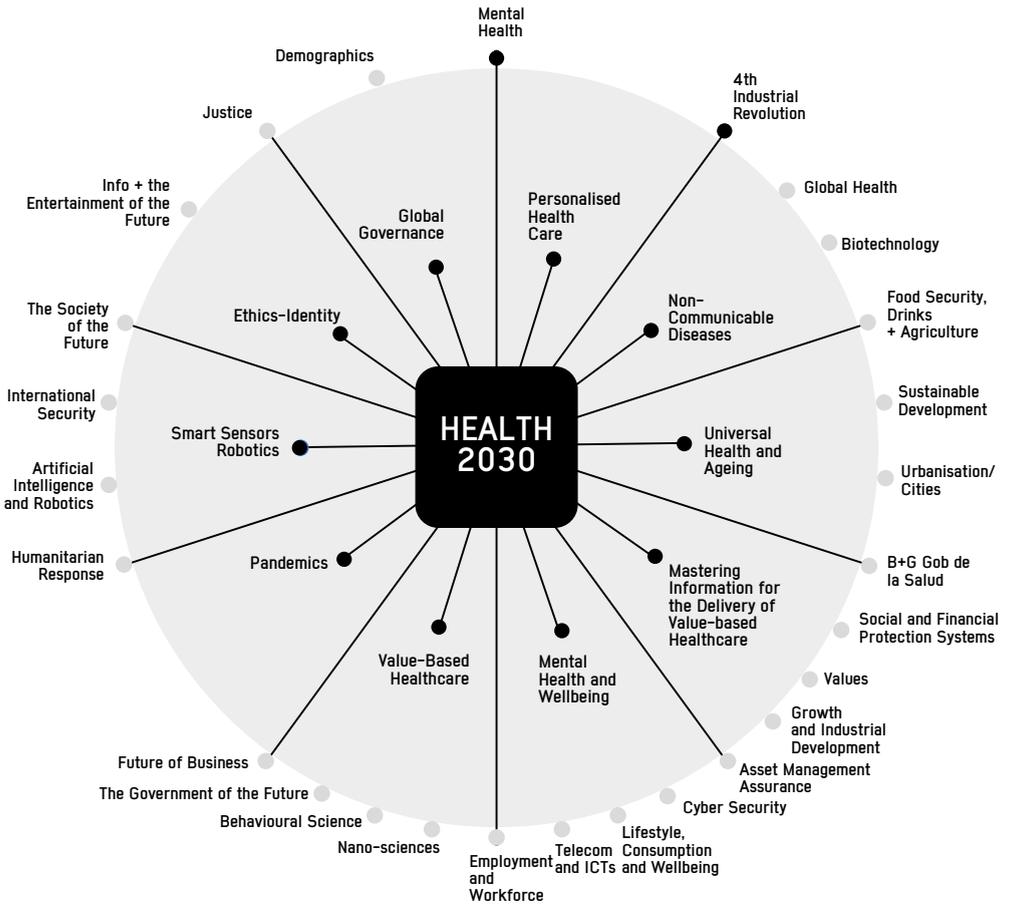
We cannot overlook the learning and needs that existed before the pandemic, although accelerated by the “real findings” observed with COVID, regarding the radical transformation that health, its systems and models must address.

The Diagram: “The Great Health Challenge”, for a near horizon (2030), collects the number of interactions that must be subject to reconsiderations in terms of health impact. Will this be the occasion for deep-rooted change? Later, in the chapter corresponding to the Megatrends and their impact, we will delve deeper into this urgent and essential transformation.

It is undoubtedly the ideal time for the “executive” decision about health, models and systems, their financing, their governance and the character/training/engagement of their professionals, accelerating the historical reflection on their future. Their defects and, above all, their desirable spaces for the accomplishment of their aims seem more than obvious. Their complex transformation is awaited by those who have to carry it out.

In this debate-action, it is essential to observe and consider health not only as an essential good and service in itself, but also from its enormous potential as a vector of innovation, growth and economic development, generating employment, wealth and well-being and inclusive prosperity.

THE GREAT CHALLENGE: HEALTH



Additionally, the measures taken to mitigate the impact of Covid-19 on the economy, especially those applied by governments in terms of “business closures, lockdowns and mobility restrictions leading to a sharp fall in demand, and the attendant consequences” created an immediate need for emergency funding and employment support in order to cushion the blow to the main economies, provide “the minimum oxygen” necessary for survival, prevent total collapse, and pave the way for economic recovery. Effective measures that have in one way or another made an emergency recovery possible, but whose true impact is as yet unclear, as are the ultimate consequences.

A crash that not only fuelled debate about the critical aspects of the model of development and growth, care within the community, transport and mobility, manufacturing and the composition and role of global value chains, the weight of the local in terms of competitiveness, the mythical “globalisation”, the role of governments and public authorities, the world of work and employment, the concentration of business in urban areas, the housing model, the education system, and in short all

those pillars that underpin our development, our economic and social policies, and the governance of those policies.

However, beyond health, which is essential and of course a priority, we are also witnessing the emergence of a new socio-economic scenario that represents a real mutation, not only in the complex and accelerated management of an unexpected situation, but above all in what could be considered a true paradigm shift. If in the short and immediate term we should witness any kind of sharp fall in global demand and consumption, a worrying decline or crash on capital markets, an unquantifiable but clear decrease in growth, an inevitable reduction in development expectations, a progressive stagnation in terms of business activity, a succession of negative impacts on different industries (manufacturing, services, finance, etc. and also in the health sector itself) and are forced to rethink our management models, our work and decision-making processes, and our natural ways of doing things, in many cases the substitution of those in charge due to lack of availability, necessary relocation, the acceleration of an imposed digitalisation which in many cases we are either not adequately prepared for, or that in practical terms is inappropriate to the specific business model, industrial sector and/or third party relationships, then we will see ourselves heading for situations characterised by a lack of liquidity, debt that cannot be repaid within the period previously agreed, or undesirable labour adjustments, it would seem that the supervening crisis situation might lead governments and a range of institutions to agree on support policies to alleviate unforeseen negative effects. Since the first and most obvious stock-outs, supply chain stoppages - especially those that are heavily dependent on or in some way involve interaction with Asia, such as the automobile and manufacturing industries, which despite having originated in Japan, South Korea and China are today spreading to the major manufacturing centres in the USA and Europe: commercial aviation, tourism, events, exhibitions etc., and companies operating within the health sector itself, not only in terms of their inputs but also in issues of staff management and substitution with regard to patient care and control, unforeseen resource requirements, and their own work and logistical organisation, catering, education, etc., will follow on from each other in a long chain of problems needing to be resolved. Today, now that we have emerged from the pandemic, it seems that we are “condemned” to a period of coexistence with the consequences and a focus on recovery, the underlying problem - the base of the iceberg - is once again in evidence, leading us to ask questions about the “*paradoxes of internationalisation*” that this health crisis has put under the spotlight, revealing the fragility of our current systems. *It is time to rethink the keys to success, and the strengths upon which we have based our models for growth and development within the framework of a desired and very much present globalisation, exploring the observable megatrends, and in particular their potential impact on our living space.*

In recent years we embarked on a profound change in the conceptualisation and structure of our business and governance model. We accepted that the complexity of the so-called “new economy” demanded new models of networked interdependence, the interweaving of multi-disciplinary and multi-country alliances and the incorporation of disruptive technologies that generally make the involvement of third-party players inevitable. We learned that businesses were outsourcing and seeking “competitive advantage” in a wider world and relocating to other regions; that internationalisation was not only obligatory but essential, either because we

were actively pursuing it in markets perceived to be of greater interest, or because we were being invaded at home and it seemed that we were in need of “global executives”, global citizens with little attachment to the cultural roots and identities forged within our companies as the wider world would require practicality and efficient management with or without soul, or with a spirit that differs from the one that had brought us to this point. We set out to form part of global value chains in which the ‘home’ territory lost its significance; in many cases, local clusters were disregarded, as the “decisions were being taken thousands of kilometres away” and market differentiation seemed somewhat irrelevant, the required local value, a differential and essential factor, was omitted. At the same time, international or globalised governance has been losing its power over time. It is not very reliable or credible for society in general, and its very complexity leads to false consensus, supported by agreements, declarations and policies that are largely a cut and paste exercise, giving the illusion of simplifying bureaucratic decision-making, avoiding disputes and facilitating the postponement of decisions, undermining the leadership that is necessary, particularly in emergency situations. A one-track approach that that seems to force us to choose between a discourse that cannot be questioned and chaos.

However, tomorrow, when this temporary “lure” comes to an end, we will have to take a fresh look at our models, reconsider many of the key ideas that have been called into question by the crisis, and examine the lessons to be learned from what has happened. We will surely revise those mandatory “contingency plans” that we have not only taken out and dusted off, but have also very quickly updated and adapted to deal with immediate needs, drawing up/updating/adjusting emergency policies in line with the severity of observable damage, always conditioned by the specific needs of the business, its policies and communication resources (both internal and external, with a focus on suppliers, clients and partners), and above all the governments involved (central, regional and local) who bear primary responsibility for civil protection and health policies (particularly relevant here), as well as international organisations themselves (including the WHO) for example, and third parties (airlines, the authorities regulating access to other countries, customs and logistics, etc.). We must build collaboration with third parties (the communities in which we operate, and in which extraordinary events occur, governments, and groups within our organisations that could be affected) into our designs for the models for the future. And in this new financial year, there are a number of critical factors that need to be reviewed. Critical factors that were caused by, or connected with, the pandemic. They were already there, we were aware of them, we worked on them, and in one way or another addressed them, with differing degrees of conviction and success. Today they are taking on greater importance, coming to the forefront and reshaping our priorities, requirements and potential solutions.

Without a doubt, more than simply a temporary setback.

It is something that we will have to live with, in terms of the after-effects of the pandemic, and also of fears and anxieties with regard to the future. But above all we should take advantage of the opportunity that this misfortune has presented us with, the opportunity to speed up and review the many changes that were already with us, and the challenges that we were loath to tackle, viewing them as still far away or of low priority.

Today, delays are no longer possible. They are here stay.

AND A LONG PROCESS OF LEARNING THAT NEEDS TO BE EXPLORED IN DEPTH

Now that the pandemic has ended (or has been contained, depending on your standpoint) and beyond the tragic statistics (deaths, the fact that the disease is still endemic, and the aftermath), the general sense of satisfaction (the positive response of health systems in general), the exemplary and responsible behaviour of the vast majority of professionals and most of the general public, the institutional economic and financial response (governments and multilateral institutions got it right in terms of the broad “new policy” of making available the “necessary” resources), extraordinary measures to support the most vulnerable (social wage, basic minimum incomes, socio-labour adjustments based on support and temporary suspension rather than termination of contracts), generalised contingency policies, simplicity in terms of processes and decision-making, generalised agility and flexibility, the response within each and every company, as businesses constantly reinvented themselves in the face of the generation of new demand and social and community collaboration, urgent regulatory and legislative reforms (new frameworks for telemedicine, teleworking, labour relations, etc.), and to congratulate ourselves for an excellent collective response, today, we still know very little about Covid-19, how long the disease lasts, its possible long term effects, why it has had such powerful destructive force in some places yet not in others. We only know its duration, the possible causes, why it has had such a powerful impact in some places but not in other, the lockdowns, restrictions on mobility and contact with others, the extraordinary speed and efficacy of vaccination programmes (in terms of design, production, approval and implementation) and rapid reinvention of health infrastructures and services, the value of social solutions (especially socio-health solutions) and the reactivation of community assets, as well as the value of functions such as diagnostics, traceability, laboratories and the accelerated application of technology.

We have perceived another reality: health systems do not respond to standard administrative divisions that separate the public from the private, levels of care, or the health/medical and social domains. The health authority at each geographical level has an impact on all those involved, and must rely on their regular co-operation. The health service can only function on a 24/7/365 basis, and needs to liaise with the public. Health vs the economy is an outdated and unsustainable discourse. Discourses, policies and media messages do not distinguish between the living conditions of people across the world (or within countries, regions and neighbourhoods), making their response ineffective.

And we could go on. These comments are enough to trigger a radical and disruptive transformation of healthcare, and furthermore encourage us to take a fresh look at the discourses and voices that predicted that by seeing this “Pandemic Crash” as a turning point, we would be able to make the world a different place.

THE PANDEMIC AND SOME OF THE LESSONS LEARNED

- 1 A world, societies, knowledge and FRAGILE systems inadequately prepared yet resilient when faced with all these uncertain events and catastrophes, their magnitude, impact and interconnected consequences.
- 2 The infonomic world we live is better at generating noise and disinformation that impacts on decision making, and shaping attitudes and behaviours than it is at generating real, basic knowledge to support those who need to act (and above all, lead).
- 3 Disaffection and democratic weakness. Distrust, disbelief and rejection of leadership and authority.
- 4 Societies and behaviour that are more individualistic, less supportive and less responsible than we had believed.
- 5 The need to reinvent procedures, systems, protocols, and bureaucratic and decision-making processes.
- 6 Virtuous systems themselves may generate negative outcomes and perverse results. What was positive in one context has negatively conditioned responses. For example: Global Supply Chains.
- 7 Generalised inequality.
- 8 Complicity and systemic challenges.
- 9 “Irresponsible media “do-goodism” in a market of audiences and ideologies.
- 10 In spite of everything, there are always alternative, apparently unforeseen, models and resources available.
- 11 Health-Economy-Society. Three indivisible axes.
- 12 Applicable Science-Research-Knowledge-Innovation and MANAGEMENT form a chain that should not be fragmented.
- 13 Health: beyond the absence of illness. Socio-economic determinants, community assets, social and care services, essential support tasks, infrastructure, training, prevention (multi-variable), education for/in health), health-industry. Goodbye to silos. Welcome to transformative systemic complexity.
- 14 The local is not merely important. It is essential.
- 15 Global co-governance. Do not try to occupy spaces that do not belong to you, or where you have neither the resources (above all the people) to perform the tasks that are essential for decision-making.
- 16 Fundamental multi-partnership. Public-public and public-private collaboration.
- 17 New specialisms, new professional profiles, ongoing lifelong education. A new professional MAP for the future.

In one way or another, this “PANDEMIC CRASH” is forcing a review and reconsideration of policies, budgets, plans, tools, and organisational and governance models. Regardless of whether they are made explicit or not, and how they are approached (post-Covid-19, the day after, return to normality, coexistence with Covid, etc.), we all need to understand that some form of adjustment or transition towards new/modified spaces and in-depth change is required.

In effect, rather than just a circumstantial setback, this is a turning point.

4.3. The agenda for taking a fresh look at new models and attitudes in favour of inclusive growth and development.

We live in a climate of uncertainty and complexity that demands the following of new paths by each and every one of the stakeholders involved in the generation of competitiveness and well-being.

Companies, governments, countries and organisations of all kinds, we are all compelled to constantly redefine the unique value propositions and the unique and differentiated strategies that make them possible, aimed at societies that appear to be increasingly disenchanted, disoriented and in need of a shared leadership which they feel represents them, and furthermore one that they are committed to.

The case of Bizkaia today, where we want to build a successful scenario looking ahead to 2050, is no exception. Our particular journey into the future also involves revisiting our commitment to competitiveness and prosperity by co-creating business-society value, as we have already reiterated in previous chapters.

TOWARDS INCLUSIVE DEVELOPMENT

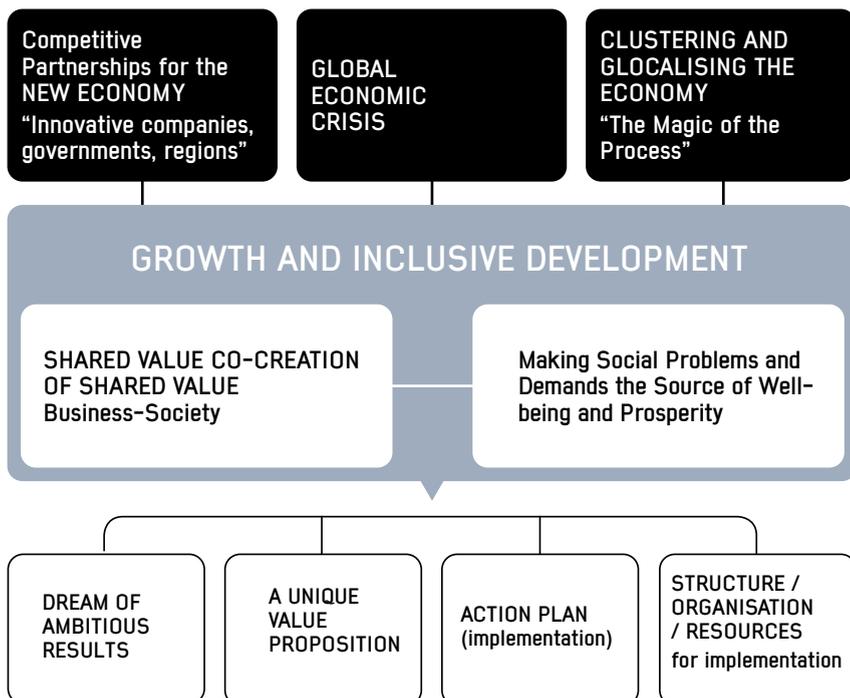
The perception of a clearly unequal world, the prospect of major gaps in the future with unsatisfactory achievements expected in terms of objectives and policies on sustainable development, employment for all, the new world of work, the search for an ad hoc universal minimum income at different times and in different societies, the search for models of universal care and real access to healthcare for all, a positive education that facilitates social mobility, the commitment to solid welfare state systems, etc., make it essential to come up with new strategies and measures for generating the wealth that will make this possible. These new realities and strategic aspirations find their driving force in the guiding principle of “Inclusive Development”, one that is generalised throughout the world, and with which the diversity of strategies and policies to be implemented should be aligned.

Thus, today, the rich learning over time and the number of new questions to be resolved leads us to seek the integration and strategic convergence of demands, milestones and lines of work already undertaken. Once again, it is time to ask ourselves whether our conceptual frameworks need to be adjusted (as well as to what extent, and in which direction), whether our practices and actions (both individual and collective) are steering us towards the solution, and above all whether we (all of us) are willing to make the commitment necessary to achieve it. The different stakeholders involved, from business and governments, to universities, stakeholders in the social and business domains, and all types of institutions and international organisations, as well as non-profit organisations and NGOs, have a responsibility to rethink our commitments and strategies in order to tackle this new challenge.

A challenge for which there is no magic bullet. This new road to be travelled and the objective to be achieved must necessarily have an impact on the key debates that will dominate over the coming decades, with new ways of understanding inclusive prosperity, turning current limitations and problems into opportunities for transformation. For this, new approaches and behaviours are required from governments, businesses, universities, and of course from individuals within the community, taking on board the need for “new organisation” and new concepts among all the existing stakeholders and enablers. As always, there is inevitably a need to travel complex paths during the transformation process. The journey so far has been worthwhile, and has sought to respond to the demands of the times along the way, and has been one that is full of results, shared learning and the commitment to the transformation of our society. It is also one that requires redoubled effort, an understanding of our environment and the observable dynamics of change, the shared commitment that we must inevitably take on, and a collaborative approach in terms of models of co-creation of value. A road that is no longer focused on growth, but on generating an inclusive model of development in the pursuit of shared prosperity and wellbeing, either with or without significant growth. Growth is not the goal, but rather one of the factors that will support and contribute to the result of striving for a more inclusive and democratically legitimate world.

A FRAMEWORK FOR GROWTH AND DEVELOPMENT

Understand, Engage, Co-Create



AN ONGOING JOURNEY TOWARDS COMPETITIVENESS AND PROSPERITY TO ACHIEVE INCLUSIVE DEVELOPMENT: NEVER ENOUGH...

Achieving such an ambitious goal is, by definition, an ongoing challenge. A changing society, its continual needs and demands, the fact that in itself it is always seeking new horizons as part of the dynamics of the goals that motivate all the stakeholders involved, mean that it is a never-ending journey. The succession of strategic endeavours, the evolution of challenges and outcomes, and the innovation that is inherent in each company and government, fortunately make it endless.

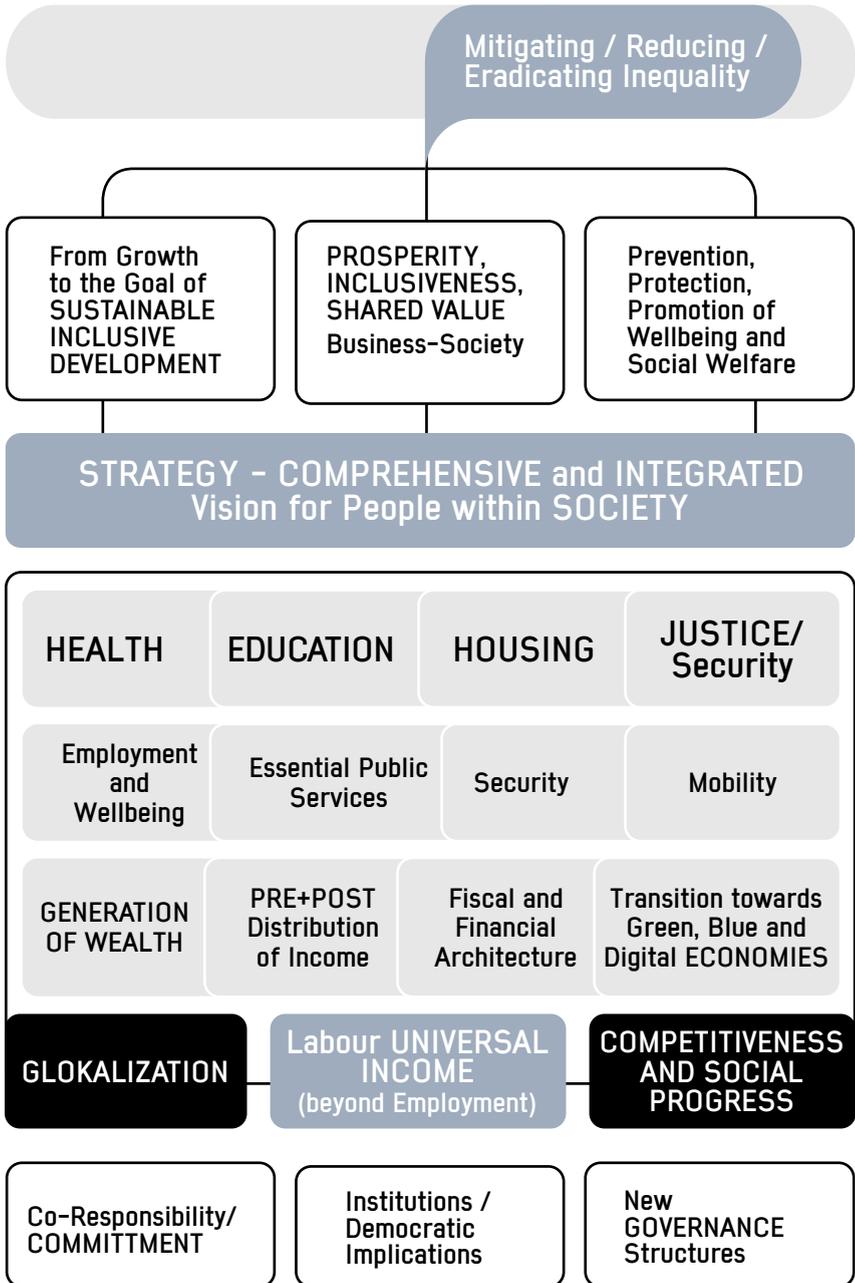
Once again, a new process of transformation is vital.

An exciting (and inevitable) process of transformation, based on a “new map for prosperity and inclusive development” that seeks comprehensive and integrated strategies that focus on people, on their needs, their desires and their aspirations. A new approach to internationalisation, understanding local value as part of a reshaped glocalisation that underpins economic interdependence, one that moves away from the legacy of uniform globalisation, within the well-understood framework of competitiveness and social progress (not of exclusive competition with EBITDA as the priority), of the generation of wealth (pre, during and post distribution), served by a renewed fiscal and financial architecture (which clearly identifies people and their circumstances and involves new types of taxation on different real sources of income), in a realistic transition in order to address so-called “new threats” - green (ecological and climate change), blue (oceans and water), and digital (5.0 revolution), interconnecting (clustering) each and every one of the related activities at regional level. A model that above all calls for a genuine effort to rethink the future of employment and how to provide people, in one way or another, with a universal income (regardless of whether or not they have a job). This continuous transformation will only be possible with a clear exercise of co-responsibility and commitment, and the strengthening and reinvention of democratic institutions which will provide us with new structures of government and governance at all levels of government and administration. Within this new conceptualisation of an extended organisation, there is significant potential for companies to create partnerships and alliances with all kinds of new players, and with the societies in which they operate.

A change in each and every one of the stakeholders. It is not a question of demanding transformations and commitments from others. If companies take on new roles and responsibilities and move towards new spaces and new interactions, creating shared business-society value, if governments are unable to perpetuate the structures of the past, but must instead adapt to the new services and solutions they need to provide, undertaking the complex but inevitable change in the circumstances of their civil servants, avoiding the acute social dichotomy between those who will enjoy permanent lifelong employment and those who do not or who never will;

in the same way, Universities, which have a strong focus on intellectual and academic excellence, must transform their objectives, prioritising the generation of a real and positive impact on society as a whole, transforming their own structures. Thus, each and every one of them will impact on transformation in all spheres of society, the “industry” of politics, the trade union and NGO “industries”, as well as within the sphere of the facilitator agencies and society itself. In short, a new framework needs to be established.

A NEW MAP FOR PROSPERITY AND INCLUSIVE DEVELOPMENT



Why would the new economy and welfare societies recommend a new stop on the long journey towards competitiveness and economic and social wellbeing that began four decades ago, and that today we have deemed to be both successful and a point of reference when it comes to treading new paths towards the future?

In short, a framework capable of raising the questions and providing the answers for these new times in a new or an old economy, reshaped, open to wide-ranging debates and innovative challenges, in the quest to generate wellbeing, wealth, employment and prosperity in this changing world that is demanding new paths, and above all new solutions.

4.4. The urgent and the necessary for a desirable 2050

Aware of the need for “urgent” action and the concomitant and collaborative focus of all aimed at saving the biennium from this “pandemic crash” (already mentioned in the previous section) but at the same time eager to explore possibilities and to bring about a long-term strategic commitment, this initiative, shared with the Bilbao Chamber of Commerce, prompts us to imagine a new desirable yet possible scenario, combining a hopeful outlook with the concrete actions that will take us there. We must take advantage of the thirty years that lie ahead of us to work on a roadmap that will make this a viable prospect.

We know that this desirable future must be built on existing foundations, based on the value of what has been achieved, in terms of comparative success. This will make it possible to overcome the great challenges that lie ahead.

Overcoming this pandemic Crash and what could be called the “*crisis biennium*” requires a return to the “normality” (albeit an adjusted one) of plans, policies, dreams and pre-pandemic commitments, speeding up their fulfilment, introducing the necessary adjustments suggested by the lessons learned during the crisis for the immediate term. Our agendas already indicated the need for the green and blue ecological transition, forcing us to make ecology, the environment, water, energy, the seas and the planet not only an essential space within which to reorient our growth and development models, but also a space that can be turned into a key source of solutions, wealth, employment and wellbeing. An agenda that signals - as it did before - an absolute commitment to an inevitable transformation of the economy and of society through digitalisation and the incorporation of the main exponential technologies, impacting all types of industries and business models. A new agenda that obliges us to review and adapt the sectoral plans that we had already approved with 2025/2030 in mind.

The period 2022-2030 is key. Undertaking what is urgent if we are to achieve a desirable scenario in 2050 requires a great effort in terms of vision, a reassessment of what was originally planned, and the identification of the actions to be undertaken at this stage, which will be decisive in shaping the future.

The pandemic has made us aware of the times, and has given us a sense of urgency, as well as reminding us that inequality, injustice, the transformations we have been dreaming of, the influence of social networks, information, the use of technology, fiscal architecture, financing mechanisms, the national debt and the presence of new players all demand an immediate reconsideration of our current models. On the other hand, it would seem that we have rediscovered the inescapable conviction of the world of “stakeholders” as a convergent space shared by all the agents involved,

and interest groups who have to share commitments, efforts and benefits based on common or shareable results and goals. We have come to realise that we need to advance along multiple paths, but with sufficient focus on a general framework and a clear purpose beyond operational efficiency and short term results, and that we need to look at the world in terms of opportunity rather than of barriers or risks, in terms of abundance rather than scarcity, and in terms of descriptive efforts and radical changes rather than limited continuous progress.

And we know that if the clarity of such agendas is to become a reality, it is not something that will happen spontaneously, or with the thunderous, unresisting enthusiasm of all. We do, however, have a powerful incentive and justification, as well as support in the form of the European Recovery Funds (Next Generation EU), which will make it possible to mobilise initiatives, political will, collaborative processes and, for better or for worse, a series of "target areas" which, regardless of the amount finally available and its successful allocation or management, will shape a process of innovation and transformation.

But beyond resilience, recovery and the incipient path of transformation, we intend to embark on a long road towards a new and desired horizon, guided by more open-minded attitudes, social adaptation and the perception of a change that is inevitable. **It is time to go after "THE GREAT OPPORTUNITY", with a resilience that has the power to transform, with skill and the ability to deal with new circumstances, with new innovative ways of thinking,** in the search for new answers and new horizons. Aware of the fact that we are moving through a dynamic of complex interdependent systems for which we need to prepare a society that is ready to tackle the difficult challenges.

Short cuts can be poor advisors in the face of complex paths and challenges.

The arrival of the first European Funds is eagerly awaited, rather like a manna capable of meeting every need - balancing and plugging budgetary holes and deficits, tackling shortcomings in public works, and rewriting programmes, plans and short-term budgetary interventions, adding green, digital labels that will somehow overcome climate change and its negative consequences, saving crisis commitments or seeking friendly, collaborative relationships between regions - but if we succumb to continuist, stop-gap decisions, party marketing demagogy, or individualised short term lobbying, opportunities for real long-term transformations will be wasted. Continuing with our current agenda, distorted by the mediation of some European governments, blinded or in need of money or quick wins, with no strategy, purpose or trustworthy strategic actions that can be controlled or are fit for purpose, would be the greatest possible of errors, and would lead to frustration. Taking a long term view is essential for transformational thinking.

The strength of a good strategic commitment, transformative projects and initiatives, genuine public-private collaboration by and with trailblazing companies committed to projects that favour the whole country and mobilising resources, plus small and medium-sized companies, providing them with access to knowledge, new skills and capabilities, new markets and the optimisation of management processes, would seem to be the right path to follow.

This is a great opportunity to build a new model of competitiveness and prosperity. Long-term thinking, the commitment of concrete resources, real leadership in terms of delivery, the sharing of leadership roles by the parties involved, and ensuring that money is available to support talent and real transformational capacity is essential.

Projects, plans, initiatives, and resources, in a real Competitiveness and Prosperity Map and not as part of an individualised auction.

A ROAD ALREADY EMBARKED UPON. THE 2030 ROADMAP

From the outset, we have reiterated that whenever we refer to the concept of “new”, this does not in any way imply starting from scratch, but rather on committing to renewed impetus, seeking innovation (in a radical way) based on inherited strengths, and of course a necessary break with those pre-existing obstacles that block or hinder social demands, unanticipated risks and observable reality in the upcoming challenges and on the road to be travelled.

Bilbao-Bizkaia-Basque Country is part of a reality which, moreover, has already been making future commitments in certain areas, and in general terms these constitute a solid launch pad for plans to be developed between now and 2030. Without a doubt, many of them will need to be “reviewed” in the face of the shifting implications of the “Pandemic Crash”, as well as of the evolution of social demands. It goes without saying that the “European Funds” will have an impact on these plans (generally speeding up their implementation), on the prioritisation of some of them; an inevitable reconsideration in the light of new and changing consequences and the externalities and international behaviour or decisions that will necessarily have a bearing on them, either for better or for worse.

We have highlighted the way in which the area we are studying, the Bilbao-Bizkaia-Basque Country, has been characterised among other things by a wide-ranging “planning” exercise, although, more often than not, there are a large number of sectoral, departmental and/or partial plans, which on occasion are not in keeping with the general “country-region” orientation, commitment and convergence, or are distorted in their implementation by the disparity of interests and priorities among the different stakeholders (generally public administrations from different parties, or operating at different levels, and the not always decisive and genuine support of the rest of the economic, social and individual stakeholders, depending on the group or interest group within which we find ourselves in each case) that should be involved. As there are innumerable directives underway, here we will limit ourselves to compiling a “Guidance Map” which we believe indicates the main commitments that define the path we are on, the starting point for the long journey to be undertaken. The infographic that accompanies this section is a good reflection of the enormous effort, the initiatives and the mobilisation of resources that, in principle, will take us through to 2030.

We have commented on how, until the advent of the pandemic, our country was adequately prepared to implement the reforms and strategies for the future, with a very good chance of success. Dedication to planning in general made it possible to take a guess at the key areas in which intervention would be needed, although a relatively condescending and continuist advance could already be observed, constrained by a complex range of concurrent elements that prevented disruptive, “revolutionary” and/or profound changes to a more or less accepted status quo, and a widespread sense of the need to minimise risk based on a supposedly consensual “stability”. Indeed the challenges were hidden in one way or another, by taking for granted a “silent erosion”¹⁰ that seemed to be taking hold in our society.

¹⁰ Title of a Basque Government Report presented to Parliament (September 2021), which although it referred to the slowing down of, and/or non-compliance with, the Statute of Autonomy of the Basque Country, could be applied to the set of strategies, attitudes and collective behaviour by all actors in Basque society as a whole.

Beyond its direct fatal consequences, the advent of the aforementioned “Pandemic Crash” meant an acceleration in all those observable trends that in one way or another were already having an impact on us, setting out new directions and courses to be followed, but taking an in-depth look at the changes needed to respond to the challenges of the future. Our institutions committed to multiple plans with a view to 2030, in addition to responding with short-term reinforcement mechanisms within the established framework.

The pandemic and its consequences, and the change in mood within supra-national institutions (European Union, IMF, to cite the most relevant), the United States of America and, to varying degrees, almost every government, as well as companies in practically every industry and sector of activity, established a series of guiding principles in what would appear to be a “catalogue of priorities and new paths to be followed, and a good number of projects and initiatives to be promoted”. To put it simply, the availability of funding and public aid at European level that EU Next Generation is putting into circulation, bound within a framework of priorities, types of projects, the scope of those projects, time-frames and the coordination-supervision of the European Commission, presents a window of opportunity (extending far beyond the resources allocated) to anticipate budgets, speed up interventions and refocus priority areas of action. In addition, it is supposed to favour models of public-private cooperation, co-governance agreements between different levels of public administration, projects agreed between multiple players, and finally a relative convergence between regions and EU member states, facilitating greater cohesion in the heart of Europe. These are ambitious objectives that in one way or another will also add value to our city-region. It is most certainly an opportunity that must not be missed. In itself, it obliges us to review the initiatives already underway.

It is worth highlighting how, at the time of writing, the Basque institutions have drawn up the budgets for the next three years on the principle of “with or without European funding”, communicating the strategic-political decision to undertake transformational initiatives regardless. Together with this decision comes a significant event in the political sphere: the recent approval of the Law on Contributions 2022-2026, which provides more than satisfactory stability and institutional cooperation.¹¹

In this sense, the periods from 2022-2025 and 2026-2030 will in one way or another determine the support base on which to project the future vision for 2050 that is the subject of this book. Hence the importance of undertaking this urgent exercise to prepare the road ahead.

EUROPEAN FUNDS. KEY PLANS 2021-2026-2030

Under the strategic umbrella of the European Union (Next Generation EU), more than a recovery plan, these funds represent a unique opportunity for the “Economic Renaissance and Transformation of the European Union, its Member States and Regions”.

A commitment to invest, and to mobilise 807,000 million euros which, together with a long-term budget pledge, will make almost 2,018 billion euros available (in principle for identified transformative projects). The goals: a greener, more digitalised and resilient Europe. The Plan calls for investments in specific areas,

¹¹ Law of Contributions. The Economic Agreement system is strengthened by an internal framework that regulates economic-financial relations between the Basque Government and the Foral Councils (and the financial supervision of the municipalities by the latter) in such a way that resources are allocated to meet the different obligations and competences, as well as the contributions of each territory to the Basque Government to meet the “COMMON” competences.

and the distribution of the total budget is specified, under the “European” criteria, supervision and interests to which both governments and businesses will have to adjust.

Although this extraordinary European commitment is laudable, we cannot ignore the concerns about how it will be put to use, its transformative commitment, and its true capacity to meet not only the real needs of the different European countries and regions in general, but also those of Euskadi in particular. Spain has one of the worst records in terms of the use of funds allocated by the European Union over the last fifteen years, and the country’s now traditional “managerial centralism”, despite being an “autonomous state” that calls itself “federal in nature”, monopolises the management, allocation and spending of European public money, incorporating it into its regular budgets.

The structure established by the Spanish government distorts the original aims of this strategic commitment. Although on paper it would appear to be a reference scenario, a plan for recovery and transformation under the propagandistic slogan “Spain Can” which lists 30 areas of intervention, the unilateral distribution by autonomous regions and the proliferation of supposed “intelligent specialisation” plans for each of them (in terms of methodology, copying and quasi similar schemes that do not take into account the local business fabric or real strengths), and the use of the Ministries’ budget lines for their own programmes currently in progress, in addition to their allocation to the structural deficit and the State’s debts, suggest that there is little scope for a disruption that is as urgent as it is necessary.

That said, the existence of these funds and the current European movement have led Basque institutions to speed up their own plan, trusting in their ability to complement their financing over time, with the funds they are able to raise, but as previously mentioned, addressing their strategic commitments “with or without the European funding” filtered by the Spanish government.

Thus, the Basque programme for recovery and resilience 2021-2026 EUSKADI NEXT needs to be updated and sharpened by incorporating substantial changes into the key initiatives and policies currently in progress.¹²

In this way, an initial approach to the general framework imposed has led the Basque institutions to align their plans and strategies with the established “labels, paths and procedures”. **Thus, initial adaptation involves an attempt to organise projects and initiatives related to the Basque RIS3, already explained in terms of scientific-technological and business capacities, the foundations of the different transitions that are to be embarked upon, and the supposed correlation with those proposed by Spain. The following charts reflect this initial outline.**

Given that the complex framework of resources establishes different areas of processing in search of solutions, from limitations and public procurement, calls for subsidies, participative loans, capital contributions and the role of regional PERTES (within the framework of the RIS3) and state PERTES (to place the State in a position of industrial and technological leadership), the Basque Plan breaks down the main strategic lines that it seeks to co-finance. **Components, regional projects (public and/or private, public-private), those associated with RIS3 and, finally, those associated with State policies and projects.**

¹² The introduction to the plan includes a quote from economist Mariana Mazzucato in this regard: “The crisis has also created a huge opportunity to pursue industrial policies beyond traditional sectoral and technological silos, and to restore mission-driven governance in the public interest”.

GRAPHIC THAT SETS OUT THE 8 COMPONENTS OF EUSKADI NEXT WITH THE 30 ELEMENTS OF THE PRTR



See graph on page number 02 of the booklet that accompanies the book



See graph on page number 03 of the booklet that accompanies the book

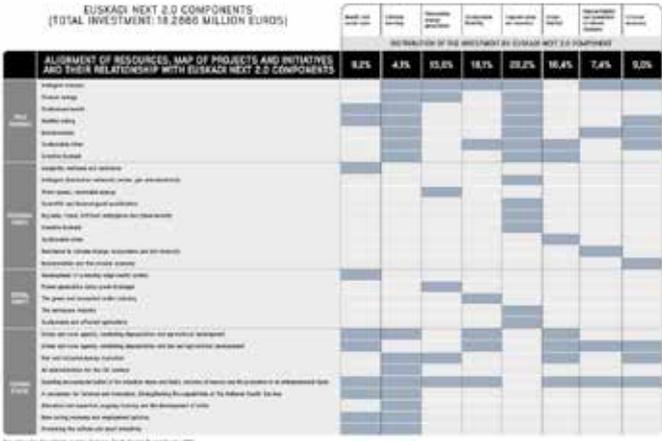
In any event, the good news is twofold:

1. Basque institutions have taken on the task of committing resources, reviewing, updating, strengthening and targeting strategic projects and initiatives for taking this first step 2021-2026.

2. The business community, the private sector and the different clusters, technology and research centres, collaboration agencies, universities, vocational training centres and all the ecosystems that make up the broad, rich Basque space for innovation, research, production and the generation of economic activity and social welfare, have reinforced their efforts and activities, focusing on a rethink of the world of work and fostering all kinds of initiatives.

At present, Bilbao-Bizkaia-Basque Country is a real hotbed of collaborative and consortia initiatives, multiple alliances and key future commitments. Most of them with a profound desire to transform the future. Others, unwilling to embrace change, focus on standard budgetary continuity in terms of subsidies and public funding.

The following infographic shows the alignment of resources and the Map of Ongoing Projects and Initiatives, allowing us to observe the relevant explosion of transformative strategic commitments.



See graph on page number 04 of the booklet that accompanies the book

Within this broad framework, which aims to include different lines and areas of action associated with the European objectives, plans and resources that provide the basis for the “relaunching of Europe”, and the obligations involved, Bilbao-Bizkaia-Basque Country is today a veritable hotbed of associationism, the development of useful tools, consortium structures and hundreds of initiatives and projects. Will these objectives eventually be achieved? In any event, it is reasonable to think that the path that is being followed, the people, companies, governments and entities involved, will result in a qualitatively significant advance in the strategic directions indicated. Today, there is a whole world of opportunities.



See graph on page number 05 of the booklet that accompanies the book

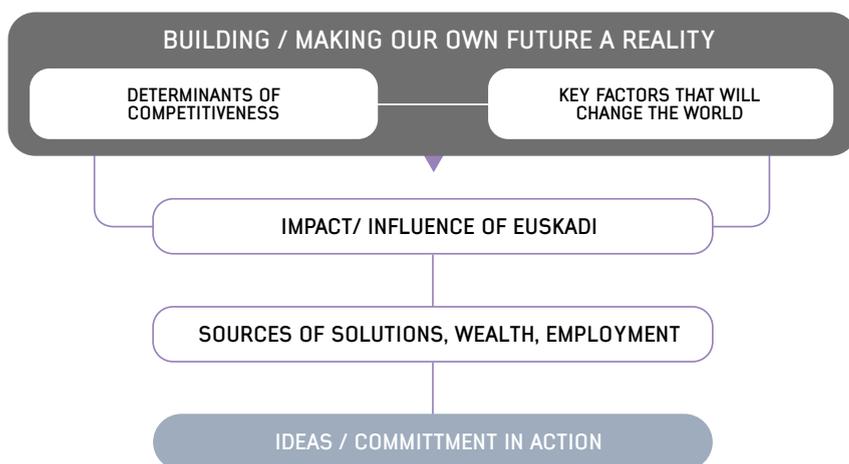
The uncertain speed of transformation that we are currently observing, transformation that must continue over the next thirty years, does not prevent us from looking at a number of key elements that are shaping and/or influencing our journey today.

A series of intergenerational changes are taking place within our society, with multiple and varied generations necessarily living closely together in a more intense way, and there is greater cultural differentiation than has been seen at any time in history. It is a society exposed to different degrees of digitalisation, levels of education and computer literacy, living with unpredictable artificial intelligence and uncontrollable and difficult to manage infodemics. A society that will experience a new and different “form of relationship with nature and with our planet”, an uncharted world of work, and one in which it is very possible that the value of that work will be unconnected to income, and a world in which frameworks and working conditions will bear little resemblance to those that we are familiar with. A society motivated by all sorts of objectives, “concrete” movements and a range of demands in a clear drive towards equality and the empowerment of women. A society where giants (economies, nations, companies) coexist with small autonomous, agile and independent players, as well as with collaborators and essential allies. A new kind of company with new roles, one that is increasingly committed to sharing value with the society within which it operates. An egalitarian society that offers real opportunities in a world with a fair and inclusive economic system that looks beyond GDP. A society that will have learned to reinterpret the already outdated globalisation, in a broad, diverse and complex space of international cooperation, more regionalised and local on a world stage where people seek and cherish a sense of belonging, which is the key “ingredient” of social cohesion and connection with the global avant-garde worldwide, in a cooperative self-determinism (staff, business, national, governmental). A world in which there are new geopolitical and geo-economic interventions, and of course new forms of governance.

We have learned that all this (and more) is what lies ahead. We know that we face a demanding journey, one on which we are setting out empty-handed. We have the capacity, the conviction, the geo-strategic positioning, the political will and the self-confidence to take on board and work with lessons learned, and incorporate them into our behaviour: the value of a clear competitive philosophy built around “stakeholderism”, the trust required to share and align objectives, priorities and shareable assets for the benefit of all, the inevitability of working in clustered ecosystems and economies, assuming specific roles and coming together with third parties. We understand the importance of social cohesion beyond the social justice it entails; we are aware of the fragility of individuality, of the economic and financial indicators of the past, of a one-track approach, of “shortcuts” based on violence and authoritarianism, and we appreciate the importance of robust institutions.

A basic “backpack” for a journey that is inevitable. A journey of radical structural reform leading to a new a new land that has yet to take shape. A new platform, “Bizkaia 2050”, a new roadmap towards competitiveness within a framework of solidarity, prosperity and inclusive development.

In setting out to achieve this objective, we have turned to a plan that facilitates orderly progress, as shown in the diagram that outlines the line of work followed.



- 1 We have already highlighted the objective role of achieving “inclusive competitiveness”, understood in the sense of a complete economic-social-sustainable, solidarity-based, multi-agent, public-public, public-private framework, in a specific space (region), promoting the clustering of all the economic activity to be developed, within the framework of the effective management of the economy and the region.
- 2 This demanding process outlined in point one needs to be directly interrelated with what we are calling “key factors that will change the world”. Here, the “catalogue of demands and challenges along the way”, that we are going to review below, would have to be subject to a triple filter: a) the observations gathered over the course of the fieldwork we have carried out, with the support of the research team participating in this project, and through different questionnaires, surveys and interviews with leading business, social, institutional, academic stakeholders and the general public.¹³ b) the rich input from the people I have held “contrast interviews”¹⁴ with people who I asked to share their own reflections and observations on the world that lies ahead of us, contrasting them with the guidelines for the content and orientation of this work, and c) the general documentation (extraordinarily extensive) on global thinking about the future which is relevant to our work.
- 3 Megatrends. Obviously we are not trying to “reinvent the wheel”, or “rediscover the Americas”. The observable megatrends are readily identifiable. What we have done is to arrange them in a logical sequence, interrelate them, and above all observe and analyse them, trying to determine the extent to which they will have an impact on our desired Bizkaia 2050 project.
- 4 Once the real impact has been established, the question then becomes how to approach solutions (not problems or obstacles) that can generate wealth, employment and prosperity for our society.
- 5 Ultimately, these would form a framework of ideas and commitments on which to act, in order to achieve the Bizkaia of 2050.

¹³ Bilbao Chamber of Commerce-Enovatinglab. Surveys and Interviews underpinning the Bizkaia 2050 project (June 2020-September 2021). Co-ordination: Lázaro Echegaray

¹⁴ Contrast Interviews Bizkaia 2050.

Jon Azua and 25 well-known people from the social, economic, cultural and institutional spheres with broad experience and knowledge of the country, and of international trends and movements.

5.1. A broad and complex initial catalogue of demands, with challenges along the way

Without a doubt, the demands we need to find solutions for can be summarised in this section by focusing on a decalogue of key points which, in one way or another, with or without a formal strategy, and amid all kinds of legitimate disagreements and aspirations, would include the following issues that need to be revisited:

- 1 **Mitigation of inequality**, a shield against dissatisfaction, lack of equity, disaffection and the source of the delegitimisation of the policies, models, and systems we equip ourselves with in order to address the problems and make the most of the opportunities and solutions that we see before us.
- 2 **Globalisation in itself** has brought enormous global benefits. However, in addition to an unequal distribution of those benefits, it has led to the strengthening of outsourcing models across value chains, with most industries opting to be part of global chains that are detached from differentiated realities, and that generate weaknesses at the local level. The search for value, and the choice of suppliers and partners requires a rethink, or at least complementary alternatives, in order to redefine our own business models, the role played by the world's leading companies and their commitments to their "base areas".
- 3 The **internationalisation** strategy requires a clarification of the spaces for co-decision making in different countries, tempered by differences in situation, and also the enabling of a broader cooperation model, one with new foundations that can have an impact on the purchasing, staffing and shipping policies, etc., that affect the whole range of cross-cutting functions and responsibilities. Presence in different countries requires sharing commitments and permanent solutions with the communities in which business activities take place.
- 4 **Information systems and new technologies**, not only as support elements, but also as essential parts of the development of new business and activity models. Speeding up certain partial measures aimed at the application of the internet of things, and robotics and automation, as well as telemedicine in health systems, e.g. for diagnosis, treatment, care and consultation, etc. that avoids face-to-face contact between healthcare professionals and patients, and above all the "humanisation of technology", making sure that it serves people and their social needs.
- 5 Strengthening our **risk maps**, taking into consideration different types of catastrophic unforeseen events. Today as in the past, it is not only pandemics, but all kinds of potential contingencies that require our "resilience, and both preventive measures and active responses"
- 6 A review not only of **labour regulations**, particularly hiring and **employability** over the long term, looking at potential periods of limited activity and fostering stable employment relationships that avoid redundancies or unwanted layoffs, but also above all a review of the new concept of work, new "social contracts", and decent access to income. The employability-income equation will be replaced by new concepts of work and decent income, with no need for the one to necessarily be derived from the other. In short, above all, the "future of work and employment" is a vital part of wellbeing and the prosperity model, life projects and the future of our society.

- 7 International agreements in terms of **governance and public policy**, speeded up and not addressed in a systematic way, that enable financing at times of crisis caused by the general environment, rethinking public space, the role of each of the stakeholders or players involved, and the search for the credibility, authority and confidence to communicate to a society that is feeling increasingly discouraged.
- 8 **Fiscal and budgetary structures**, as well as monetary policy architecture, at the service of the real economy demanding shared temporary solutions, and the inevitability of futurible prepayment schemes of the debt generated over the very long term.
- 9 A new "**Glocal**" form of **governance** that is capable of tackling complexity by focusing on observable reality and not on old models created for a different era; with different players appropriate to a model that today appears not to enjoy the necessary credibility, confidence and leadership.
- 10 Interaction between **people and the planet** as the key pillar of a new world that is profoundly interrelated, and that must embrace the concept of "**stakeholders**" as the essence of the interests allied to the search for **inclusive development based on shared company-society value** which goes beyond the usual ecological, climatic and/or environmental concept.

In short, in keeping with the Chinese definition of the crisis, once the health problem and its consequences have been overcome, we will be able to turn the big problem into a source of opportunity. And of course, as always there will be winners and losers. In any event, it is a question of thinking and taking action

with a focus on the long term, not merely in taking advantage of current conditions (prices, pressure on suppliers and third parties, exceptionally good business, etc.). It will be a question of assessing our actions in the time of crisis, and thinking about their long term consequences. We will resume our ordinary everyday lives, better prepared and stronger thanks to the lessons learned and the response of all our stake holders and interest groups on a new path towards the "new normal". The crisis has an end, albeit an uncertain one, and we need to keep these perspectives for the future in mind today, in the midst of the crisis situation. Our commitment is to produce winners, all of us.

Without seeking to distract anyone from the urgent and immediate priorities, we are addressing key aspects of the long and arduous journey towards prosperity within an inclusive development framework, revisiting our models of growth, well-being and the co-creation of value between business, government and society.

A widespread fear that accompanies us is that, once the immediate effects of unexpected crises that challenge our ordinary thinking and behaviour have passed, we tend to return to the old paradigms applying policies, programmes, plans and budgets with macroeconomic commitments and visions that have a short term impact, leaving the true microeconomic implications, which are what generate real transformation, to "luck or chance". What are the inevitable choices we must make today in order to achieve a seemingly distant but desirable future? What must we do to shape such a scenario in a positive way?

5.1.1 Listen, observe, incorporate multiple voices

In order to understand different perceptions of reality, thoughts about both today and tomorrow, aspirations for a future which, a priori, would seem distant for the vast majority of the population it is necessary to listen to many different voices.

The privileged presence in multiple forums and spaces for reflection with access to different types of international, multi-industry content, and a long-standing participation in forward looking projects and strategic analysis based on the extensive bibliography available, makes a relative approach to this “generalised and/ or dominant” opinion possible, one that is constantly evolving.

In this section, and for the purposes of this work, I will limit myself to including four specific references that I believe can provide a broad overview of what I aim to achieve in this book:

- 1 The commitment-demand option that a broad group of young people under 30 have drawn up after a lengthy process of global survey, debate and the drafting of documents and manifestos.
- 2 The most recent reflection, on the occasion of the 75th anniversary of the United Nations, is a proposal to tackle the “essential” transformations required at the present time, and the new demands to come¹⁵.
- 3 The conclusions drawn from the surveys, interviews and ideas workshops undertaken with young people in Bizkaia, albeit mostly university students, within the framework of the internal research already mentioned and under the direction and supervision of sociology professionals, complemented by Plans and Studies on young people in the Basque Country, drawn up by the country's institutions.

The survey system used also included a group of university lecturers and company and cluster association managers, thus constituting a specific set of opinions and visions of the future.

- 4 Expert opinion obtained in the process of “contrast conversations” with friends who are experts and are committed to this country, within their different spheres of responsibility.

Young people who will change the world

Thus, I would like to draw on an extraordinary study carried out by the World Economic Forum,¹⁶ involving a wide-ranging programme of interviews, workshops and creative round tables related to the network of young people between 20 and 30 called the “Young Shapers Network” (young people with leadership potential who want to change the world), based on the belief that previous generations created a socio-economic system that disproportionately rewards the very few, does not allocate sufficient resources to environmental protection and social security systems for 20-30 year olds, and puts the habitability of the planet at risk for this and future generations. With a total of 19,079 surveys carried out in 187 different countries and 344 round table debates and meetings in 146 cities in 66 countries, reaching an estimated 2,315,000 attendees. After the final debates, a manifesto was approved (the Millennial Manifesto) committing to a set of principles on which to base a militant activism, an activism which will demand to be heard, and will focus on “ways to transform society, governance systems and business roles”.

¹⁵ Contrast Conversations (Jon Azua)

¹⁶ Davos. Youth Recovery Plan. Insight Report. August 2021 (WEF)

MILLENNIAL MANIFESTO

Young people developed principles for a mature form of activism to guide action towards a more inclusive future

The Davos Lab Millennial Manifesto is the first attempt to redefine the parameters and effectiveness of youth activism in a post-Covid world marked by major examples of systemic inequalities.

Uprooting systemic problems is particularly difficult for young people wrestling with challenges related to experience and credibility. This **Millennial Manifesto** provides timeless principles that will serve to sharpen activism in their later years.

1. Creating spaces for intergenerational dialogue

We will listen to and learn from each other - present, past and future. We will respect the global context, and the fact that all parts of the world co-exist. We will share learnings to avoid replication. We will test, iterate and improve our approach, to become better leaders and ancestors.

2. We will ask big questions to advance bold solutions.

We will take time to learn why structures are the way they are, and to understand our communities' histories, before we take action. We will recognise that co-creation begins with consultation to understand systems. We will make decision-making information accessible in order to be truly inclusive.

3. We will pursue systems change and collective action.

We will build bridges within and across communities to strengthen the structures that work, and dismantle those that do not. We will set ambitious goals and move from talk to action. We will focus on local changes that can lead to global transformations and celebrate our progress.

4. We will make space for diverse lived experiences.

We will build authentic relationships with the communities most impacted by inequalities and injustices. We will acknowledge why we care about issues and who we are in relationship to them. We will join forces, share power and make decisions in open and transparent ways.

5. We will embrace uncomfortable conversations.

We will surrender our privilege and give everyone a seat at the table. We will engage to listen, understand and co-create solutions. We will create brave spaces for ideas to be heard, questioned and challenged. We will recognise the complex intersectionality of social change.

6. We will care for ourselves, others and our ecosystem.

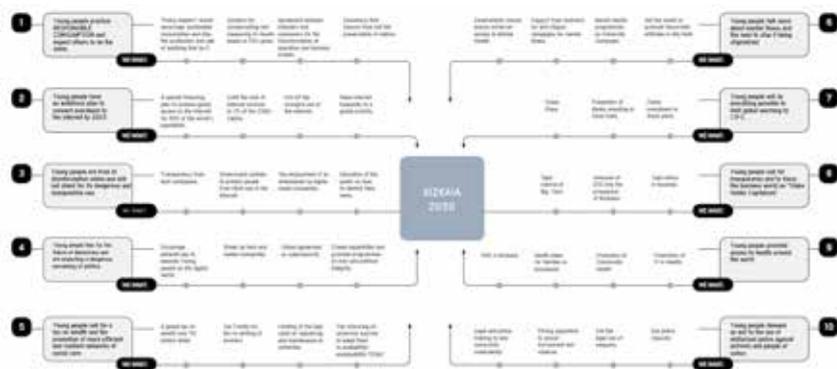
We will be kind and considerate. We will practice self- and community-care. We will find a balance between patience and impatience. We will be authentic, vulnerable and radically inclusive. We will protect our planet and our common future.

The Manifesto summarises its “40 Calls to Action”. *Have these really been internalised, and is there a commitment to active militancy, based on individual responsibility and potential capacity for decision making and influence, to embark on the transformative activism demanded of others? Would they be put into practice in future positions of responsibility?*

In any event, current positioning, which is reflected in this final document and states that 2021 is the “turning point” for mobilising joint, convergent action by individuals, the communities they belong to, the companies they work for or aspire to work for, the politicians and world leaders they will be voting for (or replacing themselves, in due course), in any field, as this is the only way to create an equitable, sustainable and inclusive future.

The following diagram captures the broad path and/or map for transformation.

RESPONDING TO EXPECTED CHANGE? WHAT DO YOUNG PEOPLE LOOK FOR AND EXPECT FROM OTHERS?



See graph on page number 06 of the booklet that accompanies the book

A vision and recommendations from the United Nations

Although a significant number of top-level managers in all types of organisations disdain long-term thinking, considering it a waste of resources, or even thinking that it can be replaced by a quick read when on multiple plane journeys, with the old story of “leave the research, thinking and innovation to others”, and that people will buy their product anyway, or that someone else will come along and take responsibility for the decision-making when they themselves are no longer around, fortunately there is no doubt that there are more and more voices committed to the future, to taking a long term view, to intergenerational responsibility, and to the need to consciously look to the future.

In this regard, it is worth including in this section the priorities that from within the United Nations itself lead to the questioning of the model or system within which we live. At the request of the General Assembly, a report that reflects on the challenges of the future, and makes recommendations how these might be tackled by mobilising resources and building commitments for the next 25 years, has been presented through Secretary-General António Guterres.

The time has come when, although there are those who believe that the Covid-19 pandemic is an invention of science fiction, and that the world will remain the same after the immediate shock has passed, the United Nations and its more than 1.5 million interviews and surveys on the subject show concern about what is to come, and the belief that a serious change of direction is imperative. The hardships that Covid-19 has inflicted on our societies, the number of deaths it has caused, the generalised impoverishment that has ensued, and the inevitable changes that are coming in the world of health, cooperation, manufacturing and its different value chains, co- and multi-governance, the financing of states and the urgent need to rethink the real public services we should be focusing on, the collaborative role of the business world, the crucial importance of educational reform, the reconsideration of work and technology, the climate change that is now firmly on the agenda and the desire to “save the planet”, as well as the need to rethink the UN itself and the different mechanisms of governance needed to move towards a different, inclusive 2050. Going beyond the generic SDGs (Sustainable Development Goals), worrying about how they are being addressed in each country or region, and understanding the differences between countries and states in terms of their size and real weight in decision-making, as well of course as addressing the sacrosanct mantra of GDP as an indicator, an objective, a driving force and the explanation for everything. The many red lines (and the hopes and solutions that are outlined) must provide us with sources of support on the diversity of pathways to change that are to be embarked on.



See graph on page number 07 of the booklet that accompanies the book

The secretary general's Our Common Agenda Report summarises the key proposals for fulfilling the twelve commitments that it understands should be made by the member states. It is worth reviewing the most significant changes that it suggests need to be made with respect to the current situation, since although they may not be finally approved, their global nature may not necessarily have a direct impact on our territory, or our capacity to act in this respect may not be of special priority, in one way or another, they will influence us nevertheless. In any event, they are certainly key elements to be considered. Among them the following stand out:

- 1 New era of universal social protection, (health cover, basic social services, access to housing, digital literacy and access to the internet as a human right, decent work).
- 2 A “new social contract”, based on the guarantee of a basic income for all those who are unprotected. (Today, 4 billion people in the world).
- 3 Protect the Planet, by demanding compliance with the Paris commitments (limitation of global warming, decarbonisation, incorporation of environmental criteria in economic models and anti-disaster measures)
- 4 Reduction of strategic risks to peace and security, prevention of conflicts and systems for their peaceful resolution.
- 5 Universal legal identity, rethinking the rule of law and the widespread application of international law.
- 6 Repeal of all gender-discriminatory laws.
- 7 Promote inclusive activities for “future hierarchies”, providing guidance and building trust in authorities and institutions, favouring structures with financial integrity and combating illicit flows. Ensure long-term thinking and projects.
- 8 New business models and a true multilateral trading system, bridging the gaps in debt architecture.
- 9 Promote public-private partnerships and systemic interaction with/between parliaments and national, sub-national and local governments, and incorporate them into renewed international institutions and processes.
- 10 Preventive and proactive emergency platforms to respond to global risks.
- 11 Universal and egalitarian digitalisation, facilitating accelerated economic and social transformation in all member countries.
- 12 Modernising the United Nations, its international agencies (starting with the WHO and UNICEF) and a call for reform, modernisation and a reinvention of the different public administrations and governments.

And what do we find among some of the protagonists of our future?

Getting closer to the people, through surveys and personalised interviews, provides a certain range of opinion which, although limited by sample size and the difficulty of the task in hand, provides some very interesting insights to be incorporated into our work.¹⁷

The results of the survey process reveal a series of opinions and aspirational comments that allow us to provide a basis for lines of action to be taken in the future:

¹⁷ The focus of the research/survey carried out, its analysis and key conclusions are included in the Report: General Conclusions. Results of the Survey Process.

Lázaro Echeagaray. Bilbao, July 2021

A) UNIVERSITY STUDENTS

When this group was asked to describe what they believe the future will be like, they unconsciously constructed ideal models that were often based on what they considered to be desirable rather than being rooted in a possible reality. It is important to point out that the questions in the survey sent to the different groups that made up the research universe took this into account. For this reason, questions such as “**How would you like it to be?**” and “**What do you think it will be like?**” were included.

In a social context such as the one we are living in, dealing with a pandemic that has succeeded in making society aware of its vulnerability, health will be one of the topics most frequently addressed, and in a certain sense, a focal point around which all issues revolve, and which in turn runs through all of them.

The construction of the social reality in which we would like to live has been based on the ideological premises and trends that exist today. Thus, it can be said that the discourses generated are based on issues such as ‘**climate change**’, ‘**environment**’, ‘**equality**’, ‘**inclusion**’, ‘**gender policies**’, ‘**sustainability**’. It is about carrying forward into the future those things that concern society today, and that it is hoped will by then have been achieved. All this is expressed in the **form of initiatives**; the vision of the future has fundamental weight in terms of the direction of those initiatives.

Those surveyed, university students aged **between 19 and 25** - the generation that will be called upon to take the leading role in the future that we are contemplating - said that they were looking for more open-minded, tolerant societies, which shows that discourses stretching beyond current moralities have taken root in the social domain, and young people have accepted them as their own, no longer as desires but as needs.

In this construction of the **social reality of the future - tolerant, plural, inclusive, and sustainable** in every sense - there is one important issue cannot be overlooked: that of **solidarity**. Because in a way this is what the collective is referring to when approaching these questions, and it is what they put forward as the cornerstone of the future they desire. The concern for others, when the “other” could be any individual or the very environment itself within which life unfolds. In this way, in their opinion it would be a matter of creating a space in solidarity with the land, with natural resources and with the other people that we share them with, without needing to worry about discrimination based on any form of sexual, “racial”, gender or political choice.

The demand is therefore for a new approach within the solidarity-based normality of cities. A new bridge between the anonymity ensured by each city and the awareness of the existence of others who may be different, and who should in no way be excluded from the solidarity circuit because of that difference. Thus, solidarity norms such as those common in archaic societies are called for; societies that were extremely close-knit in comparison with the more impersonal, anonymous form of society, left in the hands of the institutions, that exists in cities today. This solidarity needs to permeate the social fabric, starting with the institutional fabric, and become a cultural force for social cohesion.

Can this be considered an aspiration to build a new social order? Yes, from the value perspective. A society with such values will require new mentalities, new norms, new laws, and new visions. What we want to build is a social order that is based on a promise for the future that is currently understood only as a challenge.

According to the collective, another of the factors that will shape the future is **the plethora of tools and achievements that digitalisation and investment in technology will bring**. Thus, technology will not be able to influence issues such as discrimination based on gender or “race”, but it will indeed play an important role in environmental matters, and perhaps have an impact on the inequalities generated by resources: economic, productive, etc.

In these senses, the vision of the future is an optimistic one. However, this changes when reference is made to the social situation of certain groups, such as the elderly, or when the characteristics of the future of work are discussed. **Danger, be warned, social alarm bells are ringing**. There are fears that pensions will be insufficient to cover the basic needs, and that the labour market will not be agile enough to accommodate the whole of their generation.

The future will therefore be somewhere a change of values will have taken place in what might be called the ‘humanistic’ world, and a change of structure in what we will call the ‘world of work’ and the ‘world of welfare provision’. But it should be noted here that two very different points of view have been identified, both of which are sceptical about the benefits of the future. As we shall see, there is a dream of an economically developed region experiencing an economic boom in which Covid-19 has all but disappeared. This vision must be taken in context, the context of a region that has been prosperous historically, and that has achieved **high standards of living, development and innovation**. In other words, a vision of continuity is being carried forward into the future.

A process is required in order to be able to reach this society. And **this process begins with motivation, effort, proactivity and involvement**. From the point of view of social analysis, there is a break with a series of values that today are considered to be typical of young people brought up in a media world in which success is seen as the result of knowing how to be in the right place at the right time, and accepting certain constraints. It is interesting to analyse the relationship that may exist between these statements, and the perception of a future that is considered bleak in terms of employment. They reveal a trend towards the aforementioned proactivity, one that is perhaps starting right now. The collective considered that working conditions would not create improvements in the quality of life: they would affect the structure of towns and cities, and the relationship between family and work. This is where new technologies come in, despite the fact that knowledge of these technologies generates inequalities. This is why the idea of self-employment has been so popular as an employment model that helps to fulfil the need for security, flexibility and work-life balance.

Can they have an impact on the social change they are proposing? Can they be seen as a part of this process? Ideas are put forward, but the feeling is that it is the institutions and those at the top of the tree who are in control of these things. They have ideas for participation with regard to caring for the environment, being involved in training, being able to help others, supporting the local economy. Many of these actions involve little effort and are very much focused on the current mainstream. Other terms are also prevalent in this

dialectic: NEETs, layabouts, irresponsible people. There is an awareness of this within the collective which generates complaints about a lack of appreciation that is perhaps the result of a **lack of visibility and trust**.

How are institutions (understood as such) viewed? As active agencies in that it is considered that they can change people's way of life. How can they do that? Through **aid programmes** and through a **concern for society**. The institutions are responsible for ensuring that there are opportunities for young people, that there is investment in innovation, science, and public health, for attracting foreign businesses, and for preventing brain drain. Above all, **proactivity** is required on the part of public institutions in order to defend society against the latter. Alongside this, a focus on universal public healthcare and research as a driver of innovation is needed. **Private sector businesses** need a focus on youth employment and respect for the environment, and **the general public** needs to respect the environment, and support social justice and the idea of community. As can be observed, **these concepts are already starting to appear universal, as demands are being made within all sections of society**. We ask **universities** to become friendlier and less aloof, more inclusive and more egalitarian, and politicians to change their social image and show dedication to their job. One of the desires expressed for 2050 was for change in the sector, although it was felt that there is little hope of this becoming a reality. It is important to note that the sought-after change is directed towards politicians and never towards ideologies.

As we have already said, there is a certain lack of trust in institutions and in those who run them. This was clearly observed when they were asked to name the companies or institutions that they thought would create value in Bizkaia. Not one institution appeared on the list. They felt that it would be businesses that would generate value, so the largest and most important companies in Bizkaia were named, as well as leading international technology companies. When the question of which institutions will bring value to Bizkaia was put to them in a more general way, UPV/EHU and OSAKIDETZA were mentioned several times: **training and health**, in other words, the future. A future that they did not have a clear vision of, a future characterised on the one hand by difficulties of access, and decent conditions of employment that they considered do not currently exist. They want jobs that are in line with their training and their personalities, jobs in which technology could play a leading role, and create a scenario to which they would know how to adapt. There were differences of opinion with some considering that technology could play an integrating role, and others believing that it might be disruptive, possibly eliminating opportunities, and thus representing a clear threat to their professional futures. Nevertheless, there was an awareness that we are now immersed in this world, and that it will necessarily shape the future. When speaking of the economy, there was a feeling of sadness and an awareness of economic difficulties.

B) UNIVERSITY FACULTY

With a more structured discourse, with very similar and coherent lines of development, the university professors who have been part of the sample have expressed their perception of the future, their wishes, their hopes and their fears.

We immediately enter the field of the universals mentioned in the previous sections. All the concepts that fit within 'social justice' and that in this case are understood within 'social innovation'. In the definition of the desired future, positivity is observed, a developmentalist vision focused on social innovation to achieve a human region, economically developed, leading in the environmental field, advanced, or even at the forefront, of new technologies. The social economic scenario in which we would all like to live, a healthy city-region, where social health issues are a priority and form part of the strategic social and business plan. Also a participatory society, with mechanisms that encourage it, of consensual decisions, where citizens participate in political decision-making. **There are no individuals valued with psychological or intellectual superiority**, nor do they perceive themselves as any elite part.

Regarding the development objectives, there is a clear idea on how to achieve them: research and teaching. In this sense, they show a vocation towards their work and consider that they are key factors to achieve the development and innovation that must continue in the territory. They consider that research and teaching are the wickers with which an optimal future is built. In this sense, they claim money for research from the university, without so much protagonism from the technology centers. Thus, research would be the basis for innovation, knowledge, economic development and education for growth. They want to be recognized and in some cases are considered mere puppets in a world in which, although both professions are undervalued, that of researchers is always above that of teachers.

Therefore, at first glance, a humanistic, **developmental and healthy vision can be observed.**

What can they do for the society and to make Bizkaia 2050 what they want? As teachers, they feel bearers of values, not just knowledge. They believe they transmit honesty, appreciation of the environment, equal treatment for all people, consistency with consumption, promoter of sustainability and guarantors of critical thinking. And in addition to values, they consider transmitting knowledge that is valid for society, that helps business and economic development.

Starting from this idea, it is insisted, in relation to governance and the government of 2050, that the color of the governments is indifferent if they have been elected democratically; thus, even if things go wrong, there will be solutions. However, they believe that the future will continue to give us mediocre politicians.

A public administration model of the **'bureaucratic state model' type is being defined: public investments, legal certainty and equal opportunities. A question arises here. Do the people interviewed consider a Public Administration model based on the forms of private management?** As a clue, we could indicate that this group has not cited more than two social institutions among those that they consider to add value to Bizkaia either: UPV/EHU and OSAKIDETZA. **The new forms of government demand the overcoming of the previous ones, not their elimination.** Apparently the basic forms of management of the Public Administrations have permeabilized and have become anchored in the collective imagination, in the social conscience.

Bizkaia must be an academic region, where knowledge is generated from a

solid structure made up of public and private universities, with added research centers, integrated in Europe and in the strategic lines of the country.

There is no good perspective on employment and labor policies. They sense a labor market with few guarantees, with flexibility for employers, and reduction of full days due to shortages. However, they do not seem to believe that they can influence them. In many cases they are civil servants in public universities, which ensures their position. In other cases, they are professors and researchers at private universities, with many years of experience and guaranteed work. That is why they consider that in order to leave the territory, either an economic catastrophe or the proposal of an irrefutable job offer would have to happen. As teachers and researchers that they are, many of them would accept a stay abroad or a trip abroad.

C) BIZKAIA COMPANIES

This block begins by indicating that, at present, businessmen/women have a positive current vision of Bizkaia, economically and socially outstanding above the State average, with beneficial taxation, with development in innovation and knowledge (centers/network), although with a certain lack of profiles specialized in topics such as Artificial Intelligence. The importance of public administration and institutions is also pointed out, with a highly developed and powerful industrial network, and with certain shortcomings of companies in the service sector that feel somewhat abandoned by the institutions.

Looking ahead to the future, two issues are of concern to the business sector of Bizkaia: the aging of the population and the loss of value. They believe it is necessary to promote an image of a “territorial brand” that enhances their own individual value. Hope is projected on technological implementation and the change it produces in terms of social and commercial behavior. In this sense, ICTs would generate an even greater change in current ways of working, buying, informing and interacting. However, digitization can lead to other problems such as surveillance. In short, and in what has to do with these issues: aging, replacement, technological change, country brand image, **there is a certain fear of the future and uncertainty about what might happen. They fear the necessary and profound modification of their strategies and business models.**

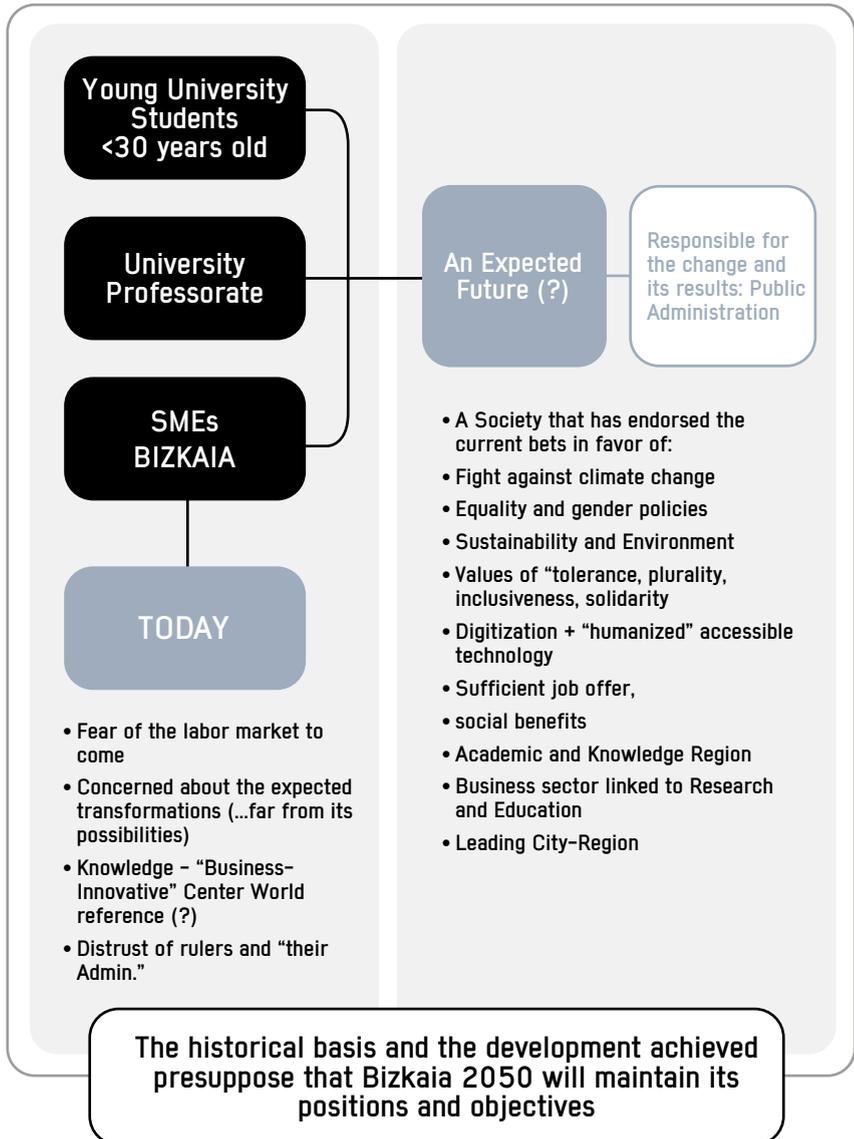
The fears regarding this topic do not end there. **They fear that the future will bring a disconnection between the industry and knowledge centers.** They consider public-private alliances to be essential and to generate networks of science, technology and research closely linked to companies in order to achieve business challenges. This, moreover, in a more competitive and difficult global environment.

The companies that have been part of the sample consider that there are some key aspects of the territory that must be strengthened. The relationship in the development of projects between the company and the administration. These relations would be even more favorable if the projects proposed by the Public Administration were reduced in such a way that they become more attainable and manageable. On the other hand, but continuing with what has to do with the Public Administration, they complain of excessive bureaucracy. Added to this is the demand-responsibility that they transfer to governments for the

retention of talent, the generation of knowledge and development policies. In what has to do with education/training, it is requested to raise the imparted level, adapted to the real demands of the territory.

In short, this block of answers-opinions, very focused on today and with demands, more generic than specific, especially to third parties (especially to Public Administration) have been reflected in a grouped way in the following scheme, they have been object of its consideration in workshops-forums with young people under 30 years old, in search of their position in terms of their own vision of the future, from today to 2050 in the development of Bizkaia and in how they see themselves at that time.

TODAY AND THE EXPECTED TOMORROW



5.1.2 An expert and coming contrast

The original design of this book and the challenge of imagining a desired Bizkaia 2050, contemplated resorting to the expert voice of personalities of recognized prestige in their different fields of action, areas of responsibility and long-term visionary capacity, with a clear knowledge of our city-region and of the world, present in multiple international forums in full prospective debate. Exceptional observers of the changes to come and a clear commitment to a sense of belonging. Ingredients that guaranteed a high qualitative value for this project.

I decided to hold an open conversation¹⁸ with all of them after sending them a brief “content” document, in which I advanced both the original base script and the idea of the scope that the book would have, with three key questions that would allow them to specify the meetings to a maximum:

1. What will be the space we see today in 2050? Bizkaia 2050 as an active and voluntary part of a space to be reconfigured together with other associated pieces of its political, economic, social, cultural and natural hinterland, adapting those models resulting from its own decision?
2. Are we prepared, as a society, as individuals, in our role as generating agents of wealth, employment, well-being and prosperity in a future space to be built: Bilbao-Bizkaia-Euskadi 2050?

The enjoyable, interesting and invaluable conversations held, the frank and honest ideas and opinions shared are beyond price.

Our friendship, trust and the long journey that we have lived throughout our vital and professional trajectories will undoubtedly allow each and every one of them to be recognized in some part of this book, and I would like to think that in the set of what is collected here. (Without a doubt, a book of extraordinary value would consist of the publication of these conversations, without adding any comment or appreciation).

I agreed to apply the method established by the Chatman House Rule¹⁹ that allows generic accounts or descriptions of what was discussed in conversations, dialogues or meetings, with the strict prohibition of associating the name of the person who comments it, preserving the necessary intimacy and confidentiality.

Almost 100 hours of conversations, multiple information and complementary documentation that emerged from them, from their plans and lines of work aligned with what was discussed, represent a rich flow to reinforce the desirable future. Their additional notes, relevant reports, documentation or, references to third parties of unquestionable value, have accompanied the exercise.

With these premises, it was of relevant importance to collect a convergent base of the main contents, concerns, illusions, bets and qualified observations that the set of these sessions contribute to that desired Bizkaia 2050 and that I collect in this infographic that offers us an unparalleled “expert and coming contrast”, emerged from this qualified group, with the integration of my reflections extracted from all the rich material from different sources already mentioned.

¹⁸ Contrast Conversations.

Personal interviews held by the author, Jon Azua, with the people indicated in the specific table. The interviews were held between February 15 and September 24, 2021.

¹⁹ The Chatman House Rule

As expected, there is broad agreement on the major issues that will condition our future, a common double feeling, between the relative confidence that we will know how to “build and/or reinvent” from our many strengths and capabilities, as has happened in other times and critical moments, as well as a more than relative concern and distrust in our true commitment and individual and social behavior, necessary to overcome the existing barriers, a dominant relative comfort and real barriers that distance us, in many cases, of the “world leading positions” in the complex and demanding new world to be shaped.

It is relevant to verify a coincidence in at least six **spaces of dualism (on the one hand, they are considered critical for the future and are valued historically positive in their differential contribution to have come this far, while a relevant deterioration is observed in them and about whose essential transformation to “win the desired future” is unlikely, missing a greater (better and faster) innovation. It is about:**

- 1 The Public Administration, their managers and civil servants, apparatuses and “own industry” and the regulatory and budgetary frameworks that support it and make up “the playing field”.
- 2 Education, training and the university system in particular.
- 3 The absence of a sufficient number of companies, driving projects, of size, strength, leadership and internationality necessary to address the future of success required or the underuse of the potential that its use in the network would offer.
- 4 Our own and differentiated “vehicles” of financing, fiscal architecture, public budgeting and Economic Agreement, and their use to enhance the country strategy.
- 5 The institutional configuration and territorial cohesion, as well as the regional, basic Basque-city space on which to build a city-region with the necessary strength.
- 6 Concern about the perception of the distance between the typology of aspirations and behaviors and values in what we have understood characterized Basque society and what seems to emerge today.

From this “dual” vision and feeling, an optimistic bet is transmitted in the confidence of having the necessary wickers to navigate a stormy and complex, existing, world of inevitable transformations that will bring the reward of a desirable Bizkaia 2050, winner of a future of its own, exciting and successful, although multiple barriers are observed to address the transformations essential for its achievement. And an indispensable claim: tackle substantial changes (what I have renamed “pending and disruptive revolutions”) that make it possible to respond to the world to come.

Thus, we briefly review the rich mega diagnosis and strategic pieces on which to visualize, as a whole, the future and, above all, the long road ahead.

We are at a critical moment that requires an authentic radical transformation, revising, reinventing or redirecting our attitudes, projects and complicities to face a changing world, more unknown than imagined and with an accelerated appearance of new players.

In one way or another, we can summarize around demography, environment-energy, economy and technology the structural forces that will redesign the future, questioning to what extent they will impact human beings, societies and, in particular, those who will live in that Bizkaia of 2050. An impact that affects a good group of changing “spaces”, provoking the necessary reactions on how to reposition ourselves before them.

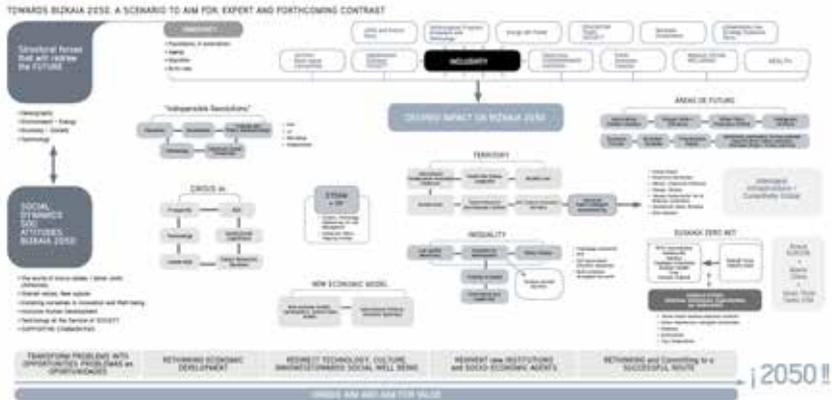
The observable (and changing) dynamics will have to be modulated, motivated, oriented towards a purpose and unique value proposition, acting on all the agendas and key elements that make it possible and that we will deal with in the next chapters.

A whole effort, daily, joint and/or collective that requires the complicity and full commitments that can be shared.

One last element, highlighted in all the comments received and analyzed, is extremely important: **2050 will be the result of everything we will have done from now until then. This first decade, 2021-2030, is essential.** In it we will mark our true future. Today is the time to redouble accelerated efforts so as not to lose a desired future.

It’s in our hands.

The richness of what was explored in alignment with the methodology, purpose and essential pieces that will have been contemplated in the structure of this book, allowed “rewriting” a basic scheme that has been enriched and reconfigured throughout this year and a half of work. The outline-script (which, as I mentioned, is my own outline, my sole responsibility, from start to finish) has been completed and developed step by step. In the final chapters (6 and 7) it will reappear to guide, in an orderly manner, the result towards the final stage.



See graph on page number 08 of the booklet that accompanies the book

FROM THE REALITY REFLECTED IN A FIXED DEPARTURE DIAGNOSIS

And, finally, before delving into the exploration of a whole changing movement that, through the already mentioned several times mega trends that will condition our future, let us conclude this chapter with a photograph on which we will have to build our strategic proposal.

We include a table: “Competitive Diamond of the Basque Country”, which has recently been carried out in collaboration with the Basque institutions by the Basque Institute of Competitiveness, Orkestra²⁰, so that we have a real starting point from which to address the different transitions that we will have to go through to mitigate or overcome the weaknesses, to convert their threats into data that can be converted into strengths, to build by strengthening and adapting the observable strengths in differentiated paths of progress and to make the multiple opportunities perceived by the set of institutional, social, economic, academic agents with whose opinion we have been working.

Beyond a traditional C.D.B.C., in coherence with our conceptual model of competitiveness, we have chosen to resort, here, to the “Competitiveness Diamond” that offers us a broad analysis of each of the Diamond’s vertices on which, from the degree of intervention of the different governments and their policies, we configure a clear initial starting image: the so-called conditions of the essential factors and/or resources that we have and the conditions of demand and our thinking about it, the availability of a network of related industries and of support, the basis of our response capacity, and the strategic context in which they operate.

The image displays four tables related to the 'Competitive Diamond of the Basque Country' analysis. The top-left table is titled 'FIXED DEPARTURE DIAGNOSIS' and is divided into 'STRENGTHS' and 'WEAKNESSES'. The top-right table is titled 'COMPETITIVENESS DIAMOND' and is divided into 'DEMAND' and 'RESOURCES'. The bottom-left table is titled 'COMPETITIVE DIAMOND FOR THE BASQUE COUNTRY' and is divided into 'DEMAND' and 'RESOURCES'. The bottom-right table is titled 'COMPETITIVENESS DIAMOND' and is divided into 'DEMAND' and 'RESOURCES'. Each table contains detailed text and data points related to the analysis.

See graph on pages number 09 and 10 of the booklet that accompanies the book

²⁰ Basque Case
Investigation project. IVC-ORKESTRA 2021

5.2 Transition into light of observable Megatrends and their foreseeable impact on our path

With a greater or lesser degree of possibility or probability depending on approximations, we have opted for a book that refuses to explain, analyze or propose alternative, optimistic or pessimistic scenarios resulting from situations, decisions, externalities that emerge as determinism to be assumed. . Our commitment is for a single scenario, the DESIRED one. *What will be that scenario in which we would like to live in 2050?*

We are committed to a world of opportunities and not of problems or barriers that make our “comfortable and beloved” lives and projects impossible, we want to see a world of shared abundance and not of scarcity²¹, we design an inclusive world with which we identify and in which we play a co-protagonist role, we want to decide with whom and how to share it, we are willing to assume the commitments, responsibilities and risks that the essential decisions force us to undertake the transformations that we will have to carry out and, we know, that it will not be a journey of manual, nor a simple, unidirectional, helpful and continuous process. We know that absolute unity is not only impossible but, surely, not the best travel companion either, so there will be decisions, attitudes and behaviors against the tide, uncomfortable and that require the courage of the option that at each moment and depending on the role we play, each and every one, at every moment, will have to assume.

Of course, we have before us a whole map or constellation of pieces that show us the enormous journey to travel from TODAY and its verifiable reality with the desirable tomorrow. Now, is everything we want to do possible?

Is it time to take a look at the Megatrends that, like it or not, are and will be among us and will condition our successive “transitions”? Although the Megatrends will be, yes or yes, their consequences and impact on our project, is mostly the result of what we do in the face of them. It is now time to understand them, understand their scope and bet on the best way to deal with them in order to turn them into an ally on our way to the desired space.

In this way we approach the next section of this long journey. What does the future hold for us in light of observable Megatrends? What will be its foreseeable impact on our strategic bets? What will be, in each case, the answer that we will have to choose to reach the objective set: the Bizkaia of 2050?

²¹ Abundance vs. Scarcity

ABUNDANCE VS. SCARCITY

Far from thinking of “distributing the existing cake” under zero-sum concepts (what one receives, the other loses), typical of the model and limited thinking of times of “scarcity”, the thought of abundance suggests “creating more cakes” and facilitate access opportunities for all creating a world of additional and growing possibilities.

Exponential technologies, duly oriented to the solution of social demands and needs, facilitate (and condition) this expected future.

Based on the theory and movement described and attributable to the school of thought of the “Singularity University” and Peter Diamandis, already mentioned, there would be six groups of immediate benefits that this way of thinking and acting provides::

- 1 Understand and assume that the world is, day by day, more and more “abundant”, increasing the collective hope for the achievement of complex challenges that appear unattainable.
- 2 Overcome the fear of losing a specific occasion or opportunity, knowing that the ability to cope is infinite and awaits new opportunities, permanently.
- 3 Not fear the future. It is in our hands, in our commitments, in our determination, motivation to appropriate it and configure it according to our desires.
- 4 Let's stop seeing “zero-sum excluding competitors”, to perceive, discover and promote “cooperative” spaces in potential collaborations with shared objectives and benefits.
- 5 Let's reinvent activities, capacities, business models, services and public policies, our surroundings and environment, through “digital lenses”, in constant evolution, dematerializing, demonetizing and democratizing the offers of services and products, making them accessible to all kinds of plaintiffs.
- 6 You reinforce your leadership role,

The following diagram shows the process that we have followed, aligned with the previous sections. The progressive transitions and the “magic of the long process” itself will determine our ability to achieve the purpose that makes the person-community symbiosis the resultant located on a Bizkaia 2050 in its own space, different from other models, taking from each and everyone of them, the best, adaptable to our own will. We will review and understand the main pieces whose expectations are already, more or less, formulated and made explicit by the observable global megatrends.

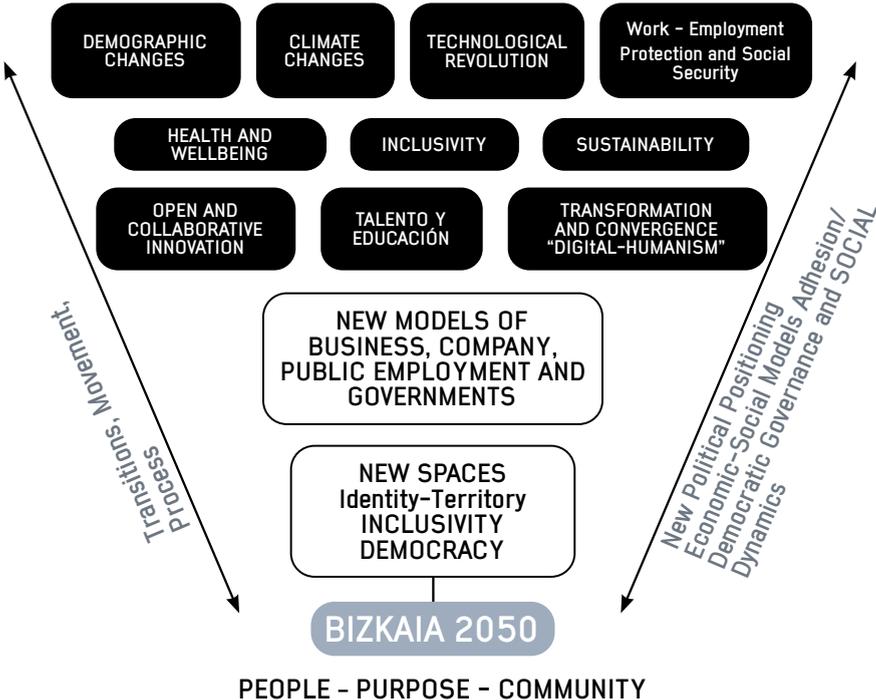
For the purpose of the shared analysis of these years, the forces that will affect, for better or for worse according to our will and response, our bets and possibilities for the future, we have wanted to reflect in 15 sections, totally interrelated in multiple

directions, the complex puzzle that will redesign a map in which we will have to move. Said map will, in turn, change throughout successive transitions that will suppose what has come to be called, over the years, “The magic of the process”.

The definition of objectives, arrival points, plans to carry out, require as an essential element of the full strategy, that magic, to a large extent controllable, the result of our attitudes and execution decisions and in part, modifiable or not, predictable or not, that it is given to us, decided by third parties and that affects the results that can be obtained step by step. A “strategic maneuver” will be feasible, and successful, to the extent that the process that leads to its fulfillment responds to what was planned. A changing process, by definition, requiring leadership and specific governance, appropriate instruments for the proposed purposes, sufficient resources, flexibility and agility in the journey, “full strategic” coherence and complicity, commitments, participation, management and constructive evaluation, at all times.

Once these foundations have been laid, here it is not a question of describing a treaty on Megatrends, but simply of approaching them, reminding us of their importance and those essential elements that they entail, and asking ourselves what their degree of impact will be on our business, social and country ideas and projects, and to what extent would we be able (and would we be willing to assume its personal and collective implications) in clearing up its drawbacks and bringing out its possibilities and positive consequences. Thus, let us rethink this map as an invitation to reconnect with the opportunities that they offer us for a better world.

IN LIGHT OF OBSERVABLE MEGATRENDS AND THEIR FORESEEABLE IMPACT ON OUR FUTURE



5.2.1. What do we expect from demographic changes?

A first significant reference requires a demographic prospective. We collect a quick comparative vision of the main figures and estimates in the world, Europe, state (Spain), the Basque Country and Bizkaia, so that we are able to “frame a realistic situation”. Firstly, in terms of size and later from the qualitative analysis of a high number of “mobile” concepts that, beyond the population base, will reconfigure our “future space”. The expected migratory waves, the changing diaspora and with which we will have to play a special role from the base territory, aging and the “n” generations that, progressively, will occupy their different spaces in the multiple spheres of our lives.

Demographic Projections

• World

The world population shows a growing trend. However, not all regions of the world are growing at the same rate. In the case of Europe, although there is an increase in the population, this growth is only 2%, being the lowest growth rate worldwide, together with North America²².

This same report indicates that by the year 2050, the world population will increase by 2,000 million people, reaching the figure of 9,700 million, and predicts that by the end of the century the world population will reach its maximum with 11 billion people.

Some countries in Asia, Africa, along with the United States will register the largest population increase towards the middle of the century, concentrating 50% of the world's population between now and 2050. This same report projects that by 2027 India will surpass China as the most populous country in the world.

On the other hand, the UN report highlights in a special way that the world population is ageing, while the age group of 65 years and over is the one that grows the fastest. This is because life expectancy at birth has increased and fertility levels have decreased; on the one hand, life expectancy at birth, which increased from 64.2 years in 1990 to 72.6 years in 2019, is expected to increase further, reaching 77.1 years in 2050 globally, while the global fertility rate, which fell from 3.2 births per woman in 1990 to 2.5 in 2019, is expected to decline further, reaching 2.2 births per woman in 2050.

• Europe

In accordance with the UN report, EUROSTAT²³ describes a population structure in Europe where 19% of the population is over 65 years of age and it is expected that by the year 2080 this figure will reach a share of 29% in the member countries from the EU. On the other hand, the percentage of the population of working age, which for the year 2017 presented a participation of 64%, will decrease constantly until the year 2050, until reaching a participation of 55%.

²² World Population Prospects 2019. UN

²³ EUSTAT. Demographic Panorama 2018

• Spain

For its part, Spain completes a number of inhabitants close to 47 million, data from the NSI²⁴, representing its population of over 65 years of age with an average participation similar to that of Europe (19%), although births have been reduced by 29 %. Hence, the increase of the population in Spain is explained by immigration that compensates for the low birth rate. In 2020, the population increase would therefore be exclusively due to international migration. This will mean that the population born in Spain will always decrease and would go from currently representing 85.2% of the total to representing 66.8% within 50 years. Of the demographic phenomena present in Europe, perhaps one of the most significant is the increase in the proportion of older people together with a continued decline in the proportion of people of working age. This will imply an increased burden on people of working age, in order to meet the social spending required by the aging population for a series of related services.

• Basque Country

According to EUSTAT, the population in the Autonomous Community of Euskadi shows a growing trend between 2017 and 2018 of 0.02%. The participation of the population over 65 years of age represents 24% of the total of the community, surpassing that of Spain by 5 percentage points. On the other hand, those under 19 years of age represent 18% of the total inhabitants in the ACE. On the other hand, EUSTAT²⁵ identifies a 36.6% decrease in registered births in the Basque Country in 1980 and 2016, in contrast to a life expectancy that is increasing; 9.8% for women and 13% for men, in the same period.

In other words, our base territory, Bizkaia 2050, will have a population very similar in size to the current one, incorporating a net balance of more inhabitants.

A desirable increase and improvement in our life expectancy with an older population that is higher in proportion, limited birth rates except for substantial changes in family, birth and/or migration policies, in any case, the need for positive policies favoring an inclusive migration will characterize the coming decades, with a significant involvement of economic agents and, especially, also employable and generating wealth necessary to finance our development, levels and well-being. Additionally, “grow, collaboratively” with complementary spaces throughout the world (as we will see later), would seem not only desirable and natural, but indispensable.

²⁴ NSI 2019-2020. Demographic estimates

²⁵ EUSTAT. Demographic Panorama 2018

BIZKAIA 2050. DEMOGRAPHIC ESTIMATIONS

Demographic Prospects						
		WORLD	EUROPE	SPAIN	BASQUE COUNTRY	BIZKAIA
Total Population (people) <i>*World (thousands)</i>	2020	7.794.799*	447.671.046	47.321.434	2.188.813	1.140.715
	2050	9.735.034*	441.220.961	49.348.530	2.159.780	1.080.740
Fertility (children per woman)	2020	2,42	2,62	1,39	1,31	1,22
	2050	2,21	1,72	1,57	1,44	1,36
Deaths (Total people)	2020		4.770.548	432.024	22.268	12.209
	2050		5.591.473	607.518	29.576	15.532
Net migration (Total people)	2020		1.270.426	364.909	14.242	6.429
	2050		1.001.288	178.664	7.797	3.784
Life expectancy at birth (years)	2020 women	75,59	82,25	86,68	87	86,6
	2020 men	70,81	75,87	81,26	81,96	91,60
	2050 women	79,11	85,38	89,67	90,23	90
	2050 men	74,52	79,97	84,35	85,6	85,30

Demographic changes and transitions

The demographic panorama presents a slow population growth, with fewer births and a higher percentage of older people; hence, the participation of this group increases in greater proportion than that of the group of working age. On the other hand, the population prospects for the coming years suggest that the increase in deaths, always higher than the number of births, would give rise to a negative natural balance. This balance would be surpassed by the positive migratory balance, which would cause an increase in population that would therefore be exclusively due to international migration.

This entails two great challenges: firstly, the social challenge of generating conditions that guarantee the physical and emotional well-being of the elderly, and, secondly, the economic challenge represented by having a smaller population of working age that stimulates the economy and guarantee pension sustainability for the elderly population.

These same challenges open two opportunities, on the one hand, to develop new business models in which social inclusion is part of their DNA, such as: maximizing the knowledge of older adults to generate solutions to the problems they have already experienced and /or on the other hand, strengthen companies by adopting social inclusion within their corporate values, such as: taking advantage of the growing migratory wave to attract talent and, not only increase the range of the working-age population and thereby guarantee sustainability of the older population, but also to boost the economy and weave business networks around the world.

The challenge of tending to guarantee the physical and emotional well-being of older adults requires rethinking differentiated services in health, nutrition, leisure, communication, transportation, among others and invites to propose strategies for new products and services tailored to the needs and expect-

tations of this segment of the population. These types of strategies are defined by the European Union as a silver economy.

The silver economy recognizes that the older adult population has invaluable expertise that makes it capable of identifying solutions to problems already known to them and therefore they are a source of innovation, which, used collaboratively with the government and companies, it could give rise to new business models and the reactivation of the labor dynamics for those older adults who are absolutely active, independent and enterprising.

On the other hand, more and more, the different investigations in relation to the role of diasporas throughout the world, their contribution in the country of origin and the host country and their attitudes and behaviors in their “new spaces of inclusivity” are of special relevance. We have an example in a recent investigation²⁶ that reveals surprising benefits of migration both for the countries of origin and for the new countries of residence. The results of the research suggest that migrants can forge new connections between their countries of origin and their new countries, and in this way these diasporas could expand commercial opportunities between companies and countries that send and receive population. In this line, McKinsey & Co., in its report “Briefing note, prepared for the World Economic Forum in Davos, Switzerland 2019”, estimates that workers who moved to higher productivity environments contribute approximately 9.4 %, to world GDP in 2015, about 3 billion dollars more than what they would have produced in their countries of origin.

Migration

Un estudio publicado por Naciones Unidas en 2019 sobre Prospectiva de A study published by the United Nations in 2019 on Population Prospects to 2050²⁷ indicates that a growing number of countries are experiencing a reduction in the size of the population. This is due to low fertility levels and, in some places, high emigration rates. Specifically, between 2019 and 2050, the population is projected to decline by 1% or more in 55 countries or areas, of which 26 may see a reduction of at least 10%. In China, for example, the population is projected to decline by 31.4 million or 2.2% between 2019 and 2050.

For its part, migration has become an important component of demographic change in some countries. For example, according to the same United Nations report, it is estimated that, in the coming years, Europe and North America, North Africa and Western Asia, and Australia will be recipients of international migrants, while other regions will be net senders. Some of the largest migratory movements will be driven by the demand for migrant workers, by violence, insecurity and armed conflict, or even as a consequence of climate change.

Foreseeable MIGRATORY WAVES will occur in the coming decades. The positive, orderly and of maximum asylum policy and action, inclusiveness and support-respect and dignified reception, will determine its impact on our development by 2050, which would require welcoming and integrating migratory flows, including, in addition to social responsibility and maximum protection of human rights, transforming them into a social and economic opportunity for the countries involved, given the contribution that immigrants could make in terms of cultural exchange, dynamization of markets and support of the welfare model in those countries with fewer births and higher percentage of older people.

²⁶ Stanford Social Innovation. Profitable migration

²⁷ Global Migration. Expected flows throughout the world (United Nations)

Therefore, to maximize the benefits that the migratory trend represents, it is necessary to strengthen public/private alliances for the design and implementation of policies that facilitate the inclusion and linking of the migrant population in the labor market, as well as in the development of professional skills in accordance with the current needs and commitments of the market, and in this way guarantee a better economic, social and civic integration that would translate into an increase in the productivity and competitiveness of the receiving regions. What will be our reaction of public policies and social behavior before them?

Although it is conceivable that most of these migratory changes will be due to socioeconomic consequences (unfortunately most of them forced by conflicts and/or inequalities in search of opportunities and better life projects), a good number of them will be a consequence of the process of climate change and natural catastrophes.

Despite the intensity of the global strategies and commitments associated with the fight against climate change, its impact, as always uneven, will cause considerable mutations in different geographies, which will not only cause an intense geo-locating process in significant populations, some of which could be partially alleviated with innovative measures of replacement, housing, employment, relocation, others by previous decisions -long-term- for the “reinvention of cities, housing and reorganization of the territory” and in addition to natural catastrophes that make them inevitable, but others will obey habits and life aspirations. Also, the “fight for talent” will cause “migrations”, temporary or permanent, especially of young people, for the offer of employability and quality of life, within the framework of a growing “competition” between city-regions for having the called “youth groups” in search of the “best development spaces”²⁸.

Consequently, the migratory movements of the future will intensify their causes and typology. Exiles, migrations of an economic nature, migrations due to natural disasters, climate change, talent, new options and ways of life... invitation from models perceived (transmitted) in globalizing messages and those coming and going (initially) as a result of internationalization of the economy and its companies, international collaborative research and growing generalized tourism.

Already today, the forecasts regarding the migration of the Asian population, proportionally distant (Asian-American around 33 million vs. 4 million Asian-European) will be inverted and migrations from Latin America to the United States will be reduced in terms of “need” to give way to “active attraction” as a result of the needs of the labor force in the United States. Africa, not only will continue to generate movements towards Europe, but internal migrations will create in a great way, village-city, country-to-country.

The Basque Diaspora

Beyond the circumstantial, geopolitical, administrative, “legal” situations that confer the character of national, resident, etc. of people in specific countries and of the “political status of the Basque” that could be recognized to a particular member of the Basque Diaspora, at any moment in history, the country and in this case, as the Bizkaia 2050 space (Bilbao-Bizkaia-Euskadi),

²⁸ “The Youth Talent Clusters” Future Map.

as a natural base, has to contemplate its Diaspora as an integral and inseparable point of it.

The Basque Diaspora, in addition to its voluntary perception of identity, image and permanent commitment, gives a full sense of belonging, has played, is playing and will play a relevant role in the future of our desired Bizkaia 2050. By conviction, without a doubt, at the same time that, even, by coexistence and mutual interest, for the construction of collaborative economic, political, social, academic and institutional spaces that enable international collaborative structures, “desired wave of bidirectional migration”, and permanent mutual enrichment. Although the scheme that we reviewed does not reflect, in the same intensity, large migratory flows with/from America with Bizkaia 2050 (which would be extraordinary news for our brothers in America who would see their democracy, equity and economic well-being consolidated in this way), it supposes a line of work of extraordinary relevance with the design of our future projects. The corresponding table includes a brief reference of interest in the changing, expected Basque Diaspora and its impact on Bizkaia 2050.

DIASPORA

Beyond its intrinsic value as a “natural” and indistinguishable piece of the Basque people itself and its active membership in/in Bizkaia 2050, from the strategic point of view in its irreplaceable role in contributing to the generation of economic and social value to the 2050 vision, it is worth picking up its essential role in its configuration.

Diasporas in general (with the greatest impact when they maintain a minimal active link with their country of origin) are considered at a global level, “net and irreplaceable contributors” to the development of the country of origin. They have a positive impact on the country’s value proposition, through different key mechanisms:

- 1 Memory, relationship, representation and bidirectional communication.
- 2 Bidirectional flows of talent, human capital, resources (economic-financial) between families, communities, organizations of all kinds.
- 3 They facilitate foreign investment at origin and destination.
- 4 Transfers of human capital in all kinds of exchanges: temporary, cultural, economic, business, academic, political.
- 5 Decisions, contributions, interaction in the world of NGOs, foundations, charities and social entities.
- 6 Investments and venture and entrepreneurial capital.
- 7 Tourism, culture, etc.
- 8 Exchange new initiatives.
- 9 Trust, knowledge and visibility to the Stakeholders through the bidirectional reference point.
- 10 “Structural” lobby in both areas.
- 11 They provide human capital in binational projects.
- 12 They reinforce educational systems, political ecosystems and academic references.
- 13 International diplomacy.
- 14 Representativeness, respect, generation of credible cooperative spaces.
- 15 Access to programs, initiatives and projects for collaboration between countries and internationally.

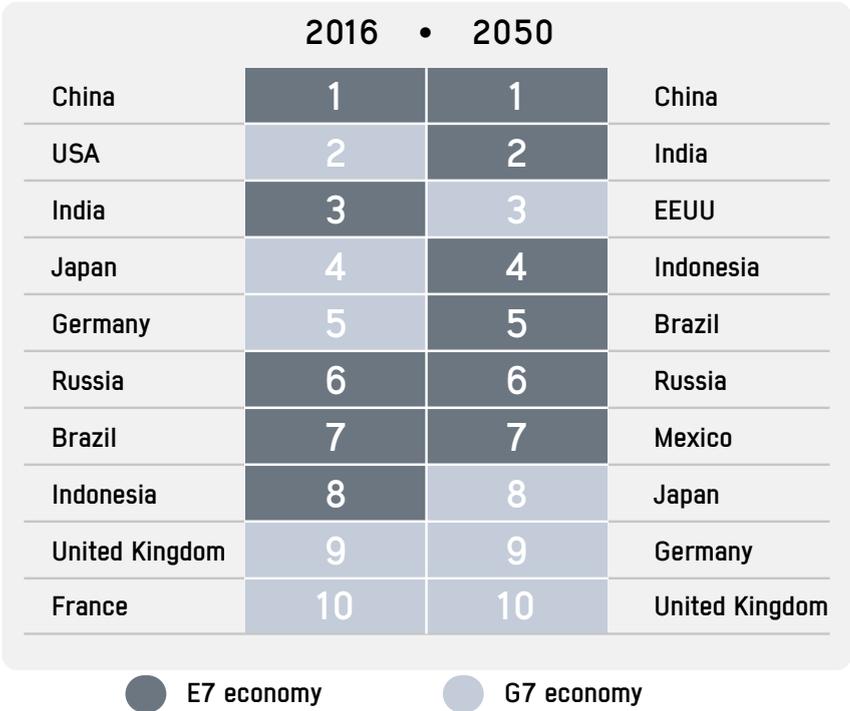
In the case of the Basque Diaspora, its wide, nourished and respectable network, especially throughout America, has facilitated and facilitates a representation that is difficult to obtain with the support/obstacle of the States and their centralized diplomatic relations. In the case of subnational spaces, city-states that will have priority in the future, they become the main “qualified, close and effective ambassador” that Bizkaia 2050 can have.

Attentive to expected trends in demographic-economic repositioning. Geolocation

Before concluding with the analysis corresponding to this section, it is worth referring to three representative figures of expected movements in the population-economy binomial, in terms of size, according to current estimates.

Assuming valid the estimates based on current bases and behaviors (GDP, displacement motivation and geolocation, territorial and geopolitical-administrative organization) in basic and positive correlation regarding the demographic behavior and its foreseeable mobilizations-migrations, 2050 will continue to offer us, with changes among them, a dozen current country-states, dominant in terms of their GDP. They would be “the top economies” under this prism.

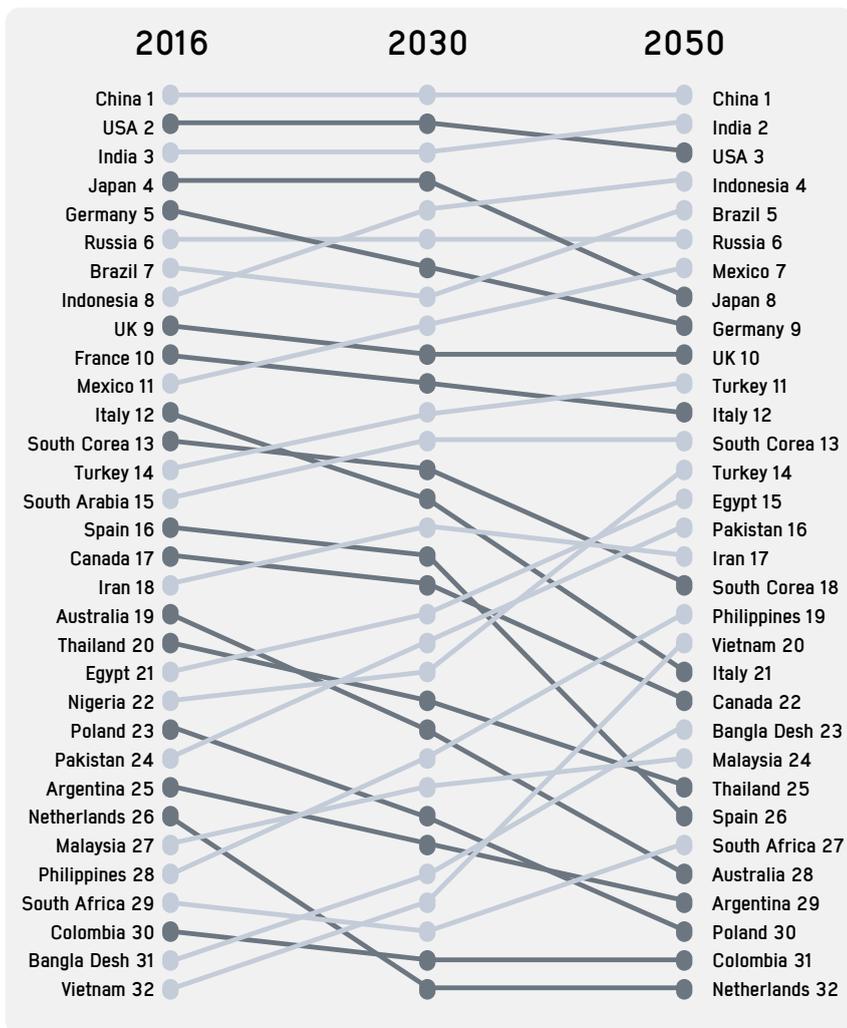
Thus, the 2050 scenario, corresponding to the order collected here, with a significant dominance of the so-called “emerging markets”.



Source: The world in 2050. Pwc

And, beyond these ten great players, we will observe significant changes in other countries that would climb positions, going on to play key roles in their respective areas of influence, mainly in ASEAN (Vietnam, the Philippines) and Africa (Nigeria). *Beyond their population-economy weight, will they make the necessary and accentuated changes to “win a desirable future”?*

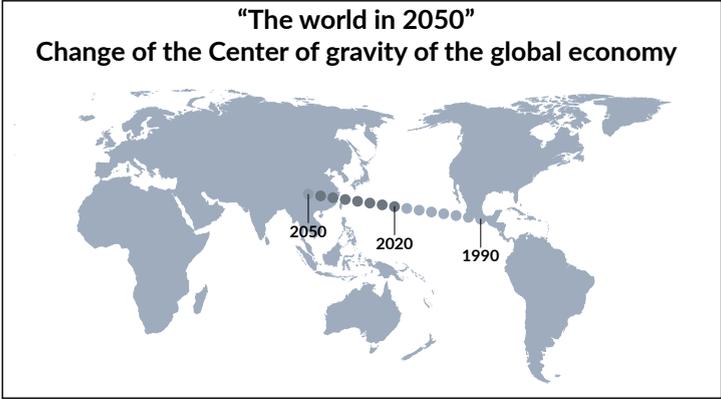
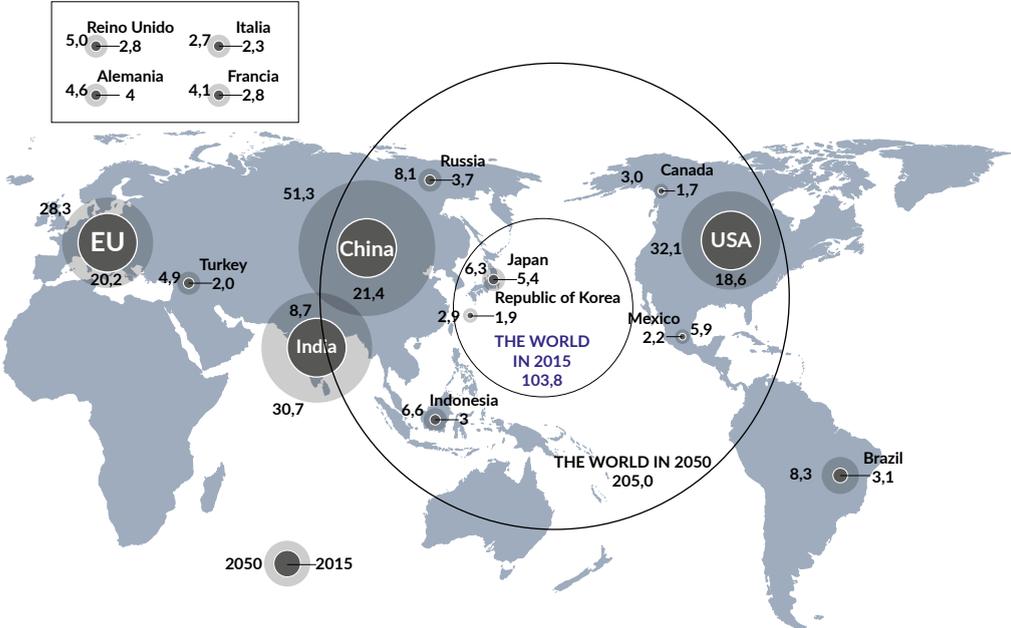
ESTIMATE OF THE CHANGING RANKING IN 2050



Source: IMF Estimates for 2016
PwC projections for 2030 and 2050

Therefore, a new space for 2050 under the determinism of size and strength of size and current configurations in the joint population-GDP axis?

THE NEW SPACE OF 2050?



Aging

Facing the growing elderly population and its expected situation for 2050, entails a series of preliminary considerations of enormous relevance, both for its differentiated understanding, and for the different actions to be undertaken.

Aging itself presupposes its analysis from a perspective of its own socio-health relationship, its different perspectives in relation to its automotive-disability, the degree of friendliness and accessibility of the required infrastructures (both for its mobility, and for its use), housing and care, in their case), their employability (in the ordinary period of active work and/or different passive or semi-passive, voluntary or compulsory modalities) and the very configuration of the work spaces, the different policies and financing of welfare, programs and professionals for care and attention, the advancement of medicine itself, its “literacy and usability of technology” (active and passive) and, of course, its innovative capacity and adaptability, in addition to new insurance systems (public and private), pension and savings systems, taxation, transportation and, not forgetting, another aspect of enormous tractor capacity, in turn, of the generation of wealth and employment, around the so-called “silver economy”²⁹. Not to add aspect of longevity and “immortality” that genomics biotechnology and spheres of biomedical engineering and precision medicine suggest.

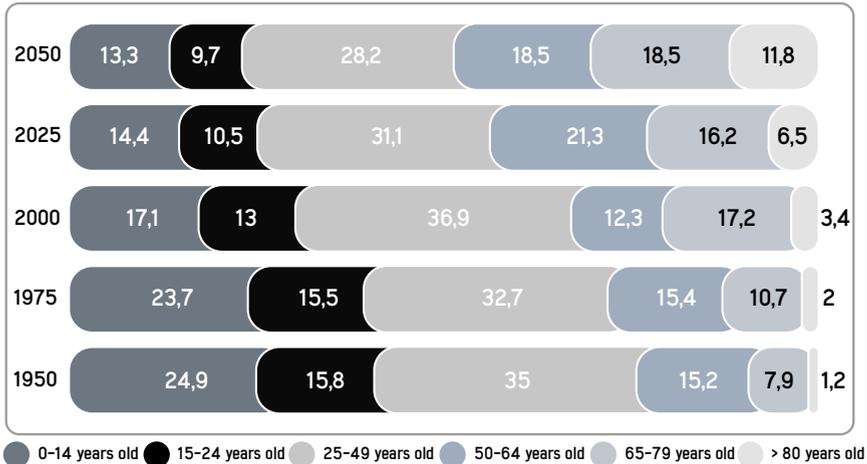
Although today, most of the public debate focuses on pensions and all the lines of debate in this regard and the care model (socio-health, community, family) and reviews of post-Covid models (in Bizkaia, initiatives of The creation of an Intelligence Cluster Center for Entrepreneurship would seem to be the core of a large number of initiatives included in the section corresponding to the Map of Initiatives in progress 2021-2026, in Bilbao-Bizkaia-Basque Country)³⁰, multiple initiatives associated with both with the Silver Economy focused on the enormous contribution of value that the elderly population makes and can make over time, ad hoc leisure and tourism, their needs converted into opportunities for industrial development and services, the new spaces for generating activities (work, technology and smart manufacturing, tourism, leisure, finance, housing, gastronomy-nutrition-food, biotechnology, education-training, culture and self-employment crowd). Once again, its conception in one direction or another is also a great source of opportunity, prosperity and a real challenge for the inclusive design of the future.

In any case, the aging of Bizkaia in 2050 will be relevant and decisive in our way of life and potential development. In other words, Bizkaia 2050 will have around 34% of its population over 65 years of age and nearly 250,000 people will be over 80 years of age, with a fertility rate of less than 1.3 births and being one of the oldest populations in Europe.

²⁹ The Silver Economy

³⁰ NIC. Nagusi Intelligent Center

EVOLUTION OF ESTIMATED POPULATION GROUPS IN THE EU-25 FOR THE PERIOD 1950-2050



Source: World Population Prospects. (UN, Revision 2002)

Successive UN reports maintain the trend. The aging figures have been framed in the EU environment, based on the projection carried out by EUROSTAT in 2004 for 25 member countries. The population has been divided into age groups and an estimate of 100 years has been made. As can be seen, the oldest age groups experience significant growth until they become the largest segment in 2050.

This current prospective analysis has put on the table another debate of enormous importance. WHO-UN consider the possibility of including “old age” as a “disease” within its “international classification of diseases”, which leads to further global reflection on the future situation of people belonging to new groups to differentiate : “third age”, “certain age” with their respective adjectives around their autonomy and real activity (seniors, elderly, etc.).

Regardless of the line of approach to aging (active-passive), a whole constellation of areas of action and incidence will cause enormous changes in our societies. It is not enough to send the message, kindly, that “the 70 years of before are the 40 or 50 of today and what can we say about what it represents in 2050”. Undoubtedly, the context and progress of our societies reflect this reality: Our growing average life expectancy without disability requires changes that will cause rapid transfers in our work and educational life, in our protection and social security systems, in the financing of our “passive years”. A large majority of the readers of this book will be an active part of Bizkaia 2050. They are today in its construction and will be in the coming years, generating a livable 2050. Many others will actively enjoy it in 2050.

In the next 30 years we will witness all kinds of initiatives that, both from the unique opportunities that technology offers us (and will offer), such as social, economic, cultural and financial transformations, in addition to the renewed health and associated sciences, they will contribute to this world.

The proper orientation of all these lines of intervention will reconfigure the world of ageing. Without a doubt, we will refocus the world of cities and assist care for the elderly-sick and/or lonely or demanding health, community services and adequate social assets, with a reconsideration of their home, residential, temporary, defi-

nitive position (its growing specialized professionalization, quality and valuation). The welfare and social security state will deal with new points of view and solutions in the world of pensioners (not only once those ages are reached in order to enjoy them, but also in the times and ways of generating them) and we will explore a vast world of telecare that facilitates their lives while offering trust, tranquility, security, protection, we will modify infrastructures (mobility, housing), we will transform job profiles, educational systems and, of course, workplaces. And we will delve into the “so-called Silver Economy” that will transcend, increasingly, high-income layers to reach the entire population, but, above all, as a source, also, of generating wealth and employment.

It will be, it is, the time to bet on an active, comprehensive, complete strategy that repositions us before that world. Prepare to make it older, of course, but with the confidence of a horizon. A phase, also, creative, constructive, of life.

AGING CLUSTER

Already at the end of the 1980s, different initiatives were carried out with the aim of generating an Aging Cluster in Euskadi.

One of the initiatives with the longest run was the so-called corporal promoted by the Provincial Council of Gipuzkoa and the F.I.K. (a novel initiative of the time, from a Technological Center, today in the Tecnalia Corporation) and different companies for the financing and “venture operations” of business projects aligned with the, then, foreseeable demands of the world of aging.

Today, the wealth and strength of projects, lines of activity, companies, social, educational, economic agents and multiple projects, public policies, make their synergistic reorganization around a cluster, fully integrable in the different ecosystems of the world, more than possible. territory (socio-sanitary, health, housing, mobility, science-technology plan, education), so that the structuring of solutions and lines of action, a strengthened strategic commitment, optimizes the use of public-private resources, provides a stability guaranteeing the long and intense road ahead. The reassignment, targeting of extraordinary ongoing initiatives, deserves it, in the same way that each and every one of them would be empowered in the performance of their specific roles.

The secondment, poly-institutional and multi-departmental in public participation, would be equally necessary.

The real strength of the country in this area supposes an incomparable wealth on which to undertake the new spaces of the future, finding the relevant niches that the observable mega and meta trends do not announce. The experience and knowledge of the models and organizations for the clustering of the economy and the country endorse them.

An instrument at the service of the demands and needs of the elderly population (today and tomorrow) and, at the same time, a living source of wealth generation, employment and well-being.

Existing/cohabitants generations in Bizkaia 2050

Until very recently, its differentiation was especially noteworthy in “educational prospects” and in issues related to the consumption and use of technology, in order to differentiate the cultural, marketing and computer literacy offer. Today, the need to differentiate the different generations that coexist in the world and in a specific population, is of great interest, strengthened by new technologies, the world of Data and personalization in all fields, which allows greater or full knowledge of each one, their tastes, preferences, purchasing power, needs and potential options in all those activities that affect them.

Without wishing to exceed its analysis, we limit ourselves to mentioning and distinguishing the different generations (today and in 2050), “cohabitants”:

- **SILENT GENERATION (74-93 years):**

They belong to the fourth age. They have been raised on sacrifice. They have adapted to new technologies, but without excesses. 15% use the internet. They let themselves be advised by young people. They won't be in 2050.

- **BABY BOOMER (54-73 years old):**

Today they are the generation with the most members. They dominate the market by number. They highly value health and want to stay active. They make remarkable use of technology. But in Spain the use of the Internet is not as widespread as it is in other countries. They are concerned with loneliness and seek meaningful and emotional experiences.

- **GENERATION X (39-53 years old):**

Very populated too. As an important fact, to say that they were already born with technology: walkman, CD, HIFI, TDI. They suffered from the dot com bubble. They value active and healthy living. They demand the human touch of technology. A KPMG study (2017) positioned them as the most active online shoppers, 20% more than Millennials.

- **MILLENNIALS (18-38 years old):**

The generation that has grown up with technology. They value experience, they want to work on their passion, they dream of controlling the future, they are committed and they expect that from society and brands. They understand online and offline as an integrated reality. They are the creators of the economy on demand, which already says a lot about their interests, the satisfaction of immediate desire and the personalism/individualism that characterizes them (with these attributes they will reach 2050). Immediacy is their requirement.

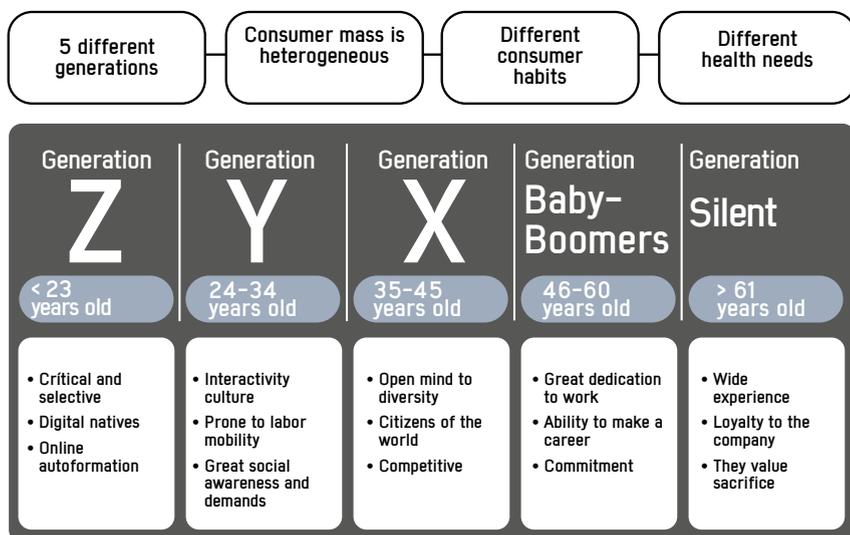
- **GENERATION Z (7-17 years):**

They will be in full professional development in 2050. Today they are pre-adolescents and adolescents. They will be between 37 and 47 years old in 2050. Digital natives which does not position them in the same range as the previous one (Millennials) who are technological natives. Having been born with the previous crisis, they are more realistic, responsible and cautious. Multicultural, tolerant of diversity, defenders of social justice (this profile has also been defined in this way in the Bizkaia 2050 survey process). They are impatient, because they have internalized the speed of response of the Internet. They use new forms of expression

such as emojis or acronyms, which is the result of the speed/immediacy that they value. They are the pill generation, all in small doses, and quickly. They say they are against hacking and bullying, but these things happen in their environments.

• **ALPHA GENERATION (0-6 years old):**

The replacement generation of Z in 2050. They are the children of the Millennials and this has its importance by inheritance. With great capacity to influence fathers and mothers. They will grow up in a gaming environment, virtual reality, augmented reality, AI. Their relationship with technology frees up mental space, which they then dedicate to tasks of a higher cognitive level. In your relationship with technology, everything happens in real time and this will have an effect on the future and how it is shaped. They are the screen generation.



In one way or another, differentiated policies, albeit from an intergenerational perspective, will be essential to move towards a new desired society.

5.2.2. And what does climate change have for us?

After a couple of decades of intense agitation, questioning, public debates in all forums and levels, and innumerable time and resources devoted to intentional Agreements and Pacts in search of a consensus on their true importance, to a more or less convergent plan to face global solutions, systematic breaches of what was agreed, everything would seem to indicate that the world approaches a true pact and commitment, for what it considers the fight against the negative effects

of climate change. Commitment to, said in one way or another, would save the planet and allow us to offer future generations a habitable space.

Finally, the verification of a real depletion of fossil fuels in a determined horizon, the verifiable global warming, the technological conditions available that allow a general substitution, the financial viability of multiple relatively convergent agendas throughout the world, a sufficient agreement on the potential distribution of profit-losses, winners and losers, and the composition of the positive impacts on nature, on people's health, on employability, and on industrial and service assets that will emerge in the "new green era", with a more than generalized environmental and energetic confidence in its achievement, allow us to expect an ambitious deployment of agendas, projects and solutions at the service of total decarbonization (with tolerable relative exceptions, a priori) for the 2050 horizon.

Consequently, we have three decades ahead of us to move towards a green economy (which, as it could not be otherwise, will interact with other transitions: blue-oceans and water-, brown -advanced industry-, red -technological -, orange -transport-, colorless -food-, gray -social- and white -educational-). A whole world of opportunities trusting in getting it right (in content, time and eligible options) in the "waves to be caught", which will lead us to our successful and desired Bizkaia 2050.

Whether we like it or not, the race towards the Net ZERO of climate change is underway and, already, it conditions all public policy and its budgets, business strategies in multiple areas, starting with energy, food, transport-mobility and the associated infrastructures. Not to mention the financial world, also conditioned, both by the type of investments, sources and savings channels eligible for their investors-savers and, without a doubt, by the importance that said decarbonization entails in terms of other types of emissions. (on this occasion, of bonds, promissory notes, financial assets) that make possible the viable financing of the transmission.

If the United States and China, basically, the oil-owning and producing countries and their intermittent geopolitical positions, moved the board in search of a better and advantageous starting point, with an expectant Europe while many of its companies prepared for the ultimate game, today is the moment of total takeoff. Some believe in "winning the total dispute" from their differentiated strengths. A true global challenge, unstoppable, that seems to have been "bought" by society, in general, for its "irreplaceable benefits" immunizing or "despising" the difficulties, inequalities and problems that, without a doubt, we will also experience.

Today, there are innumerable studies and reports (as well as the business and country strategies of those energy leaders committed to the planned decarbonization) that identify the difficulties, their interaction with multiple industries, social and economic decisions, attitudes of citizens -consumers (not always consistent in their "ideological" positioning and their practices and demands of life), pointing out different viable routes towards the viability of the objective sought. Different routes that provide us with critical variables to consider: times, speeds and rhythms, associable transformations, global governance, multi-cooperation and firm commitment in a direction with no turning back. Once the viability has been verified, with the efforts of multiple agents, the importance of marking roadmaps (countries, governments, companies, international orga-

nizations), is essential as well as inevitable. (An example: Shell Transformation Strategy 2040)³¹.

As we have already pointed out early on, we seek to explore opportunities and turn difficulties exclusively into data that leads us to think of solutions. Multiple obstacles that we will have to know how to overcome. However, the general positioning (waiting for the next conference in Glasgow, and the global reactions to the impact of Natural Gas this coming winter as an alarming warning), would seem to be a robust and viable strategy.

The different global feasibility studies allow us to verify:

- 1 **A succession of “new policies”** of the International Energy Agency, based on national strategies and the public-private sector, placing the evolution of greenhouse gas emissions in different scenarios of sustainable development. Policies that allow a 37% reduction in current emissions due to the efficient use and reform of fossil fuel subsidies, 36% due to the reduction of less efficient generation, 20% due to the substitution of nuclear sources, introduction of new technologies of capture, storage and use and processes and 9% in the reduction of oil and methane gas in the upstream.
- 2 **Maximum activation of a series of accelerators** for the transformation of the current chain of emissions: generation of renewable energies, organic-based solutions and biofuels, substitution of coal, gas and oil in renewable generation of heat and steam, “green” solutions in the processes of electrification and recycling of materials, circular economy, efficiency of materials and processes, new intelligent manufacturing³².
- 3 **Irruption of a profusion of technologies** in the 2030 horizon, modifying the global emission cost curve³³, at more than affordable average prices.
- 4 **The different benefits** related to an improvement in energy efficiency³⁴.

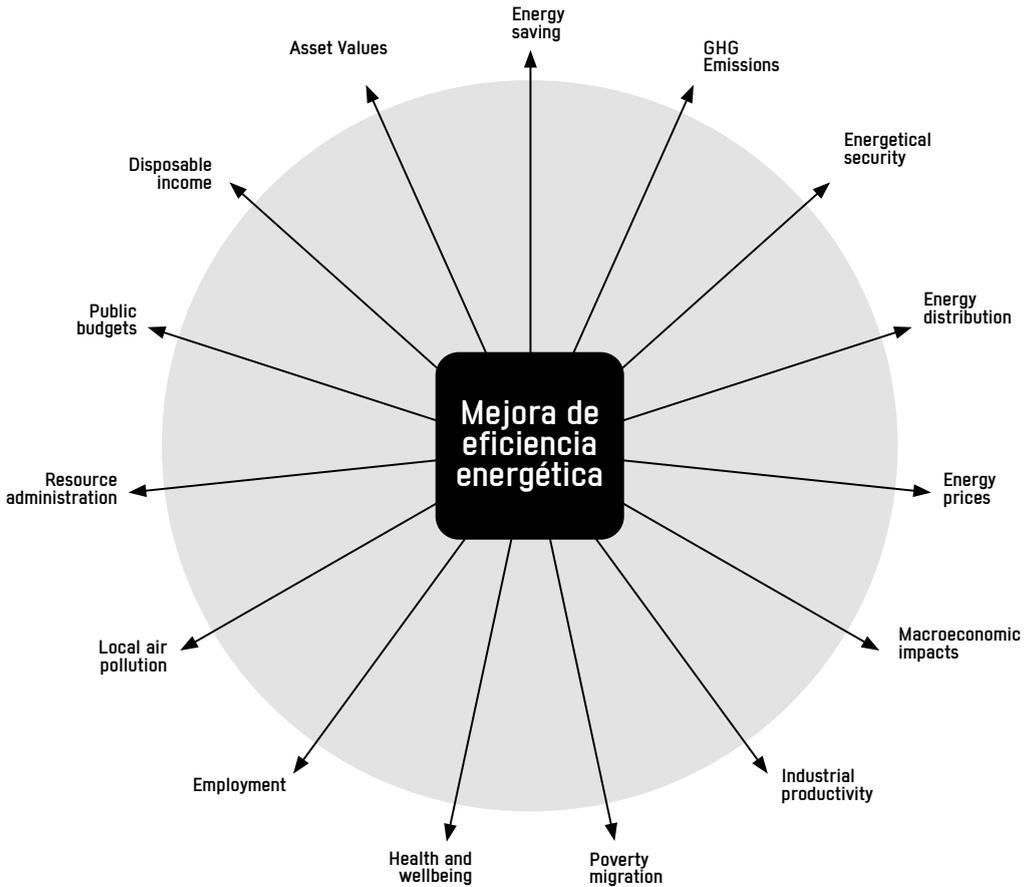
³¹ www.shell.com/transformationsscenarios#shellscenarios

³² BCG: Levers to abate supply-chain emissions

³³ McKinsey. GHG and less technological available and EIA AEO Analysis-Mckinsey

³⁴ IEA-2015. Energy efficiency improvement

RELATED BENEFITS WITH IMPROVED ENERGY EFFICIENCY

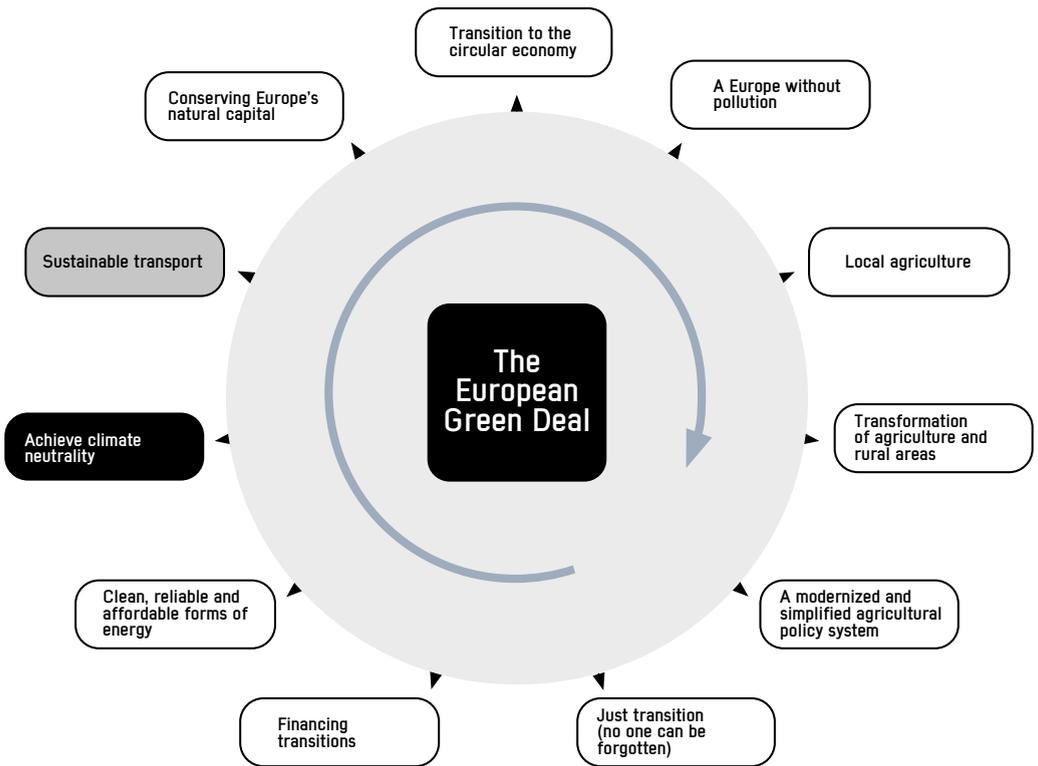


5 The European Green Deal from Climate Action at the Center of transformation.

It's sufficient to point out here that the EU today concentrates 70% of assets in natural funds in ESG (Economic-Social-Governance goals), has the most advanced regularization in "green regulation" and leads the world's commitment to green regulation. decarbonisation, on whose global fund emission and emissions market it has based its viability of indebtedness and financing of the EU-27 to cover the COVID Plan and ongoing recovery. Its "European Funds" available to the Member States, base their "eligibility", largely on projects aligned with this European green transition.

THE EUROPEAN GREEN DEAL A ROADMAP TO TRANSFORM THE EUROPEAN ECONOMY

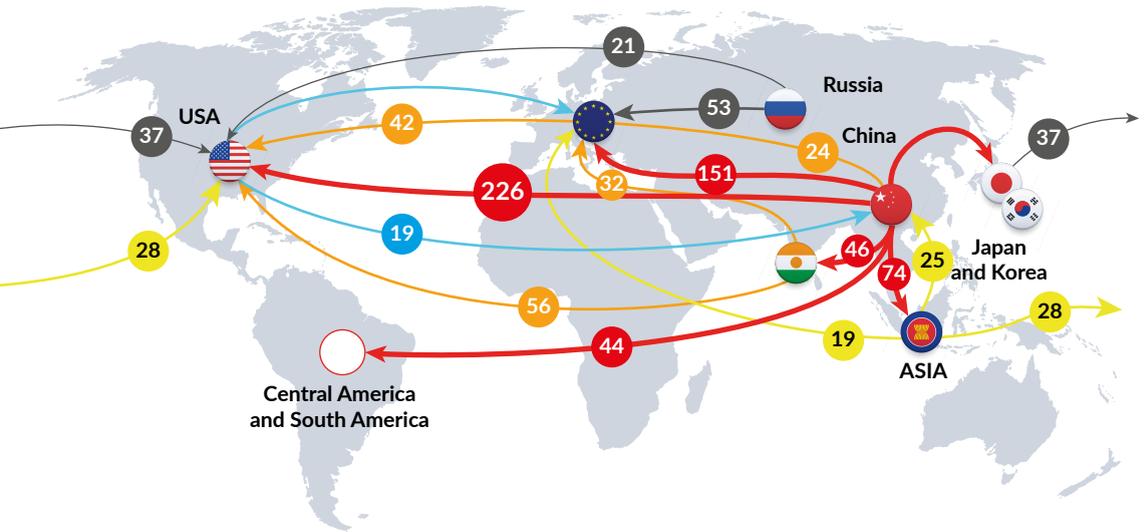
(Climate action at the center of transformation)



The previous figure clearly shows, between objectives and critical elements of its strategy, the spaces of opportunity and required and opportune action.

- 6 Last but not least, the analysis of the “20 global CO₂ emission export flows”, with their corresponding trade in rights (and/or import of emissions), which allow us to conceive a value chain whose operation makes possible the expected profitability “Zero carbon”.

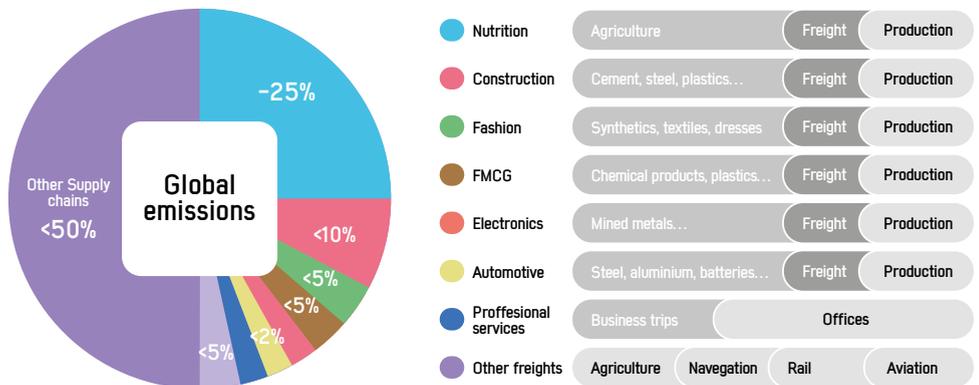
Top 20 global CO₂ export flows (Mt CO₂, 2015)



Note: Excluding mining activities and services
 Source: OECD Trade in Embodied CO₂ Database (TECO₂) BCG

Solutions that will have a special impact on manufacturing and transportation (and the logical intrinsic change in energy) as shown in the following figure:

THE 8 MAIN VALUE CHAINS IN TERMS OF EMISSIONS AVAILABLE SOLUTIONS TO TAKE US TO NET/ZERO



Note: Only selected steps of the value chain are shown here; value chain steps not shown to scale; FMCG = fast-moving consumer goods
 Source: BCG

In short, a full-fledged transformation and its different transitions, with an apparently viable financial scheme, an explicit roadmap in essentials and, with three large blocks of “competitors” or “cooperative players” around a great Green Deal, with different strengths and leaderships in their respective differential boards.

How will they impact our lives by 2050? As in everything, it will depend on our response and disposition.

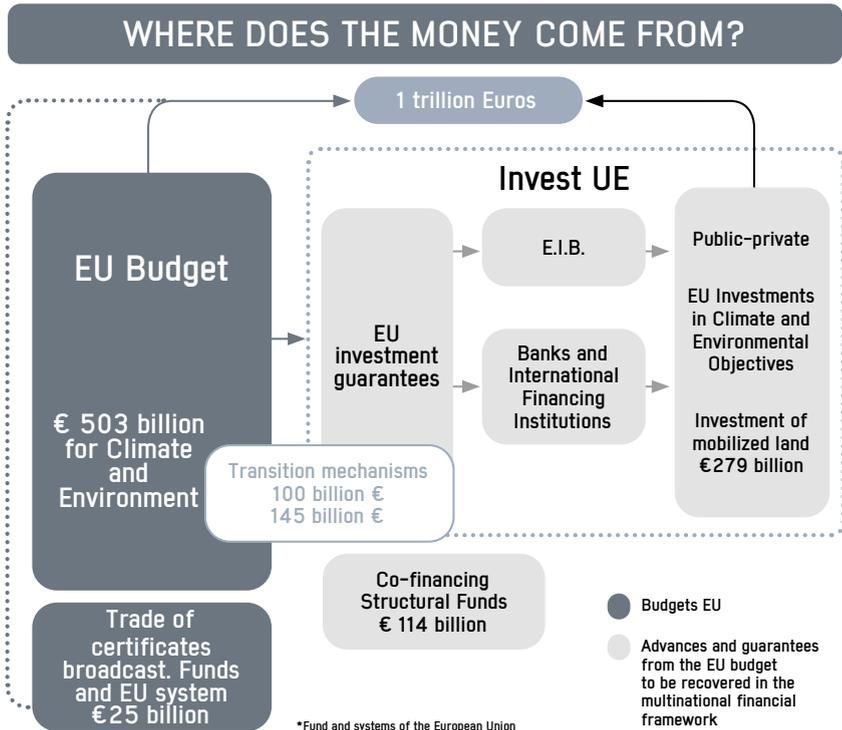
It is enough here, in this section, to collect the different initial positioning that, hand in hand with the different plans, agreements, budgets and projects, we position ourselves towards 2030 and successive years. The following figure describes this initial positioning and allows us to contemplate all the interactions that it entails (with other megatrends and with multiple bets and transitions).

The Climate Race

The climate race would seem to pit three major competitors against each other: China, the United States, and Europe based on their respective (and potential) advantages in terms of renewable energy, “clean” molecules, batteries and energy-carbon storage, electrified transportation.

However, it is important not to forget other relevant players: the Middle East Corridor in its long and intense innovative career from its current production strength and its convinced strategies in pursuit of the global objective.

THE EUROPEAN GREEN DEAL AND ITS PUBLIC-PRIVATE FINANCING



As indicated, the European financial scheme (which, a priori, would have seemed at least realistic and known), harbors viable results to support the complex transition. Its distribution, costs-benefits, winners-losers, between different countries, industries, people, within the European Union and its diverse impact over time, is something else. A challenge. Achievable, yes, but a challenge that we will all have to assume.

...the inevitable "Trade Off"

Could our society maintain the planned global and priority commitment?

Are we prepared to assume the conditions that it entails? Will we arbitrate immediate, short-term solutions, required for the planned route? How will we correct to minimize the negative effects (temporary or not) for the large number of "losers" in this game with final destiny in the "good for all" in the long term?

We have verified a positive and general discourse that has led governments, companies and citizens to assume "saving the planet" as an inalienable common good and it would seem that we have accepted "every plan, deadlines and externalities" that it entails and that inspire the current agenda. But, meanwhile, this bet is leaving behind multiple decisions and space for imbalance that affect different industries, people, jobs, countries, governments. Whether due to the impact of a commitment to "the green economy" that alters the temporary price of electricity or due to the replacement times of the car and mobility in general, or due to the proliferation of resources and programs that, with a "green label" offer little guarantee of success in their objectives, cause unwanted relocations with a high negative impact on local employment, or due to countless alterations to a specific way of life.

ENERGY TRANSITION. GREEN ENERGY AND ZERO NET CARBON

DELIMITATION	PROPOSAL	VISION / OBJECTIVE	LINE OF ACTION / GOALS
WORLD	PARIS AGREEMENT	<p>Increase global climate action</p> <ul style="list-style-type: none"> • Keep the increase in global average temperature below 2 C with respect to pre-industrial levels. • Continue efforts to limit this increase in temperature to 1.5 C with respect to pre-industrial levels. 	<p><i>"All parties should strive to formulate and communicate Long-Term Strategies (LTS) for low greenhouse gas emission development, bearing in mind art. two (of the Paris Agreement) and taking into consideration their common but differentiated responsibilities and respective capabilities, in light of different national circumstances."</i></p>
EUROPE	EUROPEAN GREEN DEAL	<p>Transform the EU into a fair and prosperous society, with a modern economy, efficient in the use of resources and competitive.</p> <ul style="list-style-type: none"> • Reduce net greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels. • Europe with zero net greenhouse gas emissions in 2050. • Economic growth will be decoupled from the use of resources. 	<ul style="list-style-type: none"> • Fresh air, clean water, healthy soil and biodiversity. • Renovated and energy efficient buildings. • Healthy and affordable food • Efficient, safe and respectful transport with the environment. • Cleaner energy and cutting-edge clean technological innovation. • Longer lasting products that can be repaired, recycled and reused. • Future-proof jobs and transition skills training. • Globally competitive and resilient industry.
SPAIN	LONG-TERM DECARBONIZATION STRATEGY 2050	<p>Articulate a coherent and integrated response to the climate crisis, taking advantage of</p> <ul style="list-style-type: none"> • opportunities for the modernization and competitiveness of our economy, and that is socially fair and inclusive. • Reduce greenhouse gas (GHG) emissions by 90% by 2050 compared to 1990. • The remaining 10% will be absorbed by carbon sinks. 	<p>Natural carbon sinks. Adaptation to climate change.</p> <ul style="list-style-type: none"> • Mitigation: • Energy efficiency • Renewable energy • Sector decarbonization: • Renewable electricity sector • Sustainable mobility and transportation • Sustainable building • Sustainable and competitive industry • Agriculture, waste and fluorinated gases • Transversal factors: • Citizenship • Just transition and support for vulnerable groups and sectors.
BASQUE COUNTRY	2050 CLIMATE CHANGE STRATEGY OF THE BASQUE COUNTRY	<p>Having a competitive low-carbon economy adapted to climate effects, derived from the consolidation of a climate change policy based on knowledge, which has allowed us to take advantage of the opportunities that</p> <ul style="list-style-type: none"> • they offer innovation and technological development. • Reduce GHG emissions in the Basque Country by at least 40% by 2030 and by at least 80% by 2050 compared to 2005. • Reach in 2050 a renewable energy consumption of 40% of final consumption. • Ensuring the resilience of the Basque territory to climate change. 	<ul style="list-style-type: none"> • Commit to a low-carbon energy model • Move towards emission-free transport • Increase the efficiency and resilience of territory • Increase the resilience of the natural environment • Increase the resilience of the primary sector and reduce its emissions • Reduce the generation of urban waste and achieve zero discharge without treatment • Anticipate risks • Promotes innovation, improvement and transfer of knowledge • Responsible Basque PUBLIC Administration, exemplary and benchmark for climate change

5.2.3. . The technological revolution

What makes the Revolution 5.0, proposed at the time by Japan, different from the Revolution and/or Industry 4.0 that is widely extensible and ongoing in practically all business and government agendas in the world? And how do both differ from the concepts of digitization, exponential technologies and information, data or automation technologies in which, by choice or passive presence, we live immersed, regardless of our degree of technological literacy?

If we attend to the “Law of acceleration of returns.” of the technologies, called exponential, substituting the well-known Moore’s Law³⁵, the “new thinking” required to undertake in this disruptive world, its speed of diffusion, expansion and growth (associated with its potential progressive reduction of costs), makes all types of digitization possible, dematerializes exponential technologies, demonetizes them and, above all, “democratizes” the access to products and services that have not been scalable until now, fostering the so-called “Communities of Digital Abundance”, after the ideas of a world full of opportunities (abundance), to the extent that it is needed and acts promulgating solutions far from thinking about the barriers or limiting difficulties prevailing in our days³⁶.

The unstoppable irruption of information technologies, the -active or passive- digitization of our lives, the arrival at a point that not only makes it unquestionable, but absolutely desirable and essential, although it transfers its key points to debate to its applicability and use in the new creation of value, its inclusive nature or exclusionary (both in access to its benefits, and in the orientation of its use), the infrastructures that will facilitate them, their ownership, the speed of their implementation and development, as well as the capacity, replacement time of the key activities, their employability, the freedom, privacy and governance that it entails.

Additionally, it provokes an intense key debate on the importance of governments in their orientation, regulation, control and generation of opportunities.

Today we can say that, to one degree or another, every activity, service, solution is subject to digitization. The transition from analog to digital is obvious, hybrid in some cases, or face-to-face or total, in others, but, without a doubt, a future “inevitable”. Thus, every industry will be digitized and the essential thing will be the “new business models, use, solutions” that they generate. The personal, business, government challenge... is a fact.

In this framework, the successive phases, more terminological than anything else, that have been taking place, from the transition from “Offline to Online”, from digitization to Smart or intelligent, to the successive “Smart n” (cities, manufacturing processes, devices, programs, etc.) or generic ones, non-manufacturing and industrialization 4.0, are phases, in greater or lesser development, of the same process. Thus, under the understanding of its all-encompassing impact, this digitization must be seen from three duly interrelated perspectives: the digitization of the economy (including its finances), social digitization and the digitization of governance. Under these mantras, generally not unique, 100% of digital spaces are developed.

Although the intense advancement of the industry has brought us at an

³⁵ Ray Kurzweil - “The new Moore’s law”

³⁶ Peter Diamandis: “GD’s for the Abundance Digital Online Community”

accelerated pace to the so-called Industry 4.0 (although it is more than likely that we are already well beyond this digit) and the attempt to go beyond the industry to provide a message of being put at the service of the total (and changing) demands of society, the 5.0 revolution, seems to draw our attention to the obligatory and essential holistic consideration that its use and priorities must have, as well as the importance of forming and facilitating its access to a whole complex society, at very different previous levels. The digital divides go beyond the real access and only literate use of the devices and concepts of this ongoing revolution.

It is, in this way, how to face the opportunities of this new creation of value from digitization, requires acting on digital infrastructures for all; access, manage, control the associable world of Data in the abundant universe that it supposes; the prioritization in the development of associable technologies, their use and focus on the transformation of all types of organizations and institutions and, of course, the purpose pursued with participation, individual and collective benefits, with and for all the agents involved.

Challenges and Opportunities of the digital world

Although listing the opportunities and challenges of this digital world is limitless, let's just focus on some of the many spaces that this 4.0 Revolution offers, beyond its own technology, as shown in the following figure:

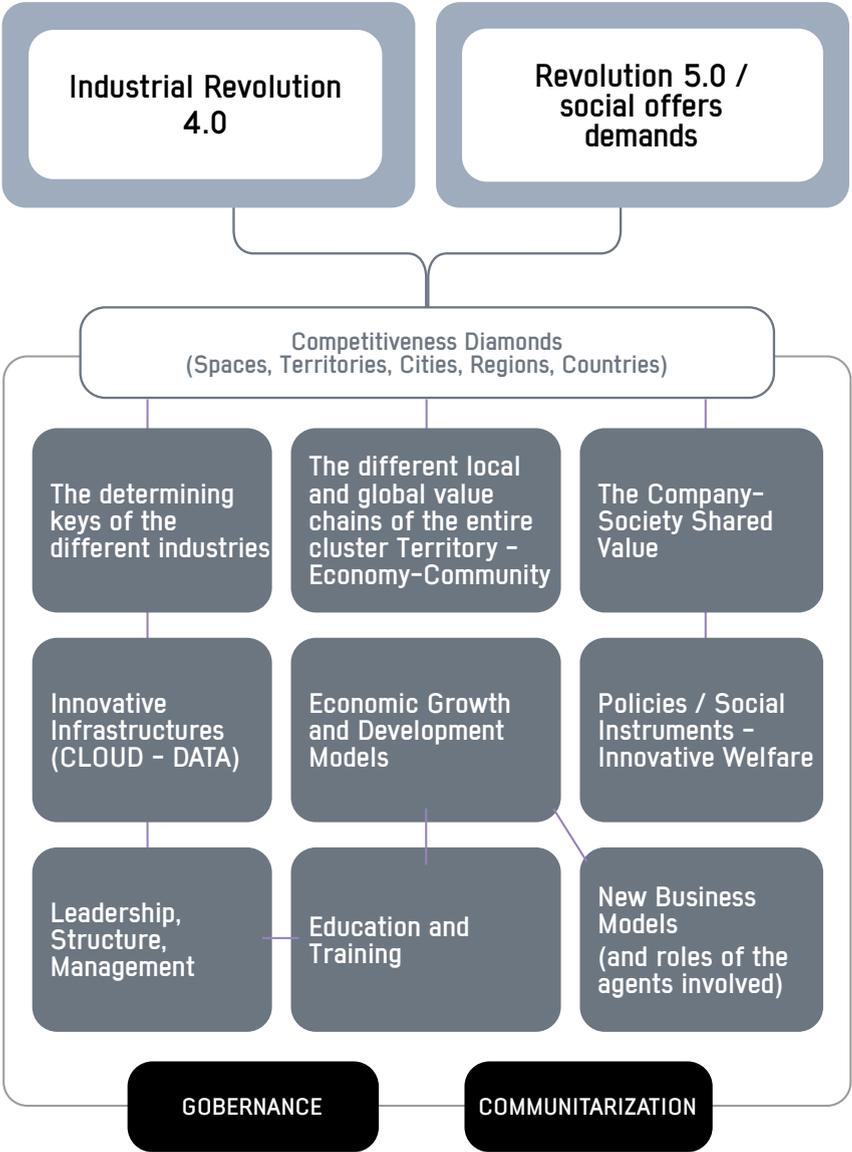
CHALLENGES/ OPPORTUNITIES OF THE DIGITAL WORLD

- 1 Digital transformation is not just a matter of technology.
- 2 All sectors are being affected.
- 3 Everything that can be digitized is digitized
- 4 Boundaries between industries disappear
- 5 Differences in assets and capabilities
- 6 Strategies to be followed by new / old companies.
- 7 The benefits for the customer
- 8 Agile Organizations
- 9 How to balance the current business model and its transformation? Anticipate the future?

**REVOLUTION
4.0 IS NOT THE
TECHNOLOGY BUT
THE MODELS OF
BUSINESS**

We are all immersed in a transforming process that requires our adaptability, in the face of its irruption, whether active or passive, in our lives and personal relationships, in our work and employment, as well as in the access to a whole new world of opportunities and, of course, of obligations and co-responsibilities.

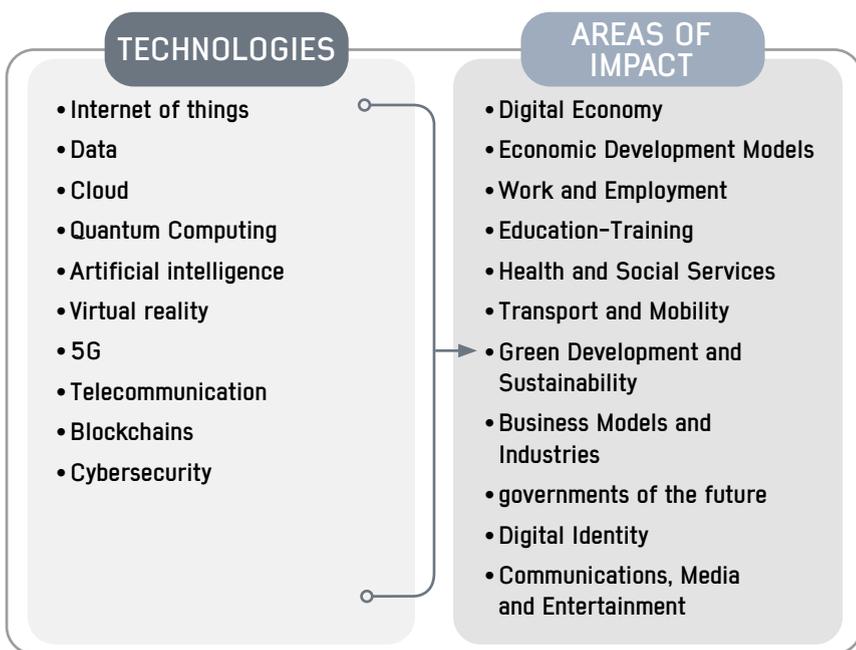
We could extend his approximation to the potential impact under a convergent double space.



...in a world of disruptive thinking, exponential generator of a DIGITALIZED COMMUNITY, whose size, scope and goodness, must be regulated, decided in a “voluntary and/or participatory” manner and duly oriented towards the common good.

Managing their impact, both technological and beyond the technology, the agility of people, companies and governments to incorporate them into their social needs, business models, governance responsibility (and use in their own bureaucratic tasks and decision making), extends to all social and political spheres.

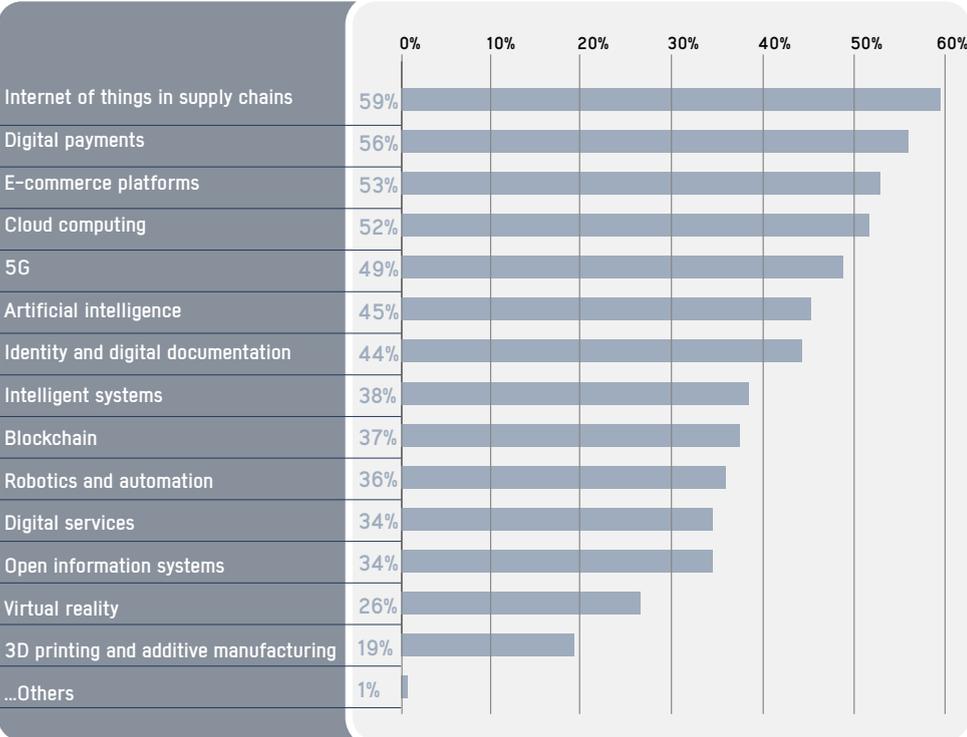
It is impossible to conceive any project, in any area of the future, that does not consider its transformation with or through technology. How should these exponential technologies and their use impact us in the main challenges we have to face?



And, we would also find a wide and open space for digitization, connectivity and innovative reinvention of all kinds of processes, as well as their interaction with the markets or exchange relationship that will accelerate and change, from the root, the passage from analog to digital economies and societies. The figure: “Digital transformation” clearly summarizes the ongoing process, applications and technologies and, above all, their (unlimited) use over time, extended to all the tasks, activities and interactions involved.

Now, the fact that these technologies and applications exist, that they are assumed to have a certain degree of influence and that it is increasingly possible to access them in their different “universal” offers, does not mean that

they are as commonly used as it seems, nor that its availability is immediate. The following figure provides good proof of this³⁷, describing how companies use different technologies in their ordinary operating practices.



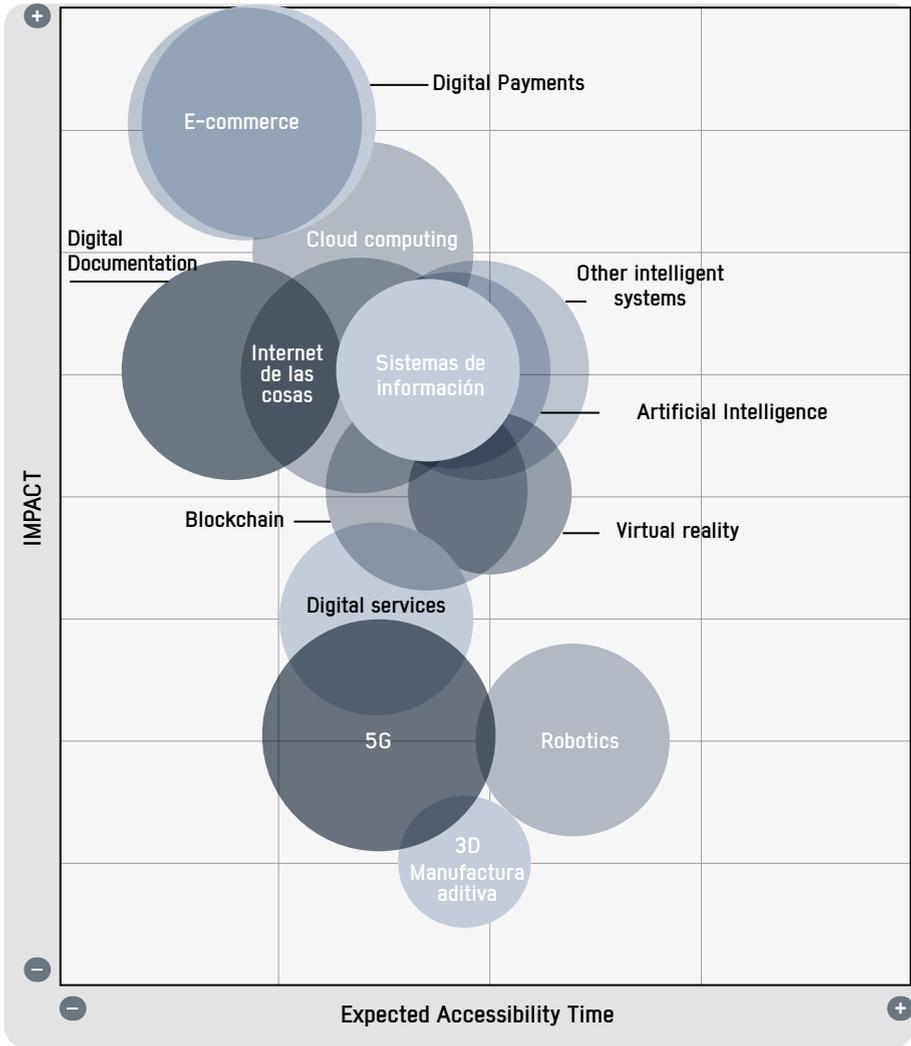
Source: World Economic Forum 2020 global survey on Trade Tech

Although it is to be expected that over time, the general increase in programs and strategies that facilitate its use and incorporation into business transformations will speed up its dissemination, training and use, as well as the increasingly demanding figure of the Public Administrations promoting (at the same time forcing) their interaction, they will considerably increase their indispensable presence.

Now, like the vast majority of technologies, their innovation processes and transit between conception and market, the different “disruptive technologies”, especially, which will have a relevant impact in the coming years, require a series of conditions, among others the time, that defines its true potentially significant use. Thus, returning to the previous source (Global Survey Trade Tech 2020 WEF), we observe in the following graph, the different time process of the different technologies and society. The scheme also allows us to observe the interaction, concurrence and interaction between them.

³⁷ Trade Tech (World Economic Forum 2020 Global survey)

IMPACT-TIME POTENTIAL DEVELOPMENT OF DIFFERENT TECHNOLOGIES



The open and accelerated concurrence of the different technologies to come opens up a whole world of opportunities, uncertain scenarios and very different degrees of preparation, response and decisions (personal, academic, business and government) that require their times and application spaces, its adaptation to the demands and social needs and the capacity of equitable access of the people to its use.

Although this triggered convergence would cause great global benefits, it will be the group of those responsible for them and the collaborative strategic framework that is developed, which will indicate their distribution, avoiding technological gaps and inequality. Returning to the aforementioned theories of abundance, the recent announcement by Peter Diamandis of what he considers the Integrative Megatrends of multiple exponential technologies that would bring us a whole world with global results and benefits is illustrative.

ABUNDANCE 360: META TRENDS

Peter Diamandis-Singularity University, argues how *“over the next several decades, exponential technological advances will converge, eclipsing decades of advances in scale and impact. Metatrends will emerge that will revolutionize entire industries (old and new), redefine tomorrow’s business generation and contemporary challenges, and transform our lives from the bottom up.”* Metatrends including increasing human longevity, the growing smart economy, AI-society collaboration, urbanized circular agriculture, and high-bandwidth brain-computer interfaces.

META TRENDS	RESULTS	CONVERGENT TECHNOLOGIES
Continuous increase in World Abundance	Mass digitization and demonetization of goods and services, available for billions of increase in mobile devices, alleviating poverty and inequality.	<ul style="list-style-type: none"> • High bandwidth communication, Artificial Intelligence in the cloud, education assisted by Artificial Intelligence. • Artificial Intelligence and socio-health medical care
Global gigabit connectivity, at ultra-low cost, connected to everything and everyone	Billions of interconnected devices, people and content. New economy of digital wealth and increase in 3 billion connected people.	Low-cost space and satellite launches, advances in hardware, artificial intelligence, materials science, and computing power.

META TRENDS**RESULTS****CONVERGENT TECHNOLOGIES****10 more years of human health.**

Biotechnological and pharmaceutical solutions, new clinical trials, restoration of stem cells, new generations of vaccines, reinvention of pharmacological processes, 3-D and additive manufacturing for organs.

Genome sequencing, CRISPR technologies, AI, quantum computing, cell mediation.

Capital Abundance

It will promote long-term financing, new ideas and entrepreneurship, accelerating innovation and democratizing access to capital.

Global connectivity, dematerialization, demonetization and democratization.

Augmented reality will reach a quasi-universal deployment

Transformation of "our daily life, impact on all industries, education and leisure.
An "overlapping world".

Advances in hardware, 5G network, artificial intelligence, materials science, and computing power.

"Everything smart, integrated with intelligence"

Cheaper chips, sensors and intelligent monitoring and activation systems.

Artificial Intelligence, 5G networks, advanced sensors.

Artificial Intelligence will achieve human-level intelligence.

Open source algorithms and machine learning tools, increased cognitive capacity and problem solving, business creation and management, and public management.

Global competitiveness, neural networks, cloud computing.

Interaction with all clusters of industrial design, health, education, entertainment.

AI - people collaboration in all professions

The new service platforms will be AI accessible to all, generating networks of collaborators of knowledge and innovation.

Smarter Artificial Intelligence, global connectivity, neural networks, cloud computing

Will these and others be the meta trends that will guide our future?

He asks himself (and questions us all): *Are you clear about how you are going to use them? On which companies and initiatives are you going to build your future?*

The technology itself is “purchasable” in the market. What is especially relevant is its use. *How do we use it, interact with it, understand it and is it applicable to innovation associated with our needs, strategy and business (and/or life) models?*

Talent, Digitization and Technology at the service of the common good

“Tech for Good” (corresponding to the transformation base map of intelligence. weforum.org) is a generalized concept that aims to provide an omni-comprehensive view of the different implications it entails, as well as those lines of relevant priority on which it affects, or from which we can act in our capacities and options, according to our starting points, areas of activity and responsibility and will or purpose of use and enjoyment of it, understanding that its use, conception and impact will be aimed at common benefit. Starting from its definitive role in the “fourth Industrial Revolution” as a basic point of attention (and development), the necessary education and technological literacy that it entails, the potential use and management of all kinds of sensors that generate, transmit and receive information, making the data (of any kind) “use of the main values that can be pursued” and poses real challenges for access to progressive technological advances and, of course, the inclusiveness of the impact-opportunity.

Our ability to respond to the impacts that can be generated stems both from our base and strengths of knowledge and preparation, as well as the EU Digitization Report to delve into them, as well as from the strategic purpose that we carry out, as well as the broad, focused journey that we will have to walk. .

“The Talent Map (COTEC-IVIE) and “Digitalization in the Basque Country and Navarra” (Orkestra-Basque Institute of Competitiveness), as well as the EU-2020 Digitization Report, “high and medium technology: base of the exports of the Basque Country and Navarra” and their respective science-technology strategies 2020, allow to cross different information in order to position lines of action in the future for our target territory and its institutional, economic and social agents, in line with both the Megatrends and situation observed as in a very special way, of the starting point and, above all, of the purpose that we have to consider in relation to future opportunities to be explored.

In any case, as we will deepen later, we have to analyze them in a broader framework, which we could specify around “humanitarian technology for the common good”, emphasizing not only the importance of technology in itself, but, Above all, the use made of them, the possibilities of real and equitable access to them, under principles and objectives of inclusion. Its necessary democratic control and governance, its effective and motivating role in permanent innovation, qualified options to offer the education and training essential to access it, to understand it, dominate it and manage its impact on society, must be the subject of our special attention. A mastery of its driving and transforming effect on our economic fabric, our industries of the future, renewed Public Administrations, the reimagining of our cities and, of course, the transformations and transitions, throughout the world, that we proclaim in this fourth “industrial-economic revolution” and society 5.0 turning the gaze of digitization towards social needs and demands. Transition towards the green economy, towards the blue economy of water and the oceans, towards industry

4.0 and, based on its transversal nature, inevitable towards the widespread use of exponential technologies (mainly Data, Artificial Intelligence and Robo-tization) with its inseparable consideration in terms of the future of work, the concepts of employability, wealth and employment, essential for any desirable welfare society.

In this framework, our base territory is well situated in terms of facilitating, attracting, retaining, growing, skills and vocations, techniques and knowledge, which is a positive starting point, although the qualitative distance that separates us from true world leaders to generate, attract, retain, manage and organize the talent necessary for the proposed objective, is not so obvious, it is in growing global competition and is tremendously demanding (and changing).

If the base is good, the majority of doubts arise when we intend to make the leap to exponential, critical technologies that will condition our future. This requires an extra effort not anymore to adapt these to our current infra-structures and models, but rather the need to equip ourselves with new skills and abilities, new frameworks, infrastructures and models, as well as education and appropriate attitudes for the new scenario to come (already among us).

Following the enriching contributions of the Singularity University in its knowledge communities on the subject and the Expert Network of Global Transformation of the World Economic Forum, to which we have referred, as well as other relevant sources, we must delve into a series of key elements to which we will have to respond for the good use in the correct direction of the opportunities and benefits that these technologies of the future offer us. **Of course, the global determining keys are not in our “little hands” but the answer to the impact they must have between us and our strategic positioning, differentiating “good, bad and indefinite consequences”, as Gita Bhatt³⁸ would say. What is our role to eradicate or mitigate its negative or perverse effects and what is our best response to “catch the good waves” of the future within our reach?**

Without a doubt, we cannot aspire to lead spaces that have passed us by and for which we have not developed our “country talent” and that seem to be concentrated in the great world players (the United States and China) or a European Union that aspires to be incorporated into a certain third role, but we can interpret the collaborative platforms, the associable players and the different roles applied to play in our limited, interconnected dimension. In any case, we must be aware that we are witnessing a radical change (dangerously potentially exclusive) for those who do not have the necessary training to face it. It is, at the same time and, on the contrary, an opportunity for those who make the right decisions, educate and train their people, transcend academic design and lead it to the search for real social solutions, implement transformative applications in their economic, business, social fabrics, services and public governance and generate an individual and collective attitude in accordance with the inclusive development to come.

It is quite a change in progress but it will not come, neither in its entirety, nor immediately, nor does it suppose that outside the giant “owners” of the current change, there is not enough space to build “niches” of success and prosperity. The technology will be available to everyone. What matters is its use.

³⁸ Finance and Development (International Monetary Fund, July 2021)

What will we do with it? How will we use and control and manage it? It is largely in our hands to undertake alternatives (surely disruptive and radical).

We are fully in the exponential technology par excellence that, of course, will generate generalizable benefits, albeit in different times and assignments. A resounding yes to this technology, but accompanied by the inevitability of humanism, as well as the data ethics that it entails. We cannot, we must not, if we are not aware of the need for integrated technology-humanity development, the latter factor being its true vector. Principle and essential binomial.

Of course, it's time for the big bets. It is time for great initiatives and driving and exciting projects. New movements, new researchers, new spaces and leaps in science and technology at the service of new products in new concepts and new opportunities. But, above all, it is the time for people. We need solid, strong, credible and trustworthy governments and leadership. It cannot be a development based solely and exclusively on

the particular interest of a company, or of a genius, of the exclusive vision and perspective of science and of whoever is capable of obtaining a successful result alone. It is the moment of the great decisions, of the great policies, of the great public leaderships that by definition must be at the service of the societies from which they emanate. It is time, more than ever, for public-private collaboration, for shared company-society values, for solidarity.

Quite a political challenge and a true social, intergenerational challenge. A true challenge of civilizations and their evolution. The evolution, the radical transitions, the waves of transformation that have accompanied human development today face a real challenge. It is a time of opportunities at the service of society.

In the converging challenge around artificial intelligence

If the process under way is already demanding enough to condition our future, the ability to respond to its impact and the choice of the role to play in the different sections of an enormous “constellation of value chains” that can be generated by these technologies themselves and the different industries and clusters in which they will be applied is no less so. It is essential to understand its content and scope, as well as our positioning in the face of the opportunities and risks that it entails.

Understand that we are in a new stage of transition from the expert network that was conceived at the time, identified as that way of approaching the different problems, towards neural networks, once very controversial, but that today they position themselves before the evidence that has come, joint demandant around the management of massive data invasion (what for?), on shared and open platforms (cooperate maintaining our differential strategic space, optimizing a single determining result (the true objective-service-solution) and differentiated in offering, and the capacity-talent-designer of solid algorithms for its achievement and “repetitive” and integral replication in autonomous organization schemes.

A challenge that requires overcoming³⁹ transition stages:

- The long journey from specialization to implementation.
- Provoke massive and open innovation.
- Master the true deep learning involved and explore its proper application.
- Overcome corporate research so that we generate open and shared, influential spaces.

For some, it would be a question of choosing to focus on different paths that make it possible to reposition themselves in what they call “waves of artificial intelligence” and that would allow companies and countries to “choose” the space in which to focus:

- The artificial intelligence of the Internet (algorithms based on our navigation and today in the hands of a few leaders: corporations, countries and super powers configuring their own ecosystems)
- Business artificial intelligence (structured data services in the industrial and business ecosystem)
- Artificial intelligence from perception (incorporates eyes and ears integrated/optimal merged online)
- Autonomous artificial intelligence (integration of the three prevailing waves).

It would be four waves that require moving from the online to offline concept (O2O) to the (OMO) online MERGE TO offline, with differentiated times, players, intensities.

The evolutionary commitment for dominance and control of Artificial Intelligence today concentrates its approach on executing tasks that meet two fundamental criteria:

- Optimize data intelligence.
- Replace social interaction as an essential element of the intended result.

To the extent that these situations occur, we will undoubtedly be building a (perhaps the most powerful and differential) essential exponential new technology as a key element that will change the world: the world of things, the world of the economy, the world of society, generating benefits within the reach of society, although not for everyone, but for those who do their homework. It also seems to be an exclusive world for those who do not have the necessary training to carry it out. An entire opportunity, at the same time, for those who prepare the right engineers and professionals to carry it out; for those who transcend the academic conceptual design reserved for very few, for those who caught or catch the right wave at the right time. A suitable space for those who are capable of implementing applications and reverse engineering of things (products, processes, solutions), implementing new ways of understanding life, generating different products and establishing processes to build differentiated business models...

Without a doubt, we are witnessing a critical development that confronts opportunities and challenges, enormous expected benefits together with an uncertain shareable distribution, as well as a whole “predictable black hole”

³⁹ Artificial Intelligence Superpowers: Kai-Fu Lee 2018-AI Super Powers

that results from the greater social and regional gap resulting from an unequal access to the “magic of expected progress” and a general decoupling between countries, regions within them, companies and people. Different times and possibilities for possible benefits not available to everyone.

Although it might seem the opposite, Artificial Intelligence will not burst into its entire wide manifestation at once. Beyond the “optimistic” future estimates, somewhat typical of what we would still consider science and fiction today, which will announce a radical and absolute transformation for the ‘30s, or the debatable impact (especially in terms of jobs) giving rise to current job losses of around 50%, giving rise to what some call “the generation of a useless society”, or imminent regional disparity (today, two superpowers - the United States and China - already concentrate the 70% of the value that can be generated in Artificial Intelligence for the year 2030 estimated at 15.7 trillion dollars), we must analyze and understand the process, content and scope (also temporary) of the different WAVES indicated above. Each of these waves has its own dynamics, its own impact in terms of training, employment, value generation, industries involved, potential regions and/or countries. Each wave, and taking into account countless factors that change over time, will experience its own evolution and development and will demand its own and differentiated policies, mentalities, capacities and actions.

Once again, we must remember that technology ends up being available to everyone (artificial intelligence is no exception) and the success in strategic positioning in each of the waves, and within them, the choice of the role to play will make a difference.

Betting on Artificial Intelligence or benefiting from it requires being aware of the enormous set-offs it can entail. Set-off in terms of employment, not just in ordinary employability but, unfortunately, and above all, in terms of the true concept of the future of work, of concepts aligned with the way of life that we have understood for centuries, the ability and dignity of doing of our source of income, the way we make a living, conceive the purpose and meaning of work, vital projects that will arise from innovative elements that, although they could produce global benefits, will not be immediate nor will they be for everyone. A scenario of winners and losers, of new professions and new ways of carrying out activities that are yet to be discovered and defined, while many jobs, many ways of working and many occupations that today seem absolutely normal to us will disappear.

Will it be the time for robotic taxes, automation taxes or taxation applied fundamentally to companies, corporations, startups and business units with the capacity to generate new solutions and new products and services?

Will we live in a world of collaborative interaction establishing the necessary time frames so that those countries that benefit from the great opportunities that artificial intelligence offers contribute to the rest of the world in order to guarantee a differentiated situation?

Are we capable of matching the entry of new technological solutions and the new applicability of artificial intelligence to paces and times that humanity as a whole can address in a way that in terms of employment, opportunity, access to education and training we could avoid leaving people behind?

Will we find a way to achieve shared development, a common good, a supportive and subsidiary commitment that breaks with individualism and is capable of advancing jointly and convergently over time? Beyond technology itself, beyond the availability of artificial intelligence, we find ourselves or we will find ourselves in a world in which social needs and demands are sufficiently satisfied at the service of all people.

Will our governments assume their democratic responsibility and legitimacy to order its exercise and orientation, arbitrating privacy, property, proper use of data and communication, avoiding control from private conglomerates, with their own rules and the opacity of the anonymity of the users present in their networks?

These days, in one way or another, the academic, social, ethical and socio-economic debate that exceeds the technology itself is recurrent. Reflected, as an example in: “Redesigning artificial intelligence: work, democracy and justice in the age of automation”⁴⁰, the basic reflections of Daron Acemoğlu⁴¹. Acemoğlu, analyzing from the economic rigor, the origin of power, inequality and prosperity and the enormous differentiating potential of being able or not to lean on institutions (entities, norms, behaviors, risks, management...) with which the different countries and their involvement in the ordering of the key elements and “possible markets” will determine their impact (it is expected to be beneficial for all).

Acemoğlu, starts from assuming reality: artificial intelligence is not only among us, but it will be a relevant part of our future and, without a doubt, huge general benefits can be expected. Having said this, the doubt lies in its distribution and the mitigation of those negative effects that it could generate. Basically, he wonders if artificial intelligence, in its current orientation, essentially linked to automation, is or can be a threat to employment and democracy. His vision, optimistic, lies in his conviction that the future is not defined as a predetermined good or bad, but that it is in our hands and proposes a determined bet to make AI (Artificial Intelligence) create inclusive prosperity and promote democratic freedoms. This bet requires correct policies from governments, a redirection of norms and behaviors of professionals, technologists, industries and companies involved and, of course, a solid and determined democratic control.

Today, there is no doubt that a huge concern goes through the perception of a “world with less employment and work” in the face of the supposed growing robotization and the substitute power for machines. Increase that leads to a debate of great magnitude in initial terms of sharing and distributing income, as well as the true meaning of work-employment.

Defining a viable social purpose is essential. If, for example, in the United States, 53% of employed workers say they do not feel identified with their work project and do not find any purpose in what they do, beyond a certain income level, and proposals are generalized Around mechanisms of universal income or guaranteed salaries regardless of employability, alternatives of great significance are being reborn yet to be defined. Not to mention the geographical imbalance between top players (both in key software and in different degrees of applicability) and the rest in the world of these critical technologies.

⁴⁰ SuBostan Review Forum + AI + Shared Prosperity Initiative

⁴¹ Why nations fail. MIT. AI and Social Dilemma

Undoubtedly, the purpose that has to reorient the use of these technologies demands that technologists, managers, governors, point out the path and form of use of these powerful tools capable of making a better world. *Is decoupling work-income a good inspiring and motivating solution for life? Reorient shared development models and channel public investment towards a new technology relationship that leads us not to compete against machines, but to compete by using and incorporating them to facilitate their contribution, achieving greater and better inclusive value?*

As in so many other areas, these are not times to let things just happen, as they come, but, on the contrary, to anticipate and try to redirect a desirable future.

We are fully in the exponential technology par excellence that, of course, will generate generalizable benefits, albeit in different times and assignments. Yes, therefore, to this technology, but accompanied by the inevitability of humanism. We cannot, we must not do it, if we are not aware of the need for an integrated technology-humanity development, this last factor being its true vector. Without this principle and this essential binomial we should not go forward.

Of course, it's time for the big bets. It is time for initiatives and driving and exciting projects. New movements, new researchers, new spaces and leaps in science and technology at the service of new products in new concepts and new opportunities, but it is time for people. New governments and frameworks that guarantee new rules of the game at the service of the common good. It is time, more than ever, for public-private collaboration, for company-society shared values, for solidarity and for transparency and ethics in its use.

Quite a political challenge and a true social, intergenerational challenge. A true challenge of civilizations and their evolution. The evolution, the radical transitions, the waves of transformation that have accompanied human development today face a real challenge. How to incorporate the benefits of artificial intelligence to these new and recreated brains whose neuronal layers are the basis of this new panacea at the service of the changing problems, needs and demands of societies. It is time for opportunities at the service of society. It constitutes a true challenge that will define any scenario and life option for 2050.

5.2.4. World revolution and the work- employment concept, along with the accompanying protection and social security

The world of work, its unequivocal association with employability and its consequent reward and/or income, together with its intangible nature associated with dignity, motivation and sense of personal life projects, in addition to its unquestionable “aggregator” role of the generation of wealth and welfare collectives, and as a direct link to models of growth, and lastly, its consequent contributive role to public finances, general budgets, taxation and social security and/or intergenerational loan systems have given, and give it, the utmost importance for the present and the future.

On the contrary, its absence (unemployment), forming the inequality of a terrible pairing for any hope of life and development, especially if, as we are aspiring, has to be progressive and inclusive.

In a serious situation of a starting point with extremely high unemployment rates emphasised by their uneven distribution (ethnic and particularly juvenile with a negative gender balance against women, a worsening number of skilled and long-term, unskilled ethnic people in the regional and urban BIPOC⁴² population) are the feared and still questionable consequences of technology, its consequent automation, robotisation, artificial intelligence and multiple applications of transformative digitalisation as analysed in the previous section.

Beyond the concern and occupation that employment deserves (and especially its absence), there is no magic formula, nor can it be assumed as the partial or sole responsibility of a single person. The labour market is a complex system in which multiple participants, as well as all kinds of variables and conditions (typical and exogenous) are to be determined.

Regardless of institutional level or colour, there is not a single government in the world that does not implement schemes and measures to generate employment. There is not a single company that does not aspire to create employment, and there is no school or university that does not try to obtain the highest and best employability for their students. But, *how are we doing it? Is there cohesion between our aspirations and ongoing policies, objectives, intensity, resources and commitments? Is it a really important objective to which we deploy all coherent and necessary resources and instruments in order to achieve it, or is it more of a hopeful result as a consequence of other objectives?*

One way or another, we all stick to the commitment of finding quality, decent employment that is sufficiently remunerated, and in accordance with qualification, aspiration and people’s needs. But, *how can it be created and guaranteed? How can our collective aspiration turn into tangible results?*

The digital transformation and the high business and population concentration with “increasing urbanisation,” would explain the identification and efficient modernisation of the different industries, administrations and countries. *Under which hopeful business model will respond to their role of public service and general interest, or strategic and/or inevitable commitments as a result of the coming changes?*

In addition, a recent publication titled “Skills Outlook 2020” (“Abilities/skills observatory 2020”) by the OECD proposes a series of recommendations for

⁴² Black, Indigenous, People other color

dealing with “*the potential of opportunities that digital transformation entails,*” mitigating the negative and varied impact that it can have on industries, countries and people. The publication conveys a bleak message: “*In Europe, less than 25% of the population between 16 and 65 years of age is prepared for the future,*” and also highlights that 60% of teachers need to retrain when it comes to information technology. Trusting that the aforementioned report does not respond to the diagnostic reality and is far in terms of content and time for that future scenario it recommends, there is no other choice than addressing an extraordinary effort of reform in the system of learning and education, in the world of work and, of course, in a renewed and extensive system of social protection which accompanies a complex transition towards a new hopeful future. We also remember that the increasing inequality is conditioned and aggravated by a series of vectors such as technological changes, globalisation and/or talent offshoring, investments and trade, the possible access to affordable finance, to the fiscal architecture itself, and the previously mentioned areas of education and the labour market. Such vectors have a variable influence according to the economic, social and political-institutional world in which the person/society is affected. We have to respond to such challenges with the inevitable collaborative participation of all involved.

The result of employment: social mobility and inclusion

The compound component “work-employment” value brings another series of crucial considerations, giving it an essential role in the framework of social policies, social protection and social development.

The OECD (Organisation for Economic Co-operation and Development) published a report of recommended reading on the definition of social policies, social protection and social development. *¿A Broken Social Elevator? How to Promote Social Mobility. (¿Un elevador social descompuesto? Cómo promover la movilidad social)*. The partial report makes up part of an extensive piece of ongoing work on the (Inclusive Growth Initiative) under the umbrella of an intriguing strategy: “*4.6 million people aspire to a better life and want to become part of that new world to create*”. This initiative is developed around a framework of public policies directed at understanding and mitigating the vectors of inequality, the decisive socio-economics of health and education as transformatives of new economic development models capable of creating new inclusive areas of social development. In this way, apart from the variations in each country, the general verification in the report does not differ from the main signs and red lines that the increasingly more extended movement towards an inclusive social development is promoted throughout the world from multiple actors and initiatives. Among those include the necessary consideration of health as a key vector in the development of people, the communities in which they live, and their potential generative capacity, in addition to wealth, employment, welfare and their powerful impact on the mitigation of inequalities and the acceleration factor of the elevator, social mobility in the complex and necessary transition from poverty, and marginalisation towards equality, a shared future, and much more than a desired, high quality life expectancy (not just in years). The report warns the stagnation of social mobility, highlighting in a regressive and striking way that by “*maintaining the current political salaries of health, education and persistent inequality initiatives for growth, a child born*

into a poor family would need at least five generations to reach a medium level of income, on average, in OECD countries. This means that 60% remain trapped in the lower category of 20%, whereas 70% stay in the higher categories. Therefore, one in seven middle class homes, and one in five people in the lower categories drop to the lower category of 20%. A whole condemnation of generations to remain in the original social class as a consequence of the good or bad luck of destiny, from being born on one side of the fence or the other, between inclusion with an improvable future, or the accelerated exclusion of marginalisation.

Unfortunately, this is not about anything that is new or unexpected. Once again, it is verification of an increasing inequality that questions typical policies. **In times of exponential and disruptive technologies and innovations, it would seem reasonable no to persist with continuist and ongoing policies and systems. New questions, challenges and redefinitions of objectives are absolutely essential. Opportunities, health/welfare and education would be the trilogy of supplementary dimensions for overcoming what Stiglitz and other leaders of transformative thinking would propose, encouraging a meticulous revision of a good number of messages that they acquired and became naturalised over time, despite their consequences being far from the truth that they proclaim: “the decline in living standards and the increase in the welfare system is blamed on immigration, globalisation or the elite,” “they cheated us by offering a world of benefits and opportunities, but they didn’t give us them,” or “the global profits from the previous century more than compensate social development in relative terms.”**

This, like other sides of the unemployment-inequality dialogue, are a call to redouble the emphasis on the generation of decent and quality employment based on the real demands and needs of society, which is conscious of the huge opportunities they offer in different future scenarios.

The future of employment: the value of solidarity in society

Moving from the Covid-19 pandemic towards its “reconversion” to an endemic disease that brings a relative “new normality,” the revaluation of the value of solidarity has also become evident in the world of work. In turn, this is a source of employability and innovation both in the expansive world of cities and associable to all those “active communities” which favour solutions, mitigate inequalities and limited barriers, and open “windows of opportunity”. The training, requalification and education strengthen their determining role for their appropriate use.

At the heart of these “new areas” (or old, ever present and not valued enough in other times), also leads to increasing the demand to public administrations in order to address and focus on renewed policies with an approach to labour, its regulation, the promotion of supply and adaptation of policies and systems - both during their development, and the guarantees of the conditions in which they will have to be provided in the future.

Our governments generally succeeded with urgent and flexible “anti-crisis” measures (and prevented stringent regulations to a large extent) from the rupture of the Europeanist mantra in place up to then, the zero deficit, no public debt, and rigidity of the productive and/or economic cycle that provided

flexible interventions in corporate employability. Suspensive measures that do not suppress employment, and adapt to the temporary nature of the demand such as the furloughs, the accelerated implementation of the Minimum Income Scheme (although in our area, it's based on scarce differential value given its previous existence), and new ideas in relation to "dual requalification", accelerating the incorporation of unemployed people into the world of work who do not have the training required for the current demand, and are a strong foundation for a greater commitment, if possible, as well as the absolutely essential network of prevention, protection and social security. A positive step, generating optimism for the long road ahead.

Ahead of us is a reality that obligates us to concentrate on the future, employment options, social and economic reopening, and urgent activation of multiple projects that demand immediate employment, acting on its counterpart and what is possible for the education that is planned.

In "*Good Economics for Hard Times*" by Nobel Prize winners Abhijit V. Banerjee and Esther Duflo, we return to one of the old debates of the year 1986 in which, at the heart of a society such as the western, advanced and avant-garde Basque society with an average income superior to its neighbouring economies, that is considered privileged and even "rich" in the close context analysed, poverty could be spoke of (always in terms of relativity) precisely from its government, from where the initiative was taken to study it, its publication and dissemination, as well as to lead mitigative policies and initiatives.

In a Basque Country punished by the hard, economic global recession, and its typical problems, in need of reconverting its industrial fabric, to overcome its unemployment rate (26%), to "*reimagine its future*" heading towards a Europe of hope, democratic guarantee, freedom, social cohesion and in desolate struggle for peace and coexistence in a complex environment that is able to dishearten anyone (all potential investors of course), the extraordinary effort and work carried out in the institutions with the objective of recognising the reality in different Basque homes, to determine their shortages, needs, and, most of all, to provide the minimum means necessary to design and implement strategies for a new model of social policy for the Basque Country, moving the "not poor" autonomous region in favour of the most disadvantaged, gave way to a rare generative effort of vanguard policies. The lack of awareness of the evidence then, together with the ever-complex definition and determining of traditional concepts did not only allow the development of this work, as it enabled a rigorous and conceptual contribution to this field, which is so in style nowadays throughout Europe and the rest of the world.

As a pioneer of a "social salary" in times when the appropriate regulations could not be developed given the competing, budgetary and political limitations, the Basque Country was "convincing," exploring new areas, legal and financial security, to pave the way at the service of the objectives it set out to achieve. In these new times, today, the world has taken on the viability of exploring roads for a "new income": to revise and reform the insufficient and obsolete, limiting legislation of the social security, its administrative simplification, the reform and qualification of its administration and to rethink the framework and essential instruments for studying the welfare state in more detail, as an intense pedagogical task.

The serious and unexpected circumstances that we are experiencing provoke new attitudes and mentalities, and highlight the importance of new roads to take. It is a good time for us to make an effort in these transformations, even though they are complicated, and they must not respond to simplistic and demagogic shortcuts, nor irresponsible improvisation, but can and must be undertaken. These new instruments go well beyond economic transfers as they advise to take down a good number of obstacles and administrative inheritances that can be overcome through responsibility, balance of rights and solidary benefits and contributions.

It is time to consider the long-term and dream of a better world. The Minimum Income Scheme must prove to be an essential part for that process and it must not get lost in “squandering” as many people believe, unfortunately. Let us make the social and economic policies necessary right now, “*the practice of good economics for hard times*,” and not a bad imitation or anecdote to go back to the past, which we had to overcome.

This new drive should not be delimited to a mitigative part of poverty (neither perceived nor real, of maintenance, accumulation or environment), nor exclusively related to “*socially disadvantaged situations*,” as determined in the initial objectives of analysis in the year 1986, but rather with a much more broader, complex and transformative look in accordance with the demands and needs of a new, future society.

Taking the approach and initial response into account, the future of labour, employability, just as it is today, will have to be transformed over the next few years as the result of economic and social changes, the inclusion of technologies (which in many cases will require relearning, new training and preparation, disappearance or replacement of tasks, substantial changes in labour and contractual relations, and complex offshoring), digitalisation of the industry, economy, public administration, education, mobility, social services... “obliging” a redefinition of the work/income pairing and consequently a new social commitment. Today’s Minimum Income Scheme demands a progressive transition towards an unknown space that makes it possible to receive incomes of a universal nature, apart from job formality. To revise and reorganise all types of existing foundations, to define benefits, commitments, responsibilities, obligations and, of course, new administrative instruments (modern and efficient) will turn out to be essential. And of course they must be sustainable with a completely transparent finance framework (which does not currently exist in the approved income). In conclusion, this requires a complete transformation. This is not just about a financial transfer in the interim.

Today, we are undoubtedly in need of a strong injection of imagination, and work, as we search for a new system of social prevention, protection, benefit and security.

The future of employment: public employment and source of transformative opportunity

Motives, both of a demographic nature, and dissatisfaction of the amount of government allowance for certain public services, or the “pandemic strategy”

to strengthen public employment in those key areas which, as a result of the detrimental years of “austerity and zero deficit” policies, especially in Europe, that were established and imposed by the European Union and applied to the letter by member state governments, and have been creating irreparable voids. Today, in question, they provoke a popular strategy (they are not intended to be ideological and/or of biased corporatist conformity) of public employment as a mantra that would intend to presuppose the validity of an old discourse from the past that appeared to be resolved: the one that public administrations and their civil servants are genuine professionals and impartial, independent and efficient, while private companies turn out to be inadequate, respond to private interests, and their only aim is to make money, which is generally at the expense of reduction, tolerance and government complicity.

This indecency would lead to investing in “the public,” dissolving types of employment, maintenance and strengthening of the civil service from its typical 18th-century means of access, and from an urgent replacement of each post, in the inevitable rejuvenation of public administrations. **Their “own industry” (political, trade union, administrative) is fed into, and its endogamic context provides them with impenetrable protective frameworks due to demanding “transformational pretensions”.** In this way, the misgovernance of the European Union would continue in the hands of their bureaucracy, governments on different levels would turn out to be rarely innovative while they generate a dual society: one half has lifetime employment and benefits from all kinds of favourable supplementary measures of their welfare, and the other half of the society is searching for employment on a daily basis, which is increasingly insecure, sometimes less formal, hardly predictable and with limited and/or unequal supplementary benefits. That type of employment model drives high disaffection.

If we look at the “Competitividad del País Vasco 2017 (¿Y mañana?)” (Basque Country Competitive Report 2017 (and tomorrow?)), as well as its successive allusions in subsequent editions, and we use some of the reflections on matters of governance, beyond its conclusions and/or recommendations for the Basque case, we can establish a series of achieved objectives that determine the evolution of the role and composition of public administrations over time. It is clear that the nation-states with greater or lesser efficiency and skill, in addition to their political will, decision and democratic control, have gone down a two-way street of “cession competency” towards supranational entities (as in the case of the EU, NATO, “Global Agreements”...) or infrastatal entities (State of the Autonomous Regions, for example, or local law and local entities). At the same time, the economy and impacts concerning innovation, territory, technology, society and socio-political determinants have drawn new scenarios that increase uncertainty and complexity, require strategies and abilities from their managers and administrators, set new regulatory and normative frameworks, and require competitive intervention models, they would oblige radical transformations in the different public administrations and would condition the interaction (internal and external) in different levels of government, and in concurrence with multi competence for tackling current challenges. Beyond the well-known speech on dual competences, the only windows or “inefficient budgets” attributable to a distinctive and unique confederate organisation that tends to simplify the reality of a complex world in itself, which makes it inevitable to coexist with multiple government systems,

a variety of agencies, instruments and organisations, and a perpetual dialogue under a wide range of instruments of control, participation and coordination with a hierarchical organisation that is necessarily vague in confluent and shared areas.

If, with a certain point of view, we also look at the economical, social and governance complexity with which we will have to coexist in one way or another, confirming that all governments and all area of activity require the participation of multi-level regions with the consequent real asymmetry (productive model, self-government aspirations, legislative will and capacity, tax system, finance and social protection, security, interaction with foreign markets, language, culture, geographic positioning, claimants of appropriate, unique and distinguished strategies), faced with complex challenges that do not always coincide with others in time and intensity, and have to take on all kinds of transformations (especially tangible ones), it would appear evident that each public administration has new roles and new public policies to tackle. Furthermore, important events such as certain demographic changes, increasing migratory movements, the presence of the so-called underground economy, the “collaborative economy” and/or “popular capitalism and multi-capitalism,” that introduce new ways of understanding employment, work, informal relationships between parties, new regulations and new technological platforms mean inevitable inputs of transcendence. Not to mention the so-called Fourth Industrial Revolution that will cause all types of new business models or transversal activities, and affect all industries (in addition to employment in public administrations). And, of course, without valuing the realism nor determinism of the incorporation of automation, robotics or artificial intelligence and its advantageous impact or substitution of employment which provokes a new point of view to consider.

Lastly, with regard to this general scenario, there is no doubt that flexible, interdisciplinary, agile, transformative and innovative structures will be key in the success of any regional or national commitment and corporate strategy, and will be the real determinant of the welfare, competitive and inclusive development of any society.

With a panorama like the aforementioned, ¿Is it suffice to replace the current posts for new civil servants, or is it essential to carry out previous work to redefine the probable impact on each specific post and administration? Is it not essential to confront a new configuration of the institutional structural framework? Is it not evident that the present asymmetric development demands its own new and defined strategies, to accelerate processes of “functional return” and “reduction/modification” of the role of administrations, and new, distinct public policies from different public administrations?

The whole world and its economy move in complex interdependent spaces organised under sovereign or distinct autonomous powers, under (a majority of) democratic controls that have to adapt their areas of competencies and public policies to their specific needs.

Would it not be reasonable to take advantage of the opportunity that all these elements of change cause in the necessary amount of new public employment posts to reconsider the actual role of civil service (its form of entry, internal promotion, evaluation... continuation or discontinuation of a post, contract

duration versus lifetime posts etc.), the redefinition of the service and its function, and the need and efficiency of its existence (public service employment is a good historic example of its insignificant value added to active employment policies), the number of teaching staff and management in an education system of comparatively low results pending on a real education revolution that is valid for the next 30-40 years, not only educational or formative in general, but with high doses of employability associable to real capacities and expectancies of societies to which they will serve; the logic of a withdrawal of certain security forces, their competency of adaptation, new criminal realities and security, or rationality of the economy or international relations, for example? Shouldn't the dualism of current employment for permanent and temporary workers, for life or unlimited contracts, public or private, be considered in the debate, for example?

In conclusion. Indeed, it is good that employment is being generated and that they are strengthening essential public roles for social development. More than good - it is essential. However, would it not be worth taking a look into this beforehand and reconsider governance, the role of different public administrations and the competences, capacities, profiles and conditions of the people who have to carry out the new functions in the future? This is certainly a time that requires us to "complicate matters". It is not an easy job. The achievable, extraordinary and decisive results of a desired future.

The governments (if they tackle the difficult transformations necessary) will be one of the greater sources of employment that we will have at our disposal for the present and the future.

The strategical commitments and their complexity, the necessary articulation of public-public and public-private, the essential and unwaiverable role of governments, which is increasingly more important, the increasing demands of society, the important areas that will have to be recovered (planning, organisation, regulation, co-governance, institutional restructuring, reconfiguration of competitive and innovative areas, multilateral alliances, new international institutions, multiplicity of institutions for the collaboration with public influence, their ordinary functions, the recovered "vigilance and security" which has been partly placed in the private world), constitute enormous sources and niches of employability.

To reconsider the public administration of the future, the posts and profiles required, their constantly updated training and evaluated efficiency, obliged a profound reconsideration with the objective vector of employment. And of course their non-permanent nature, entry mechanisms, ongoing training, promotion systems and renewal of their post and public employability.

The future of employment: green, pink, blue and grey collar revolutions

Just as we have been explaining, one of the biggest concerns that affects all types of forward planning is none other than the future of employment, which is mainly associated to the debate and contrast of automation and substitutional influence of technology and "traditional jobs" that dominate our industries and services today. Education and requalification play a key role in this. These initial premises take on a special meaning for the potential development of those areas that will shape their real impact on society, and for their typical

determinant of performance. In this way, their study and consideration demand a holistic study and intervention which especially have to include the person-machine relationship and interaction, the opportunity/necessity/quality of a potential applicable taxation system (reconsidering its typical productivity, competitive capacity and achievement; their resolution capacity of social demands and adaptation to internal training of their professionals; their role in the framework of value chains of which they are part of; their business-society commitment and value, and their willingness and possibility of generating and/or participating in strategic alliances in conciliatory and clusterisable spaces of solutions that the new challenges and possibilities of response they offer). In that way, in addition to the transformation process that it entails, we have the redesign of these different business models for companies, the real initiatives for transforming the whole of the public administrations and their *“supplementary industries”* (syndicates and political parties, intermediate institutions and NGOs) just as we mentioned in the previous section with a prior redefinition and recomposition of public services and their governance. Lastly, there is the even more complex reformulation of the social welfare state and the concepts of work, income and employment that they imply.

In all aspects of this ongoing process, beyond estimated studies and resulting success/dream of the future, it is now a real reality that accompanies us in our day-to-day, our behaviour, and in our decisions and/or reactions in view of the decisive reality. *Are we lost in this complex and inevitable revolution?*

We debate if the upcoming future will arrive with activities that *“would have to disappear and be replaced by machines, which would make the necessary creation of employment unachievable,”* we find a real exciting, developing, innovative and imaginative world which generates new jobs, resulting from the not always *“disruptive”* transformations of our lives, industries and economy that offer an attractive, hopeful and possible future which requires effort, innovative and committed mentalities.

In this way, while an intriguing report by the Bank of America (*“Robosapiens: The Future of Work”*) approaches the matter of overcoming the confrontation between man and machine, and opting for the appropriate *“collaboration”* between both in a new, shared and transformative multiple area in permanent realignment in time, and in a way that robotisation, automation, digitalisation, artificial intelligence and the Internet of things (IoT) in everything, they do not entail the suppression/elimination of people in terms of work and employment, but rather the recombination of times, contributions, joint use in a renewed definition of employment with an end result that turns into the generation of more employment (different than that of today), than that which is initially considered as *“destructible”* due to technology. This approach avoids that of the *“zero-sum,”* and offers a creative scenario (a report by the World Economic Forum on employment-robotisation estimates 12 million newly created jobs subsequent to the elimination of 85 million existing jobs offset by 97 million newly created jobs, basically in *“new professions, types and industries”*). An encouraging starting point that would entail an intense process of requalification, providing new skills and abilities to our professionals, incorporating new needs (which robotisation demands), the entry of new professionals in the successive transformation of industries concerning technological content, the fabrication of different manufacturing industries, parts, systems in demand

for their production, their progressive advance towards smart and specialised servitisation, and of course, the sectors of health, education, professional training, mobility, transport, logistics, biotechnology (more importantly, if possible, in their impact regarding agriculture, food, natural sciences, oceans... than in their huge contribution to health life sciences), the reinvention of cities and regional areas, transport and (public and private) management/administration. It is not about a reassuring tale, or a dream that just makes us wonder, but a systemic exploration of the world, its social needs and demands to make sources of new business models from them, and to generate companies that create wealth, which will have to respond and transform our economic fabrics towards an increasingly more inclusive society.

In this prospective effort, it is particularly worth mentioning three large sections, not because they are often overly highlighted, and may seem like fashion labels or what is politically correct, but because they must not be persistently emphasised while they are treated in depth. **The recently so-called “white and blue collars,” creators of value between our world of employability and the economic development up to today, and which appeared to differentiate work spaces from carrying out tasks and knowledge, as if it concerned a discontinual, paving the way for two new types of supplementary employment with renewed intensity, and have a strong impact on the “pink collar,” with the progressive and accelerated incorporation of women in the work-employment-formal market throughout the whole world. Lastly, there is the “green collar,” which is associateable to the unstoppable and unlimited transition to the green economy that is well beyond a new energy renovation after fossil fuels.** The colour is not a matter of gender, but of concept and area of intervention. These two large pillars or “paths/corridors of employment of the future,” are found in an essential third area: “the healthcare industry,” - its maximum accelerator for employment. Beyond its specific application in the field of health, public health, community and its “sub-sectors, industries or clusters” of special and essential application, the care leads to an endless world to be redefined with professions to reinvent for areas and activities of unpredictable development.

A new scenario and perspective to which is joined by an increasingly intense world of business venture, the “grey” knowledge economy and the collaborative economy, in addition to the promotion of associateable jobs with essential “communal assets” for moving towards societies of the future.

From here, the aforementioned report in line with more typical avant-garde trends and movements, suggests emerging debates that lead to a key, triple framework to accompany this creative process: the taxation system of the change (to tax the use of technology or not, and their main players and potential influence in the replacement/creation of employment), the resort to localised systems of universal minimum income in different types and with unequal extents beyond work/employment. And lastly, requalification and permanent provision of new competencies and abilities for employability in view of that immense quantity of new jobs in the future.

With this framework of thought, which brings us closer to Cognizant (Center for the future of Work), we can enter into that world which we do not completely understand, it is inspiring and comforting to observe real changes that we are already witnessing and enable us to continually imagine vectors of opportunity

that provoke transformations of professions, new jobs, companies and players for tackling a desirable future. This framework does not only lead to distant worlds that are unexplorable from traditional and/or comfortable positions, but use the immediate teachings of Covid-19, for example, to redefine us from strategic and unexpected influence in our lives to make us understand the combination of new perceptions and adaptations to ways and means of behaviour, social attitudes and lifestyle which we thought we would never experience, to our learning/response for considering “real change” in the way that we immediately go from “*future work*” to “*present work*”. Moving from what is known as “*remotopia*,” and beyond the well-used image of teleworking towards a world that is rich in new options (“*31 jobs and professions for the future*”), and compatible with a new sense of reconciliation (not only at the reach of public administrations and civil servants or large companies), to reconsider new spaces, which also overcome the unequal duality between those who enjoy the security of a job for life, and those who have to build their own, ever-changing path of employment.

Moreover, we break the myth of future jobs being the same as substitute, leading-edge technology. All we have to do is reconsider the huge employment demand that the present (and the future) show with regard to essential tasks that are distant from the aforementioned sequences (services, transport, logistics, care, health and medicine, teaching, management etc.), so we embrace technology to different extents, but it is at the service of irreplaceable people. This is, of course, providing that employees are continually trained and qualified.

Multiple training that leads to an essentially collaborative effort and work to create compatible platforms, multi-directional and multi-player alliances and a real sense of co-opetitive relationships that look much more at new initiatives, the increase of the numerator and not at an annoying denominator in the calculations of results, which are especially conditioned by the circumstances and the least differentiation, redirecting strategies towards real and unique value propositions.

There is no doubt that we are left with a real challenge ahead from a positive line of transformation that requires building a future of work, working in the world today, and moving towards new areas of opportunity. Our will and responsiveness will define our future reality.

EMPLOYMENT CREATION

There are more young people than ever. On a global scale, the population between the ages of 15 and 24 exceeds 1.3 billion. Every year, 45 million young people seek their first job, new jobs with changing content and scope for meeting this demand with unbalanced offers throughout the world.

As the unemployment rate for young people threatens to rise more, many young people face the prospect of being without a secure job in years to come, which predicts a generation in risk of social and economic consequences that are impossible to detect, but will undoubtedly lead to disastrous situations. If governments and the private sector do not educate and train young people and give them decent jobs, they run the risk of hindering their aspirations and losing their potential. This limits the possibilities of sustainable growth and compromises the achievements of political interventions in other areas.

As shown in the repeated updates of the monitoring reports by UNESCO: *“Youth and Skills: Putting Education to Work,”* governments around the world are leading with the long-term consequences of the successive financial crises, the challenges of the knowledge economy and the global explosion of technology. Wherever young people come from, and wherever they live, they need to acquire skills that prepare them to take on decent jobs with the aim of being able to prosper and fully participate in society.

The ILO (International Labour Organisation) estimates that the youth unemployment rate has nearly reached the figure of 100 million. The organisation insists on the following key message: *“Job creation is the most pressing global development priority development. A decent job is the best way out of poverty and it’s also the way economies grow. Jobs mean development.”*

The social and economic costs of unemployment, and of generalised low-quality jobs, not just for young people, but worsened with the rise of long-term unemployment for adults whose capacities-unemployability are becoming increasingly less marketable, keep increasing and erode the potential growth of economies and people, creating distrust and demotivation, and consequently undermine important values such as responsibility, effort and desire for self-improvement etc., which must constitute the foundation of people’s development, as a lack of those values complicates their life plans.

Our inefficiency of economic-social legislation that we have implemented in society has undoubtedly also meant one of the biggest opportunities of social and economic transformation for organisations and their countries.

These are times of approaching employment creation as “the objective”.

Moreover, if the priority to generate new employment is essential, then the “maintenance” of this objective is just as important. The unequal distribution of supply-demand in different labour markets according to economy, industry, and the geography concerned continues to be a noticeable rising trend, and has made a startling appearance subsequent to the 2020-2021 pandemic in the form of the “quality” and the objectives searched for by current employees. The situation occurring in the United States stands out in which, according to reliable sources (McKinsey, Rand...), “the half of workers confirm to be looking for a different job due to their employers not offering a secure future, real prospects for personal development, consideration/recognition (internal and with regard to the image projected to their family and friends), nor the space necessary to enjoy their free time, and most of all, they do not believe that the strategy to save the planet is sincere, nor the resolution of social problems nor commitment to the community in which they carry out their work.”

After gathering the surveys and opinions, it is worth reconsidering the scope and content of employability.

This way, the ongoing strategical commitments and the observable mega trends highlight a series of industries in the previously mentioned “new economies,” which have huge areas of opportunity with spectacular waves of growth, and which, correctly identified, will make it possible for a whole world to attract the generation of employment for our generations to come.

Employment that is able to satisfy the contributions and demands of our population, to finance the public budgets necessary for the maintenance of a renewed welfare state and the comfort of our citizens.

The future of employment: the new roles of companies and their convergent business-society objectives

It is now twelve years since the promoters Michael E. Porter and Mark Kramer put forward the first proposals of a new line of thought that emerged from the so-called Shared Value movement between business and society⁴³. Today, it has spread around the world with a snowball effect. This is an actual objective and is made up of the essence of co-creation value strategies (not as an added distribution once revenue is acquired, but as an essential and indispensable factor in design, formulation and implementation). The movement has brought to light a real compromise for leaders around the world who are committed to the challenge. Large enterprises at the forefront of the global economy, NGOs, foundations with more resources and assets than many governments and generative countries of opinion... committed to specific projects “paving the way day-to-day, building a new paradigm.” An extensive movement that influences and interacts with multiple initiatives, reconsidering and committing to new roles to play in the global challenge of society. If, in the first steps, Michael E. Porter expressed the need, as a starting point, to convince big investors and global financiers of the value of investing in companies with a strategy and

⁴³ Shared Value Initiative. How to co-create value between companies and society

objective of shared value, in the 2014 ground-breaking report of *“How Banks Profit by Rethinking their purpose,”* with the participation of various leading banks, they reconsidered their strategies and proposed different scenarios of strategic transformation to reinvent the bank, investment and their interaction with businesses and society. Today, the main “global investment bank” Black Rock proposes its sustainable investment and confirms it in their strategic commitment: *“It is about investing in the future and recognising that companies which resolve the biggest challenges faced by humanity could be in a better position to grow. It is about promoting new ways of doing business and creating a trend that encourages more people and organisations to invest in the future that we are building together”.* In their report *“Sustainability: The Future of Investment,”* it states that, if investing in one or another company or initiative in the past meant sacrificing VALUE in exchange for “values,” that is not the case today. Nowadays, and especially the future, the most profitable companies will be ones that make co-creation of value strategies and their response, which is measurable by social and environmental challenges, and by government - the unifying thread of their objective. Banking today, every industry tomorrow.

Perhaps with this unstoppable non-conformist movement with observable reality, step by step, we can find the way to face such serious challenges like these that lead us to reconsider the role of companies, to refine their commitment with society (taking for granted their fulfilment of corporate responsibility up until now as a good “legal citizen,” their support to the community in isolated aspects that is, in most cases, distant from their direct corporate interests, the local employment they generate and their compliance with tax and regulations in general), putting the social needs and demands as a source of their business models to provide a value that is distinct to their new commitment.

Shared Value means that companies are the best prepared economical agent (due to their assets, organisation and management, talent and capabilities) for ensuring long-term, scalable, manageable and profitable commitments to provide a special value of co-creation. In collaboration with NGOs and all types of organisations with governments and other companies, shared value can redirect their business models, opening and carrying out new initiatives and formal, quality employment, creating sufficiently motivating and increasing added value that is acceptable for different regions in which it is implemented around the world.

Shared Value is not based on trying to obtain profits, as once they are earned, it determines the proportion and the way in which they are distributed among the region like another one its stakeholders that is generally in search of a relative “social acceptance.” It is about redesigning business models from the start with the intention of co-creating value together with society. Its innovative and strategic methodology takes into account three big lines of transformation:

- 1) To reconsider and redefine the business model based on social needs and demands.
- 2) To reconsider its role throughout the “n” value chains in which it participates.

3) To reconsider its promotive and/or participative capacity in the “cluster” of which it forms part of in each one of the regions where it carries out its activity.

This strategic process in itself does not only generate added value, as it identifies, promotes and generates new opportunities, business and employment. Its strategic commitment is a unique driving force in the generation of employment, in its implication in the development of new qualities, training and formation of human capital, in its interaction with social policies, optimised use of community assets and interaction with all the cluster and value chains that it is part of.

Today, the ESG movement (Environment, Social and Governance objectives beyond economic results) “Stakeholder Capitalism” (a new way of business for a new capitalism at the service of society and one and all of the different interest groups involved) and an infinite number of branches, initiatives and “schools” of corporate thinking put the proposal and supreme objectives at the service of society.

At the same time, the transition of these business models overcomes the separating conflicts between companies and employees, and companies and governments, incorporating a new collaborative space to their relations that is required for the good purpose of shared strategies.

Their strength and long-term progress is an extraordinary tool in the creation of employment. The industries/clusters of extractive, finance, insurance, agro-industry, and manufacturing industries, and all those companies operating in isolated areas, have exponentially promoted their role and employer commitment. More than new models, they are, and will be, real sources, driving forces, and creators of sustainable employment generation and prosperity, in addition to leading companies in their respective areas of service, transforming their own vision, and enlarging their fields of operation.

Today, in one way or another, this movement and conceptual development accompanies initiatives around the world in search of new solutions, not only to change society, the role of the company and the real relationship models of government-company-society, but the very concept of the company as a whole economic unit in which the capital, workers and all stakeholders feel like they are an essential part of it with shared objectives, and not considered as opposing groups with contradictory interests.

The future of employment: convergent strategies. A commitment for employment

If, as we have seen up to here, EMPLOYMENT CREATION has to be considered as a MAIN OBJECTIVE, it will be inevitable to address an ad hoc STRATEGY, which will inevitably have to change/alter ongoing plans, programmes, processes and institutional agents. Beyond “governing” unemployment and the management of financial flows that it entails, the vectors and transformative lines have to be provoked disruptively and constantly to generate more and better employment, more quality and security, more added value, and more aligned with the qualification of the potential employee, the employer, and the

economic fabric and social foundation in the framework of a new dynamic of agility/flexibility that is adaptable to the real circumstances of our social and economic fabric. It is about building a real commitment for employment.

This “competitive” strategy with everyone in search of talent around the world makes the public/private collaborative and innovative force essential. Each party in their own strategic role and all within a shared framework.

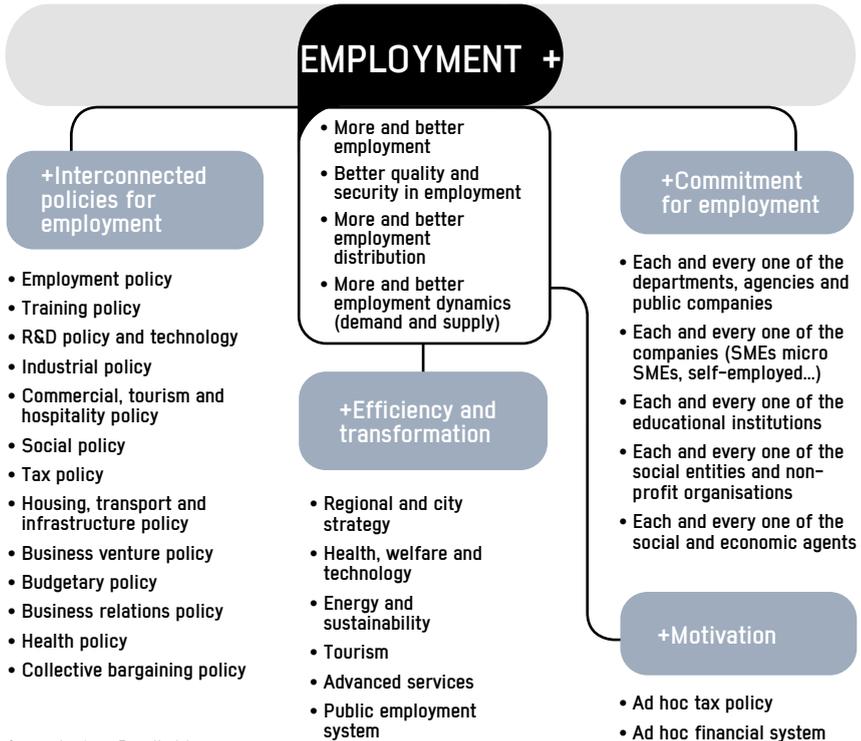
The strategic commitment entails working in multiple, synergetic, interconnected and unified directions with the participation of all public administrations, educational institutions on all levels, and the combination of social and economic agents. If we highlighted the importance of clusterisation concerning economic activity in a new “complementarity among different industries, sectors and disciplines,” the concept/model is valid for what would be the key source for desired convergent achievement. **To clusterise the employment policy, areas of social and community employment/development; the broad and dynamic field of employment/training; the industrial policy for employment; policy for infrastructures and their measurable and controlled employability; opportunities and technological policies for employment with special influence in information and technology communications and “exponential technologies,” a new reorientation of employability in tourism, hospitality, trade, leisure and services, business relations and collective bargaining at the service of employment and the essential reform of public administrations that favour quality employment in an outdated society.** In the coming years, the highlighted and extreme importance of HEALTH will have to be given special attention, since it is also a source that generates wealth and employment, beyond its role based on terms of its value in health for the population.

A strategy of this type requires the dynamic priority of finance (public, private and intergenerational), taxation and motivation of the accelerated and anticipated renewal of infrastructures, and at the service of employment, in addition to efficient and appropriate administration.

Lastly, the aforementioned strategy requires new regionalised and/or localised efficient platforms and structures in specific response to the focal points of supply and demand.

A complete unifying movement of all the instruments and areas with the potential creative capacity of employment.

ACTION PLAN AND CONTENTS



Source: Jon Azua-Ehovatinglab.

"If the objective were employment creation" ILO-Costa Rica. Development incentive 2019

5.2.5. New thinking and economic model?

To a lesser or greater extent, there are many people who support the progression towards a new idea and economic models, and with a stronger desire in recent decades.

The increasing inequality, with excessive levels of generalised disaffection, do not only question the scarce equity and high disproportion of the benefits of growth models, globalisation, a capitalism of different signs, or suppressed nationalist models, an "exhaustion or distortion" in the post-war social market economy and multiple initiatives are abandoned to a greater lesser degree towards models of inclusive prosperity from, and for, the group of shareholders and/or units of interest, questioning growth as an initial and essential foundation for potential distributions of wealth. Neither are there few who question the real efficiency and fulfilment a social democracy that appeared to be well suppressed by the strength of the achievements in a certain symbiosis based on the practices of the social market economy and different "models or policies applied and extended around the world, placing new concepts and projects in the core of the socio-economic legislation.

On this foundation, all types of movements, which are full of nuances, and not only ideological and/or from the positions of each one, put options or paths with variable intensity on the table, providing that no one deems it as being in the status quo. Consequently, we will experience a vast number of changes in the coming years that

will gradually reconfigure a new dominant idea, which will have to generate substantial changes in international organisations, in public and government policies, in the attitudes and behaviours or roles of economic and social agents, and consequently new generations of leaders and governors, participation commitments, investors, financiers, politicians and unions. In turn, **new geoeconomic and geopolitical reflections will reconfigure the pre-existent maps. Copy-cat convictions of the one-track approach will gradually disappear, as well as excuses for not considering that “there is always an alternative.”**

Beyond basic initial opinions, they will be times in which the different challenges, and transformative projects they propose from geopolitical forums around the world, clearly indicate the inevitable changes that the interactions with technological competence, use and control (or property) of artificial intelligence and the foundations of their potential development, degree of multi-agent cooperation, conflicts and/or pacts in international trade, and “digital commerce,” or the ambitious and desirable “green transition,” which as much as it will attempt to prevent, it will also generate inequality, winners and losers (at least temporarily), and they will combine alternative models with greater or lesser degree of disruptive radicalism.

Everything appeared to indicate that the guidelines of an economy of values at the service of the society, a more equitable economy in a generalised trend (diverse at the same time) on “new economic thinking,” which is also influenced by the recent SARS-CoV-2 and its still unknown impact and search of new solutions (preventive and action solutions in models which are disruptive for pre-existing ones), the more than inevitable redefinition of social contracts, the (unequal) economic recovery to come and the fleeting aspiration for resilience schemes and an increasingly more questioned concept of employability, the future of employment with the profound revision of systems of protection, prevention and social security will generate an unprecedented change.

A complete “revolution” of economic thought that impacts politics, society, its nodes and levels of government and the democracy itself. Thought and practices that will require to be re-established based on values of ethics, trust in third parties and especially in leaders with regard to their crucial (most of all) constructive choice where “democratic monitoring and acceptance,” strengthened human dignity, its move to digital and technological power and, above all, the common good.

An extremely broad framework in the middle of turmoil. To choose the appropriate path and journey will make the difference.

However, while the reality coexists with the times, needs and decisions from the different sectors and people on an individual and/or group capacity, we can not detach ourselves from a reality that generally returns to the “common and uniform” directives associable to the macro economy, global signs, superstructures of governance and the one-track approach that dominate policies and transversal plans of scarce differential value for those who have to apply, share and, if applicable, benefit from them. **Only the real transformation of societies, commitments to policies, differential value proposals and a real personal and collective joint effort for change, will oblige to tear down closed borders and favour those who decide democratic legitimacy, and the control of proximity.**

Thinking and microeconomic action are essential for a real transformation.

Up to here, we have examined all those crucial elements considered as relevant in contemplating a future over a long-term horizon from a position and time full of uncertainty, in addition to the sensation of a complex and challenging probable future. This is subsequent to a serious pandemic situation that has led many to speak of “stolen hope” (especially for today’s youth, who are unaware of the different historic incidents that would have accompanied crucial times in the lives of their ancestors, previous generations and some others, to innovate towards an urgent renovation and demand of all types of new economic models, a reconsideration of the welfare states, space, public assets and the role of institutions, “authority” and leaderships, immersed in a general climate of democratic deterioration and disaffection). Under the generalised (and in many cases real) perception of a non-recoverable deterioration and a concerning inclination towards an unsupportive individualism that has overturned into an unequal balance between the strategy for all types of “rights” and a minimum or absent commitment/obligation in the field of the debit, they convey intense anxiety in view of an uncertain and increasingly more complex future on the verge of big challenges, and a long list of observable trends that will condition our response as a society, we abandon a vision that tries to provoke credible trust for generating a scenario of “success”.

I tried to visualise an optimistic and positive world full of opportunities. This visualisation is not from a morbid wilfulness, but rather based on the analysis and diagnosis of the starting point, on what was carried out in other times which was also complex and challenging in which our society knew how to intervene and overcome, to generate strength and lay the foundations on which to tackle the times and challenges ahead. There has been an attempt to analyse the reasonably expected changes, in addition to their potential impact among us with the intention of tackling feasible challenges and plans for the future. I tried to observe our small space and region in a global context, and with a comparable view that is always focused on future generations, trying to learn and join different spaces that are also potentially shared, to cooperate with them, and act with a synergistic co-leadership that is also in mutual benefit. On this journey, I wanted to listen to critical opinions, I have explored alarms and red lights, and tried to “think big,” to refuse to suffer what could happen due to a passive attitude, choosing to make the effort to build an ideal world, and I have resorted to experienced voices that know the country and the world, and are committed to their life projects and professional responsibilities.

And here we are! In the middle of the journey towards 2050, passing through the different stations and stages, forming relationships with third parties, learning and sharing hopeful anticipation and difficulties, and willing to travel complicated and demanding paths from a

personal, intergenerational commitment, thinking of other people... and, of course, thinking of ourselves.

This journey has those “main key elements” on which we must concentrate our efforts. Our preferences have progressed, and we have opted for a predetermined way towards a specific result. To examine these crucial matters

would have to lead us to the ideal horizon. In this way, I tried to approach the ever difficult and controversial area/region in greater depth, and by not understanding it as a “classical physical container” will undoubtedly generate suspicions, fears, animosity and of course support and enthusiasm. An area/region on which to build new strengths that make the journey in question a possibility.

It is about encouraging us to “sail on promising waves” that lead us to resolve risks and optimise a hopeful path, to understand the “flavour and magic” of the process that enables us to reach the final destination. We will summarise the transformative efforts required by the ever complex exercise of collaboration, and the generation of networks and alliances of different types and importance. This will make us consider the talent that is essential for this journey, and, of course, the need to put the emotional emphasis and the conspiratorial extensive commitment that we need in the focal point of the ideal horizon.

To want to accomplish and achieve the objective proposed will obligate us to redesign their governance, establish new instruments, intra and inter agent frameworks with their roles and legitimate and private interests in cohesion and “creative generosity” with ours. It is only in this way that we will strengthen a real society for the common good.

The whole of this long process, which is excessively segmented and fragmented today, means returning to the inevitability of an overall strategic vision, to join nodes, build networks, efforts and results, in order to make it possible.

In this way, and almost without knowing or realising it, we will discover everything that we will have done on this long journey to successfully reach its end.

This is our journey to 2050 on this exciting path.

6.1. The main crucial elements that we will use to guide us

Here, we will recall those crucial points that we have already highlighted and explored throughout this book.

We will concentrate our effort by focusing on the “connection points” of the “overall strategic vision” that we proposed at the beginning of this journey. In the first chapter, simulating the journey of the future president of the Bilbao Chamber of Commerce 2050, enabled us to observe “common nodes” that outlined a potential Bizkaia 2050 in response to the observable demands, challenges, reality and objective. In this section, we highlight six crucial areas in which to intervene, in accordance with what has been announced previously: the final destination will not be “heaven sent by a spontaneous generation,” but the result of a lot of work carried out up until then.

The bridge between the desired vision from node to node, required us to successfully move the following crucial points:

- To redesign, re-imagine, drive multiple exercises and/or maps of transformation that break established paradigms and tear down comfort barriers, the status quo, and obstacles that seemed to be insurmountable until then, opting to sail on “promising waves,” and conscious of the essential “magic of the process” between the desire and the initial reality.
- To build co-opetitive and collaborative networks and strategic alliances.
- To generate, attract and retain the talent required at all times, and to re-energise our excitement linked to the commitment and desired objective.
- To reconceive our governance, and our economic, business and social models. To provide us with the appropriate normative and institutional framework for our journeys, demands and possibilities.
- To strengthen the society for the future, based on the typical values of the common good.
- To reconsider and reconceive a new, open and unlimited “liquid” space that we recognise as the Bizkaia of 2050.

These are our crucial points that will now guide us in the next pages. All of them are the result of our abilities and red dots that we identified and contrasted with the observable trends and changes that form “essential strategic lines” on which to build our desired vision,

encapsulated in a distinguished (unique) value proposal, both inwards and outwards, in search of complicities that enable to enjoy their achievement. Crucial elements defined in the chart guide of this book, in search of maximum argumentative coherence.

CONNECTIVE NODES OF AN OVERALL STRATEGIC VISION



Priorities with different categories, intensity and times conditioned by the capacity of direct influence we have available at all times. Differentiated spaces in which we have more or less direct responsibility in the different agents of the system, but with an obligation/demand of collaborative action.

The world, and also us (Bizkaia 2050), progress towards new paradigms in search of new solutions. We all want to reformulate our strategies and horizons, and we are all in need to tackle multiple challenges. Every "region" is unique, and each value proposition has to be unique.

6.2. Re-imagining the 2050 vision

If uncertainty emphasises the alarms and red lights that affect and warn us of the intensity of obstacles and difficulties for reaching a desirable scenario, which is largely different to one that upsets and makes us suffer, then to imagine an enthusiastic future full of collective energy to motivate a satisfactory, vital and professional project requires the certain chain effort, will and shared dedication from the goodness and benefits it offers as an alternative.

If it is essential to vision this successful space, to re-imagine our steps and final destination, it is even more essential to make it possible. This, and no other, is the essence and meaning of all strategy: “To imagine the unimaginable and make it possible.”

The 2050 vision that we are imagining here is built by means of bringing eight elements together; key steps that are appropriately interrelated and integrated into the “service” of a common commitment will lead us to the planned objective, understanding its distinction in three sections that make up the whole objective:

1. To provide us with a unique value proposition.
2. To reconsider and reform a “new space and region” under the Bizkaia 2050 umbrella, in its early and permanent sense, Bilbao-Bizkaia-Basque Country and its connectivity around the world in a footprint of platforms for creative knowledge, innovation and prosperity.
3. To adapt ourselves to the magic that the process entails, to explore opportunities, rethink our typical development models, put technology at the service of implicit humanism, reinvent our welfare state, the roles, profiles and behaviours for the new governance and implement a path to success.

6.2.1. Towards a single value proposal

An ambitious commitment.

We are conscious of the enormous challenges to tackle, the barriers of our abilities and limitations to overcome, huge setbacks and external circumstances that do not depend on our areas of management, nor did it seem beforehand that we had the minimum capacity to have an influence in them and, of course, the demands and desires of the society are changeable, which can lead us to other directions, and to opt for a unique scenario that defines the Bizkaia of 2050, just like it is considered here, is not

an easy choice. It is not enough to want a certain future scenario. And it certainly will not be given to us without the active commitment to make it happen. That said, *what better reason is there for us to strive to make an ideal future, than drifting into an unoriginal and continuist direction that is unaffiliated with our wills, hopes and way of life with an uncertain result?*

Here, in this book, the vision of hope banks on overcoming and switching off the red lights of pessimism, present difficulties and those that will appear on the horizon. We are set on transforming those difficulties into data and information that require answers, decisive and innovative actions to observe them from the

perspective of opportunities, to go through successive crises in terms of creative responsibility.

We will be able to identify frameworks and instruments that facilitate desirable results, and we will seek the collaboration of all those who teach, help, drive and accompany us in shared achievements. A vision for the common good in a new space that is to be built day by day.

In this way, we will head “towards a unique value proposition,” which will be our own, and different to those that try to create other cities/regions/nations from their own diagnosis, wills and commitments. A value proposition. Value for society and inclusive value. Real value on each and every resource invested in its achievement. A value proposition that manages to differentiate us in positive and relative terms regarding many other players that presently compete, and will compete with us around the world. Those others who also aspire to attract, retain and strengthen their own talent; to gain successful economic flow as a result of investment, capital, enterprises, pensions and finance; to make connections with third parties in better conditions than ours; to offer young people of the future what they can not find here... to learn and share the things that we desire with third parties...

To formulate this value proposal for Bizkaia 2050 does not mean taking a leap of faith, nor lead to impossible areas, but to affirm knowledge of the already foreseen path and focus on “developing the strategy”. This consists of asking ourselves what could be a competitive and solidary, differential position for an inclusive society from the reality of our established space. To start from its legacy, location and explore its real geostrategic possibilities, its strengths, and exploit the potential activities in new upcoming frameworks of our enterprise and economic fabric, our institutions (academic, social and administration), to clusterise and interrelate the activity/region pairing to define the role for each particular agent to undertake, and for our extended city/nation in a global context.

This value proposition requires the development of unique strengths for which we have to work on our so-called “present ecosystems,” to identify weaknesses to overcome by acquiring or developing what is “lacking” with a lot of external conviction, complementing the total supply, always looking towards the best, and on signs and objectives in accordance with what our differential proposal pursues. Convergent strengths that will undoubtedly demand new areas for the future, new and different clusters to develop and/or create, and new capacities to successfully circulate in them.

And of course, not only to remember, but reinforce and strengthen some of the essential elements of the commitment that we have been working on over time: economy/society/welfare, which has made this society the differential space that we share. There is no economic development if it is not at the service of the society to which it serves, and in which it plays an essential part. A powerful, improvable and changeable social welfare network has to have the maximum and simultaneous priority of the economic commitment. The inherent objective of this value proposal does not put the focus on growth, but on inclusive human development. That is the goal. Following this goal is to prioritise and sequence the continual progress towards real social and economic development of which we will feel proud of, and in which we are “comfortable”.

In previous chapters, I have already dedicated a large space to the model of competitiveness and inclusive prosperity, which has guided us over time. I stopped at the

conceptual frameworks and the foundations that we have followed to reach this point, and have to help us move with coherence towards the future. If everything learned in those highlighted determinants of competitiveness and welfare have been essential, they are even more so today in moving towards the future. To revisit them does not imply dismissing them, nor starting a blind search to provide us with a new model, but to rewrite them, to incorporate essential foundations, and to strengthen those which time or our practices and attitudes have neglected or destroyed.

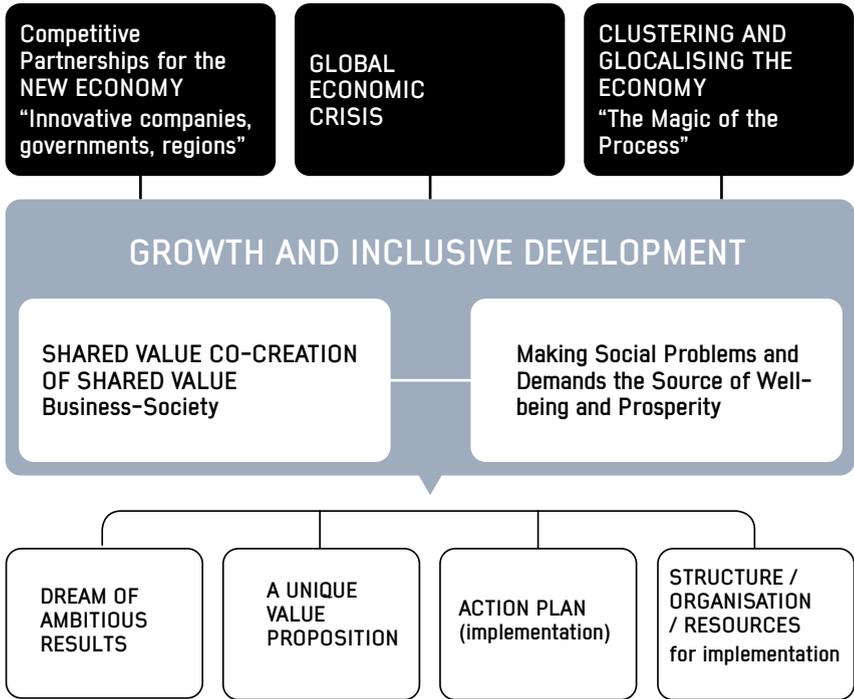
We need solid institutions that are able to build a long-term strategy for the country, to transform its governance, generate mutual understandings with the social and economic agents, to involve all of the stakeholders, intermediate organisations, facilitators with a consortial role and essential alliances for tackling the future ahead of us. We need to put in a serious effort in terms of diplomacy, economics, politics, culture and society, to highlight the importance of the region considered here, and to mobilise and co-lead the whole society. Under that umbrella, we are in need of all the social and economic agents to be aligned with the country's objectives, in addition to their legitimate objectives and personal commitments. This alignment can not be imposed, but rather as the result of a truly creative and participative relationship to bring a convergent and shared value for the benefit of all parties. We need companies, syndicates, universities... committed to the common good.

It is essential to remember and insist on what competitiveness means in a country/region/city. We do not have to improvise, nor reinvent the wheel. We act on all the key elements at the same time, updating concepts, extending their contents and scope that each moment demands, from the legitimate and essential role and strategy of each one, at the same time as the convergent and synergetic work and attitude, at the service of the shared and desired results.

We have to follow an Objective Model that facilitates the complex exploration that it implies. We need to understand its essence and share its meaning and objective. We recall the map proposed and on which we will build our commitment.

A FRAMEWORK FOR GROWTH AND DEVELOPMENT

Understand, Engage, Co-Create



This map implies an additional reflection on the conceptual frameworks of a "competitiveness in solidarity," which is well understood just as we elaborated in our Country/City/Nation/Region like others around the world, seeking our differentiation, incorporating a profound thought and reflection to ask ourselves new questions, and to seek better solutions for present demands. Different degrees of responsibility and generative capacity of impact enable us to focus on priorities.

Priorities with different categories, intensity and times, conditioned by the capacity of direct influence that we have available at all times. Differentiated spaces in which we have greater or lesser direct responsibility in the different agents of the system, but with an obligation/demand of collaborative action.

The world, and also us (Bizkaia 2050) progress towards new paradigms in search of new solutions. We all want to reformulate our strategies and horizons, and we are all in need of tackling multiple challenges. They appeared to be the same for us all. But the fact is that, after the same label which defines a matter or subject of global impact, we have to discover what the "niche" or specific area of impact is of each one (countries, regions, enterprises, government), how it will have an impact on us according to our value proposal, and where to focus the growth and wealth of our strengths to make it possible. Every "region" is unique, each value proposition has to be unique, not every objective is realistic, nor can they be achieved by everyone.

We insist that the strategic commitment of our Bizkaia 2050 space will be demanding and will obligate a special effort to tackle a complex journey which, by starting with a new reconfiguration of the region, addresses the lines of work to motivate, strengthen and/or redetermine.

The journey undertaken requires:

- a) To reconceive or redetermine a “new base area”. Which space/region are we referring to when we contemplate a space for Bizkaia 2050?
- b) To reconsider and redetermine the role that we will have to play in a global context in which we try to be a prosperous, competitive or inclusive player, and co-protagonist of our own future.
- c) To reconsider and redetermine crucial, strategic commitments in which we have to focus our transition from today, up to 2050.

6.2.2. Reconceiving the new space: BIZKAIA 2050. Base territory / objective and its connecting imprint

Just as we observed in the section on “Strategies for Connectivity and Magnetism. Hard Infrastructure,” when discovering the decisive elements of the competitiveness of the city/region Bilbao-Bizkaia-Basque Country, incorporating excellent clusters in which to intervene, different areas of opportunity generating an extended space from the commitment to convergent, synergetic and shared commitments, we have already informed that there is a need to break the traditional concepts, definitions and limitations of the regions. “Regional innovation” is also one of the requisites for living in a 2050 society such as the one we propose.

To consider the Bizkaia of 2050 in itself means a complex exercise of determinism and positioning, and not without multiple perspectives of which their interpretation could determine any ideal future scenario.

The Bilbao-Bizkaia-Basque Country today already constitutes an inseparable continuum which comprises a space with identity, meaning, commitment, history and future vocation that actively “accepts and drives,” a community that co-owns, co-leads and co-decides those crucial wills, instruments, policies, institutions and factors for their model of social and economic development, and their consequent geopolitical, geoeconomic and political/administrative configuration. An extendible core with varying intensity, impact and ideal degree with and towards a natural space that strengthens it (and this becomes strengthened at the same time by each one of the parts to incorporate) while different times, more or less shared initiatives, bilateral or multilateral needs and demands resulting from contexts and decisions often external or derived, advise or involve co-opetitive interventions. To consider this “space” today, in 2021, in real and comparative international terms, requires reference to a concept of “City-Region”, “Bilbao-Basque Country”, “Bilbao-Bizkaia-Basque Country”, “Euskal Hiria”⁴⁴... or their extension to other spaces such as Euskal Hiria, Basque Country Euroregion, Basque Country-Nouvelle-Aquitaine, Bilbao-Burdeos Corridor, Bilbao-Atlantic Megaregion and Euskadi-Basque Country.

A space under construction and permanent redefinition that will be determined by the democratic will of the citizens and the society, according to their aspi-

⁴⁴ Euskal Hiria. Concept of Basque City Region

rations, commitments and political will, their abilities and effort, and of course, their commitments, strategic visions and external changes that impact and condition our own decisions. It will not be “good or bad” because of spontaneous generation or third party imposition. It will be what we want, what we are willing to be, and will depend on our skill in building it step by step with a lifetime experience and firm intention around which strategies, initiatives, collaborative and joint effort will be aligned.

Whether it be conditioned by ideology, force of applicable administrative regulations, weight of official statistics, regulation framework or backing (of finance, predetermined activity), or due to the greater or lesser development of current infrastructures, it is not easy to generate and produce new spaces of progress and development. **We dream of an ideal space and make it possible.**

Among other many paths to explore, we have arrived up to here with relative success, and we have to traverse and innovate those supportive infrastructures that drive desirable development, from the quintuple administrative framework in which they are part of today (European Union, Spain, France, Navarre, Autonomous Basque-Euskadi region), and an endless number of interactions including private, public or non-governmental initiatives that promote their progress, achievement and potential transformation. Spaces and frameworks which are all subject to reforms and/or reinventions tending to the different sensitivities, values, drive and movements underway. We have hundreds of more or less partial or sectorized plans and initiatives at our disposal for which we have to turn our transformative dreams into a real, and long-term, overall strategic vision with a driving purpose, while having knowledge of the complexity of the process.

Without the slightest doubt, the arrival point has to respond to the demands of changing societies in which peaceful and democratic processes enlighten the ultimate desire of some and other societies that are ever conditioned by the typical evolution of each and every one of the spaces that they either form part of, or with which they interact. All societies will also seek their own journeys. Will we know how to reconcile convergent journeys?

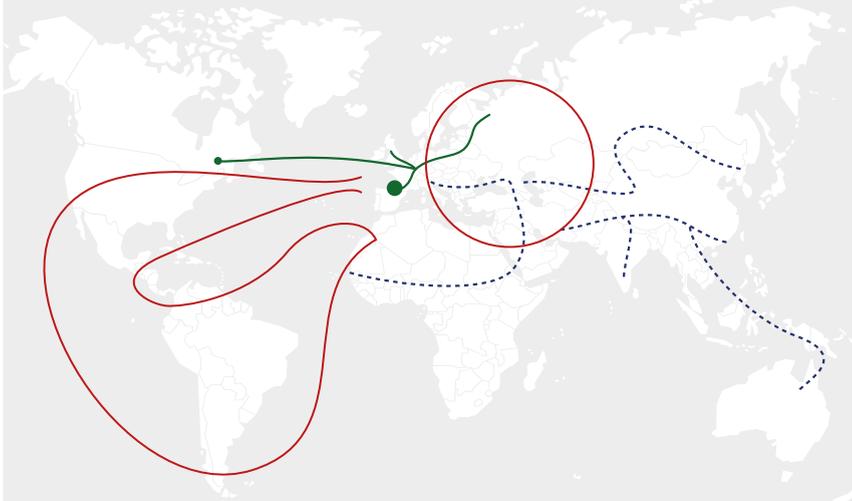
The initial meaning of the proposal in this book invites to **recover the space of the “Bay of Biscay” as a starting point, which is so intimately linked to the very origin and the entire purpose of the Chamber of Commerce, Industry, Services and Navigation of Bilbao, centuries ago in the past, and with an inherited geoeconomic and geostrategic nature, to the distinguishing nature of a natural position on the map, to a thriving, open, refreshing and innovative history with the flexibility of the Bilbao Consulate in collaborative action throughout the world, driving a sequential and natural development matched by the evolution of the successive economic activities and their requirements.** The continuity of this natural space was extended and immediately expanded towards the NE to Nouvelle-Aquitaine, and to the north of Great Britain, exploring, sailing, trading via the North Sea and especially its present and future reconfiguration as the United Kingdom (and all its prior and resultant parts in an intense process to consider). To discover and provoke that which enabled the historic tract that lead to Biscay Bay in North America and its extension to Labrador. Present connections and a foundation of a commitment for the future. A reference point on which to build a dense network of networks throughout the world. (Bay of Biscay - History, present and future reference). Networks that will have to be

extended in natural ways as they were built in their day, co-existing with the confederation of Hanseatic city-states or from the “Baltic space,” - a more than natural way for a hope for the future. We are not trying to copy what has been done in the past in any way, as we are, of course, thinking and talking about the future. A future to which all “regional areas” in the world aspire, and are eager for differential elements, history/icons that provide identity, a sense of belonging, coherence and cohesion in forthcoming steps for a better life and society.

Do we have to, or must we imagine an integrated alliance of spaces throughout the world that give “special, regional” meaning to our Bizkaia 2050? Does a multi-spatial, nodal space that enables a base region-area, at the cutting-edge of knowledge, progress and social welfare, from which its citizens’ pride and sense of belonging, solidary competitiveness of its businesses, trust, credibility of its institutions and the world of opportunities suppose a global example interacting with the first leaders and players of that time? Can we configure it as a space in which its own governance frameworks and development model is established as a result of its free decision and democratic determination, its peaceful and good intentions, and free from its citizens, enterprises, social and economic agents, sharing co-opetitive strategies with third parties from its own co-sovereignty and co-leadership, and at the service of the inclusive welfare of its population?

We live in a world of cities-region on a planet that is increasingly more urban and, at the same time, in need of a connected, innovative and necessarily specialised rural world. These spaces are the new driving forces of the economy which are used to correct the unequal and exclusive globalisation with the potential of being the main actors that lead the fight against climate change, inequality and poverty. The past was organised by periods of empires and nation-states, but now we look towards the future and see a world moulded by varied conceptions of “super cities or super regions,” that contain inefficiencies within themselves, additional problems, discrimination and misgovernment, in addition to an individual and increasing disaffection. At the same time, administrative frameworks are reinvented with greater or lesser formality which, beyond their adaptation to terminology that is adaptable to the specific circumstances of each one, they overcome reductionist classifications such as metropolitan areas, regional corridors, mega cities etc. that appeared to constitute their differential source out of the size, the support of their capacity to respond to the demands of the citizens and companies to position themselves in them, and become forums that exclude those who do not have “the privilege” (or the limiting misfortune of accumulating millions of people in them). These spaces go from being the pole of attraction and leaders of development, as well as generators of marginalisation, inequality, inefficiencies, overruns of infrastructures and services, inefficiencies of administration, governance and complex living environments. **The world of small and medium sized cities appeared to recover the necessary importance in order for them to generate spaces of competitiveness and welfare for the people.** Those cities are sufficiently interconnected, and in shared objectives for the long-term. With their own personality and identity, and directed towards distinguishable vocations and unique value proposals, the people form all kinds of alliances with different avant-garde and innovative networks, nodes and nuclei of connectivity, interaction, knowledge and mutual learning that is shared in their daily reasoning.

BAY OF BISCAY. HISTORY, PRESENT AND FUTURE MODEL



- The “natural” projection followed throughout time
- The original route - updated
- ... Indirect connections “following the imprints” from/towards the movement to the east, and towards the ever good prospect of Africa

Previous studies in “Talleres de Ideas e Innovación de la Fundación Metròpoli” (Workshop of Ideas and Innovation by Fundación Metròpoli), have been on the subject of providing ground-breaking visions on “new footprints” of regional influence that study the connection points in more detail with multi-spaces that strengthen the “competitive advantages,” which are interrelated with certain spaces that make supplementary work possible by sharing alliances from more or less common and equivalent desires found in different stages of development. At the same time, given the value of human and social capital that culture, history, DNA-regional and the “invisible threads” that weave stable and long-term alliances which are essential for making a difference, they advise to seek historic examples on which to update development, and are deeply rooted with the essence of the region to be strengthened. A real excuse for working on the present, and to build the future.

To project a new vision from the differential reality that the geography and history enabled it to form, update and renew throughout history. To learn from what has already been done to reinvent a different future.

This is the new challenge that requires to build interconnected spaces in which some call the real “*territorial diamonds*”⁴⁵ that make the creative connectivity possible from “natural origins and complementary neighbourhoods.” Our cities/region which often have economic resources and limited political power must tackle enormous challenges. In this way, we prefer to escape from a classic denomination and explore concepts and potential terms that give greater and better meaning to our future, and a hope for tomorrow. Spaces that comprise their own nature and the excellent components necessary as a foundation to determine their

⁴⁵ Fundación Metròpoli. New Smart Regions (August 2021)

own urban profile, to activate projects and stimulate cooperation networks. In our case, Bizkaia 2050 will be a new space, resulting from the generative decision of a “liquid region,” devised without permanent and immutable administrative limits. A new space that will be gradually reconfigured due to the will of the “federation or alliance” in which different players will keep generating over time.

If we want full connectivity with the global avant-garde, its talent, knowledge, models and platforms of innovation, and prosperity, we have to build the network from networks developed from an open and interrelated foundation.

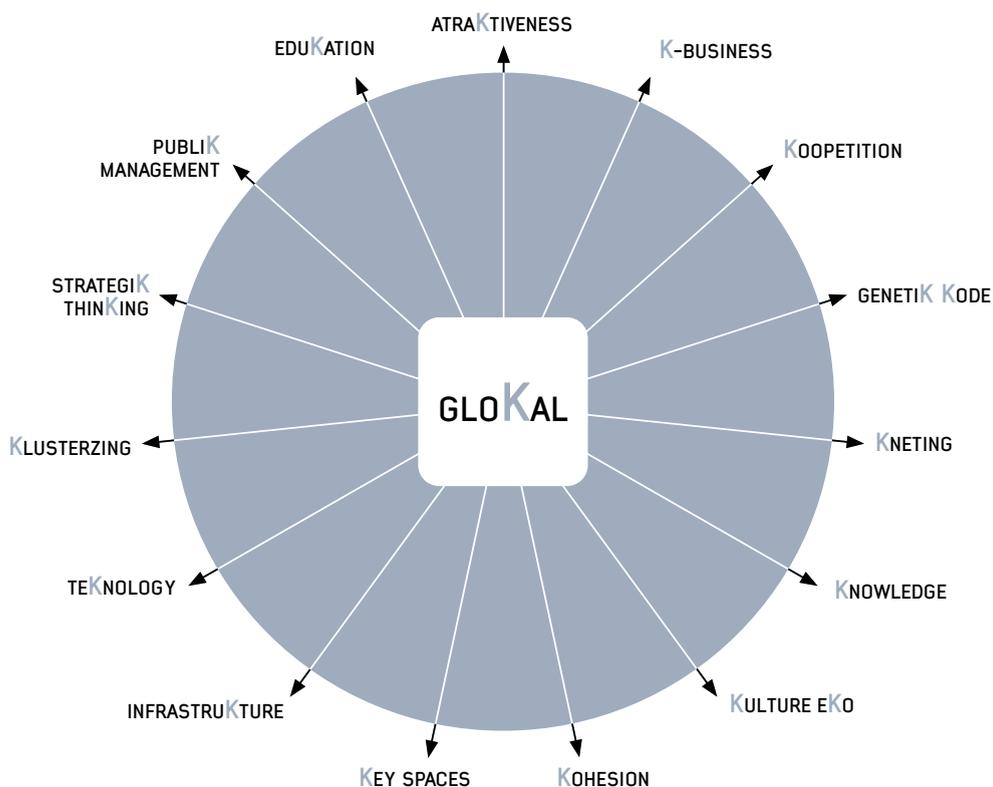
EUSKAL HIRIA

If the term “Euskal Hiria” (Basque City) has many known references with greater or lesser precision, from the literature of Bernardo Atxaga, the broad reference to the regional and sociological space that ended up being configured as a consequence of the different infrastructures of communication, connectivity and cohesion in development in the extendible area of the Basque Country and its hinterland, the first academic-political-regional reference to this term corresponds to the work from the Cities project⁴⁶ which, as a conceptual framework, was suggested as a potential regional model for a Basque area that addresses the directives of regional classification, its consequent partial and sectoral regional plans by the Basque government, and the foral and municipal institutions, in addition to their social and economic agents. The Basque Country, and more specifically Vitoria-Gasteiz, was configured as the main location for this Cities project which configured the interconnection of a network of cities (20) extended around the world as a Fundación Metròpoli initiative. This provoked learning, an exchange of experiences and strategic commitments in view of the transformations that the economy, politics, society and the habitat itself generated in the surroundings of the cities and their successive considerations as “smart lands”, cities-region, towards new spaces of innovation, sustainability (more controlled in their environmental aspect), cohesion and social development. New buildable spaces from the construction of competitive advantages based on the identification and generation of their components and clusters of economic excellence, and the instruments of governance, which we had the opportunity of determining in their day, integrating the comprehensive framework of competitiveness into the strategy of the regional foundation, providing meaning and a socio-economic vector beyond the physical projection of the planning and conceptions of the land and its use. A model of Business-Government-Community interaction and its multi-directional interrelations enabled it to have an active and regional role (breaking the traditional container concept), in order to facilitate the generation of wealth for the society, to give the regional politics a directional purpose, and not be subordinated to an inherited physical framework. In this way, the region is provided with an identity, culture and distinguishable aspirational projection, influencing processes of governance, participation and decision making, according to its future vocation.

⁴⁶ Cities Project. Initiative: “advisor and transformer of cities with innovative vocation that meets (and brings together) a significant number of personalities from architecture, economy, culture and the social sciences in the redefinition and reinvention of cities” (www.fmetropoli.org)

A space at the service of which the main areas of economic and social activity are identified to strengthen in the proposed space, and in consequence, the adaptation of a physical-region facilitator of its development and implementation. Like yesterday, the Euskal Hiria of today, conceived as Glokal City⁴⁷, is the inseparable foundation of this Bizkaia in order for us to propose the dream of Bizkaia 2050, an “interconnected region with the global avant-garde,” as an essential co-leader in a potential network of cities-region, collaborative platforms and spaces of communal interaction. The wealth of its configuration, privileged geostrategic position, aspirational vocation for the future, roots and historic strengths, make it possible to build a new space for the Bizkaia of 2050.

GLOKAL MODEL



⁴⁷ A registered concept (by JA-Enovatingla) based on the interaction of the K of Knowledge which is extended to other essential elements in the configuration of co-opetitive spaces, superior to the “globalisation” concept that appeared to exclude the determining local effect.

Consequently, the City-Region or nation of the future will be the natural space of local confluence with the globalization process that will take shape. It will be the space in which people, companies, governments in/from the vicinity interact throughout the world, guaranteeing access to the world's forefront of knowledge and innovation, as a sustainable platform for talent, creativity and well-being. The new city of the future will have responded, from the feeling of belonging, comforting and co-ownership of its own vital project, in the main dynamic and changing challenges of the world. Here, the so-called global challenges and problems will have to find a local, own and differentiated contribution, from inclusive, public and private collaboration and co-competition, participatory and legitimized governance for a true democratic integration of the Communities and the formal and informal organizations with which it is constituted. The greater the internationalization, exchange, openness and mobility, the macroeconomic rules and strategies will be more homogeneous and accessible to all and it will be the macroeconomic policies, close and differentiated, based on unique value propositions, that will mark the differences, in terms of competitiveness, well-being, social cohesion and inclusive development for different Communities.

The cities of the future will not only have to be attractive for “*workers, companies and open talent*”, in a permanent competition and growth for talent, the population necessary to make their services and infrastructures efficient and their smartization and digitization, accompanying culture and leisure and, of course, health, education and social welfare services and if not especially for the resident citizen identified with their habitat and base community. Far from being seen as a “physical container”, it will be a proactive space that generates employment, wealth and well-being. A city-region capable of offering the services and public spaces that society demands while doing so as a source of employment and wealth-generating economic activity. A city that has made its needs the driver of the economic vector of its well-being and development; with an educational offer adapted to the real qualified demand for employment of its people; with a new urban and architectural layout for the use, enjoyment and economic-financial efficiency of its resources; a financeable and self-sufficient city with a well-balanced tax system. A city pride of its inhabitants. An international reference, support of the country brand throughout the world.

In short, a renovated space that will have been equipped with those essential assets for the desired functioning of its creative, entrepreneurial, innovative and prosperous objective: technological and digital, energy, hydraulic, cultural and educational, transportation, physical and intelligent infrastructure. - people at the service of their citizens. A new driving force for its competitiveness, as an essential node in an attractive hinterland that retains flows (talent, capital, investment, employment). Inclusive and cohesive space. A recognized and identifiable territory in the world, democratic and participatory, peaceful, safe and tolerant. A reference space. A facilitator of the eradication of poverty, inequality and lack of equity, in solidarity with the least favored. A space that will have known how to make its strategy a dynamic and collaborative process, which it builds day by day.

What are the necessary instruments?

- 1 The new future “development space” surpassing the classic concept of “unitary States”, supported by super structures far removed from the sociopolitical and economic reality of an objective “new inclusive development model”, making proximity and its local effect the basis of the progressive construction of the new competitiveness and well-being space, that guides us.
- 2 A shared and inclusive vision of all economic, social and institutional agents duly endowed with resources that make possible a permanent, participatory, responsible and sustainable process.
- 3 Technological, innovative, creative services and assistance, social, labor, cultural, community, environmental, mobility, housing and educational platforms that guarantee its final objectives.
- 4 With transparent, democratic, effective, efficient and fiscally-financially self-sufficient governance, with which its citizens feel fully identified.
- 5 A city-region connected to the forefront (knowledge, culture, innovation).

How can we influence its achievement?

- 1 Raise and lead the flag of an effort and process in favor of full competitiveness, in solidarity, from an interconnected platform (physical and intelligent. Hard and Soft)
- 2 The conviction that each area demands its own model, different indicators and, above all, far from simplifying rankings, experiences in process, illustrative and agitating for new changes towards the design of its own, differentiated and unique model (unique value proposition).
- 3 Promote “multidisciplinary” towards an interdependent ecosystem: Urbanization, green growth, government of the future, government, business, employment, role of aging... towards “new models of human development”.
- 4 Co-creating value in the environment of the city-regions with which it builds shared spaces (companies + governments + societies).
- 5 Building alliances with “Centers of Excellence”, institutions specialized in cities and regional development, the inner city movement, and innovative companies in the supply of the main infrastructure and service groups to build the city of the future (Groups of Art and Territory, Mobility Clusters, Green Economy or Sustainable Clusters, Eco-City Design and Clusters, Health and Infrastructure Clusters and Services Clusters such as: Information Technology, Telecommunications Operators, Energy and Water, Sanitary equipment, Housing, Health, Health, Housing, and Health Logistics and Advanced or Sophisticated Manufacturing...). Elements, each and every one of them that will be conditioned by the evolution of the different Megatrends and changes that we will have to face. The extent to which we are able to react to these dynamics of change will determine our ability to face the pursuable success.

Consequently: “Conceive the city of the future as the appropriate platform for the process of creative, innovative and entrepreneurial construction of a space for competitiveness, welfare and sustainable human development, grouping the economic activities to support its differentiation with the provision of the innovative infrastructures demanded”.

This will be our basic starting point in the definition and construction of our territory-Bizkaia 2050.

Bizkaia 2050. Weaving networks

In the same way as the changing world in which we move and will move, on the threshold of an intense recovered multilateralism, as a “natural” response to an economic, social and political world that has to face a future different from previous times, and in line with the search for “comfortable spaces” that make each “region” a leading base territory and promoter of the desired well-being, model and progress, Bizkaia 2050 has to weave differential alliances for its reconfiguration and repositioning of future.

Thus, as we have advanced in the Vision 2050 initially proposed in the introductory chapter of this book, following the flows of the aforementioned “*Bay of Biscay*”, we find the “*natural*” and “*desired*” allies of the first order, to the best “common” achievement of the parties involved in accordance with the starting reality, our Base-Territory, made up of Bilbao-Bizkaia-Basque Country, already interacts (most of the time in an informal and punctual manner) not only with its nearby spaces, but on wide and varied platforms, of all kinds, throughout the world. The future synergistic development that all these pieces will provoke can be found in this “trace of shared future”, the propitious scenario to satisfy its own value proposal, cooperative and differentiated, integrating and intertwining, day by day, multiple spaces, necessary and complementary, throughout the world.

A process of co-creation of value that, from free, democratic and inclusive approaches, forums and decisions, generates new collaborative spaces with reciprocal benefits.

The scheme that represents the suggested process (purpose-vision-commitment) shows a sequential co-creation of value by weaving “provoked” networks and alliances. Although the natural footprint (the Bay of Biscay already mentioned) facilitates both close identification and immediate and unquestionable contribution of value, the next steps require differentiated strategic bets. Bilbao-Bizkaia-Basque Country will have to deepen their own current space, providing themselves with multiple complements that break dangerous internal dysfunctions or inefficiencies in favor of an integrated value proposition, for the benefit of all its parts. Hence a first creative movement (also internal), of successive steps, with immediate extension towards the incipient space that formulations of the Euro-Region, with Navarra and Nueva Aquitania confer. We add the Diaspora, an integral part of the geographical, cultural and economic extension. At the same time, in another complementary sense, the Atlantic Facade to the NO of Portugal, the Baltic Area and the Nordic Area, in interaction with the future “New UK-”

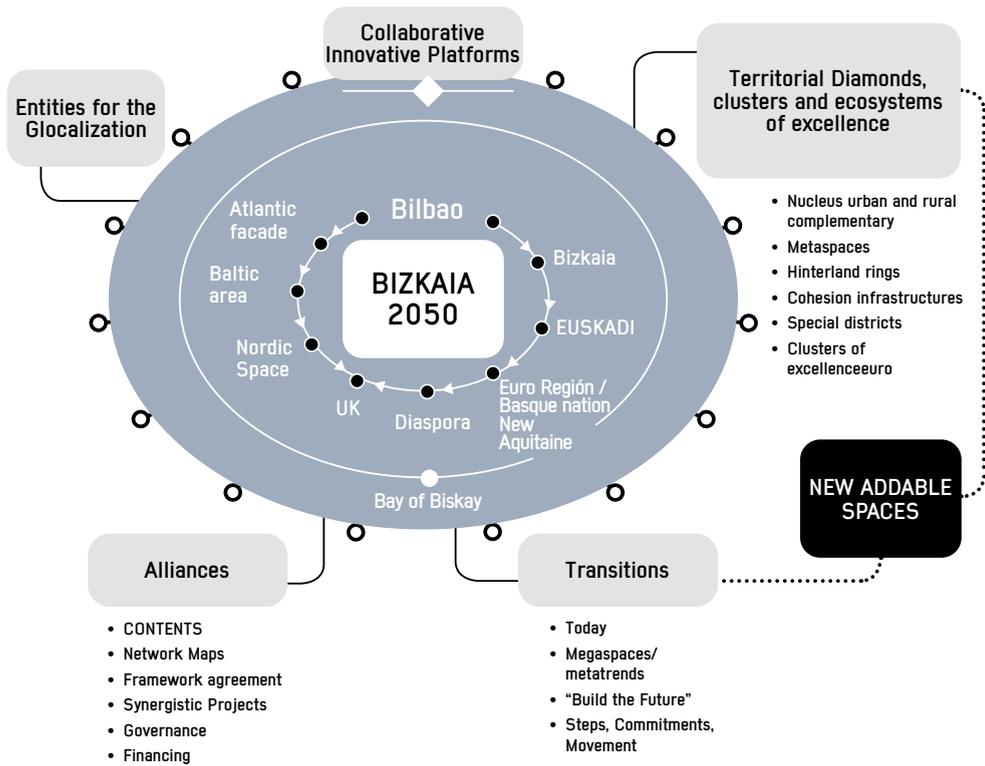
which, over time, will also reinvent-reconfigure its current political-economic-administrative organization and it will always have to be, and in one way or another, a natural ally of Bizkaia 2050.

Weaving this type of alliance is not a matter of drawing schemes, or using the compass to set concentric circles occupying a certain hinterland and spheres of “influence”. It is the result of related realities, of intense work on the design, implementation and co-governance of new shareable Territorial Diamonds, of innovative figures such as providing new special infrastructures that, without a doubt, must be included geographically in a given territory. for the service of convergent objectives and benefits, of differentiated complementarity of clusters of excellence. And, above all, the result of the correct incorporation of essential content in any alliance with a strategic and long-term vocation: clear content and objectives aligned with the purpose pursued, network maps that enable their agreed development (together or by separately), an Umbrella Framework of Agreements and Disagreements, synergistic projects, governance, financing and people. These key elements will enable transitions, changing over time, building the future, based on the dynamics of change in their societies, their economic-social-academic agents and the responses to Megatrends and their inputs. **Open alliances (committed) to/with “new spaces that can be added.**

Weaving these essential elements and contents into these two “rings” (the initial and characteristic of the Euskal Hiria-Euro-Region of the embryo Bilbao-Bizkaia-Basque Country and the one followed in the footsteps of the Bay-Gulf of Biscay) is demanding of an intense work of “Entities for Collaboration” (existing or generated ad hoc) that are active intermediation actors, facilitators of long-term continuity beyond “perverse dynamics” that political-institutional ups and downs could cause, and, above all, guarantors of the objectives and active strategies that are defined.

Finally, (not in sequential and temporal terms), a third ring of what we call here “innovative collaborative platforms”, leads us to an unstoppable succession of alliances, throughout the world, guarantor of true connectivity at the forefront of knowledge, innovation, co-leadership worldwide, from accessibility to Decision Centers and, in short, to our own learning, retention and attraction of talent-initiatives-company and to true development under our complete model of competitiveness, prosperity and inclusive development.

PURPOSE - VISION - COMMITMENT TO ACTION CO-CREATING VALUE IN INCLUSIVE SPACES



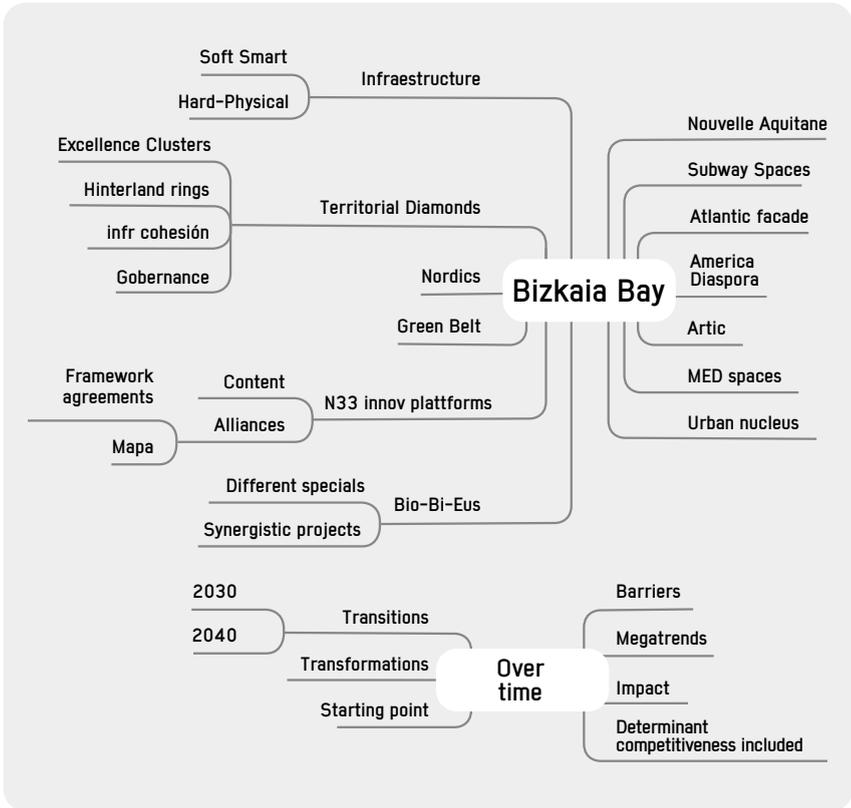
In short, it is about configuring a living, growing footprint, of “weaving, from the base, a Glokal⁴⁸ interconnection as we “incorporate” complementary spaces (in turn, in search of our own differential strategy), in coherence with the elements described in the previous section, under the conceptualization of the city-regions of the future. Our Bizkaia 2050 must be the result of the important and intense work that lies ahead and that includes the future base territory: Bizkaia 2050.

I insist. This effort and process does not respond to a voluntary approach, but to a strategic determinism based on the real strengths of a starting situation and a purpose between reality and the channeling will of the needs and opportunities for a prosperous society such as the one we propose.

Regardless of the political future that Basque society decides on in the future, based on its identity and legitimate aspirations, our size, population, capacity and economic and cultural fabric will lead us to interact with multiple political, social, economic, academic and cultural actors, throughout the world in a progressive movement from our belonging, European spirit. Bizkaia 2050 will have to aspire to be a relevant NODE of the successive spaces of which it is a part and, from this starting point, it will have to commit to:

⁴⁸ GLOKAL. Concept defined and registered by the author (2003) in his book “Clusterize and Glokalize the economy”. It includes the critical elements around the K (Knowledge) that builds a global development model with special value and relevance to the local contribution

BIZKAIA 2050. PURPOSE - VISION - COMMITMENT TO ACTION CO-CREATING VALUE IN INCLUSIVE SPACES



JA-Enovatinglab. Mind Notes Conceptual Modelling. Own elaboration (June 2021)

- 1 Weave a spatial relationship map as wide as possible, in a permanent process of learning, contribution and shared progress, following the next natural footprint that will feed itself, step by step.
- 2 Membership -collaboration- contribution to this global footprint will require working on the “Territorial Determinants” that reinforce our position (individual and nodal, as for the new spaces that will be generated).
- 3 Forming and weaving a network of networks with different innovative and collaborative platforms must be done from the coincidence-convergence of real content that adds value in all directions involved, with firm and formed alliances, focusing and prioritizing desirable and necessary maps, establishing agreement frameworks with a clear definition of commitments, obligations and synergistic and shared projects. Of course, its strength, progress and validity will require governance instruments that make it possible. Varied and different frameworks, contents, instruments, case by case.

Additionally, building and maintaining a map of these characteristics requires managing the different transitions planned from TODAY (we already have a vast network woven over time on which we have to strengthen and build the process). A rigorous revisit to the essential nucleus, prioritizing what already exists duly focused on the future and reorganizing the network of alliances, actors and agents (of all types involved), as well as the key people in each and every one of them, is essential. From here on, the successive transitions 2030 and 2040 will be decisive in this journey, observing the spaces required for the different transformation maps that we indicate in the next sections, responding to the observable Megatrends. Transformative dynamics that will also impact the territory itself, will provoke it in its continuous innovative search and will force disruptive bets. Bets driven by socioeconomic purposes and vectors and, finally, an inevitable physical transformation. Needless to say, the significant need for transparent, effective, controllable, entrepreneurial governance that will inevitably take risks and bear the consequences of its decisions.

Process that requires two lines of development, interrelated, that will be built step by step:

- ① The configuration of a “trace” or future space.
- ② Generate and consolidate interconnectivity with other spaces, throughout the world, of special interest and intervention, to fulfill the proposed multi-variable purpose.

6.2.2.1. The configuring footprint of a space of the future

Attending to the concepts described above, and following the line, both of those instruments that we will have to incorporate (and/or create ex novo) to provide the new space to be configured through its own and differentiated framework, as well as the multiple promoting initiatives that will require us over time, our new BASE TERRITORY on which to build Bizkaia 2050, will have to be the result of a dynamic process, generating a specific footprint, step by step.

1. Our geostrategic position in a natural nucleus, with a place generated in knowledge, weight and historical reality, fully identified, allows us to make use of the iconic terminology of the Bay of Biscay, widely linked to the root and history, both of our land, and of the very existence and future of the Bilbao Chamber of Commerce, Industry and Navigation, as well as of its still previous origin, through the Bilbao Consulate. The Bay of Biscay, from its unique and natural starting point, with the DNA of the base territory, enables its extension by sharing a project with New Aquitaine based on its incipient and young administrative and political framework at the time, in a France in reorganization political-territorial, within the framework of European reconfiguration and shaping new strategies to relocate to the forefront, first in France, then in Europe and, later, in the world. With proximity of cultural ties, cross-border historical relations, of necessity and proximity, and complementarity of technological spaces, industrial and port networks, academic areas, with the added reference of the inclusion within it of the Basque Department in administrative terms and Navarra in its progressive competency and collaborative redefinition towards a unique euro-region, in which the future Europe could be transformed. Natural

space, nearby and common base of development. If at the time of writing this analysis-proposal, together with today's Biscay 2050, they form an excessively limited cross-border Euroregion, under a limited framework that cries out for an innovative jolt (like all European regional policy under the mantle differentiator of its Member States), is a real base that, as a starting point, allows efforts of a disruptive revolution to be achieved.

2. Bilbao-Bizkaia-Basque Country

The geographical, cultural and political configuration of our territory, its will to build a common future, its strength and institutional organization, its polycentric configuration rich in urban centers of excellence extended and connected as intelligent nodes with their own character, the interconnectivity between themselves, the territorial dimension and the differentiated as well as cooperative and synergistic process, make this space a powerful integrated and integrating "Base Nucleus".

Speaking of Bizkaia, today and tomorrow, means referring to today's administrative Euskadi as the Autonomous Community of the País Vasco- Basque Country, which, beyond its administrative limits, its governance entities and its own peculiarities, make up a City-Region space that distributes its different essential pieces of a "Complete City", much more than a "metropolitan corridor", and a major pole of economic and human development, relevant in its relative rates of inclusivity between the different territories, being a central and nuclear element of the joint space with Araba and Gipuzkoa. The wealth of its regional territories, capital cities, population centers, urban and rural, represents a clear competitive and human development advantage, strengthening cohesion (territorial and social), the invaluable sense of belonging and the highly valued (and scarce) at the same time) "territorial magnetism". A referent space that is strengthened by the Bilbao icon as pole-head in the comparative literature of cities, which concentrates the largest urban footprint of the whole of that space described and its connection with the "Atlantic façade" and the New Aquitaine. Embryo base of a differentiated territorial space, within the framework of a convergent aspirational purpose and vocation.

3. New Aquitaine

Beyond the geographical proximity, the political-administrative belonging of the "Basque Department" to the New Aquitaine, very recently created in the timid territorial reorganization undertaken by the more than centralized France, with its administrative micro decentralization undertaken excessively dependent on Paris (which generates enormous social convulsions and a political background of notable disaffection), the natural space of Nueva Aquitania supposes a growth and expansion, more than natural, of complementarity and interconnection with the "European sheet" that makes possible the updated extension of the historical Bay of Biscay, La Côte Basque and the synergistic connectivity towards the Baltic, on the one hand, and the North Sea, on the other, in the recomposition of spaces of future and opportunity. In

the transition to 2050, all these spaces will recompose their own footprints, weave their preferred alliances and make their individual (and legitimate) aspirations essential pieces of transformation that will also impact the current base territory.

If cross-border and trans-European complementarity, within the framework of the European Union, requires, as well as facilitates, the optimization of infrastructures of mutual interest, also guaranteeing their economic-financial viability, with high-speed and/or high-speed connection, a replanning of airports, ports, navigation lines, common university districts and the joint development of clusters typical of their respective European regional development instruments, although today they are not as disruptive, differential and unique as some of us would like, regarding the The RIS3 model (Regional Smart Specialization Strategies⁴⁹), its economic coordination and co-governance makes all the sense in the world in order to tackle, with greater guarantees of success, its competition and mutual extension towards new spaces.

Unfortunately, neither cross-border Regional Collaboration, nor the Regional Policy of the European Union, nor, in my opinion, the widespread RIS3 model of smart specialization, come close to a potential “panacea”, relevant vectors for differentiated socio-economic territorial strategies, the fact that, today, it is due to the essential access to financing for the diagnoses themselves and previous states, or to the application of Development Funds (both from the European Union and from the central governments of the Member States), to the only effects of “homogenization of plans and initial initiatives between the European regions-spaces indicated here, we resort to the presentation of their own comparable bets. We observe how they would seem to work in the same direction. Unfortunately, from realities, strengths, resources and human and institutional capital, as well as financial, very disparate and different. In any case, its capacity for interrelation and synergistic opportunities are a value to be taken into account. A collaborative process would benefit all of them.

We observe in the Competitiveness Diamonds of this region, as we have been contemplating in coherence with the remaining “territorial pieces” foreseen in the expanded base nucleus, the complementary strength that the successive aspirational maps based on their respective desires for “intelligent specialization”, capabilities and synergies that enable a chain of interconnections that add value.

It is not a minor matter, its own EU process of territorial and regional reconfiguration, both under the input of the French State, and of the European Union itself, in a “new institutionalization”, concluding timid steps towards a, still distant, self-government of the Basque community, in the French State, above all, within it and its first own institutions. However, their extraordinary economic potential and their expectations for the future already share, in “joint action spaces, with Navarra and the Autonomous Community of the Basque Country in a Euro-Region project, extraordinarily potential through collaborative work⁵⁰. The degree of mutual development to be achieved will be due to them, and to us through this territorial competition effort.

⁴⁹ Since 2011, with variations over time, the EU has promoted an S3 platform (Smart Specialization Strategies) as a facilitator for regions and Member States, both to encourage regions to carry out a diagnosis and potential specialization and differentiation in its regional development strategies, and as a source for channeling aid and public resources for its implementation.

⁵⁰ MN. Cross-border Regional Collaboration and RIS3. Live RIS3 project.

THE NEW AQUITAINE AND ITS INTELLIGENT SPECIALIZATION STRATEGIES

Recent work within the framework of the Basque Country-Nafarroa-Nueva Aquitania Euro-Region that has been carried out under the auspices of the European Union and the institutions in the different communities-spaces, have taken as a "homogenizing" reference the object of identify spaces for joint work, the methodology announced regarding RIS3 (Required Strategies for Smart Specialization). The "New Aquitaine Competitiveness Diamond" is as follows

Aquitaine Diamond Study

FACTOR CONDITIONS

STRENGTHS

- Abundance of natural resources
- High migratory flow that ensures the population growth
- High employment levels
- Rich and varied Higher Education, and the existence of University Institutes of Technology
- Came as a showcase to the world. Bordeaux as the world capital of wine

IMPROVEMENT AREAS

- Low percentage of population with university education and poorly developed professional training
- Aging of the population in accelerated progression
- Great exposure to natural risks
- Low level of industrialization
- Improvable infrastructures
- Great inequality between territories (departments) in training and added value of jobs
- Difficulty finding qualified labor

CONTEXT STRATEGY AND RIVALRY

STRENGTHS

- Presence of European and world leaders in advanced aeronautical and space technology
- PUBLIC Plan to promote business creation and entrepreneurship
- Strong attraction of foreign investment

IMPROVEMENT AREAS

- Little diversification of suppliers for more intense activities in R&D and technology
- Business fabric made up mostly of small businesses (only 0.5% > 100 workers)
- Exports in decline and highly concentrated in a few sectors and countries of destination
- Far from the levels of investment in R&D of the most involved regions, and below the country average
- Small size of exporting companies

RELATED SECTORS AND SUPPORT

STRENGTHS

- Presence of sectors with a high technological level (aeronautics, space, defence, laser, nutrition, cosmetics...)
- Higher Education System of excellence ACCORDING TO position in NUMBER of masters and doctorates
- -Cluster of Research and Higher Education in Bordeaux, which brings together all the Universities of the region

IMPROVEMENT AREAS

- Few subcontracting companies, highly concentrated in metallurgy
- Improvable infrastructures
- Great inequality between territories (departments) in training and added value of jobs
- Difficulty finding qualified labor

DEMAND CONDITIONS

STRENGTHS

- Income levels in line with the country's average, leading provincial France although far from the most thriving regions
- Taste for quality and excellence
- Great concern for the environment

IMPROVEMENT AREAS

- Low percentage of young population

...Towards the commitment of a way to go in the framework of 2050

As we have anticipated, the work promoted by Orkestra has already been reflected (and engaged) in the plans of the institutions involved. Thus, the Science-Technology Plan 2020-2023 (Basque Government + Provincial Councils), the RIS3 Navarra and the Cap Metiers Nouvelle Aquitaine collect the strategic lines and their points of contact and interaction (Basque Country, New Aquitaine and Navarra) in the converging areas that they intend to address as an initial basis. Mobility, Energy, Agro and Cultural and Audiovisual Industries. A first step in unlimited collaboration over time.

ORIENTATION OF THE FOUR STRATEGIC AREAS IN THE RIS3 OF NEW AQUITAINE, EUSKADI AND NAVARRA

REGION	MOBILITY	ENERGY	AGRO	ICC
EUSKADI	<p>ELECTRICAL MOBILITY (energy priority)</p> <p><u>Strategic guidelines:</u> increase in the use of electric vehicles (cars and bicycles). Boosting the recharging infrastructure. Electrification of PUBLIC transport.</p> <p><u>Transversal guidelines:</u> Technological and industrial development, Legislative, normative and regulatory development, Awareness and Communication and Training.</p> <p><u>Roadmap:</u> Comprehensive Plan for Electric Mobility in the Autonomous Community of the Basque Country, Basque Government 2018.</p>	<p><u>Lines of work:</u> Electric mobility, Energy efficiency in industry, Electric networks, Solar thermoelectric, Wind, Wave energy, Oil&Gas</p> <p><u>Facilitating technologies:</u> Storage, Power electronics.</p> <p><u>New value chains:</u> Offshore energy, Smart Grids, Resource efficient manufacturing.</p> <p><u>Roadmap:</u> EnergiBasque Strategy</p>	<p><u>Lines of work:</u> Healthy food-personalized diet, New food production systems, New gastronomic developments for especially sensitive populations (children and seniors), Safe and quality food; New detection and conservation technologies, Integration of ICTs in processes; Food with new usability features.</p> <p><u>Roadmap:</u> Strategic plan for gastronomy and food 2020.</p>	<p><u>Related sectors:</u> Performing Arts, MUSIC, Cultural Heritage, Language Industries, Visual Arts, Crafts, Publishing and Print Media, Audiovisuals, Videogames, Digital Content, Design, Architecture, Fashion, Haute Cuisine, Advertising and Marketing.</p> <p><u>Lines of work:</u> Creadis3 - Smart Creative Districts, Definition and perimeter of the ICC in Euskadi, Aid Programs, Networking</p>
NAVARRA	<p>Promoting autonomous and connected electric vehicle (P. automotive mechatronics)</p> <p><u>Driving areas:</u> Automotive and mechatronics.</p> <p><u>Sectoral challenges:</u> Promotion of the electric, autonomous and connected vehicle and its components, both in terms of product and process, as well as promoting the development and implementation of new mobility industries and services in Navarra.</p> <p><u>Transversal enabling technologies:</u> Materials, biotechnology, microelectronics, photonics and advanced manufacturing technologies.</p> <p><u>Roadmap:</u> S3 Navarra.</p>	<p><u>Driving areas:</u> Energy management (photovoltaic, wind, hydro, biomass, geothermal...) and equipment manufacturing (wind turbines and auxiliary).</p> <p><u>Sectoral challenges:</u> Reduction of fossil energies and strengthening of the wind sector.</p> <p><u>Transversal enabling technologies:</u> Materials, biotechnology, microelectronics and advanced manufacturing technologies.</p> <p><u>Roadmap:</u> S3 Navarra.</p>	<p><u>Driving areas:</u> Primary sector (agriculture and livestock) and Agro-food industry (especially vegetable transformation and poultry farming)</p> <p><u>Sectoral challenges:</u> Structure the food value chain and Commitment to healthy eating.</p> <p><u>Transversal facilitating technologies:</u> Biotechnology, materials, nanotechnology, microelectronics, advanced manufacturing technologies.</p> <p><u>Roadmap:</u> S3 Navarra.</p>	<p>DEVELOPMENT OF THE AUDIOVISUAL INDUSTRY AND ANIMATION (within ICC).</p> <p><u>Driving areas:</u> Audiovisual and animation industry.</p> <p><u>Sector challenges:</u> Development of the audiovisual and animation industry.</p> <p><u>Roadmap:</u> S3 Navarra.</p>
NEW AQUITAINE	<p>MOBILITY AND INTELLIGENT TRANSPORTATION</p> <p><u>Strategic axes:</u> Make the region a pilot territory and innovate in solutions for mobility; Promote international supply chains; Stimulate innovation and networks between actors (AMI, calls for projects...); Launch mobility bonuses.</p> <p><u>Technologies:</u> economics of raw materials (skills in ecological design, composite materials and recycling); electrified power trains (chemistry, electronics, and electrical engineering skills); electronics and information technology on board (need electronic and digital skills).</p> <p><u>Roadmap:</u> SDREII and Global Strategy to support the sector in Poitu-Charentes.</p>	<p>BATTERY POWER AND STORAGE</p> <p><u>Strategic axes:</u> new models of ecological transition.</p> <p><u>Challenges:</u> assistance to companies and their vision for the economic development of the territory.</p> <p><u>Roadmap:</u> SDREII</p>	<p>AGRIFOOD INDUSTRY</p> <p>No further information available at the moment.</p>	<p><u>Priorities:</u> Leather sector, luxury goods, textiles and handicrafts and ICC (Visual arts, live performances, music, cinema, TV, radio, videogames, books, press, communication and advertising).</p> <p><u>Challenges:</u> in terms of CCIs: creation, development, production, reproduction, dissemination or marketing of goods, services and activities that have a cultural, artistic and/or heritage content.</p> <p><u>Roadmap:</u> Luxury Textiles and Leathercrafts Roadmap 2020-2022</p>

Source: Own elaboration based on S3 Navarra, Caps Metier Nouvelle Aquitaine and Science Technology and Innovation Plan 2020 (PCTI).

4. The Baltic Space

Its extension and connection with the powerful “Baltic Area”. Space that is being built as a singular “clustered space” uniting the different regions in different States, inside and outside the European Union and/or the European Economic Area and the Russian Federation together with its former Republics, (Baltic Republics), Polish, German and Scandinavian regions,, as well as Iceland and Greenland, having the Baltic Sea as the “unifying” element, giving rise to countless agents, initiatives, common projects and an incipient pilot model of governance at the end of the 21st century, building poly-State and multi-associative spaces from the strength of each of its members, discovering common spaces of co-competition, in search of shared spaces, regulatory, budgetary and disruptive co-governance frameworks.

This so-called “Baltic area” of great history, recognition and contribution of value, is a case worthy of study for the construction or innovation in territorial, administrative and/or co-competition and interdependence spaces, beyond the physical borders of the moment.

If an initial approach would lead us to define the spatial limits of those regions that, regardless of their current political-administrative organization and/or “belonging” to a specific State, surround the Baltic Sea (Estonia, Latvia, Lithuania, Finland, Poland) and we expand it based on those others partially bathed by its waters (Russia, Sweden, Germany, Denmark) and we look for linguistic identities or reconfigurations of governance and cooperation (the “Council of Baltic Sea States” including Norway and Iceland), or its link with the Hanseatic League and Federation of the past or updated with a future vocation after the “Balticum” concept, we would reinforce, even more, interest in connecting with its contribution in a new pan-European league with maximum potential.

Today, the European Union itself has promoted a “Baltic Countries Strategy”, not only providing them with a special framework for their development, but also financial support for the clustering of their economic activities, their specialization (understanding their respective RIS3) promoting a shared development, beyond the borders of the European Union. This Baltic space is not only a driving force for technological and economic future bets for Europe, but also a unique ecosystem that champions a powerful salvation and model enrichment of the ECO-Region. Its intense work in the face of the double challenge of “saving the planet, from the oceans” and the future blue economy as a vector of wealth and development, encouraging joint work, which had already been taking place, from multiple initiatives of its members, before the umbrella of the European Union. It also stands out for the real specialization of its different Member States and regions and, from their relative heterogeneity, they provide an extraordinary added value proposal.

Observe its commitment to saving nature at the service of people, making the sustainable economy of the oceans the best way to build a future for all.

Its complementarity and convergent development for the Bilbao-Bizkaia-Basque Country nucleus is of the first order. Already today, many of our leading companies (in the green, blue and food transitions, in addition to technology) have made this space a natural partner for development. The coming years will exponentially multiply these converging relationships.

Its development plan for 2030 offers a relevant approximation to the potential coherence in our inevitable and clearly recommendable, especially, in its innovative complementarity in the green and blue economies. Boosted, also by the aforementioned European Funds, they will give an accelerated impulse to these areas of development in their 2030 Agenda, further boosted by the extraordinary digital strategy in which they have been leading for a year.

World references with the main icon of privileged observation in and from Estonia.

THE STATE OF THE REGION

Already in 2016, thanks to the European RIS3 program, the Baltic had carried out up to 70 individualized plans. An effort of homologation, interpretation and shared vision underlies the commitment to generate a true “State of the Region”, overcoming fragmented actions and programs.

The conditions of the Report prepared by its collegiate governance bodies were a transformative wake-up call. Its external authors resorted to local metaphors: “While the sun still shines and shines with splendor”, encouraging immediate action to overcome a more than relative complacency, from relative success (a wise lesson for all, Balts or not). Bet, without a doubt, on a disruptive change towards a new leadership scenario. The need to go beyond the initiatives and proposals that the methodology and internal plans of the European Union proposed, to also open up to other markets such as its traditional Russian and Chinese neighbors, to explore the opportunities that its green and blue space, from the hand of innovation and technology offered, made successful development possible. Already then, too, the possibilities that a Brexit would open up towards the North Sea and other external routes to strengthen their own link to the Union and the common European economic space were illuminated.

Stable governance mechanisms were strengthened, governments, companies were mobilized and numerous intermediate entities were generated to promote driving clusters and synergistic projects, redouble the internationalization effort and promote qualitative leaps in an intense activity and clustering strategy.

An entire path that can be shared towards the BLUE ECONOMY, interrelated with the main clusters of excellence on which we must focus our efforts in the coming years...beyond the OCEANS.

TOWARDS THE BLUE ECONOMY beyond ocean sustainability

- 1 Fishing and, in particular, the new “precision fishing”, intensive in the use of exponential technologies.
- 2 Oil & Gas and other energies (renewable?), with special development in offshore infrastructures, wave and wind energy, as well as natural waste.
- 3 Tourism/Leisure.
- 4 Coastal planning, marine eco-construction, port reengineering.
- 5 International Shipping and new shipping lines (towards the Arctic?)
- 6 Bio-Science and Marine Biology.
- 7 Oceanographic Research. Marine infrastructure.
- 8 Water sport.
- 9 Climate Change.
- 10 Food, Gastronomy, food chain.
- 11 Piracy, Terrorism, Security.
- 12 Catastrophes and Natural Emergencies.
- 13 Illegal economy (drug trafficking, smuggling, human trafficking...)
- 14 Naval design and construction.
- 15 Marine insurance industry.
- 16 Maritime platforms, autonomous vessels powered by green energy (Hydrogen).
- 17 Smart distribution networks (electricity and other utilities).
- 18 Potability and human use of ocean water.
- 19 Education, specialized training for this NEW BLUE ECONOMY.
- 20 Imagination-Innovation?

5. Atlantic Façade

The so-called “Atlantic façade” also supposes a natural neighborhood towards the North-West of the Iberian Peninsula, in the “Cantabrian, Asturian, Galician and Portuguese corridor”. From Bilbao to Porto, interconnecting with the urban-territorial rings of Santander, Avilés-Gijón-Oviedo; from A Coruña, Santiago, Vigo and at the end, Porto. Demanding interconnection of compatible infrastructures as well as facilitators of its development, clusters and companies that are members of regional value chains that were reinforced by all of them, integrable port and navigation lines, and all the potential for a better future for all of them, while enhancing their interconnection, as a polycentric territory with other development conurbations.

If we approach it, even if it is only to contemplate its current explicit vocation in the environment of its respective RS13 (by the hand of the European methodology and the subsidized homologating and simplifying intervention of the Spanish government, as a basis for its decisions of infrastructures, budget financing policies, allocation of European Funds and regional development plans), we observe an enormous similarity in all of them, betting, apparently, on the same industries, technologies and future areas.

Will they find in them their true differentiation? Probably not. Like the others, they will need to open up, beyond the corseted RIS3, towards new collaborative spaces, generate new platforms and rethink the unique content of their intelligent specialization “labels” in use.

Forming a shareable space together with the progression proposed here would, without a doubt, be a good choice. As always, in mutual benefit.

In any case, we are starting from a basic territory that will always require new initiatives, with broad signs of trust, with a true spirit of partnership. A base that benefits everyone and that not only does not exclude or entail exclusivities, but also encourages additional openings towards other nodes or connection points, promoting the development and prosperity of the base territories, embryonic and preferential, of departure, by natural means, neighborhood and proximity. Historical roots, wings of a different future.



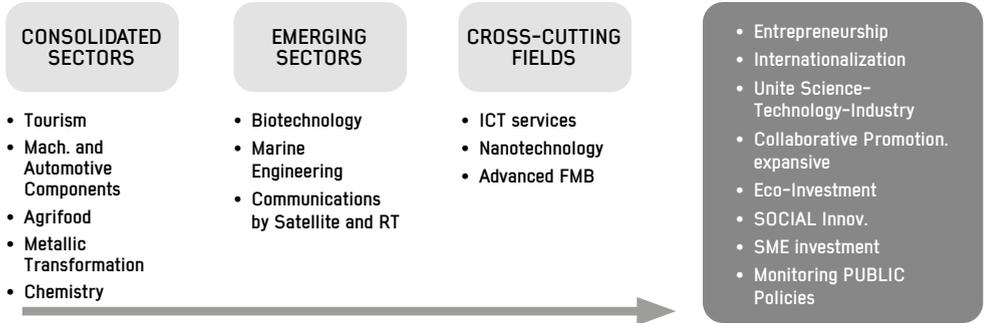
Source: Project Cities/ Foundation Metròpoli: Euskal Hiria

Bilbao is in the heart of Euskal Hiria, the Basque City Region. A polycentric territory that constitutes the most important Urban City Region in the north of the Iberian Peninsula

Embryo-Objective starting base on which to build an avant-garde space.

INTELLIGENT SPECIALIZATION IN CANTABRIA, ASTURIAS, GALICIA AND NORTH OF PORTUGAL

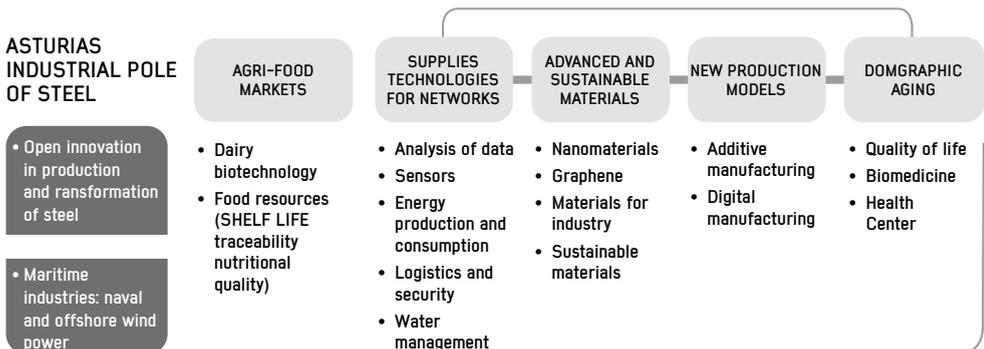
CANTABRIA RIS3 SECTORAL PRIORITIES



NORTH RIS3 - PORTUGAL



ASTURIAS RIS3



6.2.2.2. Interconnectivity with other global spaces of special interest and/or given interaction

From the previous point we can already deduce a characteristic feature that will be reinforced, understood and empowered as we go through this journey towards 2050 in the next sections.

The world that we live in today and, above all, the one that we will live in on the 2050 horizon will be a new world of networks that are increasingly interdependent, differentiated, specialized and with characteristics that aspire to be unique, although for its achievement, everyone will need everyone. Undoubtedly, an essential factor for its collaborative strategic adherence will be the will to belong and the free decision of each of the integrating parts of additional spaces for their networking.

Our Bizkaia 2050 must be the result of its capacity to generate differential strategic alliances that place it at the forefront of the world, playing the role that corresponds to it, small or large, but with differential added value. Only that belonging and active role will bring you the desired success.

Platforms of cities and territories, of thought, culture, new models of economic development, universities, innovation and entrepreneurship, nodes of regional and global value chains in those industries of which our companies are a relevant part of, financial centers and of capital, institutional, of talent and educational at different levels and, of course, guarantors of the presence of our people in all those places where relevant decisions are made for our model and future.

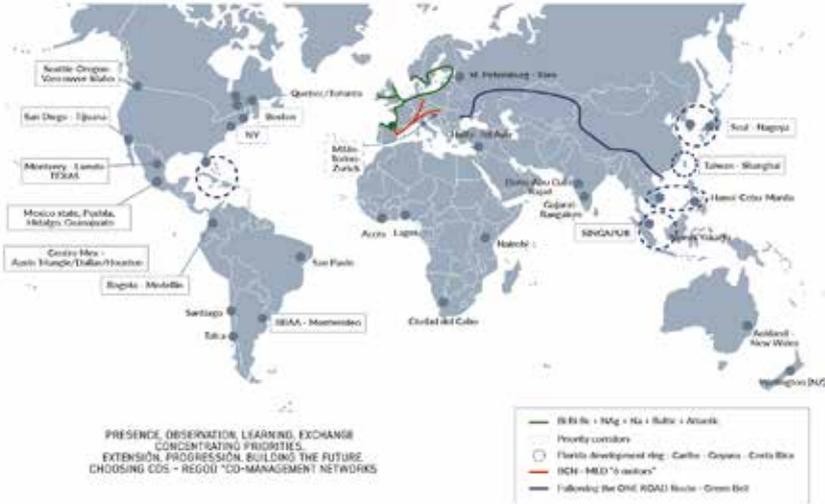
Already today, there are innumerable existing relevant contact points. We have to empower a selective presence in those nodes (or empower their generation) aligned with our strategic purpose and take care of, pamper, organize their country integration in such a way that we guarantee the desired map. Beyond our institutional, educational, and social relationships, our business interactions they represent an unrivaled wealth that must be well directed and oriented towards strategic purposes. Observing the world and our successive actions in terms of the network will not only facilitate proper alignment, optimization of usable resources, but also essential strategic coherence. Based on the different pieces that would make up this initial vision of a Biscay territory in the broad sense, we can approach a first representative map of these networks (Collaborative Platforms).

Aware of the foreseeable evolution and future trends that would draw a 2050 scenario, we have to think of subnational or substate nodes-city-region (in 2021 terminology), moving away from inherited macro-state conceptions. Nodal spaces in which **we have a true voice and ability to influence (it is about receiving, contributing, and generating value for our base territory and developing-applying microeconomic measures that will be the ones that make the difference and bring uniqueness.** The major policies and framework agreements will make everyone equal, will force and condition us, without a doubt and it is necessary, but they are not enough, nor will they be those on which we can generate an impact without our vocation, aspiration, purpose and commitment to a desired Base-Territory.

Constructing that “magic map” that would configure our space for the future requires addressing those key elements that will condition it, based on our attitude, capacity and willingness to face them in these next 30 years until we reach the destination point.

These nodal platforms for innovation, competitiveness, knowledge and inclusive prosperity will change over time. There are no “clause numbers”, but rather they obey their own characteristics, differential contribution, real links of shared values and a significant “objective selection” in line with the world we observe and long for. Already today, in one way or another, we are immersed in a large part of them. It corresponds to “revisit” them with the intention of optimizing the existing relationship, grouping and prioritizing them and looking for our biggest and best sources of synergy so that we focus our work.

“Knowledge Platforms. Innovation, Competitiveness and Inclusive Development”



See graph on page number 12 of the booklet that accompanies the book

A nodal network that opens beyond its original space.

Bilbao-Bizkaia-Basque Country, the Bizkaia of 2050, will be a NODE of a multidirectional network of networks, forming a microcosm in the new relational “world map” of 2050, physically far from its geolocation and natural and historical link that has given meaning to its configuration as a base territory, at the service of its value proposition.

Consistent with the approach that accompanies this entire book, Bizkaia 2050 will be a territory that, beyond its physical conformation, its administrative and political limits, its current description. A “creative and liquid node” that expands and connects throughout the world, generating its own living space,

co-star of the global avant-garde, the basis of an inclusive society of wealth, well-being and prosperity in which its citizens feel comfortable, proud and express their satisfaction, belonging and self-esteem, co-protagonists of a vital, personal and professional project in and from here. A differentiated space in which their companies find (and contribute) the differential “competitive advantages” to bet on developing their main tasks here and from here, in their innumerable value chains in which they will have to participate over time and world.

A Bay of Biscay as a symbol of recognition and distinction, the fruit of its history, its pioneering nature in international connections, the essence of its maritime expansion and its inevitable “dry” complements, such as logistics ports-railroads, along of connected territories, of the historical capacity to access cutting-edge knowledge and its translation into an entrepreneurial character that has shaped our model of development and well-being. A “base area” from which to build a prosperous future.

A Bizkaia 2050 that defines its own political role in that space and changing world of which it will be a key protagonist.

Bizkaia 2050 will be a dense network, a swarm of networks that must be woven, activated, promoted and shared. Its strength will be in its ability to do so, earning a differentiated role in each and every one of the nodes or platforms that it incorporates (and/or to which it is incorporated). Give and receive, enrich, be enriched, share and cooperate, at the same time (cooperation). Its starting point and base is and will be its own goal, its success and its true challenge.

All its economic, social, academic, institutional agents will be part of a swarm, synergistic and feedbackable. To create and generate opportunities for Inclusive Development.

The strength of this network of networks will allow us (and will force us due to its own configuration and allies) to travel connected (playing an active co-protagonism) with different geostrategic development spaces. We have analyzed the different demographic, knowledge, migratory dynamics (voluntary and involuntary), the transfer and geolocation of talent, physical connectivity, as well, and the transfer of the weight and power of the different economies and the control and use of exponential technologies and its application, of the behavior of successive supply and/or value chains (local, regional, global) and of the leading role that different geographical areas and regions will have to choose and play in the next thirty years. Our platform does not expect to reposition ourselves only in our neighborhood or in our cross-border regions, or even exclusively in the changing Europe that we hope to help improve, transform, empower. Our effort and journey must lead us to a more than sufficient connection with China and, above all, with each and every one of the city-regions that will be interconnected, in a relevant way, through a new primary network, the CHINA'S ROAD & GREEN BELT, already under construction, is not connecting you to an infrastructure (essentially land with important maritime complements and, of course, areas), but rather the construction and generation of spaces from a support infrastructure as well as a facilitator. In 2050, city-regions such as those that will be developing, throughout Euro-Asia, will be common in our language, dictionaries, geography

and history lessons. The new world map will feed the new generations. And, indeed, if the routes and enterprising navigability of the once historic Bay of Biscay took us throughout the world, it will continue to do so in the next century, from its new nodal network configuration. Communications with “the new Silk Roads”⁵¹ promoted by the Chinese strategy. Let us embrace the great opportunities that it offers in its own transformation.

ONE BELT-ONE ROAD. CHINA



⁵¹ Peter Frankopan. Will the EU be excluded from the new Silk Roads?

And, faithful to our history and purpose and future, our Bay of Biscay will strongly resume its connections with America as it did in the past, building new types of equal alliances to share a future of our own benefit, we will strengthen our links with the United Kingdom (which predictably in 2050 will be a different entity from the one we know today, with important transformations towards a UK, although strengthened by its “federalization” with the “new British space” together with IRELAND, SCOTLAND and WALES and the strength of each of them in their own developments, networks and movements.

Our Bizkaia of 2050 will also look to the ARCTIC. Its navigability and transport lines will be limited, but they will represent a new alternative and/or complement to the barriers, limitations that we have today (in 2021).

If today we observe the learned world map with a territory (central in the image), we will have to look at the desired world above, from the arctic spaces and its geopolitical and geoeconomic reconfiguration.

Towards a new map and vision of the world from the arctic?



The distances between Scotland and America will be reduced, the North Sea will be reduced and, consequently, so will we. Technology, advanced manufacturing, the announced transformations of the green and blue economy, will bring a whole stream of opportunities. Imagination, knowledge, collaborative innovation, nodal and network connectivity offer all kinds of opportunities.

The base territory, terminal and intermediate arrival station in 2050, will allow our small node to offer the desired results.

Bizkaia 2050, an open, connected, competitive, inclusive territory, a living laboratory of knowledge, innovation and generation of shared initiatives.

Generate Networks. A singular task

Bilbao-Bizkaia-Basque Country has an extensive, qualified and relevant Network of Networks throughout the world, a vast majority of them with top-level partners-companions and with presence and tentacles in important “NODES” or Centers of Knowledge, Innovation and Decision.

However, a selection is missing (it is not about having thousands of occasional contacts or non-differential relationships or that, finally, we are not conceived for standing out as leaders or co-leaders of the first level), a prioritization, a active role on our part, a comprehensive alignment with the Value Proposal of the Territory and, above all, the “maximization of convergent and synergistic opportunities offered by those networks of relevant international weight that can “facilitate, focus” our effort.

Companies, associated clusters of different levels and models, certain centers or academic units, professionals of recognized prestige, international alumni network (especially in some postgraduate programs), political and union organizations in certain spaces, some NGOs, pre-existing networks (religious, cultural, social), sports entities, internationalized financial entities, estates and family and/or listed companies owned by investment funds, foreign capital, industry-technology-science ecosystems and already make up a network of networks sufficiently rich to transit to a different world. We have a diaspora that is more and better organized than we think and with wasted potential.

The technology here can also help us. (Data, artificial intelligence...) to identify and order our information and make it accessible to those who have to decide. Who and how should promote, generate, manage the necessary networks?

I have resisted, here, reflecting a broad and important list of base networks on which to “build an integrated path”. We distinguish ourselves by being leaders in multiple areas (world reference in certain models of innovation-social, technological, urban-, in the configuration of industrial policy models, in sustainable human development, in professional training, in critical entrepreneurial projects, in some key business areas, in the museum world, in a unique and differential language, in certain religious orders, in the extensive development cooperation, in a diaspora that is extremely well valued in their “new host countries”, in a model of cooperativism... We have top-level international companies (although they are not many), prestigious and with antennas throughout the world. **Are we capable of aligning the effort in a strategic**

direction? Can we link our personal “resources” abroad and favor their involvement with our territory and its purposes and value propositions?

Here is one of our great challenges, as well as a favorable wave of transformation. To believe, to exercise, a true foreign action, a diplomacy of the 21st century, beyond the official status of Embassies and formal movements for which we are not their first options.

This is the true differential mechanism that we must turn into the essential tool of our selective work in each and every one of the nodes of the consortium platform of knowledge, innovation and entrepreneurship. Generate value, for our territory as well as for all the others that make up the shared network of networks. **Being a relevant part of the network, not just being in it. Co-protagonists to all the places where decisions that affect us are made.**

6.2.3. The magic of the process. Riding the favorable waves, mitigating risks and optimizing opportunities.

The purpose and unique value proposal that we pursue, from the idea, the very reason for this book, “transcends from a new dream and voluntary exercise” to the search for a desired Bizkaia 2050, betting, yes, for an aspiration for the future, to the service of which we strive to build the strengths and solutions that make it possible.

Achieving it entails an initial “bath of realism”, which required a first diagnosis of the real starting situation with an in-depth analysis of what, in a classic methodology, would correspond to a SWOT. (Analysis of the weaknesses and strengths, as well as the exploration of opportunities and threats, from a current “territorial embryo”). The “Starting Point” conferred a realistic way, from the verifiable results, to know the transition from the base darkness, in the initial period of reference, coinciding with the self-government framed in the Gernika Statute⁵², the illusion to overcome its difficulties and provoke a journey through complexity towards a better world, in a scenario then unknown, but longed for. That starting point, an invaluable source of learning and collective knowledge, has allowed us to observe it based on new forces, some structural and others evolutionary in the face of the times and advances expected in the future and that, whether we like it or not, confront us with a demographic reality and challenges, with a committed and different focus and enhancement of the environment and its inseparable connection with the tremendously demanding energy-climate space, in a changing movement towards the economy of the common good, at the service of a multi-objective society pressing for changes of conditioned scenarios, for better or worse, depending on the use we know how to make of it, of exponential technologies that affect the entire universe of action.

The aforementioned forces move (and will move with greater impact and speed in the coming years) under a vast interrelated blanket of Mega and Meta trends to which we will have to match our future capabilities and will. It will not be enough to have done things well so far, nor repeat it from a permanent continuous improvement. **These are disruptive times. Critical revolutions that we have to observe, understanding and anticipating social dynamics for which we have to know, interpret, provoke, educate, and share different**

⁵² Statute of Autonomy for the Basque Country.

Approved and in force since 1979 and known as the Gernika Statute.

attitudes for a society that will inevitably be different in 2050. Today, we do not know how stage of self-government we will find ourselves, in the foreseen temporary space, we do not know the extension and organization that our objective base territory will have, we face movements, behaviors, uncertain purposes. But we are certain that they will be different from the current ones, that movements and dynamics will already be underway that will shape new players, new spaces, new challenges. We know that there is a horizon that, in one way or another, we have to reach: an inclusive, prosperous and competitive society in and from solidarity (intra and intergenerational) on a livable planet.

Under this complex and at the same time exciting claim, we have made a journey in search of the impact that all of this, in its entirety, will have for the desired Bizkaia 2050. So far, in the different chapters, the main areas involved, their foreseeable changes to be expected, have been collected. We have contrasted it with expert voices committed to the future, forming a wide space of actions to be carried out, hopeful dreams and fears or concerns in the face of doubts as to whether we will be able, together, to travel the difficult road ahead. Relevant and essential players for any path to follow. With all this, I have tried to collect a broad field of action consistent with what we are, what is to come and what, apparently, we are willing to do. From the beginning of this adventure, it has been clear that I have not tried to analyze different scenarios (as possible as the choice of only one), but to search for one: just “the desired one”. Betting on that “Bizkaia 2050” in which we would like to find the society that responds to specific aspirations that give life to the suggested unique value proposition.

The dreams, desires, hopeful achievements have been opposed to the “Red Lights”, perverse alarms and barriers that would prevent any purpose with which I propose here.

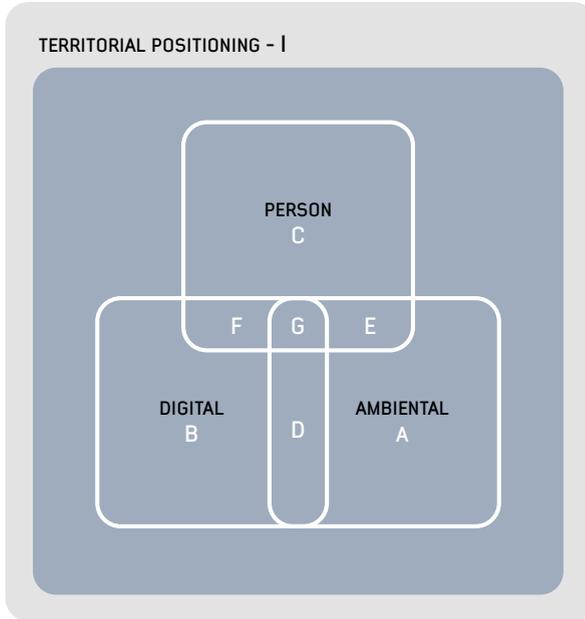
What relationship do all those red lights detected (perceived, indicated, explained) with different intensities and impact have with the guiding lines of the proposed strategy? How will they prevent favorable responses to the challenges that observable trends announce to us?

A long way allows prioritizing, grouping and converting the difficulty into “favorable waves” towards the proposed purpose.

For this long journey we have thought it appropriate to group the so-called “red lights” or identified problems, according to a “Driver Axis” in its priority relationship with the person-society to which it is addressed, attending to the ultimate good sought, to the environmental concept, in a broad sense and to the technological-digital world. The three spaces make up the baseline. Joint spaces that generate intersections between them, in very different ways and that demand coordinated, synergistic action with converging results. To achieve this, a whole network of alliances, and their administration and governance, with an evident territorial positioning, is essential: This exercise makes it easier for us to ask ourselves about those “favorable waves” that, from the opportunity they offer, would take us to the desirable point.

Thus, this journey will be the “magic of the process”. What will make it possible to go from the purpose and imaginable dream to the actions and initiatives of all kinds that we will have to undertake in the coming years.

Having identified what awaits us and aware of our starting position, it is the way in which we have ordered and integrated the “Magic of the Process” that guides the journey to the Bizkaia of 2050.



DRIVING AXIS

WHERE?

A: ENVIRONMENTAL
 B: DIGITAL
 C: PERSON

HOW?

D: ENVIRONMENTAL + DIGITAL
 E: PERSON + ENVIRONMENTAL
 F: DIGITAL + PERSON

WHAT?

G: PERSON + ENVIRONMENT
 + DIGITAL

WHO?

H: ALLIANCES
 X: ADMINISTRATION

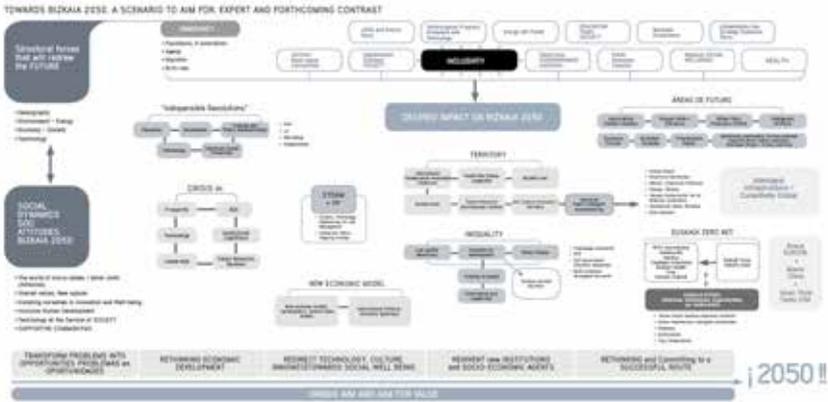
WHAT FOR?

I: TERRITORIAL POSITIONING
 TERRITORIAL

We have decided to concentrate in five themain “structural” forces or domains that will redirect the path to the future and we have analyzed the possible driving changes of each of them, in terms of their dual capacity to generate real impact and their inclusiveness for our planned model. , considering their different points of intersection. These five forces or “driving axes” have to respond to the **WHERE** (the essential environmental, digital, person-society domain) to the **HOW** in their basic interrelation; in a **WHAT** to expect of the future and what we should do with a complete vision; the **WHO** with a special role to play due to the multitude of alliances and the contribution of each of the pieces that make them up and their respective Administrations and governance, with special emphasis on ours; and, its **WHY** specified in our differential territorial positioning: Bizkaia 2050. We have filtered them according to the social dynamics already underway or expected in the coming decades. Elements that have fed what we understand are “The Indispensable, Disruptive Revolutions that we have to undertake and we have aligned them as those “Areas of the Future” that we intend to turn into our key cluster-industries, drivings, of our economy. This accumulation of actions and references demand “redesign and reconfigure” our base territory and the assumption of new business, political,

union and governance models; an intense task in pursuit of talent, the mitigation of inequalities and our positioning in the global context, geography and model. A basic claim underlies the entire approach: Win the Future⁵³.

In this way, returning to the basic scheme on which we have been working throughout this book, on a long journey towards Biscay in 2050, from what we have learned to get here, and, above all, how much we will have to do, choosing the “waves of the future” that make it possible, at all times, to redirect ourselves to a purpose and achievement of our unique value proposition, we have to focus our priority effort on these driving axes jointly. Thus, returning to our leading guide, we tackle the following phases of the trip.



See graph on page number 08 of the booklet that accompanies the book

It is precisely these “favorable waves” that would lead us to the final Value-Purpose proposition. It is the opinion to choose in the different driving axes or strategic lines to go through and that in the differential way in which we act, will make up the true: “Magic of the Process”.

Identifying problems (especially if we assign them to third parties) is a simple exercise. Surely recognizable and shareable. Understanding that its solution or disappearance (“even if we don’t know what magic recipe does it”) will lead us to assume success. But, in addition to making them ours, it is the work, commitment and process itself that will make their achievement possible or not. (“A general theory of disasters and failures of public and business strategies and policies, the result of atrophied governance systems, excessively bureaucratized, poorly resilient, excessively behavioralized, collectively irresponsible and not committed to the proposed objectives. Generally blamers of the leaders and first levels of responsibility, hide the actions or passivity of the rest of those involved”).

⁵³ Building spaces to win the future. Angélica Rodríguez García-Enovatinglab.

Against the error installed among us of thinking that others are responsible for what happens and that “we” are just passive assistants, it is the best way to avoid a desirable future. On the contrary, it is precisely the collective good work that is the true ingredient of a successful result.

The real challenge is to transform these problems into opportunities. Doing so is not just pointing them out or wishful thinking. Redesigning and/or reinvigorating the required transformation processes constitute the essential ingredient.

6.2.3.1. Transform problems into opportunities

Although undertaking what would seem to lead us to a desirable Biscay 2050, it would seem to face countless barriers, problems, alarms that would make its achievement impossible, our aspirations, the attitude and mentality of solidarity and collectiveness (of course personal, of all and each one of us as key protagonists of what would happen to us), entails turning problems (perceived or real) into WAVES of OPPORTUNITY, in the confidence of having (or developing) the strengths, attitude and instruments that they require.

With this attitude, we confront those “Red Lights” described in our initial diagnosis, with the different associable driving axes (either because they hinder them or because, in turn, they would enable their solution and the waves of opportunity-future and change that in the light of the world and expectable will we have to overcome.

Thus, the following table offers the guiding result of this first stage.

Do we share, in one way or another, the difficulties indicated? Do we want, in its case, to overcome them? Do we trust our ability to act within the framework of the meta-mega trends that, whether we like it or not, will occur in the future? In short, do we assume the will and commitment to make of its solution the waves of the future that will lead us to a desired society? Do these waves respond to the true opportunities-strengths that we either have or are capable of acquiring or developing?

THE WAVES OF THE FUTURE. A WHOLE WORLD OF OPPORTUNITIES

	WAVES OF THE FUTURE	DRIVING AXIS	MEGATREND
FUTURE AREAS	Industrialize climate change	A Environmental	Climatic change
	Green Energy + Efficiency	A Environmental	Climatic change
	Bilbao Financial Plaza	I Territorial Positioning	
	Artificial intelligence	B Digital	Digital Revolution
	Circular Economy	A Environmental	Climatic change
	Food, Gastronomy, Sustainable Tourism, Rural Development	G PERSON + ENVIRONMENTAL + DIGITAL	Climatic change
	Mobility Cities*	G PERSON + ENVIRONMENTAL + DIGITAL	Climatic change
	Digital Transfer	B Digital	Digital Revolution
TERRITORY	Bilbao Icon	I Territorial Positioning	
	Innovative, Collaborative, International Platforms	H Aliances	Digital Revolution
	Talent Networks and Decision Centers	H Aliances	
	Art, Culture, Economy/Territory	G PERSON + ENVIRONMENTAL + DIGITAL	
	Industrial Fabric, Smart Manufacturing	G PERSON + ENVIRONMENTAL + DIGITAL	
CRISIS OF	Prosperity	G PERSON + ENVIRONMENTAL + DIGITAL	
	Technology	B Digital	Digital Revolution
	Leadership	G PERSON + ENVIRONMENTAL + DIGITAL	
	Age	C Person	Demographic challenge
	Institutional Legitimacy	X Administration	
WIN THE FUTURE	Euskadi Zero Net	A Environmental	Climatic change
	FFCC-Aeronautics, Automotive, Nautical, Cities-Urbanism, Biotech-Health	G PERSON + ENVIRONMENTAL + DIGITAL	
	Euskadi Cross Industry Zone	I Territorial Positioning	
	Technology - Humanism	F Person + Digital	Digital Revolution
	PPP		
	Self Government - Concert	X Administration	
	Node Extension	H Aliances	
INEQUALITY	Low quality democracy	X Administration	
	Anti-value parasites / development		
	Ethics / Values	C Person	
	Form people	C Person	
	Governance and leadership	X Administration	
ESSENTIAL BASIC REVOLUTION	Education	C Person	Demographic challenge
	Government	X Administration	
	Training and PUBLIC Administration	X Administration	
	LP		
	Requalification	C Person	Demographic challenge
	Internationalization	G PERSON + ENVIRONMENTAL + DIGITAL	

Source: Own elaboration based on S3 Navarra, Caps Metier Nouvelle Aquitaine and Science, Technology and Innovation Plan 2020 (PCTI).

Our opportunities lie precisely in the transformative dynamics itself and the potential changes that will come and that we will promote with and from our decisions. We find huge opportunities in:

1. Areas of the Future that global commitments (and our own) will impact everyone, in one way or another, and that we have made our own, internalizing them in our strategic design: from industrializing climate change to the search for those green energies for which we set out with relevant initiatives and strengths, the great spaces that artificial intelligence offers us for intelligent and specialized manufacturing, totally redesigned in circular economy niches. The transversal support of a powerful and extensive digitization of the economy and social services, from an advanced digitization 5.0, the commitment to urban innovation and mobility of cities, as well as the differentiating vector of food, gastronomy, sustainable tourism and rural development innate in our economic-urban model and the financial culture that, around an integrating concept of Financial Plaza, channeling the new fin-tech resources that enables its viability and long-term viability, forms a broad proposal upon which to advance.

2. The territory, as we conceive it, formed in its “liquid-open” condition, in a growing development generating and weaving new cooperative alliances as a co-protagonist node of a swarm and network of networks, with various knowledge platforms and innovation throughout the world. Knowledge, learning and shared value and state-of-the-art connectivity. An entire maximization of talent networks, co-creation of value and reconversion of the concept of decision centers, from new spaces that are physically limiting and more supported in interactions of shared interest. Offering territory of the art-culture-economy vector, required for the flow of people, talent, capital and knowledge, essential for a new world.

A base territory, considered in itself, as a “large intelligent factory”. Territory in which you can “manufacture everything that is necessary”, from collaborative systems in an economic clustering of all interrelated activities.

3. The crises of prosperity, access and use of technologies, especially those of an exponential nature (computing, communications and sensors), the recomposition of leadership at the service of intergenerational demands and for different age groups at the same time, from the strengths that institutional transformations will promote. Our own changes and responses will turn into opportunity the inevitable crises that we will have to face.

4. And we will win the future to the extent that our areas of specialization and strategic bets focus our efforts. We have chosen a specialization, progressively better and more complete, consistent with our needs, as well as starting strengths. The Euskadi Zero Net represents a clear and possible path. Manufacturing based on powerful and clearly world-leading bases (automotive, railway, aeronautical, energy, maritime-nautical-port, Biotech, health), will be enhanced by a humanistic conception of the applicability and use of technology, the experienced and improved culture of public-private partnership, reinforced by institutionalized public-public collaboration. A territory that will have a, day by day, greater self-government, the strength of an Economic Agreement, adapting to the times, beyond a simple ordinary income and financing mechanism. Strengthening its enormous fund and potential for economic-financial and political sovereignty.

5. The vocation of a territory committed to avoiding, mitigating, and suppressing inequality entails having committed itself to strengthening a high-quality, real participatory democracy, with renewed governance and leadership that generates trust and social affection. Supported by values of ethics and solidarity, of rights and obligations, committed to overcoming those so-called “parasites” that prevent ambitious developments for a better world at the service of the common good.

6. A territory-society that assumes and will assume that the process of converting data-problems into real opportunities requires facing “disruptive revolutions, in terms of education, welfare, administration and governance of permanent training and requalification, in long-term processes. A revolution in its government and leadership, in each and every one of the roles that the different actors will have to address. Open, learning and sharing, throughout an internationalization beyond markets or nodes.

Rethinking problems merely as information given for their conversion into opportunities is not only the initial path to undertake, nor an unattainable or unreal effort, but rather an active and possible guide towards the desired Bizkaia 2050.

6.2.3.2. Redesigning, promoting, reimagining our main “transformation maps”

Addressing both the opportunities of the future, overcoming the initial difficulties, and understanding the changing impact of the world to come, requires facing what we have called “essential revolutions” that would lead us to achieve the desired vision. It requires an “organized” effort, on multiple integrated elements, interacting in systemic dynamics. A formal, organized-institutionalized revolution?

The complexity of the new solutions, the interdisciplinary interaction demanding converging objectives between disparate proposals, forces us to equip ourselves with reference frameworks that guide the areas of interest involved and, above all, the multiple activities that we have to promote, simultaneously, under multiple common umbrellas. To optimize resources.

We have discussed it throughout this book in previous chapters using the so-called “Maps of Transformation”⁵⁴, which must serve our purpose.

Following a methodological approach⁵⁵ with the intention of exploring the main trends, their interactions and interdependencies between industrial and regional challenges for the hypothetical case of Bizkaia 2050 (Bio Bi Eus 2050 Prosperity), hand in hand with the “intelligent network of global projects already mentioned”, used to seek the participation of different knowledge communities and collect their observations (valid for this specific case, as well as for all kinds of related academic work) and in its conceptual framework of the map for inclusive prosperity, already described in this book, around twenty “Maps of transformation” have been integrated, with multiple associated variables, in the framework learned to address competitiveness and prosperity, on which we adjust those keys or priority areas of action that could

⁵⁴ Instrument used for the World Economic Forum and its Network of Global Experts, interacting to solve the “global risks” on which they base their Agenda for progress and transformation. The rich exchange between members of industries, companies, governments, institutions, academia and international organizations generates dynamic collaborative networks, providing opinions, reports, publications, resources of extraordinary conceptual value and participatory methodology. (www.intelligence-werforum.org)

⁵⁵ Created by Jon Azua – World Economic Forum. (Bio Bi Eus prosperity briefing. January 2021)

Committing our transformative effort means prioritizing “Revolutions” to provoke, as well as the configuration of the guiding framework until the final destination:

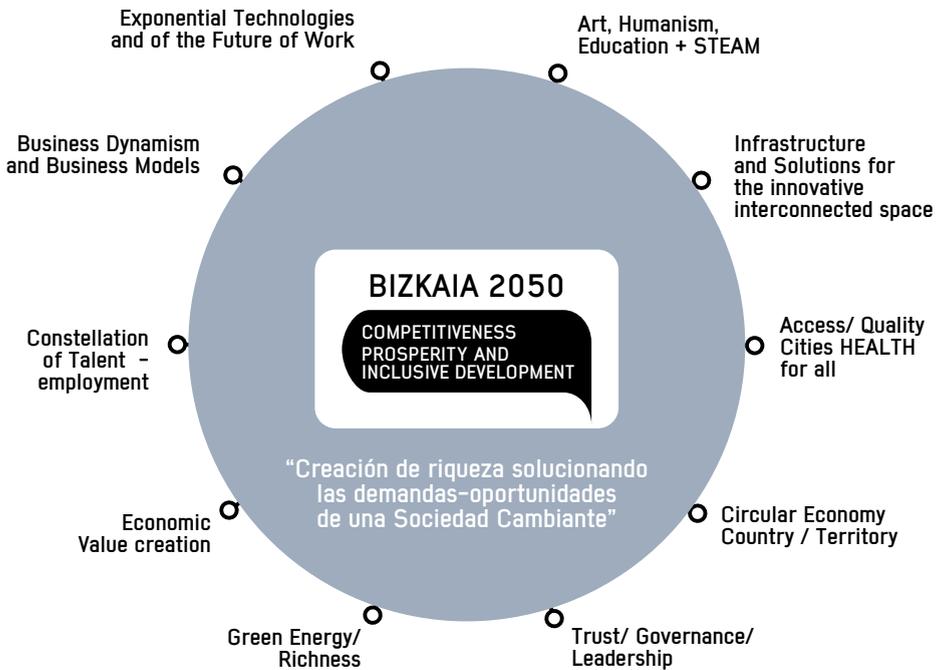
- Rethinking the use of the opportunities offered to us.
- Emphasizing an adequate positioning before the inputs of an economic development in creative questioning.
- Channeling cultural, human capital, social and innovative strengths towards the common good.
- Advancing in the inevitability of adapting governance, institutions and economic and social agents-actors to the changing realities demanded by society at all times.
- Compromising the roadmap towards the planned objective.

Here, we try to summarize and simplify a manageable approach, to the object of this book, as a guide for a “Converging Map of transformations” for Bizkaia 2050. (Although each of the points that the scheme collects, connects with its own Transforming Map, responding to all the elements already mentioned). It will be up to each of the multiple actors responsible for taking us to the final stage, redefining, promoting and governing their own map(s) of transformation, coherent and aligned with the collective purpose (at all times I have insisted that It is a demanding, committed, complex and choral route).

A long and intense process (we have time until then) to reach the expected and desirable 2050.

The path is marked out and we will know how to travel it:

1. Assuming problems, barriers, difficulties and inevitable changes as DATA and information, transforming them into OPPORTUNITIES for innovation and value generation.
2. Rethinking, together with the world movement already underway, the socioeconomic model for a new inclusive economic development and betting on our own spaces based on our real starting point and aspirational vocation as a society.
3. Committing an effort and responsible exercise to relocate technology-culture in its full humanistic sense at the service of social demands and needs under the objective prism of the common good, with a special commitment to the binomial economy-social welfare, inclusive and inseparable (neither as an objective, nor in the temporal priority of its application).
4. Reinventing-rethinking institutions, their democratic governance and efficiency, generators of value for society, as well as that of all economic and social agents and the role-attitude-behavior of each and every one of the citizens in the different roles with whom we act at every moment and place.



Approach to a Map of Transformation (Transforming Map Intelligence.webforum.org)
(Created by Jon Azua - World Economic Forum, January 2021 Bio Bi Eus 2050 Prosperity Briefing) webforum.org

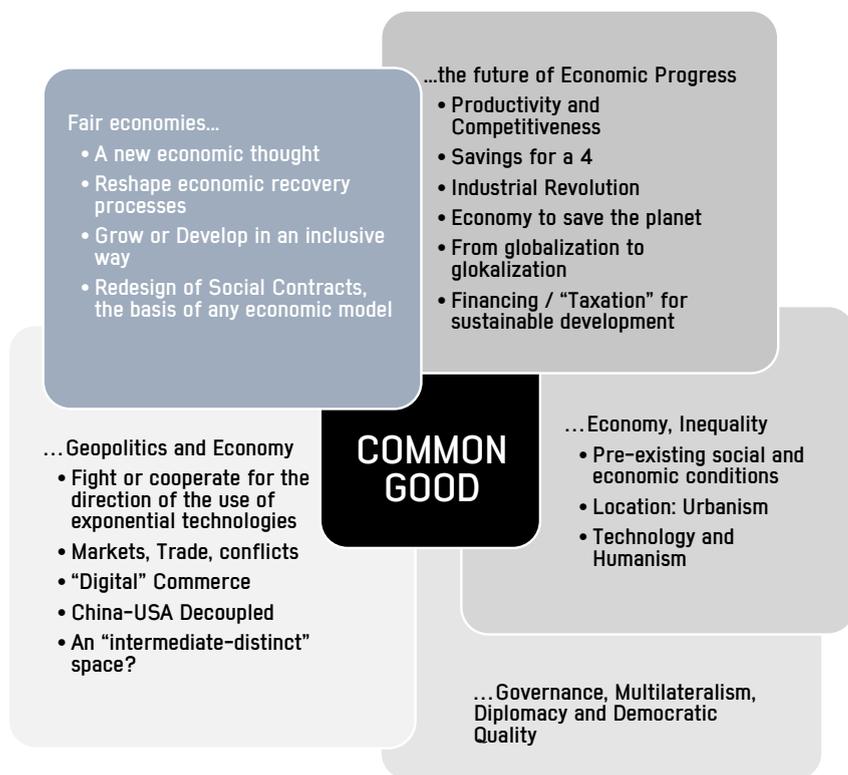
A) Towards our own model of economic, prosperous and inclusive development.

How to achieve a better future in this demanding and complex uncertainty, in permanent change, inserted in a wave of new economic thought?

Coexisting with uncertainty from our certainties oriented towards the vision that the great final objective points out to us, convinced (and committed) of the new attitudes and capacities that we have to acquire, promote and, above all, share.

Whether we like it or not. We are already immersed in this stormy sea that, beyond difficulties, offers a whole world to discover. We have already learned to navigate, we have already set the horizon and we have already confirmed our vital project. And, of course, we have already glimpsed the desired and successful result that awaits us at the end of this path.

In the 2021-2050 journey there will be many key areas whose orientation, in one direction or another, will lead the dominant economic and social models in one direction or another.



Nothing, in this sense, will be by chance nor, in most cases, will respond to the comfort of its actors. The decisions made will be responsible for the final dominant model. Fixing, a priori, a solution to each and every one of them is little less than impossible, although, and as a society, we will have to choose the lines, guidelines that we want to follow.

Our guide lies in a unique value proposition that emphasizes prosperous, inclusive and sustainable human development. The road to it passes through **COMPETITIVENESS** in **SOLIDARITY**, which implies high added value productivity, with the emphasis not on growth, but on shared economic and social development at the same time. It requires constantly weaving alliances with third parties, win-win, and public-public and public-private cooperative spaces. It requires building a solid, complete welfare network, supported by a reinvention of the roles that our government institutions, our economic and social agents will have to undertake. It requires economic, social, environmental and democratic governance objectives in/with all the "stakeholders" involved. It demands a balance and social pact (not only a Social Contract in terms of obligations with/for all). A bet that has to promote solid, transparent, viable institutions that can overcome situations. Follow, observe the changing world in all the variables indicated and a permanent effort of anticipation-adaptation, oriented to our own objectives and aspirations.

There is no single magic recipe, but there is a roadmap on vector principles. We have the compass oriented at all times. We will have to correct the course along the way.

We have not said, at any time, that this was neither easy nor of a single path. We are not the only ones who will have to explore this adventure. The rest will accompany or confront us on this journey. It will be the democratic society of our Bilbao-Bizkaia-Basque Country that, democratically, decides, at all times, on the alternatives that this world offers. We know (we remember here, once again) that there is no single thought, that the message that is so easily used to impose a single path (most of the time, without sufficient evidence of its results) is false.

The economic “new thinking” that we will be facing is full of options and, what we do know, is that all the variables are related. Two great models of the future would seem to be proposed, facing each other: the United States of America or China. We don’t want any of them. We want to bet on a different one, learning from the benefits of each one of them and also from what we do not believe would add value to the desired society that we aspire to build. We want to build it, yes, also with them. But... ours. Our Biscay 2050.

We are lucky to be a small, cohesive, manageable territory, in a privileged starting position. The agility and flexibility required to navigate this complex world must help us. We are not going to grow, greatly, in size. In 2050 we will have a society similar to the current one, sufficiently homogeneous and integrated, qualified and trained, within the framework of a social welfare state, at the head of a world, albeit less and less unequal, still with differences demanding solidary cooperation. And we will live in a clearly humanistic society, with a broad culture and creative capacity, which will have made innovation (also technological and social) its main transformative baggage. It will be a democratic society, necessarily open to the world, jealous of its own identity and vocation for self-government.

With that horizon, full of opportunities and future projects, there is only room for creative optimism. The society that makes up Bizkaia 2050 will have known and will know how to opt for converging decisions that have generated the appropriate transformation maps. The “underlying economic movement and thought” will have been translated into possible realities.

B) Relocating Technology, Culture and Innovation towards Social Welfare and the generation of wealth.

The commitment behind a pro-social welfare and prosperity vector requires a comprehensive and integrated orientation of a good number of “Maps of Transformation” that make possible, once the main favorable waves to be pursued have been identified, a clear search for the generation of wealth and prosperity.

The main “niches” that we have to explore and develop, the guiding areas that will take us to the proposed horizon will become incommensurable (“our vision for a world of abundance and opportunities”) that forces us to a special fourfold focus:

- 1. Business dynamism and its driving force from the clustering of economic activity and its base section in intelligent manufacturing and its driving-companion impact of associated energy and servitization.**
- 2. Employability, work and its link with talent and training.**
- 3. The health, well-being and social security, essential in the creation of a space of well-being and social cohesion.**
- 4. Humanism, art, culture and education oriented and support of the required human capital.**

These four sections, fully interrelated and united, make up a basic nucleus of our essential “transformations” and accompaniments of the other three spheres of deterministic focus.

The clustering of the country, causing an integrating recovery of the multiple spaces (natural or provoked) that have been generating their self-organization with their own strategies (partially differentiated from the singular and unique of each one of its members), aligned with the strategy of the city-region, and day by day, with that of the rest of the spaces that are enriching the Bizkaia of 2050, will end up configuring a swarm of networks, ecosystems, cooperatives.

This differentiated “space”, connected throughout the “Innovation, Knowledge and Entrepreneurship Platform” throughout the world, represents the great differential value commitment of our Bizkaia 2050. We have already highlighted the leading role of the “intelligent manufacturing” that feeds and drives the rest of the industries and economic activities (and social intertwined) throughout the territory is fed back and strengthens strongly, being the true base source of wealth generation, employment and well-being. The aforementioned strengths enable access to knowledge, technology, the essential flows of growth and development, adequate taxation to finance our state of well-being and prosperity.

The already mentioned “timeline” and to which we will return later, reflects the successive bets and obtainable results that this long journey between 2020 and 2050 will configure. The essential bets seem indicated, their results will depend on our capacity and success in the way of carrying them out.

Our industrial, social and commitment-will-associative culture, motivated by a purpose and integral vision with multiple participation, as well as cooperative, will have to give the desired results.

If we succeed in the use and control of the technologies that will be at our disposal, we place them at the service of the social demands and differential priorities of our “intelligent differentiation and specialization”, we will be able to take advantage of the chosen waves that will take us to the end of the road.

C) Redesigning our institutions, their governance and the new roles of Social and Economic Players

We have repeated throughout almost the entirety of this book the key importance of institutions, the governance in place from them and the essential collaboration with social and economic players, as well as “Civil Society”, naturally. The public-public and public-private framework has been, is and will be a differential factor in the achievement.

If the social dynamics, changing demands and preferences of our society will be absolutely normal in our daily lives, innovative transformations in all of them are to be expected (and, above all, provoked). New players will arise, democracy will demand new ways of acting and relating, citizens, their main collective and representative institutions, their own governments, society-community as a whole, will be increasingly demanding in the attention, role to be played and objective complexity of the mutations (economic and social, in the field of well-being, the “personalised solution”) to come. They will require ad hoc responses and instruments for each need and intended result. The commitment to innovation that is conveyed to the economy, to business and to people, must be, if possible, more intensive in its application in the areas of the public sector and Government, as well as in the world, up until today, increasingly exclusive and specific to the so-called ‘politics industry’ in its extension not only to political parties and organisations, but also to the civil service, trade unionism, their internal apparatuses and the composite institutions, agencies, cities and services comprising it. Society will press for change and/or new actors will arise who, more often than not, out of disengagement or frustration want a different space. At the same time, in the same way that we are witnessing the regions’ differentiated role, the sense and vocation of close self-rule, the commitment to manageable and close micro-economic solutions, the political areas themselves “will increasingly demand new spaces, new models of collaborative self-management, new associative spaces based on determination, will, independent politics and real co-governance.

Thus, ‘geographical innovation’, ‘administrative politics’ will be a constant. It is the responsibility of political parties and institutions to anticipate these demands and solutions.

Similarly, we have already highlighted the main roles that will be demanded, with increasing force, from the business world. Their business models will advance in terms of the full integration of the response, at the same time and also, to the social needs of all stakeholders and the different communities in which they operate. Globalisation itself will strengthen global strategies with particular emphasis on the countries and regions in which they operate. The ‘multinational’ model of foreign companies living like islands on ‘their own ground abroad’ will not survive. The sooner they take ownership over true real commitment throughout their operational footprint, the better, both for their shared knowledge and learning, their relationship with the population, the local market they serve, their acceptance by the community and, ultimately, their success as reflected on their income statements.

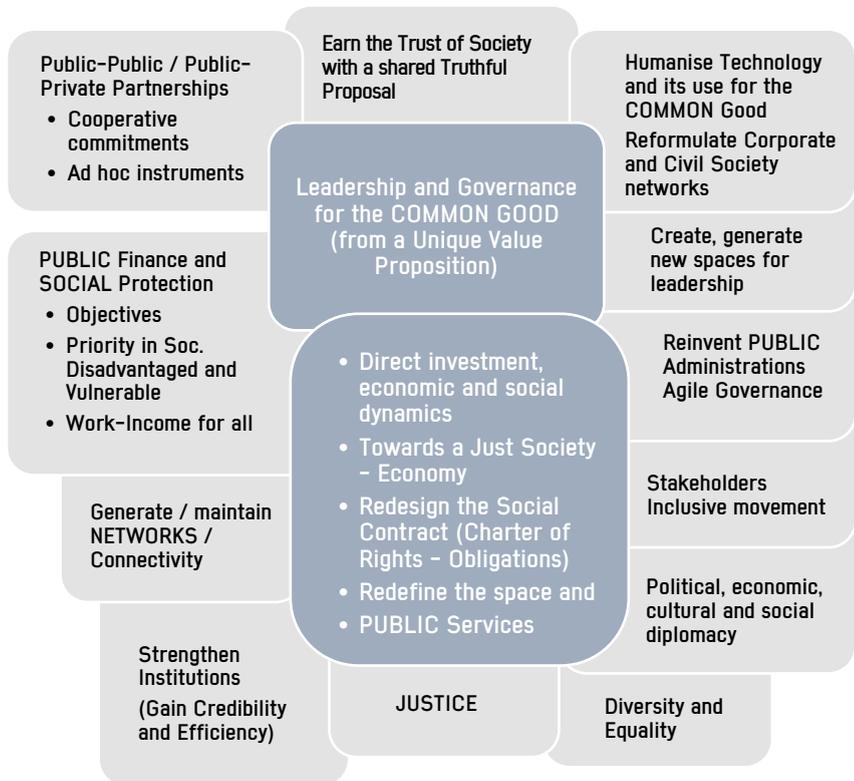
The evolution of the movements in economic and social thought underway will reconfigure these new institutional and business models, as well as their

governance. Realities that will, moreover, become more demanding as geopolitics gradually moves, as we have already pointed out, towards the east, to new city-regions that will play leading roles around the world.

Finally, this recomposition of the world map of the future will reinforce the need for new governance models for the different networks of networks in which the different city-regions will be involved. Their model of organizational and guiding innovation will be a decisive factor in the desired result. Agile, flexible, manageable systems, based, above all, on trust and generated and shared value instead of on legal and contractual formalities with an emphasis on strictly commercial obligations (although these will continue to be inevitable and, to a large extent, essential).

A whole wide world for redefining and redesigning our institutions, the search for shared co-decision-making spaces, efficient and transparent governance, real “earned” leadership that is ‘not given by the nomination or appointment’ in itself, and new roles of economic and social players.

And, above all, ‘it is not just them that have to change’. ‘We’ do too. This involves, affects and benefits everyone.



D) Generating the required talent and the emotion associated with the commitment and purpose sought.

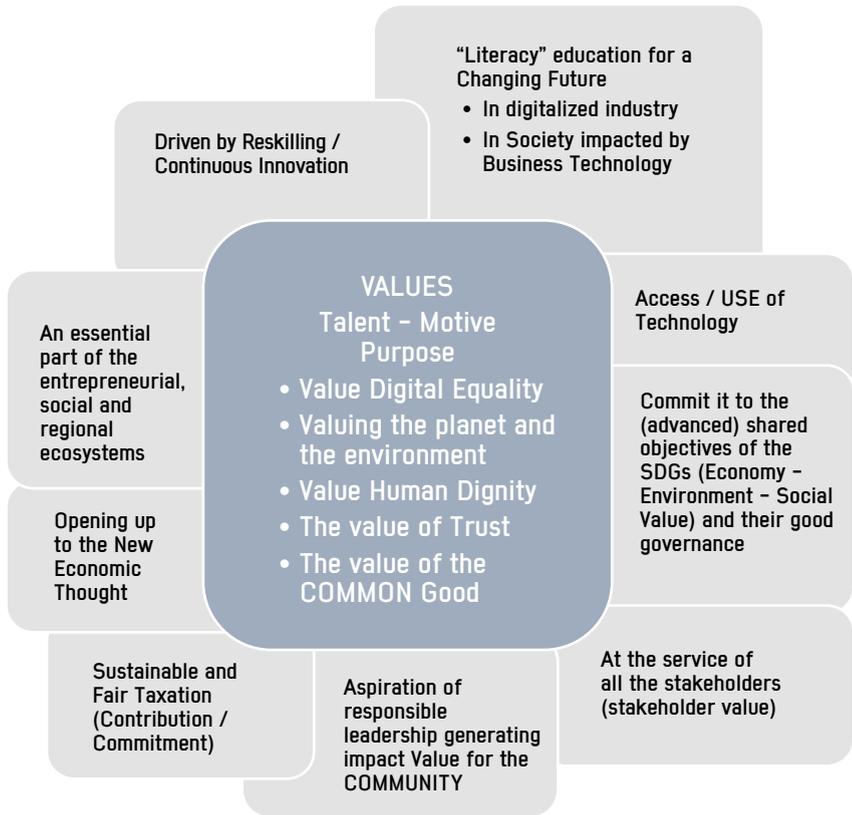
Talent is the key word for the future of employment, reskilling the human capital essential for professional development, interpersonal relationships, business projects, governance and, of course, moving through life plans. Talent focused on and aligned with the unique value proposition of a specific region (in this case, Bizkaia 2050) and the heart of the transformational strategies underway and to come. Talent essential for generating networks, connections with third parties around the world, building partnerships with high added value, and incorporating the multiple diversity of different capacities, knowledge, disciplines and types of people.

Talent to discover and create opportunities, and identify the niches or spaces in which we can occupy cutting-edge spaces and be differential co-protagonists in them.

The generation, attraction and retention of talent does not have one single, magic recipe. If education, changing training throughout life, learning and socialisation, creative curiosity, an open mind, the risk of going through the unknown or uncertain, are a complex essential base for its development, "collective configuration" is no less important. That talent, not individual, but shared, will be the lifeblood for building the space in terms of the inclusive prosperity and competitiveness sought.

Bizkaia 2050 needs to work on its talent and generate the emotion associated with the commitment and purpose sought. The real challenge is not just to have a high-value knowledge base, but for it to be accompanied by the will (individual and collective) to make it available to a project, a collaborative process, a specific society, a specific community. In this case, the Bizkaia 2050 that we want to build, of which we feel proud, comfortable in it and its differentiated identity. Values that do not promote any kind of mobility, attitude, behaviour or talent towards any objective. As with all the many attributes we have been taking on this long journey towards 2050, our chosen horizon, there will only be strategic assets to the extent that they are aligned and add value to the unique proposition being pursued. Otherwise, they would not actually be strategic.

A committed value. It is built day by day throughout our lives.



6.2.4. Reimagining a Successful Journey

The successful journey is already set out and underway.

The ‘timeline’ is our chain of successive commitments and expectations of expected results. In each phase and stage, we have to evaluate compliance and correct the course according to the decisions made (and any new changes that society may demand). The agenda is demanding. It is not a matter of following individual initiatives or projects. It is about leading society as a whole towards an expected and sought-after ultimate good. As we have pointed out ad nauseam, we have a number of “pending disruptive revolutions” ahead of us, a great desire for change, a willingness to commit, a balance between rights and obligations, solidarity and democratic demands.

The desired vision with which we embarked on this journey will give us a glimpse of a connection between the reality of the starting point in 2020 and the scenario or station seen in 2050.

Throughout this book, we have been contrasting that baseline situation, through the changes that would inevitably challenge us over time and we have followed its stepping stones-guide, with the final proposition.

7.1. The chosen station. Winning the future

The further away we set the horizon into the future, the greater the difficulty and complexity in predicting a specific stage. In this regard, I see Bizkaia 2050 and its vision not as a conundrum or a given end, but as a committed journey, a guide to behaviours, policies, decisions, active responses and the management of transitions and social, cultural and economic dynamics that occur over time.

I have only two certainties: **1)** that the world we are part of will change and **2)** this world, rather, will be what we do to shape and achieve it.

It is about building the Bizkaia we have chosen, expressed in different visions that give shape to the unique value proposition that responds to our aspirations (more than dreams) and the multiple strategies that make it possible. An entire set of visionary approaches that manage to transcend simple dreams:

...A living, vibrant, cosmopolitan region based on its deep roots and cultural and social identity, strengthened by a pluralistic, engaged, innovative and creative society.

...A region for all. Inclusive, with opportunities, employability, services, habitable, essential benefits for all.

...A space of security and social cohesion.

...An expert space full of talent, designed and appreciated for its constellation of ecosystems for business development and economic activity with high added value.

...A digitalised space, providing all kinds of services and access in response to social needs and demands.

...A space of active engagement and commitment, and responsible behaviour from all its inhabitants and economic, social and institutional players.

...A Net Zero Carbon space

...A walkable and enjoyable space in social interaction and proximity.

...A space with guaranteed accessibility throughout its physical footprint.

...A green, sustainable space.

...An "efficient", enjoyable, inspiring space (buildings, installations, designs etc.)

...An eco-space free of waste and surplus spending, with its own active culture that has made the redesign of the circular economy standard practice.

...A space in which everything/any demand-complex and comprehensive system is manufactured-produced-serviced

...Glocalised mirror with particular relevance of the local effect connected to the forefront of knowledge and innovation.

...A healthy space (overall health for all), care and attention throughout life and beyond the absence of illness.

...A high-quality gastro-food space with a healthy diet.

...A community of learning, training and ongoing education for all.

...A space connected and coordinated with the leading innovative and creative hubs-platforms, at the forefront of knowledge and creativity.

...A space that loves and is committed to culture, with real access to it.

...A disruptive space, a leader and protagonist of unconventional changes and solutions and always open to promoting change and taking risks in its transformation.

...A space for research, science and application of solutions of high value and level, world leader (especially Europe).

...A space open to experimentation and continuous improvement

...A space of equality, equal opportunities and treatment, with the best rates of inequality and “social lift” in the world.

...A space committed to the distribution of benefits... and opportunities, as well as the obligations they entail.

...An exemplary space in its democratic institutions and forms of government, its public administration and its leading participatory companies, committed to society.

...A space of values. A space of roots and wings, creative identity and disruptive aspirations.

...A space with prominence and its own voice anywhere that decisions are made that have an impact on it.

...A resilient, responsive space that anticipates crises and difficulties.

...A space constantly looking towards the future without forgetting the past (because they were, we are, because we are, they will be).

...A supportive, prosperous and inclusive space.

...A space conceived as a genuine “community of continuous ongoing learning and education throughout life”.

...A multilingual space (Basque, Castilian Spanish, English... and French), as well as a promoter of the use and cultivation of the melting pot of languages that are known and used in the region.

...A space that guarantees a universal basic income, and support of the social welfare network, inclusive of all in the aspirations and projects for the future...

An attainable dream, seen in the light of its protagonists. A society that proposed an intermediate station (beyond 2050, a whole new and enriched journey will be taken, with updated road maps, aspirations and demands), for which it would have to “Win its own future”. Winning it will have entailed a long shared journey.

The 2050 vision brings us here with the satisfaction of having ‘won the future’ foreseen in 2021. A chosen station on this long journey. Our commitment, and everyone else’s, is to build a better world for future generations.

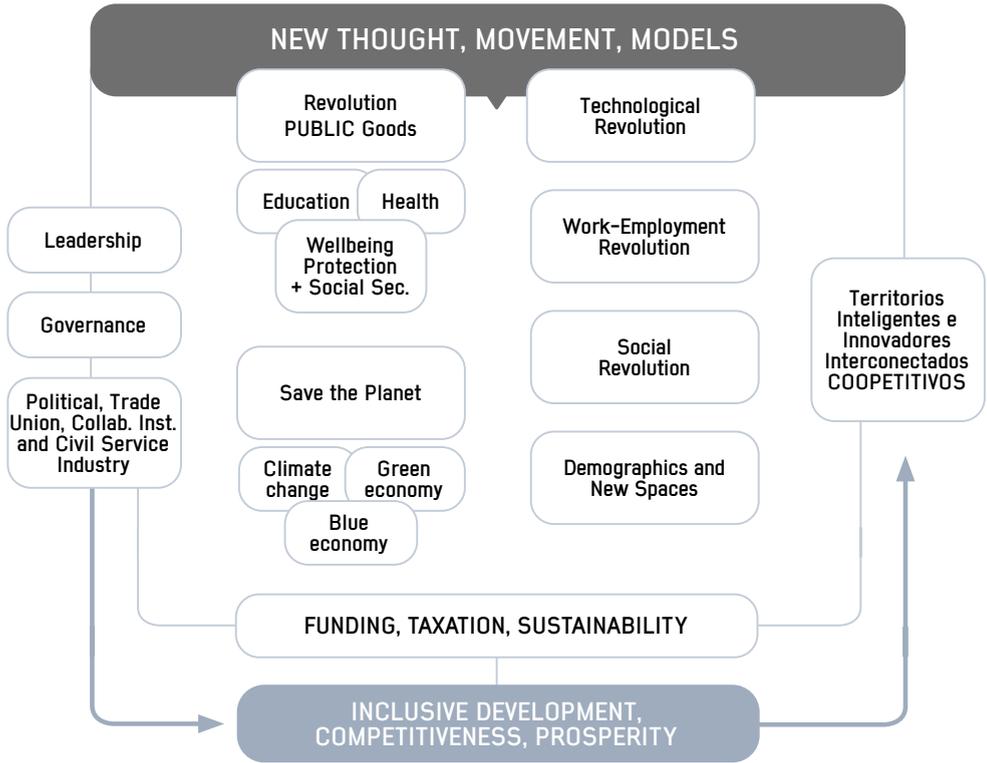
What future is it that we will have won and how will it have been achieved? How have we known how to and wanted to win the future?

We have been fully aware of the need to take ownership of our future and win it. No one was waiting for us eager for our company’s essential contribution to change their future, waiting for what we wanted to achieve. We needed to go out in search of other players, eager to learn, eager for new paths and committed to building a better world:

- We chose the principles, models and commitments that, within the framework of changing economic thought, social dynamics and socio-economic movements and their respective transitions, shed light, on which we wanted to choose our way of life and the type of society to which we aspired
- We identified a series of “disruptive revolutions” that demanded our efforts: technology, educational, demographic, work-employment, social capital and green-climate change.
- We focused our work on the different transformative economies that would make it possible to generate wealth and well-being.
- We faced the inevitable transformation of our governance, leadership (public and private), institutions and public administration.
- We reformulated and strengthened the profile and role of our different economic and social players, their co-protagonism and firm path, always changing and towards the common good.
- We updated, reformulated and enhanced our contributions and financial and fiscal architecture at the service of society and its objectives.
- We reinvented our smart, innovative region and connected it worldwide, at the forefront of solidarity and collective progress.
- We tirelessly advocated the strength of values, identity, roots, culture, creative humanism, ethics and solidarity at the service of all, based on long-term intergenerational engagement.
- A long journey, avoiding or mitigating toxic parasites and turning red lights and problems into opportunities, guided our commitment, aspirations and confidence in the future.
- We equipped ourselves with a commitment-framework to inclusive development, competitiveness and prosperity.

And here we are. At the chosen station. We have won our future and see the value of what has been done.

AN OUTLINE FOR TAKING OWNERSHIP OF OUR FUTURE AND WINNING IT



7.2. What we will have done to get here

We are, once again, in the spring of 2050. We return to the narrative connection of chapter 3, “*Bizkaia in 2050: A desired vision*”, with our President of the Bilbao Chamber of Commerce, Industry and Navigation, Aitziber Itxasmendi, who is already known to us.

Today, after the enriching and satisfying day spent yesterday, she chairs the biannual ‘*Global Innovative Competitiveness for Inclusive Prosperity 2050*’ that brings together in Bilbao 3,000 qualified leaders representing the different hubs and players from the international Knowledge, Innovation and Entrepreneurship platform that Bilbao-Bizkaia-Basque Country, decades earlier, championed for its formal constitution. The voluntary and enthusiastic support of multiple organisations and companies, both public and private, as well as institutions, promoted under the collaborative conviction that would facilitate Bizkaia 2050, the inclusive idea of a long-term commitment. The vision and commitment of their predecessors seemed to have borne fruit.

While yesterday Aitziber used the icon of the Bilbao Estuary and its journey through history, modernised and modernising the current reality, transformed into the common good that our society enjoys, today she will take advantage of the large auditorium (the high level of in-person representation in Bilbao is joined by tens of thousands of people through all kinds of technology platforms around the world) to send and share a renewed message of optimism in the face of the challenges of the years to come. Her part will be long, she knows, but she believes it is necessary. **You may wonder what it is that we did over the years to get here.** Her objective is not only to strengthen the necessary confidence in the cooperative work required, or to dispel concerns in the face of a new (always) uncertain future, but to convey a renewed message of optimism, as well as of shared effort, to those who have to lead and direct the following decades in a never-ending effort.

With satisfaction, she reviews the already classic (at least for her) book that was published in 2021, “*Bizkaia 2050: Bilbao-Bizkaia-Basque Country*”, comparing what was written with the observable reality. Thus, supported by the qualified creative ‘rigorous gaming’ technology, widely used in public presentations in this region of the historic Bay of Bizkaia (*What would have happened with that widespread use of PowerPoint, dominant 30 years ago now?*), she goes on to detail the chapter that she has reread so many times: **What will we have done to get here?**

She smiles. Without a doubt, she thinks, we have been protagonists of the change. The timeline **shows us and reminds us how we have won our future** (how many times had she reviewed the planned and fulfilled agendas).

One by one, Aitziber highlights the 100 outstanding achievements that, feeding back into each other, one by one, in a “comprehensive and inclusive offer”, had brought us here.

She saw how, despite the passage of time, the drivers, the barriers overcome, the continued existence, in one way or another, of the ongoing or expected challenges and dynamics, not only remained valid for future momentum, but also projected consistent development. Indeed, the chosen model looks

optimistic and enjoyable. But, how much effort, sacrifice, commitment has been required of so many people to undertake the complexity of the path travelled to make it possible. It did not come down from heaven. It is the result of solidary, collective work.

By way of introduction, she recalls the why and the value of the 'group' which each of the actions carried out reflected, highlighting the challenge or objective sought at the time, 30 years ago today.

An entire journey imagining the future they could make possible.

Building partnerships, learning with others, generating and sharing value, connected with the world's cutting edge, always innovating with creative curiosity. Trusting ourselves. Taking ownership of our future.

"This is what we did and what has been shaping, from our differential vocations, the co-opetitive journey of all of us who make up this network of networks. Learning together, innovating together, sharing talent and effort and seeking, among all, the common good pursued. True to our commitments, today we contemplate the successful result of what we have done on such an intense and fruitful journey", she says.

Yes, she says, we have "won the future". "Let's remember, with the satisfaction of what has been done, how we got here". The essential basis for approaching new stations of the future.

Aitziber Itxasmendi had grouped 100 events/achievements carried out, over so many years of work, based on the 'favourable waves' that it had been proposed to navigate only 30 years ago now, defying the challenges of the future set then. Challenges that had to be overcome, problems, red lights and barriers that seemed to prevent the realisation of the collective effort demanded. Turned into opportunities, they marked the main favourable waves that were chosen on the long voyage. In her methodological presentation, she had opted for two essential considerations: 1) a better connection with everything that, in an iconic way, was proposed yesterday to the future Consuls of Bilbao and the living example of the economic development of Bilbao-Bizkaia-Basque Country, and 2) the most relevant element in whose service everything was done: people. Thus, she set out to review everything that had been done to get here, knowing that all of this is very closely interrelated:

- 1** To put the Region in relation to the people as an 'identity platform and basis of their life and career plans'
- 2** The environment and saving the planet by and for people
- 3** The different economic activities at the service of people and their well-being
- 4** Technology for use and enjoyment by people and under their democratic control
- 5** The new working space and employment of and for people, beyond the associated income
- 6** Talent, training and education as essential tools for people and their collective use
- 7** Art and culture from, for and by people, the essence of their own development
- 8** A social welfare state for people and their solidarity rights and obligations
- 9** Networks, connectivity, at the forefront for people and their aspirations in life
- 10** Governance and leadership at the service of the people in society

Above all, a commitment. A job done. Bizkaia 2050, chosen, built, won, over time.

1 People-Region

- We are committed to **expanding a horizon and a space that can be shared** from a relative neighbourhood and a vocation for the future based on a geo-economic relationship, a strategic footprint and a vocation for the future. We arrange its adherence, commitments and governance. **The Bay of Bizkaia – Atlantic-Baltic Space Chamber Confederation** that will determine our future and we put it at the service of humanism and the common good.
- **Bilbao estuary: Icon of the “essential history of the Bizkaia and Basque economy”.** Learning from its strengths, reinforcing and revitalising its driving footprint.
- **Bilbao-Bizkaia-Basque Country: development with/from Atlantic front, Nouvelle-Aquitaine, Baltic Space...** towards the world. Step by step. The consistency of a natural claim in shared benefit.
- **Portugalete:** Location. How many towns, comarcas and historic areas in this Bizkaia 2050 space have made a creative difference? Bizkaia 2050 in a **genuine geography of expert and specialist localities**. It is not about inventing laboratory cities, but about bringing laboratories to real spaces.
- **Suspension Bridge.** Beyond physical infrastructure. **The generation of spaces of development, social, entrepreneurial culture, working interconnectivity**, accomplice. Bridges that unite shared spaces. Not separating barriers.
- **Special Districts: Urban-financial-fiscal innovation.** Shared goals, co-governance; differential contributions according to assets, vocations, benefits and mutual synergies. The very institutional framework of our city-region, its differential confederal key, has led to “Special Districts” that have been developed by the Institutional and Foral Relations Act, incorporating the priority reality demanded by growing globalisation: Airport Base guaranteeing cutting-edge connectivity, multinational port development, logistics, power plants, communication infrastructure, park networks, attraction of investments requiring industrial land, university campuses of excellence etc. have led to a shared framework, duly regulated for the common good.
- **Zorrotzaurre:** The “Manhattan of Bilbao”, the **“island of knowledge”**, an Urban Technology Park. Dream big, work the day to day. **Build a dream at the service of the city, the country and its inhabitants.** Beyond housing stock. Urban planning from an economic vector.
- Reconvert, base history-reasoned futures, as well as with implicit risk. Complex, controversial decisions that generate winning spaces (Eus- kalduna, Abando Ybarra, world-renowned architects, industry-services, manufacturing-culture-leisure etc.). **Transformed into a city to win the future.**
- A “Lighthouse of Bizkaia 2050”: Much more than buildings and architecture. The island of knowledge concentrates very high **added value, first-rate international benchmark, promoter of all kinds of initiatives.**
- Present the solid “pieces of education”, School of Engineers, Sarriko, University of Deusto... Jesuit Consortium of Universities. (Networks and more networks).
- **The strength of long-term decisions.** “Clean the Estuary”, an essential step to unleash a complete transformation. Transfer to the Abra, expansion of port space and services, abolish river navigation, eliminate container beaches, urban barriers, and

sanitise and achieve the potability of the water. **Decisions and “unique projects”, an essential transforming base.**

- The “**new expansion development in Bilbao**” after the arrival of the High Speed Train in Villa. The extended Euskal Hiria finally has a minimally acceptable rail connection, our models of coexistence and mobility generated, **recovered public space and a transformed sociology.** Seen, in its day, as one of the 'last' urban extensions of Bilbao, with urban reuse and redesign, gaining public space for progress in the transformation of the city and multi-use demanded.
- **A new smart city-region.** Beyond the old concepts of the

2000s around Smart Cities, the new Bizkaia 2050 has been able to integrate the vision, governance and services available to its population, its citizens, and its economic and social players.

2 People-Planet and the Environment

- **Petronor refineries:** The transformation towards the green economy... and the new refinery and future world of hydrogen. Refinery 2050 model. **A company that anticipates its future from the success of its present.**
- **The Hydrogen Corridor. Focused industrial associationism,** shared with the future. Coopetition demonstrated, innate in our region's culture.
- **Circular Economy:** Urban and forest waste as a primary source of clean energy. A 4-R strategy (redesign waste generation, recovery, reuse and **circular redesign from the source**).
- **First European Net Zero region.** We believed in it, we trusted in our ability to achieve it and we committed ourselves to green growth, demanding deadlines and objectives, **collaborative commitment, and shared business-society value.**
- **Green Vector: Grow from climate change.** It was not a “tax” or an unattainable excuse. Design, management, timeframes with feasible transitions, sharing costs and benefits.
- **Save the planet: Driving the transformation of our economy and the environment.** Constant transparency. **Manage winners-losers** at all times.
- **BBV-Frontiers of Knowledge.** Permanent headquarters in Bilbao for now, in 2050, 30 years, transcends its prestigious awards and recognitions, **generating an open space of knowledge.** Its finalists and winners enjoy “sabbatical periods” in Bizkaia 2050 to work with the Science-Technology Knowledge system of our ecosystems, **enriching endogenous and global development.**

In addition, its biannual event, becoming the heart of the ‘BBV University for open knowledge’, provides a first-rate international reputation and image, as well as an unquestionable source **for attracting and retaining talent.**

- **Livinglab Science-Technology-Humanities.** The interaction of so many outstanding initiatives in this field has made Bizkaia 2050 a true livinglab, sought after by the best leading global talent.

3 People-Development, economy

- **Hovercraft:** River and sea transport. New mobility, electric, green, public. *New business models based on our culture and knowledge, making social demands our models of success.*
- Autonomous multi-modal platform - green, under local global leadership. (Our leading consortium companies: energy. Railways, boats, buses) *Reinventing customers, markets and solutions.*
- Railport, logistics station, open to the city and base of the energy, wind power, marine, green industry (Port of Bilbao). Assets are only strategic if they are aligned with the strategy. *A natural endowment or asset at the service of a driving strategy.*
- **New generation of Technology Parks,** base of *ecosystem chains. Companies, Science-Technology-Industry, public-private.* An example of commitments for the future: today there are 1,250 relevant companies, with high technological capacity, located in the updated network of Technology Parks. We were pioneers in the 20th century and we are benchmarks in their reinvention for this 21st century.
- **Applied, collaborative and impact-generating research.** A country that had to research to generate a transformative impact. Today, present in the main thematic projects and centers, in the leading networks worldwide.
- **Blue Economy:** Water, Sea, drivers of multi-industry spaces of opportunity. *Cluster new spaces.* True to our history, competences, geolocation, future opportunities, with the support of our partners, a driving economy to lead the future. A vector that has “set the obligations” to transform our economy.
- **The Arctic Routes:** Transcend the known routes, paths and assets. *Explore new areas of future potential.* Leave today’s paralysing immobility. Not afraid to explore the future. Take manageable risks. *Anticipate the future... and work to reach it.*
- **Innovate from what is known:** The new, old, always updated and leading Shipyards, their associated industry/culture (*Zamacona*). Beyond a company... *the clustered strength and a complete real (or provoked) ecosystem.*
- **Specialist and autonomous banks:** Always on the search for *added value niches.* Not diversifying into what we do not know. But innovate, learn, attract... essential elements to enhance our basic capacities towards *new lines of activity and wealth.*
- **Maritime OEM:** The importance of the components (changers, promoters of SMEs and new sources of activity, employment, wealth, well-being etc.). New professions. In search of the business, idea, key driving project to grow complementary networks. *Provoke systems.*
- **Tugboats:** *Leadership witness of history.* Things do not happen by chance. Niche, niche, niche... towards the world markets that demand it. *Solutions and not singular products.*

- **Vision/decisions for the future.** The successive chain of clustered diversification (Benedicta -Sestao-, Lamiako -Erandio) naval, industrial, aeronautics, materials, iron and steel etc. (La Naval, Celaya, Murueta, AHV, General Electric, Babcock & Wilcox, Vicinay etc.)
- **The differential strength of CLUSTERING:** Innovative growth from natural bases and culture, moving towards new intertwined activities, provoking evolution and complementary diversification towards new industries and activities. Cluster the Economy (all its activities) for a final objective: *competitiveness and prosperity*.

Not generating 'Associations, instruments or putting a cluster in your life.' Duality of the economy (everything interrelated that generates shared synergistic value) and region (close, manageable, with a vocation to share spaces). Fully integrated in the country-region strategy (*co-opetitive partnerships for the new economy*).

- **Industry-Manufacturing: 'The taste for grease'. The value and uniqueness of 'the factory' and its social structure.** Bizkaia 2050 is committed (and has been) to industry, the driver of innovation, formal employment, technological acceleration, multi-training discipline, the long term, investment, stability, permanent labour and social relations, rooted in the region and the recognition, promotion of training and local-based talent required. Open to international markets, integrated in trusted relationships Business-Government-Community. Driver of specialist professional services.
- **Offshore and 'floating platforms'. A new 'physical' region on the move.**
- **Added value steel: The ever old-new steel.** Indispensable clean industry that can be shared with regional planning and its residential uses.
- Shared industry (promoter and support) of habitable, residential and sustainable spaces, and quality of life. (Barakaldo, Lutxana, Erandio, Sestao etc.). *Creative, productive urban innovation*.
- **The shared answer:** Transformative institutional initiative and vision, responsible nerve, leader, manager, accomplice of private corporate initiative. We are not silos, but essential partners for explaining our income statements and the success of the country strategies, as well as the taxation funding our services and welfare. *Government-Business-Society*.
- **BEC. Bilbao Exhibition Center.** Shared infrastructure for the entire regional space, its industries, its image in the world. The associated name goes beyond its physical-administrative location. *Indirect support for the generation of wealth*.
- **Machine Tool.** An example of *system integration, driving innovation, multi-industry singularity, knowledge, ecosystems, training and entrepreneurial culture, internationalisation, collaboration*. At the essential service of every industry. Source of demand/generator of high technology.
- **Torre Iberdrola.** Symbol not only of a global leader, driver of the global industry of smart, efficient electricity grids and transformation systems, *driver of the local industrial fabric, knowledge and taxation*. Bilbao-Iberdrola. Successful symbiosis. Iberdrola and its supplier network are a *benchmark in Supply Chain models worldwide*, as a generator of wealth and shared added value.

- **Stock Exchange-Financial Center.** The new cryptocurrencies, blockchain, fintech, venture capital and investment, continuous financial innovation, networks with the major 'global financial centers'. *Lifeblood for our development and well-being.* Its essential role for our development is much better understood by linking it to other initiatives and players that we will highlight later, analysing some key players in this Bizkaia 2050 to make it possible for it to be considered a Cluster and Financial Center of '*Finance Tech for Good*'.
- **Torre BBVA:** An International Center of Entrepreneurship. Beyond a container of initiatives for the use of an iconic building. *Global Entrepreneurship Network* in coordination with multiple seed spaces and initiative accelerators. The movement happened within the framework of a hive of thousands of start-up initiatives in the BBBC space. Today, in the middle of 2050, the International Center of Entrepreneurship, not yet opened in 2021, has been the incubator of thousands of start ups, scale ups and intra-entrepreneurship, the base of multiple partnerships, the driver, primarily, of relationships and initiatives with the Israeli entrepreneurship space, the Middle East and the East Coast of the United States of America, *connecting Bizkaia 2050 with its powerful ecosystems.*
- **The New Torre Bizkaia Center,** Open Innovation, forum of the new Public Administration, reinvented at the forefront of public and institutional service. Guarantor of the essential governance of Bizkaia 2050. The Center, far from being infrastructure or a container to accommodate what exists, has been a driving force behind the profound "*Revolution of Public Administration*", its profiles and roles to be played, access, training, promotion of its civil service, under *new equality schemes and employment-civil service relationship in line with society and the socioeconomic development model and progress in the self-rule of Bizkaia 2050.* We built a true integrated solution from food to other spaces of connection.
- We put the strategies of the agri-food industry in the objective convergence of co-creating value by eradicating hunger, achieving optimal food security, improving the population's nutrition and promoting sustainable agriculture, within the framework of its particular effect on climate change (it accounted for 18% of carbon emissions in the 2020s) already then on its agenda for sustainable development.
- **Process integrated in an effort interrelated with rural development and settlement, the commitment to the produce of the so-called 'zero mile' favouring consumption, of the highest quality, redesign of the food chain with the two-fold momentum of Food Tech and its driving nature, of the highest quality, in tourism and gastronomic-nutritional education, as well as its impact on the world of smart construction-hospitality and quality job creation.** Its extraordinary development over time and the training of tens of thousands of professionals, with a vast exchange network worldwide, have generated an unimaginable space of connections, international relations, essential to the positive promotion, image and brand of Bizkaia 2050.
- Thus, beyond its essential training, it has also become one of the main sources of job creation, the generation of wealth, and industrial and service development for our region.
- Today, in 2050, Bizkaia 2050, has the largest number of Michelin stars (global

medallion par excellence), its restaurateurs stand out in the global top 100, they have generated the new fusion cuisine with the main international cuisines, more than 50,000 professionals have been trained at the BASQUE CULINARY CENTER Network of Schools, created in Donostia in 2010, and the number is growing in the other “member and affiliated” schools. AZTI, a global pioneering technology center that came from oceanographic and fishing research, is today an international benchmark, with a particular impact on bio-marine food.

- Its **impact on health and quality of life, as well as the worldwide prestige of the EUSKO LABEL quality system, has made it a key player in global food.** Additionally, its interaction with green strategies addressing climate change, quality population settlement in rural areas and its absolute reinvention in the wrapping and packaging industry, within the framework of the circular economy philosophy, have been essential to the transformation of our region and ways of life.
- **And we committed to our beloved INDUSTRY, ‘smart manufacturing’, in constant rebirth.** If in the 1980s we made a great effort to ‘save it’, in the 1990s to refocus and **cluster** it, and thus, over the years, innovation-specialisation-internationalisation over time, adapting it to a changing world, **the exponential technological disruptions that challenged us only accelerated our reinvention.** Convinced of our ability to produce-solve the manufacturing demands of a new economy of quantum technology to come, we accelerated our adaptation to it, with a vocation for co-leadership.
- We successfully ‘grew the limited size of our SMEs and micro-enterprises’ through an ever-changing and enriching clustering, working co-opetitively with third parties in external models and systems, we continuously promoted local and glocal constellations of value chains, we strengthened driving companies, we linked ecosystems, we made our ‘liquid’ region grow and we committed to the business-society shared value, we trained its potential leaders, we promoted public-public and public-private industrial strategies and policies for talent, people, capital, business and knowledge, and we connected them to the world.

4 People-Technology, Innovation and Knowledge

- We understood a world of **exponential technologies** that would determine our future and we put it at **the service of humanism and the common well-being and society for all.**
- **Zorrotza Bio-Computer Center and Data-Cloud Intelligent Center. The monetisable value of tomorrow.** Driver of applied technology directly related to the “industrial base and driver of health”.
- **New global headquarters of Banco BBV.** At its original plot in the Casco Viejo of Villa, since its move in 1857, the now often ‘reconverted’ bank is one of the leading financial institutions worldwide. Its partnerships with the main institutions in North and South America (from Canada to Argentina, and its main partner and market in Mexico), its extensive differential competence in the Fintech world and,

particularly, in the world of micro-financing, has led it to stand out in Africa and India with great success. It also has its major Data & AI Innovative Center in Bilbao, key to its success and differentiated offer. (**Impact/result of the ecosystem of the Industry and Financial-Institutional Center of Bizkaia 2050**).

- **Casco Viejo.** “7 Knowledge & Intelligent Commercial Center” is a **benchmark model of urban commercial centers** that have replaced the classic model and architecture of vertical oneness in dedicated commercial buildings. Its **distributed urban geography**, full of logistics and commerce support services, is an attraction for commerce, entertainment and urban leisure. Known as the Casco Viejo, the first area in Bilbao with Villa, popularly called ‘the 7 streets’ for its structure and underlying area.
- **Confederation of Special Spaces for Inclusive Innovation and Development.** (A formal institution and governance, incorporating all the interregional spaces that make up the Bay of Bizkaia-Balticum-Atlantic-NE space that has configured Bizkaia 2050). The necessary institutional co-governance is strengthened (and given meaning) by the hundreds of social, business, academic and scientific-technological institutions, as well as institutions for collaboration that have been **weaving partnerships in a rich swarm of partnerships and collaborative networks**. A space that, united, has become a driver for all the other spaces of which it is a part.
- Aitziber Itxasmendi wanted to make a **special call to the value of talent, its generation, attraction and retention**. She recalled the changing perception that the different city-regions worldwide compete for certain rankings. In 2025, she went on a study trip to South Korea, then described as the “most innovative country in the world”. These kinds of trips were common as part of the learning activities carried out by the BRTA network, which then brought together 17 Research and Technology Centers in the Basque Country with the two-fold objective of **‘learning from the best’ and ‘generating homogeneous thought and language among the network’s management’**. She checked her notes: the ranking was based on seven weighted factors (R&D projects in progress; business diversity in high technology; local research concentration; driving efficiency of initiatives, productivity and patents). After South Korea, Sweden, the United States, Japan, Germany, Denmark, Singapore, Finland, Switzerland and Taiwan.
- On her return to the Basque Country, she was lucky enough to be invited to a select breakfast-meeting with ten Basque entrepreneurial figures who had achieved recognition thanks to their initiatives in the ecosystem, either in Silicon Valley or Cambridge, and who, in one way or another, interacted with the Basque ecosystem. She wondered, then, how could they contribute and strengthen their work in our region. The discussion made it possible to note down the “needs” not covered by the current system. She incorporated it in a brief report on her visit to Korea that she presented to her boss. Her boss promoted a ‘tank force’ at the Technology Center where he worked, together with the International Center of Entrepreneurship, and they began contacting companies and networks in the country with links to the top countries in innovation. The effort would be focused on **building strong concrete city-region partnerships in each of those countries**. Today, 2050, the ‘micro network’ of innovation and entrepreneurship works with these 10 partners and has been extended to the entire Bizkaia-Bay of Bizkaia 2050.
- **Innovation and Entrepreneurship. Networks. Wealth and Well-being.**

5 People-Work and Employment

- **'Widespread Impoverishment'** would be a situation that can be overcome while at the same time provoking change. It became a continuous demand throughout the design of public policies.
- No employability in line with training or with consistent expectations Proposition-Reality global objectives. Our **revolution towards employability, education and integration** was one of our top priorities.
- Opportunities only exist 'abroad'. **We built opportunities 'at home', connected to the world**, co-protagonists of the 'ideology offered' by third parties.
- Beyond labour reforms to return to the past with a clear disengagement with the concept of company, to the dignity of work-employment, permissive protector of staff absenteeism, confrontation as a tool for improvement or delegitimation of the 'employer', **the social dynamics that the world of work and employment demanded were addressed**. Overcoming negative forecasts about people being replaced by robots, digitalisation, new technologies and the prevailing fear of numerous job descriptions, the effort made led to a combined commitment to learning and reskilling, the recreation of inclusive job markets, entrepreneurship and job creation as an objective, new working and employment models and their new viable and sustainable conditions, the design of digital and non-in-person working, employment in the collaborative economy and, above all, **the protection system and social security for employment and unemployment**.
- **The conception and dignity of work, beyond the income associated with its provision, entail satisfaction, dignity and the perception of contributing value. Basic income mechanisms not associated with the work provided or the unattainable minimum income** were essential. But, at the same time, the effort to create jobs was an essential objective. New professions, new demands and social needs that future advances demanded, the opportunities that the emerging exponential technology itself and **redefined public services opened up multiple waves of opportunity**.
- The virtuous cycle: social demand, economic activity and business niches, waves of opportunity, training, reskilling, "backpack of unemployment benefits and lifelong training", preparation for employability, working conditions, associated taxation throughout the entire career and a prevention, protection and social security system was regenerated.
- A new public-private local employment service was born.
- And today we enjoy its results.

6 People-Education-Talent

- **Refocus the Nautical School of Portugaete: symbol of the transformations required by the very nature of the change in the activity and industry or space that originated it.** Training, training, training... Break the teachings, programmes, “static knowledge” that has been around for ever. **Progress with the social dynamics of the times. Try to build from what already exists.**
- **International University Centers.** A university of the future. What is behind an ‘**own University District**’. The transformations in the world of education and especially of universities have not only led to opening up to growing internationalisation, or to venture financing, co-ownership, networks of qualifications, academic staff, and research centers and nodal chairs, and degrees and syllabuses-shared plans, but also to an unlimited number and style of training, professions and modalities of degrees and construction nuclei. **The old, exclusive universities of past centuries have ceased to exist.** Updated access systems (academic staff and students), updatable offers, applied research and network relations with the local economic fabric are today a true melting pot of offer.
- **The Bizkaia 2050 extended platform itself feeds its university wealth and adds great value to this ‘network of international universities’**
- **Obieta Institute. The value and recognition of those who made a difference? New windows of opportunity and generation of glocal knowledge spaces.** The creation of this Center, promoted by the Alumni Institute, alumni educated at the Faculty of Law, is today one of the main **Centers of International Studies worldwide.** Its academic excellence and recognised Impact Reports on Multi-lateral Organisations are essential today, among other areas, in the analysis and progress in the vast area of self-determination and internationalisation, true to the extraordinary work of the person who lent their name to the prestigious Institute, resident at the University of Deusto, with the **nodal participation of professors, lecturers and researchers from the rich expert network of Jesuit universities.** Its ‘Dual Shared Center’ at Georgetown University in Washington is the embryo of its extensive network in constant growth, attracting professors, lecturers, students and an entire network of prestigious schools.
- **Rectorate of the International Chamber University of Studies.** The incorporation of these new headquarters in Bilbao represents a **qualitative leap in the long process and commitment of the CACOBİ in the transformation of its Bilbao Business University School,** when in 2022, as a result of the publication of a book on the Bizkaia of 2050, it decided to weave a solid Higher Education network, multi-campus and with its own curriculums and degrees, with other schools and Universities of Chambers of Commerce, sisters, with common and shareable elements: Port and industrial cities, historical links, international navigation and trade relations, with the commitment to make education one of its differential points.
- **We learned that inclusivity as well as curiosity and the observation of different and distant worlds essential to ‘conquer a better future’ start at home and at school. We understood that we had an education system demanding a genuine revolution.** It was necessary to break the moulds concerned about exclusive reforms that put the emphasis on structure, professional staff in personal and collective careers as an objective, non-differentiation that condemned them to standardisation and mediocrity

a priori. Our students needed to learn from a different perspective, to socialise collaborative work based on collaborative effort and discipline and not on the benefit of others' work. We needed to move towards the world of skills and knowledge, and not get stuck in the inherited practice of predictable exam answers. **We took on the search for “provocative” answers to a future that challenged us.** Potential generations for creative capacity and its implementation. **We were able to promote relations with international educational centers in search of demanding excellence. We reformed teacher training, we reinvented the traditional teacher training colleges, we rewarded the responsibility of the heads of educational centers. We generated learning communities, we promoted networks of education professionals and experts. We made teaching prestigious at all levels.**

- The commitment to ‘intelligent tutoring’ as a driver of change, based on the strengths of Teknika, we promoted talent acceleration and retention, ongoing training, improved access to education and support for those who stand out, as well as those requiring extra support, and an increase in remote technologies favouring hybrid models that are not exclusively in-person, thus promoting major educational reform. **Agreed not from and for the system’s workers, but above all, at the service of a society in need of training and education for a future that was approached differently.**
- We embraced one of our best weapons of the time.
- In the 2020-2025 period, when the world was concerned about the training-employment duality in the face of a future that was, for many, threatening, **we had a jewel appreciated by third parties. Our Vocational Training system, its dual capacity, directly related to industry and the economic fabric, permeable to the technological revolution underway, enjoyed international prestige, a global reference in the changes that were being promoted and high employability rates.**
- **This winning nucleus of the moment was strengthened by new complementary paths towards new areas of training, with new careers, professorial reinforcement, greater commitment and business monitoring, renewed extension towards the world of social services, health, welfare and exponential internationalisation.** A commitment was made to invest in their capacity as ‘centers of entrepreneurship’, complemented with a path based on the recovery of the role and training of apprentices, guild and trade masters, as well as Professional Training in differentiated degrees and possible organised access to higher education. **The maximum collaboration of the public network with the private network and of both with international networks was regulated and promoted.** In short, a true commitment to the utmost dignity and connection between the demand of social needs with the education-training available.
- **A new regulatory framework was necessary to cover, with guarantees for all stakeholders, the new waves of opportunity that arose in the world of Vocational Training:** the definition of ‘Reskilling-Remuneration’ programmes for the marginalised population of that future to which we aspired (neither in employment or in education), up skilling to adapt to new professions and labour market demands, for adult education and practical/technical e-learning, lifelong education, bridging or complementary preparation to/from higher university education, customised incompany plans.
- New taxation, trade union and business participation, flexibility.

- **After overcoming a long, intense dominant phase in the last 20 years of the last century and the first few decades of this century, focused on facilitating access to university, the commitment was redesigned towards content specialisation, the quality and excellence required and a profound transformation of the system.**
- **The old bureaucratised officialdom of Spanish universities of the past that had been transferred due to 'legal imperative' and 'the comfort of the exclusive dominant group' was replaced by new open, ground-breaking, differential universities with their own spaces. Updated career, reinvention of Chairs, Higher Education Centers, internationalisation, own degrees, infrastructure appropriate to the educational objective, link to the generation of impact on society and a joint focus on: Instruction, Research, Impact. Networks of networks, public and private, increased and strengthened by the growing innovation in the 'Educational and University Industry', with greater or lesser intensity, **unconventional models have flourished, syllabuses with a broad humanistic sense committed to our society's problems and aspirations, forming transformative, visionary, rigorous, focused, dynamic and resilient mentalities and attitudes.** Universities committed to forming real leaders, capable of working with third parties, innovators, lovers and cultivators of thought, with a global perspective to understand the world that challenges them. Thinking about the specific space in which they have to apply their decisions.**
- **Universities with a true vocation for networking and building shared solutions. Universities that feed our knowledge and innovation platform worldwide, in and from Bizkaia 2050.**
- **We were able to attract young people (mostly) and talent. Those who chose and moved around the world. We educated them and they were not attracted by the opportunities that our base area offered them.** Either they understood that they had been prepared for a different type of company, society or expectations, or they thought they would find a more enriching personal or professional adventure, at least in the short term, or they thought to strengthen a differential career path that would give them a better future.
- **We identified what others were doing to attract them** (or perhaps they were simply 'there') or, worse still, we sent them thinking that we were educating them to bring innovative routes back to our ecosystem and we didn't know/we couldn't keep them here and they discovered the benefits abroad. We strengthened our networks, the follow-up of our talent and **we attracted the flow that we needed (flows of capital, investment, companies, organisations, projects, investment funds, international educational centers etc.). And, we redesigned everything that could be required and that others appeared to offer them:** cosmopolitanism of international organisations, clusters of global excellence, educational systems adapted to the labour market, flexible jobs; regulation, financing and facilities for start ups and ad hoc mechanisms to scale their growth, visibility and access to international markets, entrepreneurship and intrapreneurship accelerator networks, quality of life, quality health insurance, professional development opportunities, cultural vanguard, 'youth offer', affordable accommodation, international connectivity and security.

7

Art and culture from, for and by people

- **Cultural heritage, history and transforming future** (Puerto Viejo/Puerto Deportivo/Intermodality). Algorta-Arriluze. Examples of intervention. Make upcoming actions visible, a chain of **inspiring achievements of broad, continuous transformations. Today's solutions to continue tackling tomorrow.**
- We made of each of the existing reference niches a **dual role, identity-heritage at the service of the renewable (and differential) future.**
- **San Mamés-Athletic: The value of difference, updated, enhanced, added value, complicity with society. (Innovate from Lezama's 'liquid' and 'a physical' concept?)**
- **An example** is what happened this morning. The San Mamés stadium was the perfect setting for the debut of the player Moussa Ndiaye, born in Touba-Diourbel 18 years ago.
- His professional debut is preceded by his long association with the Basque club's youth academy. At the age of 8, he joined the Athletic Club Specialist Training Center in the city of Touba. The Center is part of the **Lezamatik Mundura Network** that the Athletic Foundation has been promoting worldwide for 20 years (it now has 20 Training Centers with a mixed Curriculum, dual school-industry and academic-sports, which has seen more than 1,050 students benefit from a full course, having imparted more than one hundred complementary continuous training programmes) under the supervision of Teknika, a center of excellence in the Basque Vocational Training system with a presence in Africa, in a broad development cooperation plan co-directed by the Secretary of Foreign Action of the Basque Government.
- Moussa and two of his sisters (Khady and Aissatou) attended the programme that the Club, together with the sponsorship of institutions in Bizkaia and Euskadi and around one hundred Basque companies, in addition to 10,000 'friends of the Foundation', fund and promote in the framework of ongoing cooperation and development programmes. Thanks to his training and personal education, his work at the local Machine Tool Center (owned and managed by the Basque Machine Tool Institute) and his disruptive training, in line with current regulations, three years ago he moved to Lezama to the residence assigned to players from abroad linked to the Basque youth academy as a preliminary step in their potential professionalisation and selection to join the first team. Moussa seems called to be a sports star and the praise of his coaches and teammates only enhance his standing and expectations. In his first interview, entirely in Basque, he highlighted his recognition of the team and the contribution it has made to Senegalese society over time. One of his sisters (Khady), trained on the same programme, made her debut two seasons ago with the women's team, although a few weeks ago she was signed by PSG in Paris (champion of the European Champions League for the last four seasons).
- With Ndiaye, there are now 20 players born on the African continent who have made their debut with the first team. Another 10 of Asian origin and 11 Latin Americans are part of this transformative programme established 20 years ago now and active in the Club's different 'professional' divisions. The Foral Council of Bizkaia and the Basque Government this very morning signed an extension to the corresponding agreement for the next 25 years.

- **Guggenheim Bilbao. Beyond the Museum... Accelerator protagonist of change, psychological recovery and our self-esteem.** With its Management Framework Agreement and membership of the global Guggenheim Network recently renewed, Bilbao continues to be the key focus of the Foundation's expansion strategy S.R. Guggenheim, based in New York, and cultural-educational innovation in Bizkaia 2050.
- **The Guggenheim Museum Bilbao, its interaction with the around one hundred museums in the Bizkaia 2050 space, a global reference as a Cultural City with differentiated museum treasures (Fine Arts, Women, Basque Ethnographic and Archaeological, Language, Chillida Leku, Oteiza, Balenciaga etc.). Not a City of Museums. A living space of art, culture and economic development. A city-Region, the nucleus of art, culture and education, an essential vector in the region.**
- **Art-Economy-Region.** Across the length and breadth of the Bay of Bizkaia and the Côte Basque. Weaving a complementary corridor.
- **Marzana Piers and Incubator of Art.** Leveraged by the BBBC Faculty of Fine Arts, which has become a vast **Urban Campus**, full of housing available to faculty, academics, researchers, students and their families, all kinds of workshops, galleries and service centers, all kinds of study programmes in artistic and cultural disciplines, with the proliferation of leisure and entertainment spaces make this area in the surroundings of Marzana, Bilbao La Vieja and the **'reinvented' space with the continuation of the High Speed Train Station in 2026** make it a **significant Incubator of Art, youth and creativity.**
- The renovated Basque Archaeology and Ethnography Museum is one of the revitalised jewels and icon of our region. Its conceptual and thematic redesign, the investment in its transformation and the extensive research-educational display are today a global reference. **A living example of the inclusive history of the Basque people, its rich history based on the position and role of the Bay of Bizkaia, extended worldwide,** have made this wonderful Institution a global benchmark and attraction. From its original roots, its extensive historical transformations in North and South America (Amerikanoak⁵⁶) and collaborative effort have generated an entire network of related Museums and Cultural Institutions.
- Under the influence of the different cutting-edge centers mentioned (Guggenheim, Frontiers of Knowledge, Faculty of Fine Arts, Living Labs of Knowledge, Educational Ecosystem, Network of Museums and the Basque Ethnological Museum, Bizkaia 2050, based on a **cluster of languages with enormous strength in the creative cultural industries in the region, it is constituted as a Think Tank, a global reference in Language Policy.** It makes Basque a living, solid and supportive language based on the singularity under study.
- **When you have to move in an immense interconnected space, generating and participating in a swarm of networks, the way to do it is by providing differential value that makes you stand out and lets others recognise and value you for that difference that gives you 'uniqueness'.**
- Our region has been able to highlight its identity, ancient culture (and its transition to a commitment to being at the forefront and change), highlighting values applied to the search for prosperity and solidarity, shared and inclusive development. We have been able to protect and promote our cultural heritage (history, community, customs, rituals etc. and historic monuments, traditions and

⁵⁶ Douglas. Origin and History of Basque migrations to America

values), reinforcing our own unique language, alive, as well as universal, from which we have cultivated a commitment to **humanistic education that has been able to value philosophy, history, fine arts, architecture and design, literature, connected - strengthening a world apparently dominated by technology and the economy. We have been able to give Art-Culture a vector role for inclusivity and make it an economic driver, making cultural industries and their content an essential element in our generation of wealth.**

- **Art-Culture-Economy** have been drivers of a true revolution of ideas and thoughts, of endogenous development, of new cultural institutions that, in addition to contributing to unique networks of cultural-educational-economic diplomacy, have advanced models of governance, financing, employability, digitalisation and new professions.
- Today, culture is no longer that leftover Cinderella that was undervalued in key decision-making forums. An open window to the world, pride in belonging and the future.

8

People-Welfare Society

- We overcame the consequences of Covid-19 and **used the lessons learned** to accelerate a new, different future.
- **'The Lost Decade'** was for us a phrase that could not paralyse life plans and future projects, neither for young generations, nor to determine the path of our country-city-region.
- **'Future of Youth: Stolen'**. Discard it from popular opinion and take on the firm commitment to **incorporate them into the active commitment with their own future.**
- **Barakaldo-Gurutzeta/Basurto-Olabeara. Bio-Health Complex. From the Hospital to the health ecosystem of the 21st century. Beyond the hospital, health was and, above all, is, today in 2050 a multidisciplinary, technological, industrial, as well as health, social, community, care space, and it is also a generator of wealth and employment.**
- If back in 2020 we were proud of our health system and models, as well as of the public network of the then 'forty-year-old' OSAKIDETZA-Basque Health Service", valued by the population as the 'best service provided by the Basque Public Administration', **the accelerating post-pandemic reflections of the time and the courage, bravery and vision of the political leaders and stakeholders in the region's extensive health system, meant they chose to tackle a true revolution postponed in this world.** No one hid the fact that it was inevitable to break away from the continuing path of 'slow improvement' in current models. **'We envisioned a new changing space in provision and insurance, in frameworks and policies, as well as in funding.** We understood that health is much more than the absence of disease, that it is not just health care, but also the social and community conditions, the wide and changing world of care, the multi-disciplinarity required, the advances and discoveries that research and technologies contributed demanded new professions, new education and reskilling, new public-private dialogue and new labour systems; a true revolution. We went from speeches to committed practice. **The revolution undertaken, always with a task ahead, addressed the human and personal capital at the service of health,**

throughout all the levels, committed to technology for health, under realistic criteria of assessment of the cost-efficiency-value in health, positioning, it goes without saying, “the value in health” as an objective result to the service of which the other associated elements in the equation (ownership, economic cost-effectiveness, procedures, deeper universal, real access to healthcare for all, eliminating the barriers that prevented effective access) were made available. Appropriate use of precision medicine was enabled, a strenuous effort was made concerning Big Data based on the need (now a reality) for a universal health passport, a clinical record carried by the user and available to the entire system and interaction worldwide. **An entire renewed model that gave rise to new healthcare professions in a diversity of niches that end up explaining health.**

- And the most relevant step of all: **a public-private health system of social economy and complementary volunteering at the service of society.**
- In this way, **the success of quality universal public healthcare, one of the greatest achievements of advanced societies, required a positive and creative transformation towards the generation of an innovative, public-private space, guaranteeing maximum value in health for the population.** With its regulation and control, guaranteed funding, insurance and universal access, as well as the catalogue of essential provisions that have to be offered from the rich typology of the system's stakeholders and actors, which are the responsibility of governments, as a task, service, responsibility and essential policy, has been accompanied by an opening to other actors, breaking the myths of ownership, bureaucratisation... of all the required tasks. The different areas, which have been developed over the years, their multi-professionalism, the related scientific progress, the extraordinary reconfiguration of health infrastructure (including homes), teaching and research, the considerable pharmacological contribution, mobility and applied technology made new ideas essential.
- **A revolution that has told (and driven) the collaborative intensity of the health clusters that in each of the different spaces of the embryonic nucleus of Bizkaia 2050, and their connection with the platforms of knowledge and innovation, make this model implemented an inexhaustible source of advances in our population's Value in Health, as well as the creative development of new companies, new specialist Research Centers, superior manufacturing centers, areas of care and services in professional reskilling and the region's long intelligent specialisation in health sciences and industries.**
- Within the framework of the developed health system, the commitment to what were associative initiatives to ‘reinforce zero mile healthcare’ in 2020, today flourishes with more than 1,000 qualified companies with a high degree of specialisation in specific activities at the service, also, of health. Industry-Technology for health has been generating responses to human capital at the service of health care, access and treatment (both expert professionals, as well as a rich rollout of social economy formulas and formal and regulated volunteering), the industry-business symbiosis with genomics, precision medicine, Big Data and an extensive link with smart, digitalised manufacturing, driven by artificial intelligence and the extensive and qualified science-technology network, with particular relevance in regenerative therapy communities.
- Health, wealth, knowledge, employment, education and community development.

- **E-Sports. Towards new leisure and entertainment models?** Subwindow, also, a generator of knowledge, wealth, employment and well-being. Door to a leisure and entertainment model, completely widespread today, as well as a source of employment, education and business.
- And beyond its relevant and priority attention from the sphere of health, **'active aging and longevity'** has been addressed by our active agents in this Bizkaia of ours from the consideration of **'welfare economics'** working on the creation of multi-markets of mega opportunities. The industry and services in the Bizkaia of today stand out for their high degree of internationalisation (from their local testing ground -understood in the extended, open context of Bizkaia 2050 already discussed). Bizkaia 2050 has successfully **'reinvented'** the conception of **'the elderly'** and **'old age'**, taking the **'actual age, perceived, personally'** of a different population, reinventing their life cycles, the space and times of these cycles, redesigning their infrastructure, their educational plans and systems, their homes, their income (and pensions) distributed over time, adapting them to their needs at any given moment, their leisure and, above all, their ability to contribute to employability, work and society. New fiscal architecture has been established in response to this reality.
- Today, in 2050, we continue to search for a theoretical pro-immortality pill or medicine that some covet. What we do observe, with satisfaction, is the chain of successive advances that we are incorporating into a growing population, exponentially improving their quality of life, their **'active ageing'** and their participation in and contribution to society. Aitziber recalls her participation, a few weeks ago, in a jury honouring the main start ups comprised of **'seniors'** who have chosen to put their experience, savings and time at the service of future business projects in this their next professional stage after successive activities in their first 75 years of life.
- The Bizkaia of 2050 is benefiting from the high-reach commitments promoted at the time. The oft-remembered **'Covid-19 pandemic crash of 2020-2022'** that today we only remember due to its endemic nature and residual **'disease due to persistent side effects'**, caused profound transformations in many of our systems. Thus, **the successful system of "Retirement homes and social services" that our region enjoyed led to a profound refocus of the world of healthcare, socio-health and community services, infrastructure and care models, organisation and funding, and the training of the professionals who worked in it.**
- Thus, together with the then recently created **'Nagusi Intelligent Center'** for the study and promotion of entrepreneurial projects and initiatives at the service of aging (so called in those years) and a rich variety of initiatives throughout the Bilbao-Bizkaia-Basque Country, the International School of Nursing and Care was established in 2025 and today, 25 years later, merits satisfying distinction and pride.
- The **International School of Nursing and Socio-Health Care** has received special distinction from the WHO and the UN as a **"Special Ambassador for inclusive universal healthcare"**. Its recognition as a **center of excellence in education in the socio-health and community field has been highlighted as a clear example of continuous healthcare innovation, its contribution to organised and quality migration and development cooperation for an inclusive world.**

- The creation of this school was designed and promoted with the idea of providing **specialised education of the highest quality to people who, mostly in their countries of origin, were hired and educated to study and work, in a dual system, in Euskadi in the broad field of health from the socio-health, care and community asset fields.** It was also integrated into a development cooperation programme, addressing controlled and planned migratory flows, educating people in search of new opportunities in Europe, giving them the preparation and full legal regulation for redesign and employment in the country for a determined period, with the specific conditions that could facilitate either remaining in the country or their organised return to their countries of origin, thus contributing to the development of their communities.
- The consortium made up of the Institutions responsible for Healthcare, Social Welfare, Municipalities, Universities (public and private), the Network of Technology Centers of the Basque Government and the “target-origin” countries that have been increasing over time gave way to a **first-rate Academic-Labour-Welfare Institution.** Its lecture halls have already educated more than 25,000 people, they have a portfolio of around one hundred research projects and innovative services, and they have contributed to the co-creation of around one hundred companies both in the Basque Country and worldwide. Its impact on the Basque population is invaluable not only in terms of value in health, but also in the mobilisation of active, regulated volunteering networks, as well as an extensive collaborative network of similar Institutions already active in twenty countries, promoting a wide exchange of academic staff, students and collaborative projects.
- Over the years, different companies, private foundations and investment funds have contributed substantially to funding the School, its programmes and the development of ‘subsidiaries’ in different countries.
- **The Bizkaia of 2050 today offers the comfort sought in its unique value proposition and, in turn, represents a successful base on which to go from the ‘intermediate station’ to new ‘sought-after spaces’ on a new distant horizon.** The President of the Chamber of Commerce and the Consortium Confederation that is meeting today in Bilbao knows that ‘the success of the past does not guarantee the success of the future’. **There is no time to lose. It is time to approach a new reflection for another 25 years. Tomorrow’s society will appreciate it.**
- **Today, in 2050, there is time for celebration, the protagonists of this chosen starting point deserve it.** They exerted themselves and committed to the hard work and risk to overcome the challenges that lay ahead. Each person from their share of responsibility has brought everyone here. Today, she observes how, “... **thinking and working for others, also meant thinking and working on themselves**”. What else could have been the underlying objective: **The search for the COMMON GOOD. The sought-after Bizkaia 2050.**
- **A better world. Bizkaia 2050 is a global benchmark of business, committed to the philosophy, essential pillars and shared objectives that the role of business has made its own in the essence of its different business models.**
- The active convergence of different corporate social responsibility strategies, business-society shared value, the framework of the first law of participatory companies of the 2000s, the differentiated cooperativism of the Basque Country (with special significance in the already legendary and prestigious group Mondragón MCC), the widespread ‘social economy’ giving rise to multiple

modalities of companies with high social content, and the currents that spread throughout the world three decades ago behind the triple convergent objective-indicator: SDGs (**five essential pillars: leave no one behind, protect the planet and its biodiversity, use innovation for harmonious development, create fair, inclusive, peaceful, democratic communities and society, and establish stable relations between the public and private worlds, working together for the common good**), exceeding the initial basis of addressing the economy, ecology and social issues, have been materialised in the business model for prosperity, inclusiveness and sustainable human development that Basque companies pursue (and achieve) today.

- **Successive enrichment from convergent partnerships and initiatives.** Long-term efforts such as the legislative and government initiatives themselves, cooperative and social economy movements, entrepreneurial towns and their factories and innovation laboratories, innovative commitments in labour relations, the tens of thousands of Basque business initiatives, the country's broad associative framework and the intensification from Academia-Business, and, above all, society's genuine valuing of business, have generated a model of success.
- **A long journey, centuries making companies and society in this 'Bay of Bizkaia',** sailing the seas, also rooted in the different target countries and regions. Bizkaia 2050 has completely recovered the social, real recognition that values the entrepreneur (without needing to disguise it with other adjectives) and the company as a unit of all its stakeholders, and has overcome complexes (media, social, typical of other times and areas and/or ideological systems) recognising, valuing and promoting their creation and development. **Today, with more than 75,000 companies, our region stands out for its creative, enterprising and innovative strength, technological leadership and high capacity, employment and prosperity. Its international relevance connects us to the cutting edge internationally and opens (wide) the network of networks of our economic diplomacy.**

9

People-Networks and Connectivity

- **Bilbao Consulate-San Antón:** historical record, driver of the region's innovation and progress-image. We committed ourselves with the weight of its history to build the new world of opportunities and favourable waves to which we aspired. **We reinvented its role at the service of the Bizkaia 2050 to be built.**
- **Network of Networks.** Physical infrastructure: Connectivity, professionalism for endogenous development. Yes. But beyond that, smart infrastructure, culture and innovative knowledge that generate impact, wealth and well-being. Not only supra-regional, but also internal connections.
- **Bilbao estuary,** connected to the entire **Bilbao-Bizkaia-Basque Country area. One more piece. Araba-Gipuzkoa, Nafarroa, Nouvelle-Aquitaine, Cantabria-Asurias-Galicia-Porto... and towards Catalonia and the Mediterranean.**
- **Development Cooperation:** Ongoing commitment, changing and differentiated ideas and lines of work? Country values. Basque model? Fully integrated with companies and clusters, as well as NGOs from the entire platform, they carry out essential work in favour of inclusiveness and the internationalisation of our economic-industrial offer.

- **Physical and smart connectivity not only throughout the main network of the BBBC ledge (with its connections to the North Sea and America), but its full interaction with the 'Green ONE BELT' from/to China and its exhaustive inter-connection nodes, from dry points, land and river, air and personal connections in that swarm of infrastructure that the innovative platforms make the new Bizkaia 2050 attract, generate, retain and share the world's forefront of knowledge.**
- **The Bilbao Chamber of Commerce, Industry and Navigation has recovered the historical role it was responsible for playing and has played throughout its history.** Its promoter and entrepreneurial spirit, its commitment to long-term thinking, its changing refocus towards the companies that make it up and in its first complicit step together with all the Chambers, Basque and from the Baltic, Atlantic and Nouvelle-Aquitaine area, base, it has been spreading across the world. The Chamber of Commerce has, thanks to its effort and successful work, been able to facilitate the progressive creation of this Commercial Network that offers so many results.
- **Consuls of Bilbao.** The traditional figure of the Consuls of Bilbao has undergone a triple change in their role from the 2020s: 1) Collaborating on the facilitating effort made in the fabric of partnerships and formal agreements with the regional areas that could be incorporated into the BBBC and its institutional, economic, social and academic players, 2) Active promotion of the image, initiatives and movements of Bizkaia 2050, 3) Coaching and assurance of the Chamber itself and its Network University has contributed to strengthening the International Economic and Cultural Diplomacy of Bizkaia 2050.
- **The Cultural, Economic and Academic Diplomacy of Bizkaia 2050 is today a growing reality.** The commitment to strengthening with a true 'Diplomatic Intelligence Network', using all the talent available for Bizkaia 2050, mobilised the use of resources (especially technology and relationships) to achieve constant contact of all the internal and external value, looking for the ongoing momentum and management of the collaborative initiatives at the service of the country. The objective of being present everywhere and/or at all centers of decision-making that could affect Bizkaia 2050 mobilises resources, initiatives and people, reorganises and optimises the organisations involved in these objectives, and strengthens the presence and development of the region base.
- **The 'Diplomacy' sought has been not only strengthened, but also focused, not on a limited core, but on the wealth brought by all kinds of pre-existing relationships that all the economic, social and academic players have been weaving worldwide.** The effort has been focused, in recent decades, on their knowledge, synergistic use, optimisation of their networking, generating new opportunities, and undertaking new ventures from the multitude of existing projects and instruments.

10 People-Governance and leadership

- **Disengagement.** Frustrated hopes and rejection of authorities, leadership, institutions and politics. We strived to earn trust from a complete active transformation. **Earn trust and engagement with projects and people** from mutual work in the search for honest, sincere and committed approaches, under the mantle of the joint search for the common good and the commitment-balance between rights-obligations.

- **Leadership, efficiency, savings, conservation and promotion of new energy sources.** Leading from true intelligent specialisation based on what we did “know how to do” **Save the planet with timeframes and commitments that can be taken on by Society, mitigating the winners and losers.**
- **Symbiosis of public-private agendas and strategies.** Shared, sustainable aspirations for the long term. The constant balance. Take risks and confront demagoguery or uninformed messages.
- **Training in governance, political leadership and civil service.**

A good example to understand this relevant transformation of the civil service, carried out with determined priority negotiations by the leaders of Basque institutions with the Spanish Central Government, whose underlying light has conditioned the entire formation of the Basque civil service since access to self-rule in 1980, in addition to the inevitably complex negotiations with trade unions, civil servants themselves (on different systems) and the expectations of society at the time (2020) that, at the gates of a generational renewal of the public administrations with the retirement of existing posts, had as a final result a new civil service of its own, adapting to the expectations of the changes that the world was bringing forth and that would require a different model of relationship with Society, with the disruptions that they questioned and for the redefinition of the roles and profiles required.

- **The enormous prior work carried out, reinventing the ‘Administration and Governance of the future’, the conditions of access to the civil service, the social and political debate, in addition to needing to define the essential tasks of the civil service and those that could be carried out in different forms of collaboration with private players, in addition to careers and their non-permanent and immovable nature, is an entire manual of participatory success, leadership, and shared and strategic commitment to the common good from an exemplary Administration.**
- Today, María, for example, is enjoying a sabbatical-training year after her last six-year cycle with the Basque Public Administration. She joined the civil service in the second call after the corresponding updated law ended the old system that granted positions, ‘plazas’, for life that were specific and rarely changed.
- Under the new system, the fixed and long-term nature for civil service work entails work cycles or periods in certain activities or work areas that are accompanied by a continuous training process and a promotion scale that every six years requires “Excellence-Training” for updating and adaptation to the new assignable tasks as a result of the unending, changing needs and demands of society in the course of continuous reform, modernisation and redefinition of the Public Administrations, their different instruments and agencies, as well as the working conditions themselves and the evolution of public goods, services and roles.
- María has essentially worked in education and has spent three full cycles in different schools, localities and areas of service and/or responsibility. She is now to be promoted to a management position at a Community Learning Network that includes a dozen centers of different levels, formal and informal, in line with the current Education Pact. Based on her specific programme, she has to hone new management,

leadership, technology management and basic pedagogical and economic-financial tool skills to best perform her tasks. Her humanistic education (essentially in Basque philology) in a successive journey of additional education (French philology, psychology, cultural management etc.) has been adding to her experience with valued social appreciation that makes her confident in her progressive development in the well valued and efficient Basque Public Administration.

- María enjoys her work, she feels and knows that she is well rewarded for it, has a satisfactory work-life balance and is proud of her contribution as a civil servant to society. She values the training she receives, and checks cycle after cycle her professional development and advancement. She belongs to an Administration recognised for its prestige and contribution of value to society, it fills her with pride and satisfaction.

Aitziber Itxasmendi concluded. She looked at the exhausted audience. Her long speech spent emotionally reviewing and emphasising so much effort and work done, made her once again proud of this Bizkaia 2050 that she enjoys, of which, like all those present, she (rightly) feels a protagonist.

Indeed, no one had been given anything for free. A history of effort, of debate, of initiatives (most of them committed, others accepted and/or accompanied) led to a satisfactory result. The Bizkaia of 2050 is better than that of

2020 and, without a doubt, they have the right frameworks for the Bizkaia of the future to be even better. The intergenerational commitment will continue on its path.

She encouraged all the other representatives of the different parts and nodes of this platform of knowledge, innovation and inclusiveness to continue strengthening their extensive and fruitful Network of Networks. Future challenges, innovative responses, renewed commitments

The journey towards inclusive prosperity and competitiveness is, indeed, never-ending.

8

Epilogue: Final Comments

Looking at the future with an optimistic frame of mind and the commitment to explore opportunities on which to build a better space for the generations to come requires the environment (internal and external) be looked at with the changing and critical perspective of someone who feels challenged by an evolving, uncertain, complex and demanding world.

The satisfaction of a successful journey (always relative to the point of comparison and with the constant conviction of the endlessness of the task performed) cannot lead to a paralysing complacency that disables new critical observations that would encourage a redoubling of efforts, retouching or breaking away from paths chosen and rethinking new roadmaps.

This journey towards a Bizkaia of 2050 is an invitation to imagine a sought-after, successful scenario in which the society that experiences it feels proud, excited and in solidarity with what it enjoys. That observes the new world presented to it with enough confidence to face and build, in turn, another even better world for the generations to come.

The world that we are contemplating on that near, although apparently distant, horizon could seem part of an excessively indulgent and unrealistic dream. It is part of an aspirational and desired vision (some would say idyllic and lacking in self-criticism or knowledge of both the starting point and its weaknesses and threats). This is not the case. The sought after dream will only be possible if it is 'won' based on effort, sacrifices, commitments shared by a society, proud of its identity and differential uniqueness, on which it has been willing to build a significant number of initiatives and projects, giving up many private interests. The connection of chapters 3 ("Bizkaia in 2050: A desired vision") and 7 ("An attainable dream in the light of its protagonists") is clear proof of the work to be done. What we will have done... to get to the expected station is more than a catalogue of good intentions. It is above all a provoked invitation to undertake hard work. It is demanding. It calls for generosity, solidarity and an entrepreneurial spirit and courage. There will be many difficult decisions to be made, debates and dialogues to be generated, new instruments to be reinvented or reimagined, renewed leadership to be facilitated, commitments to be prioritised, troubles and pressures to be endured, as well as risks taken on and errors made.

So near and yet so far. Drawing a distant future while also managing the immediate, the day to day.

Bizkaia 2050 is not only desired but, above all, attainable.

Bilbao-Bizkaia-Basque Country. An exciting, thrilling journey to our own future. Building it however we want and not going to any given future.

**Annex 1:
Bizkaia in 2050 • “A desired vision”
50 References for a journey to the future**

- ❶ The Bilbao Chamber of Commerce, Industry and Navigation was founded in 1856.

Pioneer in these kinds of institutions in the Spanish State, associated since its predecessors' origins with European networks with similar objectives.

- ❷ Bilbao Consulate was established in 1481. Essential precedent of the economic, commercial and internationalisation development of the Bilbao-Bizkaia-Basque Country area that we are dealing with today.
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- ❸ Name used by the author of this book to give shape to the hypothetical explicit formulation of a confederal Governance System between different Chambers of Commerce, Industry and Navigation in the limited scope of the Bay of Bizkaia concept and its extension along the Atlantic front, its extension to the Baltic area and its extension towards other horizons, guarantors of the new interrelated space that configures the desired Bizkaia 2050. For the purposes of this book, the author puts its founding in 2035, promoting the progress needed to reach 2050.
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- ❹ **Bilbao-Bizkaia-Euskadi-Bay of Bizkaia 2050**

Bizkaia 2050 can only be understood as a space that overcomes the current physical, administrative and political limits, conceived as an innovative competitive space that is built day by day by the will of its society, sharing a vocation and project for the future. As will be seen throughout this book, the strength of this Bizkaia 2050 space is understood with a global iconic reference (Bilbao) which is, in turn, fed by much more than its own limited space, largest city in the region of Bizkaia, a relevant part of Euskadi (Basque Country) and its connectivity and sphere related to the entire space described.

Bay of Bizkaia represents a unique and immovable differential both due to its physical-geographical location, as well as its opportunist history over time and, above all, its vocation and purpose for the future.

- ❺ **Exponential Technologies**

As will be explained in the corresponding section, throughout this book, when referring to transformational technologies as a whole (using the terminology of Peter Diamandis), his thinking on exponentially growing technologies “dissolving” barriers to entry as they impact people, their

ways of life, industries and markets. They are characterised by being digitalised, disruptive, demonetised, dematerialised and democratised. From this book's point of view, they will make sense to the extent that they are put at the service of the humanism of progress and the employability, wealth and well-being of people.

6 SARS-CoV-2

The Covid-19 pandemic is given special consideration at the starting point of this analysis. Under the "Pandemic Crash" section, its impact and social consequences are assessed in terms of health, economics and geopolitics. Covid-19, declared a pandemic by the World Health Organization in March 2020, has tragically impacted the world, generating substantial changes in our lives.

7 San Antón Bridge

Forms the coat of arms of La Villa de Bilbao and is considered the starting point of the conversion of the historic town of navigators into La Villa de Bilbao in 1300. The appointment of the historical figure of the "Consuls of Bilbao" is commemorated by this place and it is the meeting point for the official ceremony held by the Bilbao Chamber of Commerce, heir of Bilbao Consulate.

8 Bilbao estuary

Along 14 kilometres between the Puerto Exterior/Abra de Bilbao and the Casco Viejo or Historic Center of the city, it has been the backbone over the years of the economic development of Bizkaia and, to a large extent, of the Basque Country. It is, today, a living testimony of the Basque economy and of the history of its inhabitants, and represents a broad characterisation of the character and strength of its economic, political and trade union history.

9 The reference to an electric vehicle platform will accompany the innovative and transformative idea to autonomous vehicles and platforms, heir of the industrial-maritime capabilities of the Bilbao Estuary, its shipyards and the progressive development of the clusterable footprint of the different industries, skills and culture of this City-Port that represents Bilbao and its hinterland.

10 Petronor

Today part of the Repsol Group, it represents an entrepreneurial initiative from the 60s, creating one of the refineries with the highest productivity worldwide, an inexhaustible source of wealth for Bizkaia, and driving force of the Port of Bilbao and related companies.

11 The European commitment to the green economy in response to climate change and the generation of the NGEU (Next Generation European Union) programme and special funding for projects promoting innovative processes represented a spectacular movement in favour of green hydrogen, an alternative to green hydrocarbons, among other processes. Petronor leads its 'Green Hydrogen Corridor' which, in the first instance, incorporates 70 companies from the Basque Country with a presence in its Value Chain with multiple innovative initiatives.

12 The Meatzaldea Technology Park, promoted by Basque institutions, focuses its commitment (2021) on the green energy of the future. Petronor has located its Expert R&D&i Center there and it is the headquarters of the Energy C.I.C. and different public-private initiatives focused on the broad, innovative world of energy.

13 The vision here assumes that given the Bizkaia-Euskadi strategy in favour of decarbonisation and the commitments for 2050 and the skills, strengths and strategies in this regard, the country space covered here will be declared a "Net Zero Region", leading this movement in Europe.

14 The consideration of the Port of Bilbao as a railport and the associative reconfiguration with other ports aligned in the Bay of Bizkaia New Worlds space would follow a leading vocation in the progressive transformation of the Port, from a privileged position at the forefront of the Atlantic space. A port concept decisively incorporated its rail interconnection and its "organised relocation" in different terminals, dry points and associated services outside the Port.

15 Blue Economy

Terminology in reference to the clustering of economic activity related to water, oceanography, the sea, fishing, marine biology, ports and all kinds of associated activities, configuring a comprehensive map of competitiveness and development.

16 Port-City presupposes the open interaction of the Port with the different spaces of its hinterland in collusion with its populations and environment. The commitment to the regeneration of public spaces for the enjoyment of the population with port activity needs is an international reference model in urban innovation.

17 Arctic Routes

Today, the congestion of the Suez Canal, the constant search for alternatives to the usual routes and navigation, and the 'revolution' in the logis-

tics-productive concept associated with global and regional supply chains, open the debate, exploration of efficient, lower-cost options and the search for new spaces. The already historic routes through the Arctic, the geopolitical-geoeconomic reconfiguration of the future, new technologies, new “autonomous vehicles and vessels”, as well as the effect of climate change itself, could reconfigure new maps in the future. If the circumstances were right, the Bay of Bizkaia and its Port of Bilbao would be an additional opportunity.

18 The area described is a cradle of highly specialised shipbuilding activity. Its continuous innovation, industrial culture, supplier world, training and capacity base constitute a solid pillar to face the future foreseen.

19 Portugalete, a town full of nautical history, is home to the Higher Nautical School which, in line with the strategic commitment that can be seen here and aligned with the transformations of specialised autonomous ships would play a relevant role in the chosen future.

20 The Suspension Bridge or Bizkaia Bridge, a World Heritage Site, is more than an icon. Both banks of the River Nervión have their “last or first” connection point from-to the pass on this historic iron transporter bridge. An irreplaceable bridge of interaction between both banks.

21 La Benedicta is a key reference in the economic history of the Estuary. Its industrial block has been home to key industries, cutting-edge technologies, world-leading companies in their respective niches and, of course, it is a leader in the region’s business and labour culture.

22 The consideration of the Port of Bilbao as a railport and the associative reconfiguration with other ports aligned in the Bay of Bizkaia New Worlds space would follow a leading vocation in the progressive transformation of the Port, from a privileged position at the forefront of the Atlantic space. A port concept decisively incorporated its rail interconnection and its “organised relocation” in different terminals, dry points and associated services outside the Port.

23 Once the heart of shipbuilding in Bizkaia (La Naval, Euskalduna, Celaya, Ruiz de Velasco, Zamacona, Murueta NewCo etc.), as well as the historic iron and steel base reflected in the now defunct Altos Hornos, giving way to the innovative Acería Compacta, world leader in the ‘green’ iron and steel industry from 2025.

24 Interconnecting node of different infrastructure and methods of transport generating a dense mesh that facilitates the need in this space of the region that includes half of the country's population.

25 The intensity of the successive crises and industrial reconversions experienced in this part of the region, with particular impact on the left bank, which was home, mainly, to the bulk of the shipbuilding, iron and steel, and electrical and capital goods industries, left a certain mark on the area, negatively affecting its population. The institutional effort, with pioneering urban planning interventions and actions with the essential weight of the urban plans associated with the European Union, Bilbao Estuary 2000 Society, the municipal commitments and a clear vision of the future, have led to a complete renewal towards a smart and sustainable space with maximum quality of life, which according to the commitment in question, meant that 2050 would culminate with a radical transformation for the benefit of its citizens, with innovative industry coexisting alongside quality of life and the environment.

26 The confederate organisation of the different foral regions that make up the Basque Country in 2021, as well as the uniqueness and variety of the economic fabric, population distribution, land availability, and the political and fiscal co-sovereignty that the inevitable physical supply-demand differences required for the harmonious development of different projects of common interest have over the years until 2050 lead to the creation of a new arrangement, 'Special Districts'. Positioned in a specific regional-administrative framework, they cover the required shared projects (essentially infrastructure: industrial and technological programmes, airports-ports-terminals, energy, specific industrial facilities etc.) that will be provided with frameworks for collaboration, financing, taxation and shared governance. The use of the Economic Agreement system and the successive contribution links between these institutions and state and European administrations will have facilitated its effective development by 2050.

27 BEC – Bilbao Exhibition Center

Modern infrastructure from the beginning of the century anticipating the new trade fair-commercial world, support for the region's industries and essential multipurpose space to complement the required infrastructure. Its international interaction with the global network of associated centers key in the new Bizkaia 2050 space.

28 The Cruces Bio-Health Complex (Gurutzeta) joins the Basurto-Olabeaga Bio Sciences and Health Center to create a 'single district' with special medical, care, educational, research and entrepreneurial interaction for the world of health in 2050. Different public and private universities, companies, clusters, laboratories and health and care centers comprise a hub of extraordinary value.

29 Zorrotzaurre is now an island after its transformation from a rundown peninsula following the exit of leading industrial companies and urban decline. Considered for years as a 'space for the future', its transformation started with the momentum of a Master Plan commissioned from the architect Zaha Hadid, and today, still in development, it represents the basis of an 'island of knowledge' whose projection to 2050 positions this work.

30 The innovative idea of a 'Seasonal Urban Technology Park' led to a rethinking, in its design and progress to date, of the concept of Technology Parks, adapting their potential to the restrictions and opportunities of the available space.

31 Abando-Ybarra is an urban development from the 1990s that makes it possible to 'return the City of Bilbao to its Estuary' and provoke an extraordinary post-crisis transformation, once the activities of the historic Euskalduna shipyard, of old industrial facilities, are closed down, eliminating rail positions, cargo and container terminals and abolishing commercial navigation on the Estuary, and after tackling the cleaning and purification of the Estuary, together with the extension of the Puerto Exterior de Bilbao and the transfer of different activities to the new space.

32 The author positions a potential 'Bizkaia 2050 Lighthouse' at the peak of the 'Isla de Zorrotzaurre' as a symbol of the transforming essence of the new Bizkaia 2050 space. Its configuration, strategic position and expected urban facilities will host a first-rate reference icon.

33 San Mamés

Stadium Headquarters of Athletic Club de Bilbao. Historic team that, to date, plays with exclusively Basque footballers or footballers from 'the Club's youth academy' in their pre-professional stages. As with everything associated with talent attraction and retention, international connectivity, the objectives pursued, its transformation is considered while remaining true to its identity and history, updated for the international context.

34 The Engineering Schools of Bilbao and the University of Deusto are two essential pillars for understanding the development of the region of Bizkaia. Their evolution and progressive transition towards new spaces and modes of growth, education and collaborative associations worldwide will be essential for the new society sought and true to their founding roots and core of the historical evolution of their centers of higher and university education.

35 In this limited urban space on both sides of the Estuary, Bilbao has an essential array of culture, economic, human capital formation and institutional, academic and business interaction, as well as a window of its urban innovation in the 1980-2000 period, which will be the basis of the continuous development of new initiatives, disruptive innovation and mix of uses in urban planning guided by an economic vector dynamizing the prosperity of its city and its inhabitants.

36 Inaugurated in 1997, the Guggenheim Museum Bilbao represented a first-rate strategic commitment, a world pioneer in the field of museums, in the capacity for strategic public-private partnerships in the world of art and culture, and an example of the positive use of culture, architecture and design as a driving force also for urban innovation, education and an inclusive element and promoter of local companies. A living example of the convergence of international, urban planning and inter-institutional, educational, economic and cultural strategies. Gateway to strategic partnerships with the main international culture-economy-education nodes.

37 Guggenheim Urdaibai is today a project considered in the Guggenheim Museum Bilbao Strategic Plan for its 'seasonal' expansion in the Urdaibai region, taking on an innovative project in the world of 21st century art. Redoubling its experience as a driver of regional, artistic, creative and educational innovation.

38 A commitment to recognise and highlight the special differential contribution of women throughout history, from the world of creativity and art. A museum, as a living and active space for the influence of gender on creation in education and women's social, political, scientific and technological transformation on humanity.

39 BBVA (Banco Bilbao Vizcaya) has been a cradle of bankers for the State and the world. Its iconic headquarters on Bilbao's Gran Vía have over time emptied and, today, its 'Torre' has given way to a future International Center of Entrepreneurship that the Foral Council of Bizkaia hopes to turn into a key pillar of generation of companies, talent and wealth.

40 The consideration of the axis of the Estuary towards the Duranguesado area and its connection to Gipuzkoa entails a description of the extended configuration of the concept of the Bay of Bizkaia that this book intends.

The mentioned axis is a natural extension of a space beyond the current physical-administrative limits. Without an open, comprehensive conception such as is proposed here, there would be no Bizkaia 2050.

41 In 2050, it will be an anecdote and a usual way of life. However, as of today in 2021, it becomes the first initiative for a European high-speed train interconnection according to the plans approved by the European Union and the Spanish Government (responsible for its approval and construction as it then had the monopoly of the inter-Community railways in Spain and approved in 1987, guaranteeing the connection with Paris-Madrid, the so-called “Y Vasca” which would also link the capitals (Vitoria-Gasteiz, Bilbao, San Sebastián) as a natural Spain-France route and configuration of the ‘Basque City-Euskal Hiria’), negligence, administrative boycott, opposition to ETA terrorism and the anti-system movement of environmental groups, its 400-kilometre route is still under construction. Today its possible inauguration in 2026 is announced.

In any case, in this book its actual existence on the 2050 horizon considered is incorporated, having contributed in an essential way to the planned connections and the vertebral generation of the space we propose here.

42 Euskal Hiria, as described in the chapter corresponding to our definition of the Bay of Bizkaia Region, supposes a City-Region concept, configurator of the essential core of the Bizkaia 2050 space and platform.

43 Bilbao Metro

Inaugurated in the 1990s, it has been an essential piece of infrastructure in shaping the population’s mobility in what was once ‘Greater Bilbao’. After more than 25 years since the presentation of the initial project and the constitution of a Public Consortium for its construction and exploitation, it was not until 1998 when it was inaugurated in a reduced version (the initial ‘INOT’ project covered 42 kilometres running on both sides of the River Nervión, and it was developed with 9 kilometres on a single line, leaving its expansion open depending on its results, demand and viability). Today, the metropolitan area is inconceivable without it, with its 100 million passengers served and its progressive expansion (now 45.2 km of network in use) and ‘replication’ in other conurbation areas such as Zarautz-Donostia-Irún in an advanced stage of construction. Backbone infrastructure for all rail and tram transport in the City-Region, duly interconnected with the other methods of transport.

44 We use the definition of ‘Intelligent Commercial Center’ to highlight the area called ‘Casco Viejo de Bilbao’, in the city center, which throughout its history (foundation of the city eight centuries ago) constituted the ‘market or commercial center’ of the time. Today, its vitality and high added value reinforces its role, continuously innovating in the concept of local commercial centers and proximity to advanced services for customers and suppliers.

45 Bilbao Zaharra-Bilbao la Vieja, until recently was considered a marginal neighbourhood given the decline and substandard housing resulting from population migrations and the transformation of the city itself. Today, it is being revitalised based on the dynamic vector of attraction of youth, creative activity, innovation of urban spaces and its connectivity with the city. Focus and source of the future for 2050.

46 The Basque Museum, undergoing refurbishment and transforming dynamics in 2021, will have been a true value of the identity and history of the Basque people and their language. The oldest People and Language in Europe, a livinglab of archaeology, ethnography and linguistics with continuous updating and innovation in coexistence with the multicultural melting pot that will have been reconfiguring Basque identity.

47 Bizkaia-Baltic-Atlantic Space already defined, which, conserving their own systems and institutions, configure spaces and initiatives that are shared and that will be endowed with their own rules and governance for the future sought.

48 Governing confederation of the future space planned for 2050.

49 At the time of writing this vision, the Bilbao Chamber of Commerce has a Higher School of Commerce and Business Studies, attached to the University of the Basque Country. The envisaged vision proposes its transformation into an International University, networked, with multiple Universities throughout the Bay of Bizkaia space described here and its interconnection with the rest of the country's universities. After its first steps generating a European educational platform (with its Chambers of Commerce network in the main port, industrial and commercial capitals of Europe) with particular emphasis on promoting and founding in the Bi Bi Bizkaia space and later expanded with other institutions throughout the space of the future Bay of Bizkaia, a worldwide network with its own curriculums and degrees, it is a leading benchmark in the academic world of 2050.

50 As described in the corresponding chapter of this book, the regional concept that Bizkaia 2050 entails will form a space with 33 innovative and collaborative platforms worldwide.

Annex 2: Contrast Group

One of the essential keys to creating this book has without a doubt been the contribution of what from the very start I understood to be essential: my personal conversations with a “Contrast Group”.

Choosing a limited number of figures to turn to is always a complicated matter, since choosing means including some and leaving many other people outside the formal framework of this group. It could without a doubt have included many other people who would have enriched the contents of the book by contributing their extensive experience and multiple differentiated visions. Each and every one of them, those who were in the end part of this Group and those who were not ‘formally’ in it, would be unique authors of their own books. However, they would be ‘other books’.

I turned to the generosity of these people whom I invited to talk with some brief notes that I provided to guide what I wanted to exchange with each of them. Friendly, open, fresh and unreserved conversations between friends who have made a convergent journey over the years, united by commitment, affection and best wishes, concerned for the best future of our country. We have coincided on multiple initiatives, shared, debated and, of course, disagreed, throughout our personal lives and careers. In truth, I consider them to be people with a great capacity for analysis, foresight and commitment, excited by this country and its people. Their contributions are of great value and I have considered them, whether for explicit use, or to compare or disagree, in this final process.

All of them, with different successful careers that accredit them, without any reservation, to envision a future suitable for the project chosen. People from whom I have always learned (and hope to continue doing so).

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Anex 5: Notes

Page 7

1- Bizkaia 2050: Bilbao-Bizkaia-Basque Country Is an indissoluble base unit. Throughout this book, we will use various “denominations”, that respond to a shareable identity. The policies, strategies and political actions of each of the pieces that make up this city- region (in classical terminology), address the set of interventions from its origins until today.

Page 11

2- Peter H. Diamandis. How to go Big, create Wealth and Impact the world

Page 34

3- Group of 16. Nucleus of the founding States of the C.E.C.A. And the European Economic Community, existing at the time after successive entries with that of Denmark, Ireland, United Kingdom and Greece. Spain would be admitted in 1986

Page 39

4- Various internationally renowned institutions have created multiple reports and studies that include in the “Basque Case”, in reference to its various economic development strategies (used as a base for the compared study in industrial policy matters, urban recovery, sustainable human development, innovation, linguistic recovery and normalisation, confederate political organisation and public financing.

5- World Economic Forum. Determinants for Citi-Region Competitiveness. The Bilbao-Basque Country Case.

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6- The aforementioned model and concept, apart from the geolocation of the Bay of Bizkaia, generating an open area connected with close near neighbours and in relation to their presence throughout the world.

Page 46

7- On the occasion of the participation of Bilbao, as a City – Region invited to the Shanghai Expo (2010, Bilbao-Bizkaia (Bilbao Regional Government and the Bizkaia Foral Regional Government), with the support of the Metr poli Foundation, they presented Bilbao 25+, bringing together 25 key projects in its transformation, using + as “ the ongoing process, to which many other projects would be added in time, and many of which are already underway.

Page 53

8- “Long-term regional strategy for inclusive competitiveness: The Basque Country case, 2008 – 2020”.

Orkestra-IVC 2021/05 • Mari Jose Aranguren, Mikel Navarro, James Ralph Wilson, Edurne Magro, Patricia Canto, Jes s Mar a Valdaliso

Page 57

9- “Michael E. Porter. Harvard Business School Investigated clustering and competitive strategies. Years later, prior to the publication of his well-known book: “The competitive Advantage of Nations”, Euskadi was the first region – nation within the world to apply a complete strategy based on these concepts.

Page 87

10- Title of a Basque Government Report presented to Parliament (September 2021), which although it referred to the slowing down of, and/or non-compliance with, the Statute of Autonomy of the Basque Country, could be applied to the set of strategies, attitudes and collective behaviour by all actors in Basque society as a whole.

Page 88

11- Law of Contributions. The Economic Agreement system is strengthened by an internal framework that regulates economic-financial relations between the Basque Government and the Foral Councils (and the financial supervision of the municipalities by the latter) in such a way that resources are allocated to meet the different obligations and competences, as well as the contributions of each territory to the Basque Government to meet the “COMMON” competences.

Page 89

12- The introduction to the plan includes a quote from economist Mariana Mazzucato in this regard: “The crisis has also created a huge opportunity to pursue industrial policies beyond traditional sectoral and technological silos, and to restore mission-driven governance in the public interest”.

Page 93

13- Bilbao Chamber of Commerce-Enovatinglab. Surveys and Interviews underpinning the Bizkaia 2050 project (June 2020-September 2021). Co-ordination: Lázaro Echeagaray.

14- Contrast Interviews Bizkaia 2050.

Jon Azua and 25 well-known people from the social, economic, cultural and institutional spheres with broad experience and knowledge of the country, and of international trends and movements.

Page 96

15- Contrast Conversations (Jon Azua)

16- Davos. Youth Recovery Plan. Insight Report. August 2021 (WEF)

Page 100

17- The focus of the research/survey carried out, its analysis and key conclusions are included in the Report: General Conclusions. Results of the Survey Process.

Lázaro Echeagaray. Bilbao, July 2021

Page 107

18- Contrast Conversations.

Personal interviews held by the author, Jon Azua, with the people indicated in the specific table. The interviews were held between February 15 and September 24, 2021

19- The Chatman House Rule

Page 110

20- Basque Case

Investigation project. IVC-ORKESTRA 2021

Page 111

21- Abundance vs. Scarcity

Page 114

22- World Population Prospects 2019. UN

23- EUSTAT. Demographic Panorama 2018

Page 115

24- NSI 2019-2020. Demographic estimates

25- EUSTAT. Demographic Panorama 2018

Page 117

26- Stanford Social Innovation. Profitable migration

27- Global Migration. Expected flows throughout the world (United Nations)

Page 118

28- "The Youth Talent Clusters" Future Map.

Page 124

29- The Silver Economy

30- NIC. Nagusi Intelligent Center

Page 130

31- www.shell.com/transformationscenarios#shellscenarios

32- BCG: Levers to abate supply-chain emissions

33- Mckinsey. GHG and less technological available and EIA AEO Analysis-Mckinsey

34- IEA-2015. Energy efficiency improvement

Page 137

35- Ray Kurzweil – “The new Moore`s law”

36- Peter Diamandis: “GD`s for the Abundance Digital Online Community”

Page 141

37- Trade Tech (World Economic Forum 2020 Global survey)

Page 146

38- Finance and Development (International Monetary Fund, July 2021)

Page 148

39- Artificial Intelligence Superpowers: Kai-Fu Lee 2018-AI Super Powers

Page 150

40- SuBoston Review Forum + AI + Shared Prosperity Initiative

41- Why nations fail. MIT. AI and Social Dilemma

Page 152

42- Black, Indigenous, People other color

Page 164

43- Shared Value Initiative. How to co-create value between companies and society

Page 179

44- Euskal Hiria. Concept of Basque City Region.

Page 182

45- Fundación Metr poli. New Smart Regions (August 2021)

Page 183

46- Cities Project. Initiative: “advisor and transformer of cities with innovative vocation that meets (and brings together) a significant number of personalities from architecture, economy, culture and the social sciences in the redefinition and reinvention of cities” (www.fmetropoli.org)

Page 184

47- A registered concept (by JA-Enovatingla) based on the interaction of the K of Knowledge which is extended to other essential elements in the configuration of co-opetitive spaces, superior to the “globalisation” concept that appeared to exclude the determining local effect.

Page 189

48- GLOKAL. Concept defined and registered by the author (2003) in his book “Clusterize and Glokalize the economy”. It includes the critical elements around the K (Knowledge) that builds a global development model with special value and relevance to the local contribution.

Page 193

49- Since 2011, with variations over time, the EU has promoted an S3 platform (Smart Specialization Strategies) as a facilitator for regions and Member States, both to encourage regions to carry out a diagnosis and potential specialization and differentiation in its regional development strategies, and as a source for channeling aid and public resources for its implementation.

50- MN. Cross-border Regional Collaboration and RIS3. Live RIS3 project.

Page 205

51- Peter Frankopan. Will the EU be excluded from the new Silk Roads?

Page 208

52- Statute of Autonomy for the Basque Country.

Approved and in force since 1979 and known as the Gernika Statute.

Page 211

53- Building spaces to win the future. Angélica Rodríguez García-Enovatinglab.

Page 215

54- Instrument used for the World Economic Forum and its Network of Global Experts, interacting to solve the “global risks” on which they base their Agenda for progress and transformation. The rich exchange between members of industries, companies, governments, institutions, academia and international organizations generates dynamic collaborative networks, providing opinions, reports, publications, resources of extraordinary conceptual value and participatory methodology.
(www.intelligence-werforum.org)

55- Created by Jon Azua – World Economic Forum. (Bio Bi Eus prosperity briefing. January 2021)

Page 248

56- Douglas. Origin and History of Basque migrations to America

Anex 6: Figures and Schemes of the booklet

Page 1

BIZKAIA 2050: “a desired vision” 50 references for a trip to the future

Page 2

Graphic that sets out the 8 components of EUSKADI NEXT with the 30 elements of the PRTR

Page 3

The total investment covered in Euskadi Next

Page 4

EUSKADI NEXT 2.0 COMPONENTS
(Total Investment: 18.2866 Million Euros)

Page 5

Projects underway. Update on the BASIS OF FUNDS from Europe

Page 6

Responding to expected change?
What do young people look for and expect from others?

Page 7

KEY AIMS FOR ACHIEVING THE 12 COMMITMENTS from the declaration commemorating the 75th Anniversary of the United Nations

Page 8

towards BIZKAIA 2050. A scenario to aim for. Expert and forthcoming contrast

Pages 9 and 10

Competitive Diamond for the Basque Country

Page 11

responding to EXPECTED CHANGE?

Page 12

Presence, observation, learning, exchange concentrating priorities, extensión, progressión.
Building the future. Choosing cds - regoú “co-management networks”

Page 13

So if we’re able to include it in our aim for prosperity?

Page 14

BIZKAIA 2050: a new competitive space in solidarity for prosperity and inclusive development

Page 15

“Critical agendas” on which Bizkaia 2050 will have had to position itself, define itself and program itself.

Anex 7:
Team of partners

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General Secretary and Project coordination

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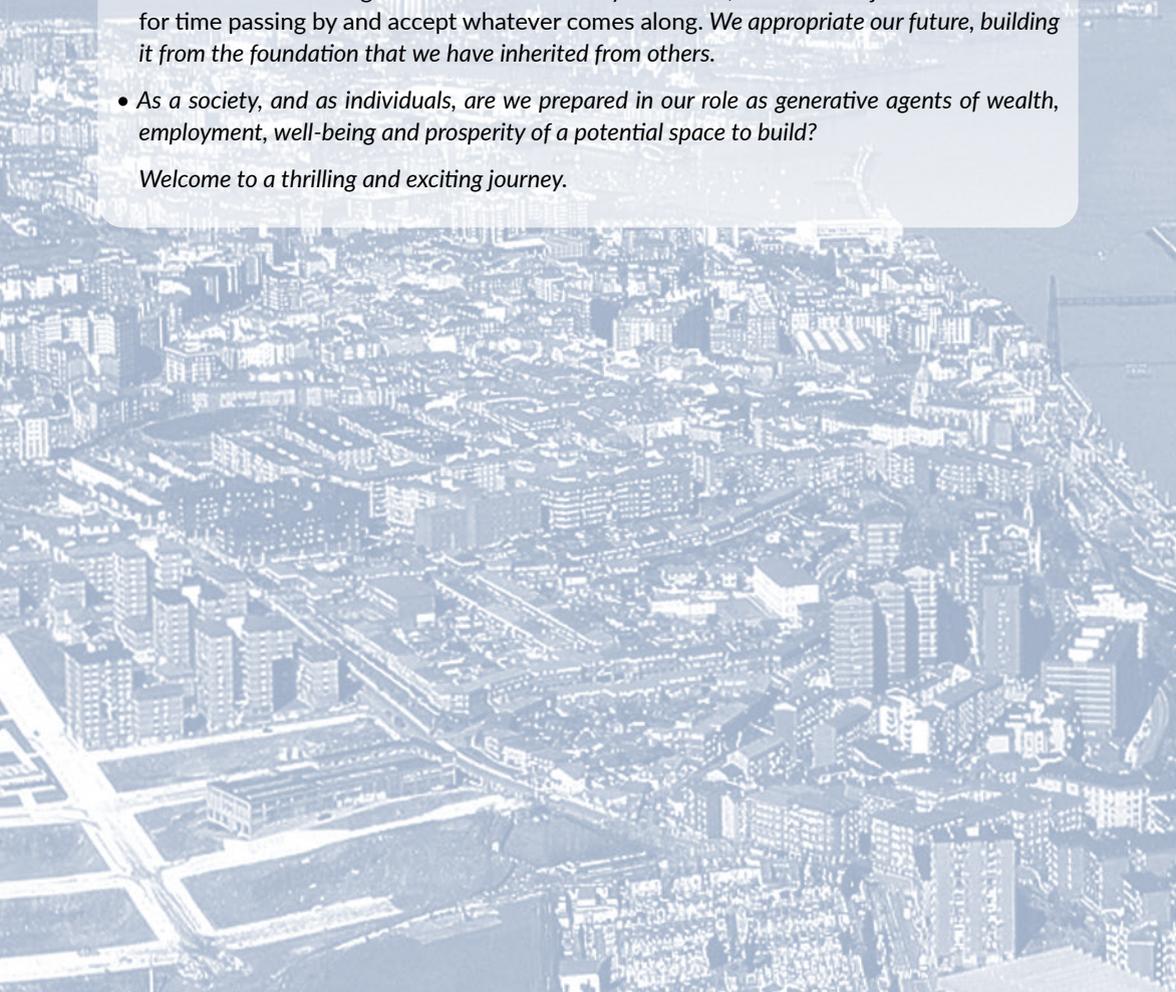
D.L.: BI-00517-2022

Print
Garcinuño Comunicación Gráfica

Cover photo
Mikel Arrazola. Irekia

- **Bilbao-Bizkaia-Basque Country** entails the minimum basis for starting to build the Bizkaia of 2050 as an exciting project that answers a key question: *What would it take for someone to choose and carry out their professional and life project in the Bizkaia of tomorrow?*
- *What will we have done between TODAY and 2050 to reach the ideal society that we imagine, and claim to be possible?*
- *The choice of the iconic Bay of Biscay image makes this provocative attempt for the future possible. A historic connection with an inherited and strengthened, innovative spirit over time, which structures an imaginative narrative that is confronted with the observable reality. An exploration of trends and challenges of the future from a perspective of opportunities, and waves of achievable success. To build a new footprint for the future, as an important node and the main theme of knowledge networks, innovation, venture, and inclusive prosperity throughout the world.*
- *Bizkaia 2050: Bilbao-Bizkaia-Basque Country is a proposal for reflection for the demanding, challenging and possible supportive commitment between generations. It is also a provocation to support and to make decisions, to take on risks and to start real revolutions, disruptive changes and uneasy transformations. Most of all, it is a song of hope and motivation for young generations for them to believe and trust in themselves, in what is to come (and what they can bring). It is also to strengthen expectations (and possibilities), so that intermediate generations will live 50 years more, and will not just have to settle for time passing by and accept whatever comes along. We appropriate our future, building it from the foundation that we have inherited from others.*
- *As a society, and as individuals, are we prepared in our role as generative agents of wealth, employment, well-being and prosperity of a potential space to build?*

Welcome to a thrilling and exciting journey.





The **Bilbao Chamber of Commerce** was founded in 1886 and, as can be deduced from its founding documents, its objective was to work towards the economic modernisation of the Biscay province with a focus on the national and international markets.

A successor to the Bilbao Consulate, the Chamber of Commerce has shown an outstanding ability to adapt throughout its history.

Its promotion of the local territory and of Bilbao as a modern city has led the way for local companies and entrepreneurs. Far from being anchored in the past, the Bilbao Chamber of Commerce has faced its future with the conviction that is required to take on new challenges:

The **Bilbao Chamber of Commerce** is a privately-managed public law corporation whose mission is to:

- represent, promote and defend the general interests of commerce, industry, services and the maritime sector
- provide services to companies
- conduct as many activities as are required to boost Biscay's economy.

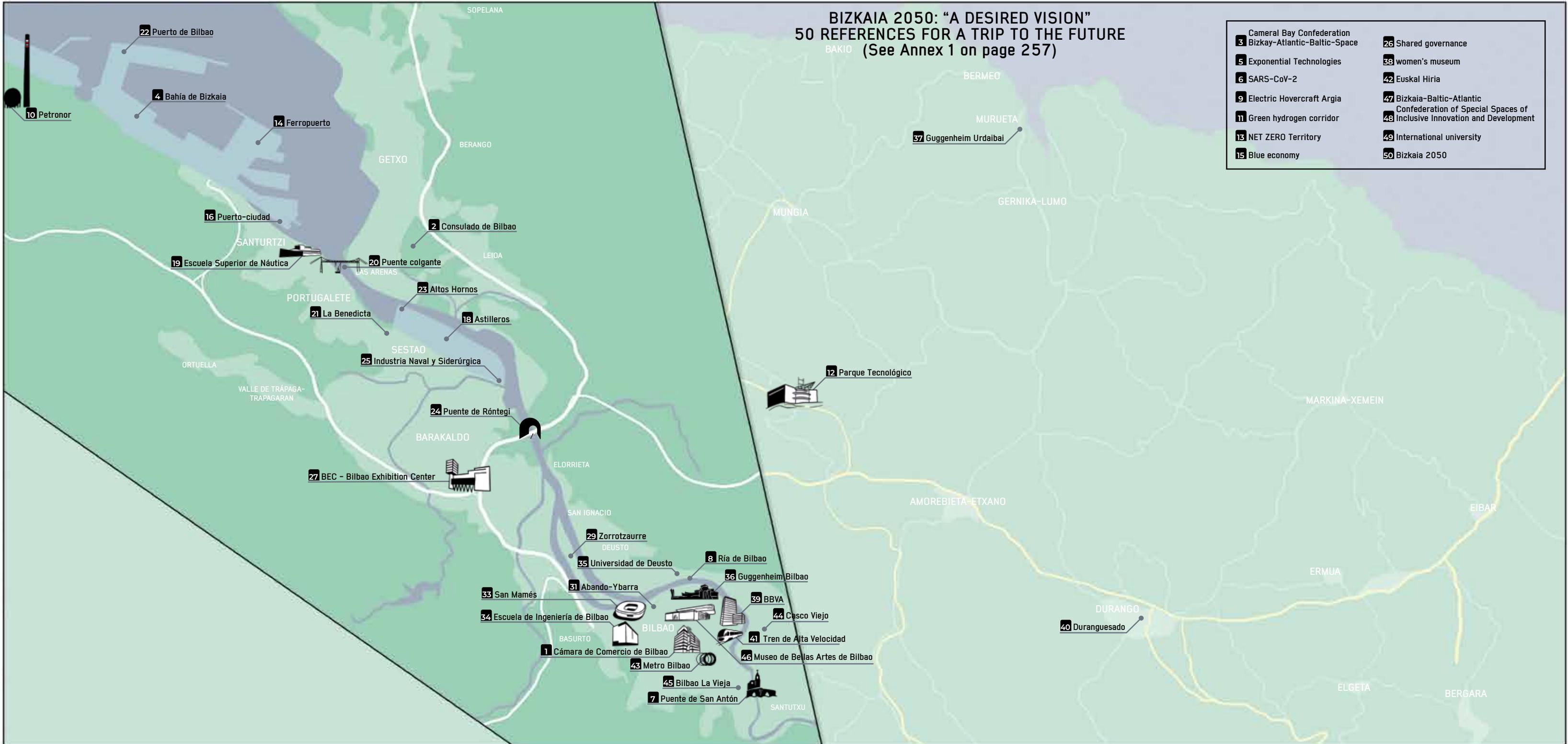
The Chamber of Commerce is a body that consults and collaborates with the Public Administrations before which it represents the general interests of Bilbao's companies. Given the social and economic importance of its mission, the Law states that all companies must be automatically included in its register. In order to promote active participation in those institutions whose scope of management coincides with the general interests of the Chamber of Commerce, the Chamber participates in various representative bodies.

BIZKAIA 2050: "A DESIRED VISION"

50 REFERENCES FOR A TRIP TO THE FUTURE

(See Annex 1 on page 257)

- | | |
|-----------------------------|---------------------------------------|
| 3 Cameral Bay Confederation | 26 Shared governance |
| 5 Exponential Technologies | 38 women's museum |
| 6 SARS-CoV-2 | 42 Euskal Hiria |
| 9 Electric Hovercraft Argia | 47 Bizkaia-Baltic-Atlantic |
| 11 Green hydrogen corridor | 48 Confederation of Special Spaces of |
| 13 NET ZERO Territory | 49 International university |
| 15 Blue economy | 50 Bizkaia 2050 |



EUSKADI NEXT

Basque Country Programme for Recovery and Resilience

A Health and care services

B Lifetime learning

C Generation of renewable energy

D Sustainable mobility

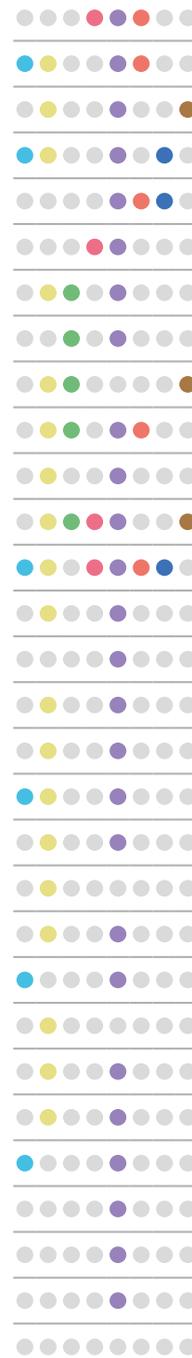
E Digitalisation and innovation

F Urban habitat

G The natural habitat and the prevention of natural disasters

H Circular economy

A B C D E F G H



ESPAÑA PUEDE

Plan for Recovery, Transformation and Resilience

- 01 Urgent scheme for sustainable mobility that is safe and interconnected in urban and metropolitan settings
- 02 Housing and urban regeneration plan
- 03 Transformation and computerisation of the agro-foodstuffs and fisheries logistics chain
- 04 Conservation and restoration of areas with their biodiversity
- 05 Preservation of the coastal zone and its water resources
- 06 Safe and inter-connected, sustainable mobility
- 07 Large-scale introduction of renewables intended to develop energy sources
- 08 Electrical infrastructure, the development of intelligent grids and the introduction of flexibility and storage
- 09 Road-map for renewable hydrogen and its sectoral integration
- 10 A fair Transition Strategy
- 11 Updating of public administration
- 12 Spain 2030 Industrial Policy
- 13 Encouragement of SMEs
- 14 Plan for updating and developing the competitiveness of the tourism industry
- 15 Digital connectivity, promotion and introduction of cyber-security
- 16 National Artificial Intelligence Strategy
- 17 Institutional reform and build-up of the capabilities of the national science, technology and innovation system
- 18 Renovation and extension of the capabilities of the National Health System
- 19 National plan for digital skills
- 20 Strategic plan for encouraging Professional Training
- 21 Updating and computerisation of the education system, including that for under 3s
- 22 Urgent scheme for the care economy and the strengthening of equality and inclusion policies
- 23 New public policies for a dynamic labour market that is resilient and inclusive
- 24 Upgrading of the cultural industry
- 25 Spain Audiovisual Hub (including video-games sector)
- 26 Promotion of the sport sector
- 27 Law for the prevention and prosecution of tax fraud
- 28 Adapting of the taxation system to the reality of the XXIst Century
- 29 Improvements to the effectiveness of public spending
- 30 Sustainability of the government pension scheme under the terms of the Toledo Agreement

Private projects

M€

Brain Mirroring Center (BMC)-Aetereal Ments S.A.	530,7
Renewal of cogeneration and use of renewables - Cemosa	6,0
Transformation of the TMP (Thermo Mechanical Pulp) a production process toBCTM (Bleached Chemi-Thermo Mechanical Pulp) - Zubialde	6,0
Improvement to the processes employed to increase productivity, energy efficiency and reduce environmental impact -Smurfn Kappa Nervión	20,1
Alcaline Electrolysers / PEM - Sener	120,0
Automatic selection of pieces using integrated artificial vision in the processes - Elay	95,0
Automatic selection of pieces using integrated artificial vision in the processes Chain Plate	2,0
Production of small, light chain links for vehicle transmissions with automatic gearbox - Elay	4,0
Application of heat to material to permit production with high mechanical resistance materials Heatform - Elay	320,0
Circular Economy and Sustainability - MCC	636,9
Digital business supported by Artificial Intelligence	570,8
Training, health and demographic challenge projects - KONFEKOOP	6,5
Creation of new cooperatives - KONFEKOOP	24,0
Wave power - Iberdrola	8,0
Infrastructure for connection to the electrical grid at Bilbao and Pasaia ports - Iberdrola	28,5
Electrification of urban bus fleet - Iberdrola	326,0
Bilbao Port Authority Infrastructure - APB	133,6
"Programme for the introduction of a National Youth Insertion System Objective 100,000 young people" - OECD and Fundación Novia Salcedo	731,0
E3L - EUSKADI LIFE LONG LEARNING - Universidad de Deusto	14,7
GIZEiA - Gizarte Eraldaketarako Campusak - Universidad of Deusto	9,4
SINCE - inStitutions IN Climate Emergency - Universidad de Deusto	8,4
R3-Manufacturing Next Generation - APM - Advanced and Computerised Manufacture Cluster	245,0

Among the regional "PERTE Regionales" in Euskadi the following will be included

- PERTE Regional 1 > Longevity, wellness and resilience
- PERTE Regional 2 > Intelligent distribution networks (water, gas and electricity)
- PERTE Regional 3 > Wave-based, renewable energy
- PERTE Regional 4 > Scientific and technological training
- PERTE Regional 5 > Big Data, Cloud, Artificial Intelligence and Cibersecurity
- PERTE Regional 6 > Euskadi Creative
- PERTE Regional 7 > Sustainable cities
- PERTE Regional 8 > Resilience to climate change, ecosystems and biodiversity

Distribution by components

The total investment covered by Euskadi Next amounts to 18.2866 billion Euros, per the distribution by the elements shown in the following table.

This is the total investment with which it is hoped to leverage funds from the Recovery and Resilience Mechanism (MPR). The financing from the MPR will vary on the basis of the level of government support for which the various projects can opt which in turn depends on the nature of the investments and the Public-Private arrangements on which the various initiatives are based. At the moment, the potential for co-financing is unknown for the PERTE, which also makes it difficult to establish the level of government support required for the projects that are encompassed by this arrangement.

Total investment committed by means of public tenders and auctions

COMPONENT	TOTAL INVESTMENT (M€)
Health and care services	284,5
Lifetime learning	747,8
Renewable energy generation	699,8
Sustainable mobility	1.391,4
Computerisation and innovation	1.316,4
Urban habitat	1.306,5
Natural hábitat and the prevention of natural disasters	976,2
Circular economy	79,9
TOTAL TENDERS AND AUCTIONS	6.802,5

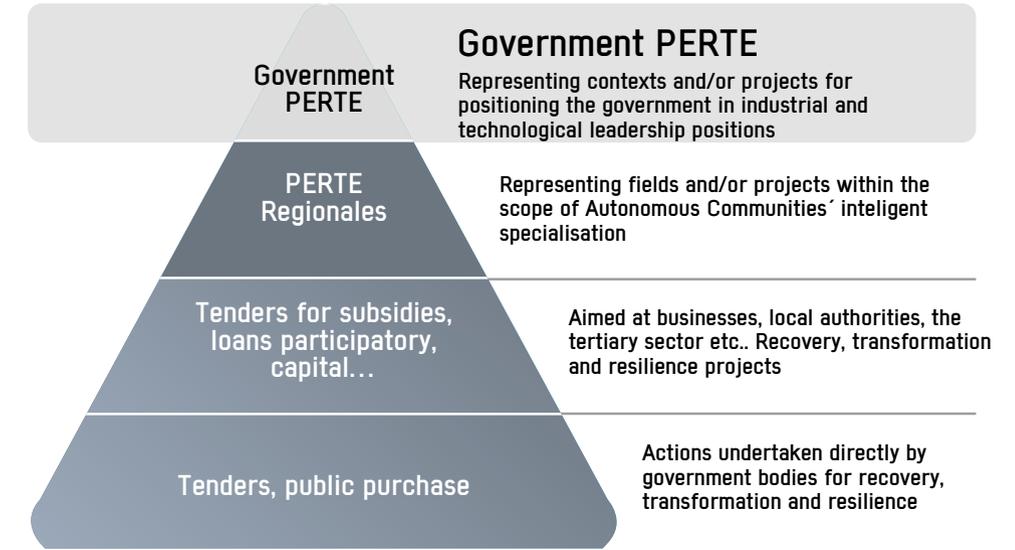
Total investment by components of Euskadi Next

COMPONENTE	TOTAL INVESTMENT (M€)	%
Health and care services	1.683,6	9,2%
Lifetime learning	747,8	4,1%
Renewable energy generation	2.852,4	15,6%
Sustainable mobility	3.315,7	18,1%
Computerisation and innovation	3.684,0	20,2%
Urban habitat	2.993,9	16,4%
Nat. Habitat/ prve. Nat. disaster	1.359,6	7,4%
Circular economy	1.649,6	9,0%
TOTAL EUSKADI NEXT 2.0	18.286,6	100%

Distribution of Euskadi Next investment by area

DISTRICT	TOTAL INVESTMENT (M€)
CAE (no breakdown)	59%
Araba	11%
Bizkaia	18%
Gipuzkoa	12%
TOTAL	100%

The total investment covered in Euskadi Next amounts to 18.286,6 M€



Graphic showing the 8 components with the 7 strategic areas of the RIS3



Relationship between components of Euskadi Next and regional PERTES

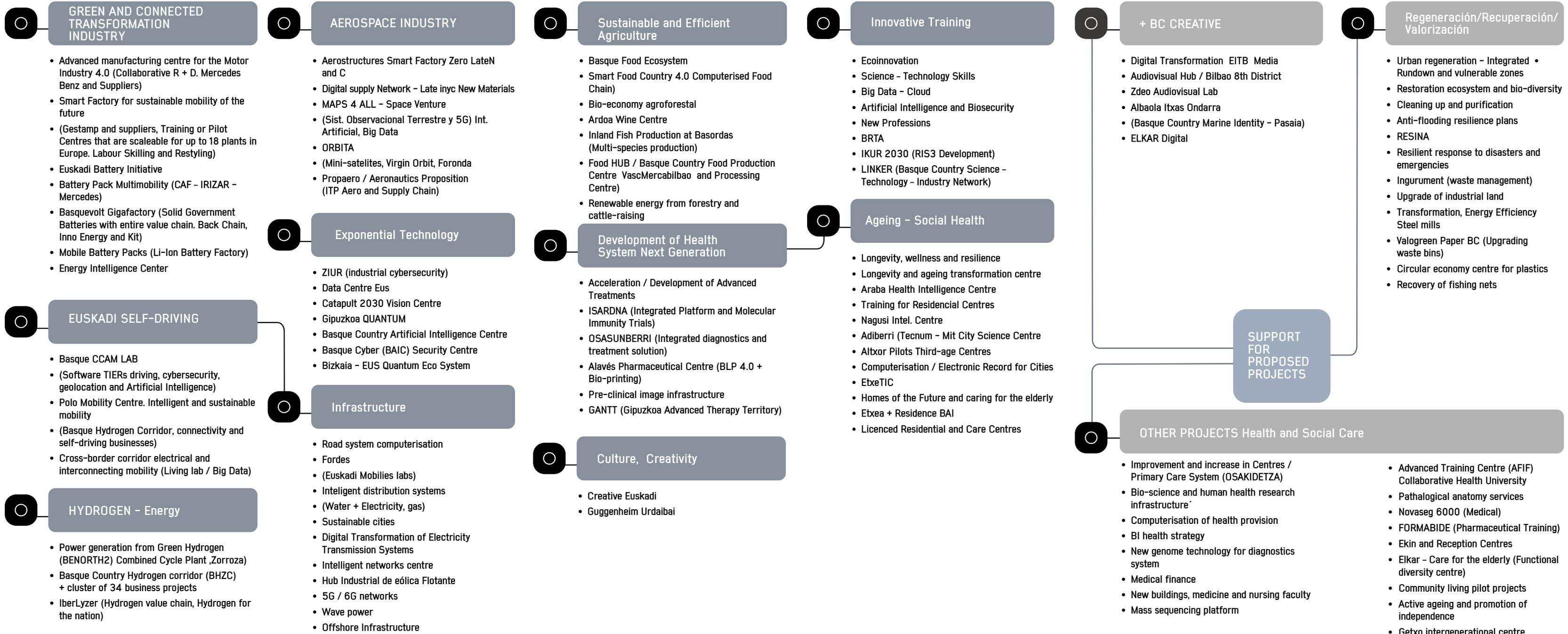


Relationship between components of Euskadi Next and Government PERTE

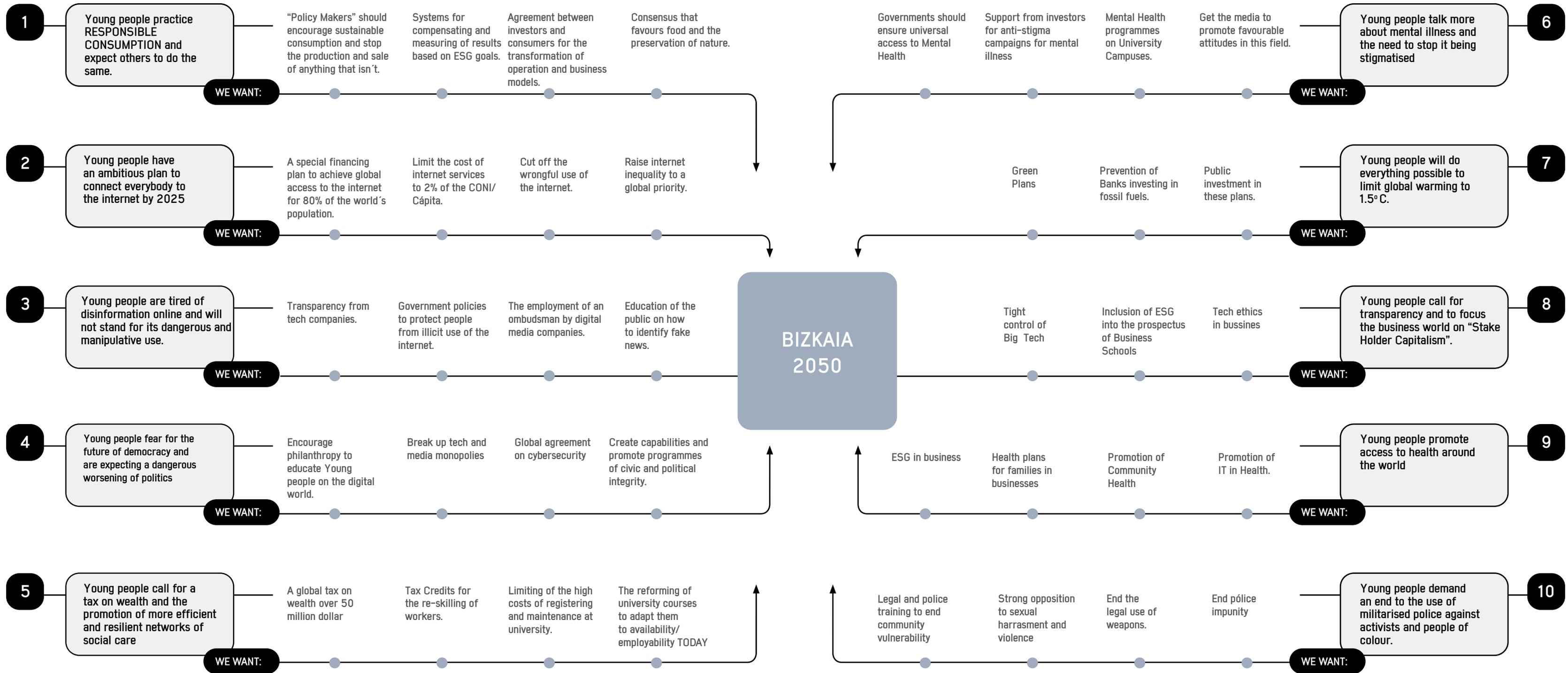


EUSKADI NEXT 2.0 COMPONENTS (TOTAL INVESTMENT: 18.2866 MILLION EUROS)

		Health and social care	Lifetime learning	Renewable energy generation	Sustainable Mobility	Computerisation and innovation	Urban Habitat	Natural hábitat and prevention of natural disasters	Circular economy
		DISTRIBUTION OF THE INVESTMENT BY EUSKADI NEXT 2.0 COMPONENT							
ALIGNMENT OF RESOURCES, MAP OF PROJECTS AND INITIATIVES AND THEIR RELATIONSHIP WITH EUSKADI NEXT 2.0 COMPONENTS		9,2%	4,1%	15,6%	18,1%	20,2%	16,4%	7,4%	9,0%
RIS3 EUSKADI	Intelligent industry								
	Cleaner energy								
	Customised health								
	Healthy eating								
	Ecoinnovation								
	Sustainable cities								
	Creative Euskadi								
REGIONAL PERTE	Longevity, wellness and resilience								
	Intelligent distribution networks (water, gas and electricity)								
	Wave-power, renewable energy								
	Scientific and technological qualification								
	Big data, Cloud, Artificial Inteligence and Cybersecurity								
	Creative Euskadi								
	Sustainable cities								
	Resilience to climate change, ecosystems and bio-diversity								
Ecoinnovation and the circular economy									
STATAL PERTE	Development of a leading-edge health system								
	Power generation using green hydrogen								
	The green and connected motor industry								
	The aerospace industry								
	Sustainable and efficient agriculture								
ESPAÑA PUEDE	Urban and rural agenda, combating depopulation and agricultural development								
	Urban and rural agenda, combating depopulation and the and agricultural development								
	Fair and inclusive energy transition								
	An administration for the XXI century								
	Updating and computerisation of the industrial fabric and SMEs, recovery of tourism and the promotion of an entrepreneurial Spain								
	A consensus for Science and innovation. Strengthening the capabilities of the National Health Service								
	Education and expertise, ongoing training and the development of skills								
	New caring economy and employment policies								
Promoting the culture and sport industries									



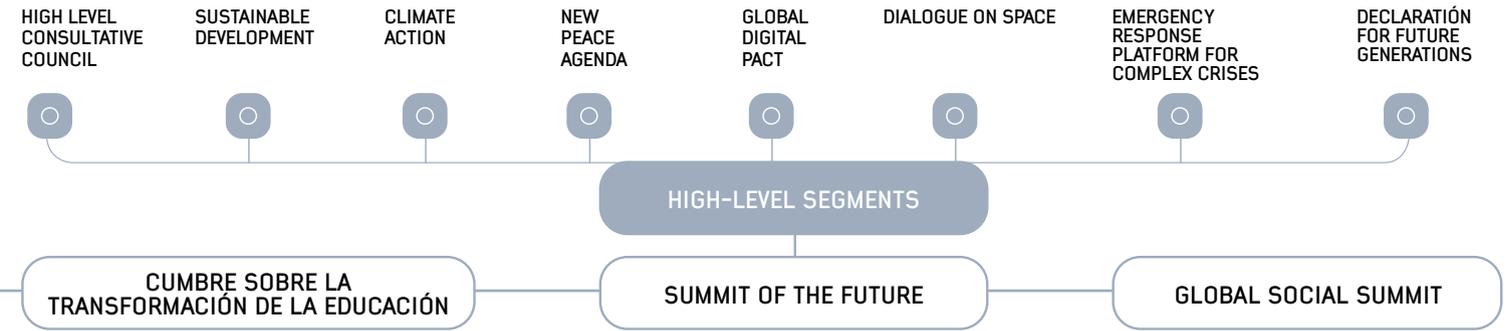
RESPONDING TO EXPECTED CHANGE? WHAT DO YOUNG PEOPLE LOOK FOR AND EXPECT FROM OTHERS?



KEY AIMS FOR ACHIEVING THE 12 COMMITMENTS from the declaration commemorating the 75th Anniversary of the United Nations

All of the actions proposed are in line with the Sustainable Development Goals and are designed to accelerate their realisation

PROPOSED KEY MOMENTS



1 Leave no-one behind

- Renewed social contract centred around human rights
- New age of universal social protection, including health care and the security of a basic income for the 4 billion people without protection
- Boost the availability of adequate housing, education and life-long learning and decent jobs
- Digital inclusivity
- Global Social Summit in 2026
- Seek complementary GDP

2 Protect the planet

- Meeting of leaders in view of the 2023 review
- Commitment to achieve the goal of 1.5 degrees Celsius and net zero emissions by 2050 at the latest
- Climate emergency declarations and the right to a healthy environment
- Support package for developing countries
- Adaptation and resilience measures
- No extraction of carbon after 2021 and the gradual reduction of subsidies for fossil fuels
- Taking the environment into account in economic models, mechanisms for the setting of prices of carbon and realistic commitments from financial institutions
- Framework of biological diversity subsequent to 2020
- Transformation of food production systems so that they are sustainable and fair
- Measures from the General Assembly on territorial threats from climate change and for prevention, protection and solutions in situations of environmental displacements

3 Promote peace and prevent conflict

New peace agenda to:

- Reduce strategic risks (cyberwarfare weapons, independent weapons systems)
- Strengthen international forecasts
- Redraft responses to all forms of violence
- Invest in the prevention of conflict and strengthen peace, including the Peace Consolidation Fund and the Commission for the Consolidation of Peace
- Support regional conflict prevention actions
- Focus security policies on women and girls
- Safe and sustainable use of space, including by means of a multipartite dialogue on the use of space

4 Comply with international law and ensure justice for all

- Human Rights as a means of resolving problems, including by means of broad laws against discrimination and promoting participation
- Application of Human Rights in the digital field to cutting edge matters and new technology
- Universal access to the internet as a human right
- Human Rights mechanisms with a more sustainable financial base
- Legal identity for all people, an end to statelessness and protection of the internally displaced, refugees and migrants
- A new conception of the rule of law
- Global road-map for the development and effective application of international law

5 Focus on women and girls

- Abolish the laws that result in gender discrimination
- Promote gender equality by means of quotas and special measures
- Facilitate financial inclusion for women, including by means of investment in the care economy and support for female-led business
- Take the opinions of younger females into account
- Eliminate violence against women and girls, including by means of an emergency response plan

6 Promote trust

- Global code of conduct that promotes integrity in public information
- Improve the experience of people with public bodies and basic services
- Inclusive national actions to listen to public opinions and 'imagine the future'
- Anti-corruption measures in line with the United Nations Convention on Corruption
- Reform of the international tax system
- Joint structure on financial integrity and combat of illicit financial flows

7 Improve digital cooperation

- A global digital consensus to:
 - Connect everyone to the internet, including all schools
 - Prevent the fragmentation of the internet
 - Protection of data
 - Apply Human Rights in the digital world
 - Introduce criteria for reporting discrimination and misleading content
 - Promote the regulation of Artificial Intelligence
 - The digital world as a global public resource

8 Modernisation of the United Nations

- High level Consultative Committee on the protection of common resources and the provision of global public resources lead by Heads of State and Government
- A policy for the entire system based on people, taking into account gender and diversity
- Listen, take part and consult more (including online) on the 75th Anniversary Declaration
- Gender equality in the United Nations system by 2028
- Re-establish the Secretary General's Scientific Advisory Council
- 'Quintet for change' for United Nations 2.0, including: innovation, data, strategic forecasting, results orientation and behavioural sciences

9 Ensure sustainable financing

- Summit of the G20, the Economic and Social Council, the General Secretary and the leadership of international, financial institutions to achieve a sustainable, inclusive and resilient world economy, to which end:
 - Support for stimuli in the Sustainable Development Goals, including by means of an Alliance for the final stretch that will allow access to those left furthest behind
 - Provide more flexible incentives to research and development
 - Put right the deficiencies in the architecture of debt
 - A fairer and more resilient multi-lateral trading system, including the revival of the WTO
- New business models
- Improve United Nations budgeting procedures

10 Encourage alliances

- Annual meetings between the United Nations and the leaders of regional organisations
- Better interaction between the United Nations system, international financial institutions and regional development banks
- More systematic interaction with parliaments, subnational authorities and the private sector
- Local civil society points in all United Nations entities
- The United Nations Office for Collaborating Associations will ensure the consolidation of access and inclusion, including digital accessibility

11 Listen to Young people and work with them

Youth

- Remove barriers to political participation and measure advances through an 'index for youth in politics'
- United Nations Office for Youth
- Summit on the Transformation of Education in 2022
- Recovery barometer to track the recovery of professional development and access for youth to the labour market
- A highly ambitious coalition to promote the creation of Green Jobs and Jobs in the digital economy

Future Generations

- Summit for the Future in 2023
- Ensure the long-term mentality, including through a United Nations Laboratory of the Future
- Represent future generations by reusing the Trusteeship Administration Council, drafting a Declaration on Future Generations and creating the post of United Nations Special Envoy for Future Generations

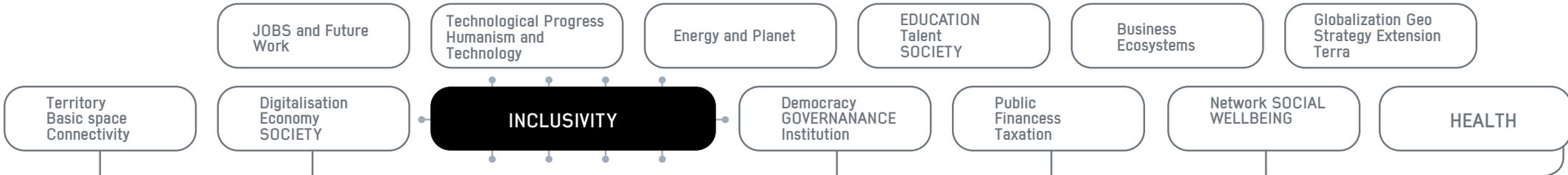
12 Be prepared

- An Emergency Platform will be organised to respond to complex global crises
- Every 5 years the United Nations will publish a strategic forecast and global risks report
- Global public health:
 - Global vaccination plan
 - Empowering of the WHO
 - Greater security and preparation on world health
- Speed up the development of products and access to health technology in low- and medium-income nations
- Achieve universal health cover and cover the deciding factors in health

Structural forces that will redraw the FUTURE

DEMOCRACY

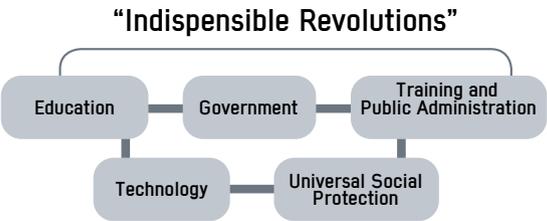
- Populations, N Generations
- Ageing
- Migration
- Birth-rate



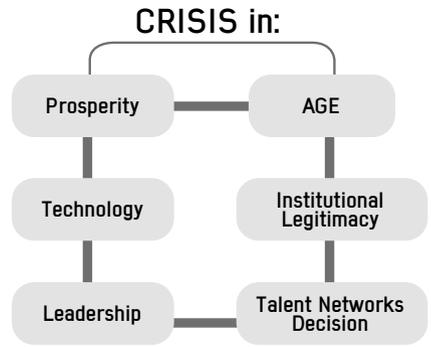
- Demography
- Environment - Energy
- Economy - Society
- Technology

SOCIAL DYNAMICS SOC ATTITUDES. BIZKAIA 2050

- The world of micro-states / Minor Units (Alliances)
- Shared values, New spaces
- Installing ourselves in Innovation and Well-being
- Inclusive Human Development
- Technology at the Service of SOCIETY
- SUPPORTIVE COMMUNITIES



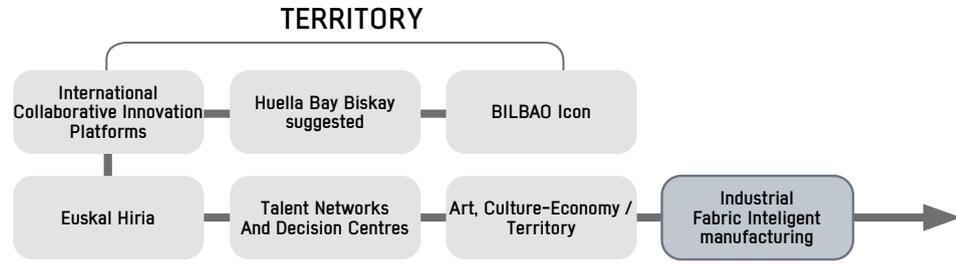
- PPP
- LP
- Retraining
- Globalisation



STEAM + FP

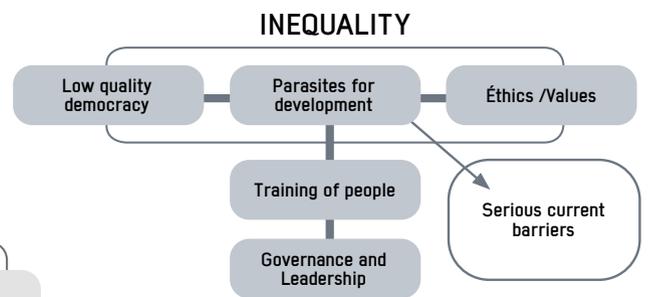
- Science, Technology, Engineering, Art and Management
- Humanism, Ethics, Ongoing training

DESIRED IMPACT ON BIZKAIA 2050

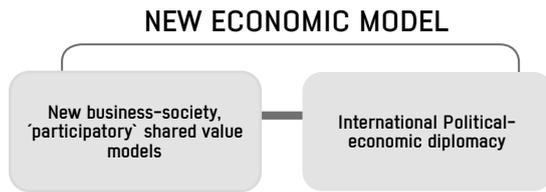


- Energy Output
- Electricity Distribution
- Vehicle / Electricity Platforms
- Charge / Battery
- “Nichos Cacharrerías” for AI, Robotics, automation
- Aeronautics, Naval, Railways
- Blue Economy

Intelligent Infrastructure / Conectividad Global



- Technology-Humanism
- PPP
- Self-government-Economic Agreement
- Nodal extension throughout the world



- “Hacer crecer nuestras empresas tractoras”
- Driver: manufactura inteligente clusterizada
- Empresas
- Instituciones
- Org. Colaborativas

Nueva EUROPA + Nueva China + Innov Think Tanks USA

TRANSFORM PROBLEMS INTO OPPORTUNITIES PROBLEMAS en OPORTUNIDADES

RETHINKING ECONOMIC DEVELOPMENT

REDIRECT TECHNOLOGY, CULTURE, INNOVATIÓ TOWARDS SOCIAL WELL BEING

REINVENT new INSTITUTIONS and SOCIO-ECONÓMIC AGENTS

RETHINKING and Committing to a SUCCESSFUL ROUTE

UNIQUE AIM AND AIM FOR VALUE

¡ 2050 !!

COMPETITIVE DIAMOND FOR THE BASQUE COUNTRY

Condiciones de los factores

	WEAKNESSES	STRENGTHS
LOCATION AND NATURAL RESOURCES	<p>External energy dependence but with an advanced diversification and self-sufficiency policy.</p> <p>Shortage of industrial land in Gipuzkoa and Bizkaia.</p> <p>Lack of natural resources.</p>	<p>Small in size and with a system of polinuclear cities and plans to improve internal integration and articulation.</p> <p>Located on peninsular transport routes linking with the EU and the sea.</p> <p>Attractive climate and environment.</p> <p>A unique culture.</p>
POPULATION AND LABOUR FORCE	<p>Mature population with low level of natural growth rates.</p> <p>Growing – although not excessively – immigration with low levels of qualification.</p> <p>A high percentage of people with no more than secondary education and a small percentage of the population with 6th form secondary education.</p> <p>Low level of knowledge of languages, although growing.</p> <p>Little mobility of people: both geographically as well as between organisations.</p>	<p>Medium to high level of activity with a low unemployment rate.</p> <p>Medium to high cost labour.</p> <p>Large percentage with tertiary education, with qualifications in sciences and technology.</p> <p>Large percentage of research personnel, although with a small percentage of doctors, Little resource provision and low efficiency ratios.</p> <p>Immigration as an opportunity, although not responding to national strategy and complicated to manage due to institutional inadequacies</p>
HEALTH SYSTEM		<p>Good health system, mainly public.</p>
EDUCATIONAL SYSTEM	<p>A network of four universities (one mostly public and three private) with presence throughout the territory and with degrees associated with the national economy, although none of them are world-class teaching, lacking in research, endogenous and with few connections with other agents in the innovation system.</p> <p>A system of ongoing training is poorly organised with low participation rates.</p>	<p>A good primary and secondary education system with a large number of private colleges.</p> <p>A good network of professional training schools.</p> <p>Numerous business schools, although none with international rankings.</p>
TECHNOLOGICAL INFRASTRUCTURE	<p>Lack of public research bodies.</p>	<p>Potent network of technology centres, although mostly adaptive rather than generating technology and few university connections.</p> <p>Network of well developed technology parks and BIC, although cooperation between agents unsatisfactory (both intra- and extra-parks).</p> <p>Development of new agents on Basque Country network of science and technology: CIC, BERC....</p> <p>Increasing development of advanced service businesses (TKIBS), although somewhat local and not world-class.</p>

WEAKNESSES

STRENGTHS

TRANSPORT INFRASTRUCTURE	<p>Lack of integration and unitary management in relation to the environmental, economic and social context of the transport system.</p> <p>Railway infrastructure underdeveloped for both internal and external connections but with plans for improvement underway.</p> <p>Airports with few international connections.</p>	<p>Acceptable roads infrastructure although increasingly congested.</p> <p>Potential in commercial ports, although not sufficiently exploited and lacking in inter-modal platforms.</p> <p>Medium logistics infrastructure.</p>
OTHER ADVANCED INFRASTRUCTURE	<p>Internet services expensive and of poor quality</p>	<p>Advanced telecommunications infrastructure (fibreoptics network).</p> <p>Good rail, conference and cultural infrastructure.</p>
FINANCIAL SYSTEM	<p>Stock market not adapted to business financing.</p> <p>Venture capital and business angels relatively underdeveloped, in particular for innovative projects.</p>	<p>Developed and efficient banking system, although subject to short-termism and unwilling to take risks.</p> <p>Leading Mutual Guarantee Companies.</p>
ADMINISTRATION	<p>Regulation function in Central government hands, which is negative for the development of advanced administrative services in the Basque Country.</p>	<p>Competent Public Administration with resources. Healthy and pluralist administrative and institutional fabric, although overlapping and in need of coordination.</p>
Demand conditions		
DEMAND FOR PERSONNEL	<p>Consumer organisations underdeveloped.</p> <p>Low percentage of young population.</p>	<p>High and growing income per capita level that is uniformly distributed.</p> <p>Increasing level of use of TIC by families, although a long distance from that in leading countries.</p>
COMPANY DEMAND	<p>Lack of anticipation, demanding or novel nature of local consumers, compensated for in part by the high degree of thoroughness on the part of the multinational companies serving them.</p> <p>Few consumer goods producers and driving force businesses.</p> <p>Little penetration of the North-american and Asian markets.</p>	<p>High percentage of exports going to European markets.</p>
PUBLIC DEMAND	<p>Little use made of the purchasing policy of public companies.</p> <p>Low level – although increasing – seriousness in the application of environmental standards.</p>	<p>European technical and environmental standards.</p>

Related and support industries

	WEAKNESSES	STRENGTHS
GENERAL		Capability of the nation to 100% produce sophisticated products: cars, aircraft, hospital...
SERVICES	Low level of high tech manufactured goods.	<p>Notable industrial specialisation and competitive local network of industrial suppliers.</p> <p>Specialisation in the manufacture of intermediate goods and capital goods (connected with metals and petrochemicals).</p> <p>Incipient TIC sector in clusters.</p> <p>High degree of medium technology manufactured goods.</p>
CLUSTERS	<p>Low level of knowledge intensive services.</p> <p>Absence of adequate financial and corporate nerve, sufficient to lead large projects with global potential.</p>	<p>Industry moving towards more advanced sectors.</p> <p>Availability of a range of business-connected services, although not world-class.</p> <p>Progressive switch to services of the economy.</p>

Strategy and rivalry context

ENTREPRENEURIAL STRUCTURE	<p>Little –although increasing– n.º of large companies and business groups.</p> <p>Majority of decision centres for large companies, located overseas.</p> <p>Large percentage of subcontractor companies, although almost half of them are sufficiently autonomous.</p> <p>Inadequate inter-company cooperation, although signs of improvement can be seen.</p>	<p>Business fabric largely comprised of SMEs</p> <p>Local business people are settled and are committed to the country, with a unique presence of cooperative groups.</p> <p>High degree of competence.</p> <p>Abundance of institutions in the business field (business and industry associations, cluster associations, Chambers of Commerce).</p> <p>Well-developed social economy.</p>
ENTREPRENEURSHIP	<p>Medium level of entrepreneurship with a low innovative and international profile.</p> <p>Social and cultural values that do not reward risk, creativity and individual initiative, scientific culture and innovation.</p>	<p>Nation with a tradition of entrepreneurship, with serious entrepreneurs and capacity for survival.</p> <p>High level of public enterprise.</p>
GLOBALISATION	Little presence of foreign capital.	<p>Medium commercial opening to overseas by Basque businesses, focused on the EU with little presence in Asia, North-america and the East.</p> <p>Medium direct overseas investment, focused on the EU and Latin America, although rapidly expanding and diversifying towards Asia and the East.</p> <p>Liberal regulatory framework for commercial relations and overseas investment.</p>

WEAKNESSES

STRENGTHS

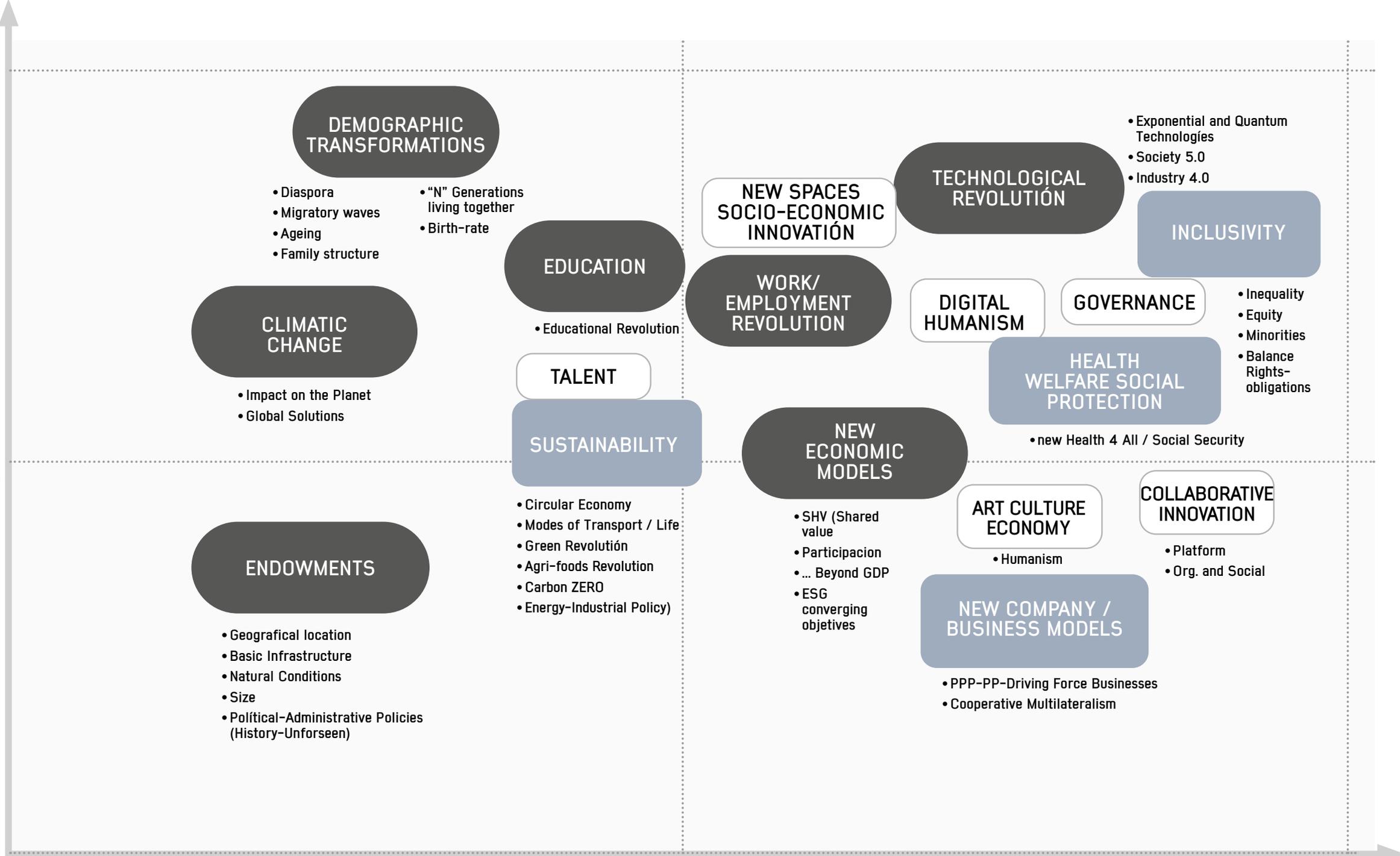
INTANGIBLES	<p>Small percentage of companies with R & D activities and spending on R & D (excluding technology centres), which makes their relationship with and capacity for absorption of technology from other agents difficult.</p> <p>Little propensity for the use of intellectual protection (OEP).</p> <p>Little technical innovation in products.</p> <p>Inadequate development of non-technological development (comercial, organisational...).</p> <p>Low level of development of intangibles linked with sales and marketing (brands).</p> <p>Little development of human resources policies</p>	<p>Culture of quality widely accepted (certifications) and capacity for adaptation to the client/market.</p>
SOCIAL AND EMPLOYMENT RELATIONS	<p>Regulatory framework for the labour market is rigid and not adapted to the socio-employment reality of the Basque Country.</p> <p>Labour conflicts.</p> <p>Instability and uncertainty due to the socio-political context.</p>	<p>Trade unionism organised in the Basque context.</p>
TAXATION AND PUBLIC POLICIES PÚBLICAS	<p>Insuficient liberalisation and inadequate regulation in services, energy and land.</p>	<p>Global fiscal pressure less than the European average, although Company social security contributions and corporation tax are rather high.</p> <p>Autonomy and fiscal incentives appropriate to investment, innovation and globalisation, although subject to ongoing questioning.</p> <p>Numerous programmes and public policies favouring innovation and improvement in management.</p> <p>High level of dialogue between the regional and local government and business, that leads to adjustment of policies to needs.</p>

Finally, a true scenario showing the basis on which to build towards 2050. Aware of strengths, of a positive valuation of the long road taken to get to here, aware that ‘everything that glitters is not gold’, qualifying the ‘oasis’ and the comfort to which we have a right to enjoy and warning of the enormous challenges to be met, with

a demanding society that does not hide its concerns, projects our disaffection and high degree of individualism and relative skepticism faced with the collective risk and commitment required.

A starting point.

Impact on innovative, connected, prosperous and inclusive territorial spaces



DEMOGRAPHIC TRANSFORMATIONS

- Diaspora
- Migratory waves
- Ageing
- Family structure
- "N" Generations living together
- Birth-rate

CLIMATIC CHANGE

- Impact on the Planet
- Global Solutions

ENDOWMENTS

- Geographical location
- Basic Infrastructure
- Natural Conditions
- Size
- Political-Administrative Policies (History-Unforeseen)

EDUCATION

- Educational Revolution

TALENT

SUSTAINABILITY

- Circular Economy
- Modes of Transport / Life
- Green Revolución
- Agri-foods Revolución
- Carbon ZERO
- Energy-Industrial Policy)

NEW SPACES SOCIO-ECONOMIC INNOVATION

WORK/EMPLOYMENT REVOLUTION

NEW ECONOMIC MODELS

- SHV (Shared value)
- Participacion
- ... Beyond GDP
- ESG converging objectives

TECHNOLOGICAL REVOLUTION

- Exponential and Quantum Technologies
- Society 5.0
- Industry 4.0

DIGITAL HUMANISM

GOVERNANCE

HEALTH WELFARE SOCIAL PROTECTION

- new Health 4 All / Social Security

INCLUSIVITY

- Inequality
- Equity
- Minorities
- Balance Rights-obligations

ART CULTURE ECONOMY

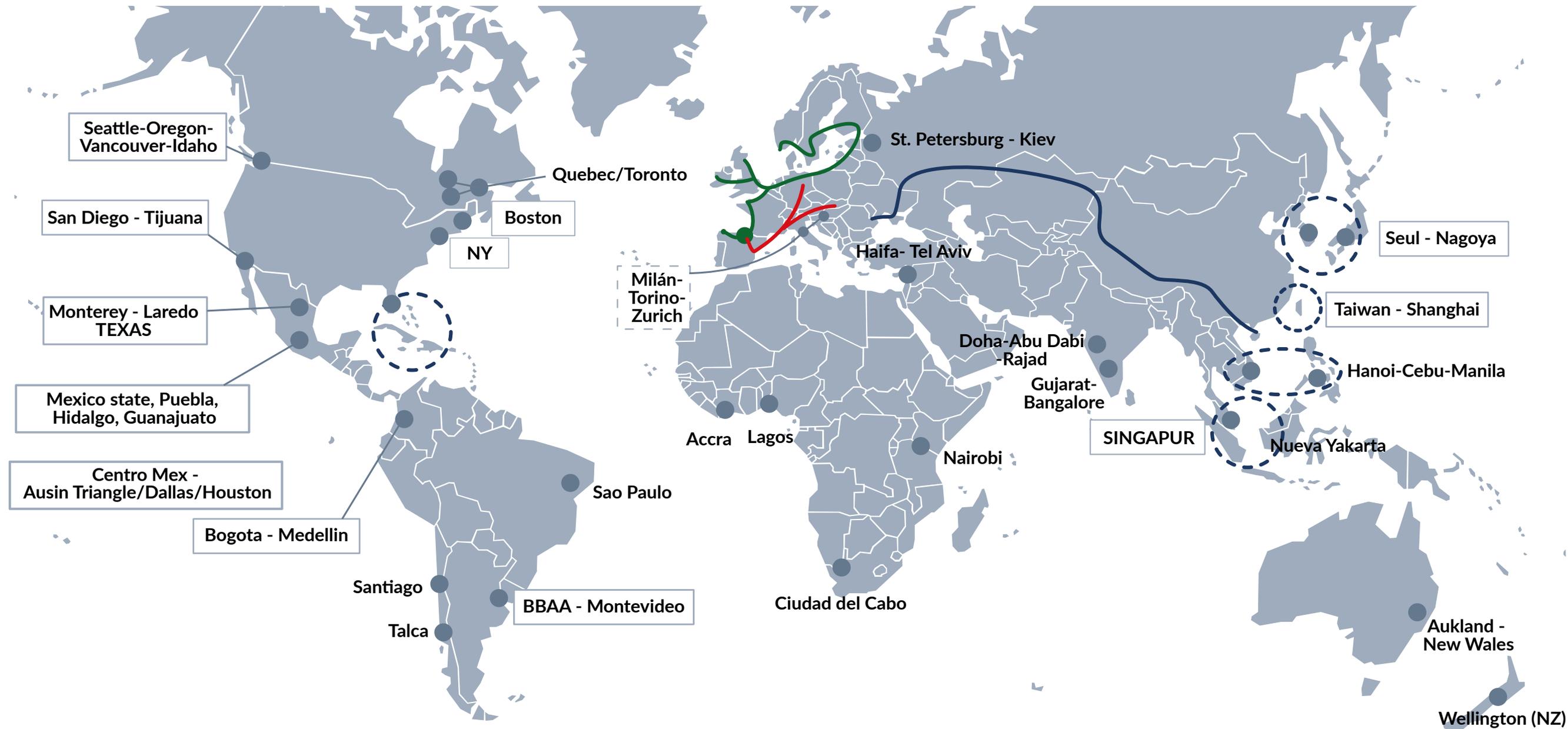
- Humanism

NEW COMPANY / BUSINESS MODELS

- PPP-PP-Driving Force Businesses
- Cooperative Multilateralism

COLLABORATIVE INNOVATION

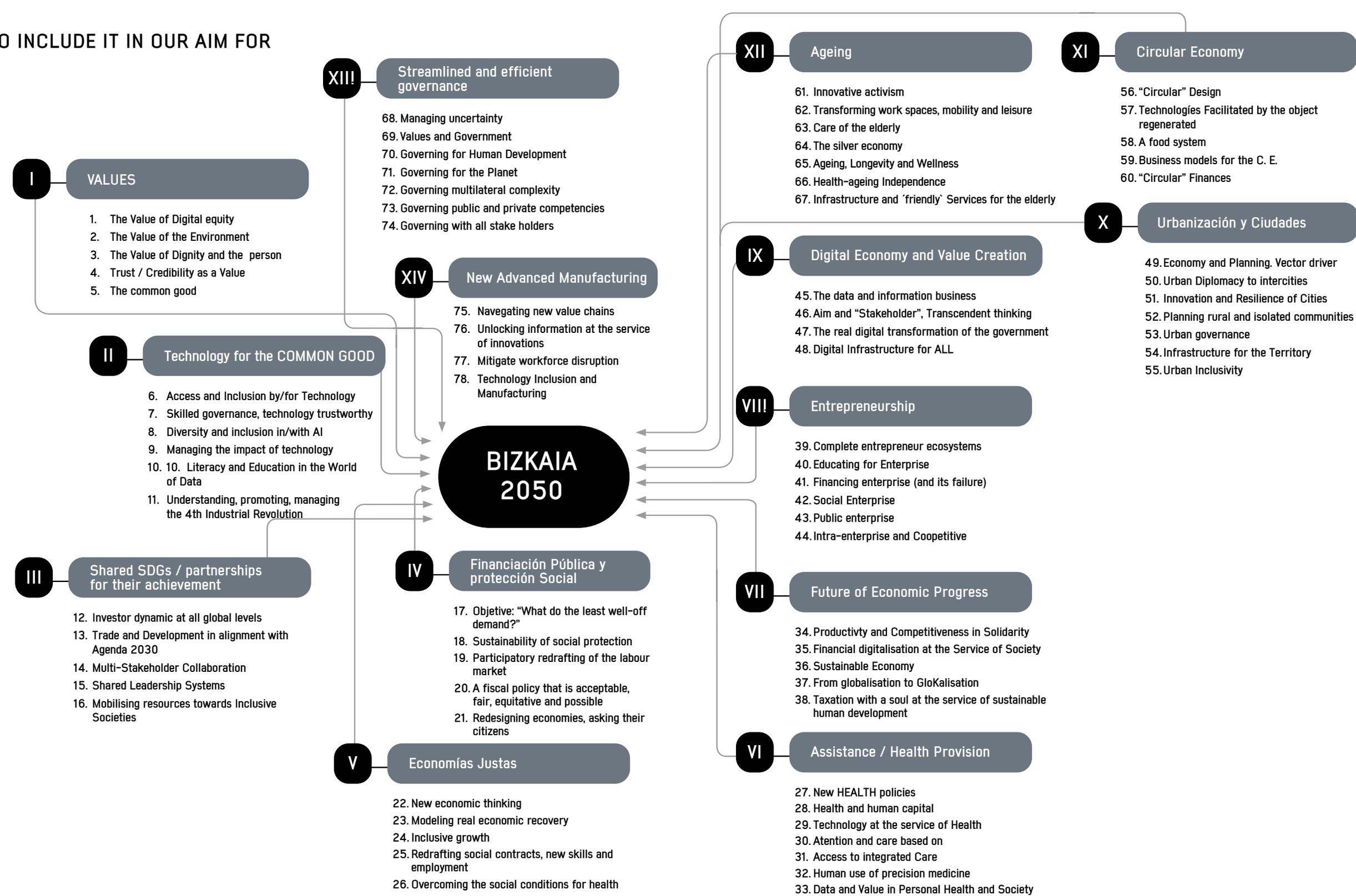
- Platform
- Org. and Social



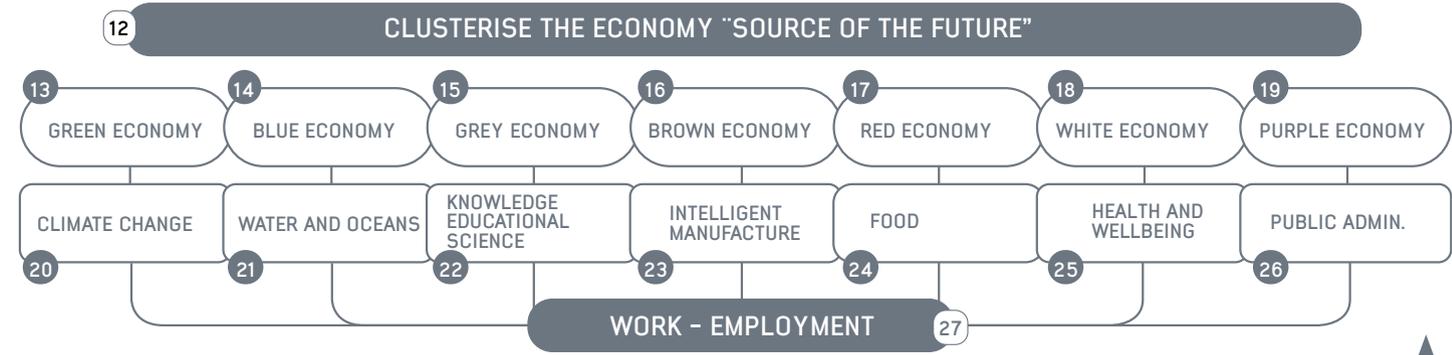
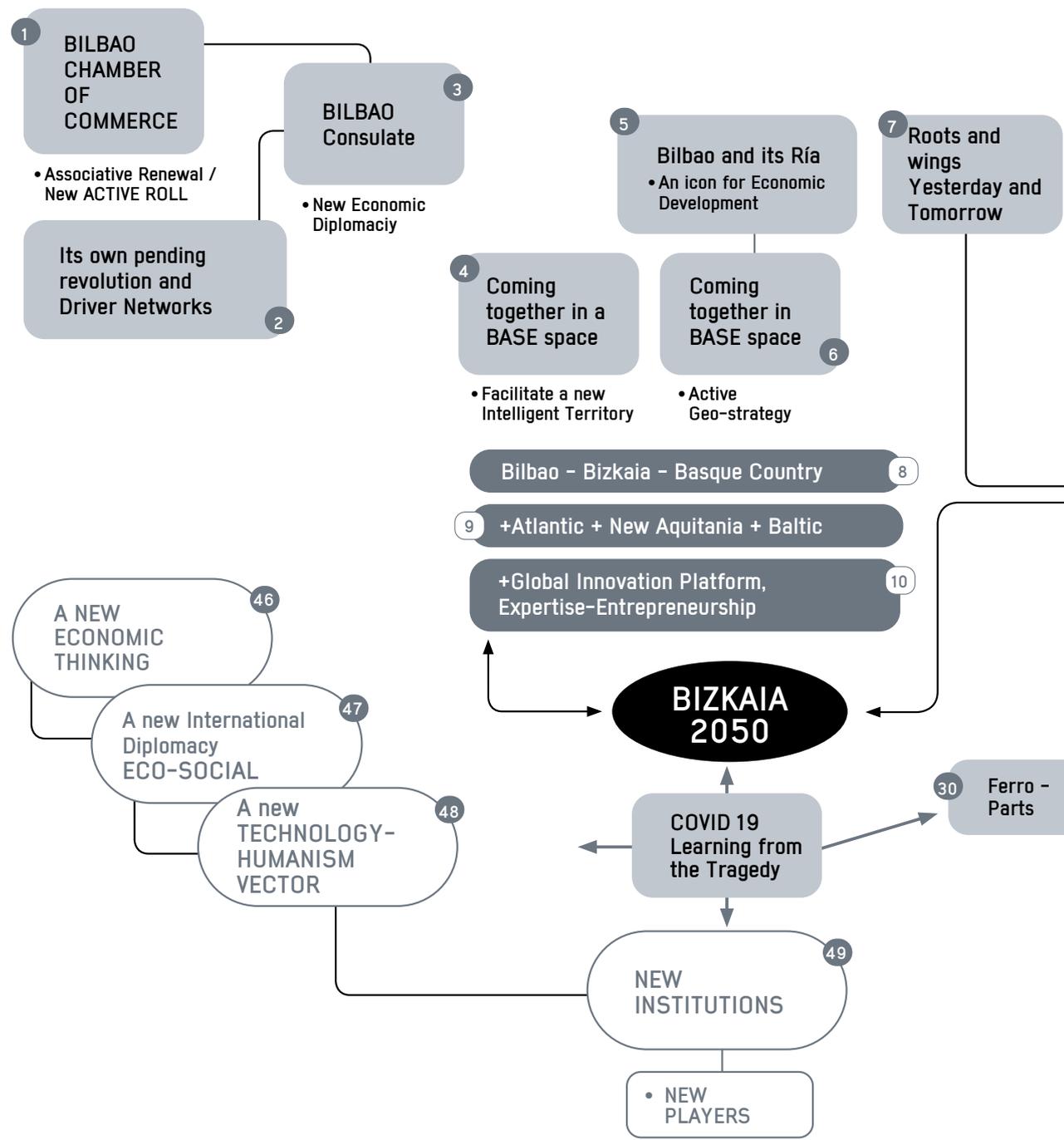
PRESENCE, OBSERVATION, LEARNING, EXCHANGE
 CONCENTRATING PRIORITIES,
 EXTENSIÓN, PROGRESSION. BUILDING THE FUTURE.
 CHOOSING CDS - REGOÚ "CO-MANAGEMENT NETWORKS"

- Bi Bi Bc + NAg + Na + Baltic + Atlantic
- Priority corridors
- Florida development ring - Caribe - Guyana - Costa Rica
- BCN - MED "6 motors"
- Following the ONE ROAD Route - Green Belt

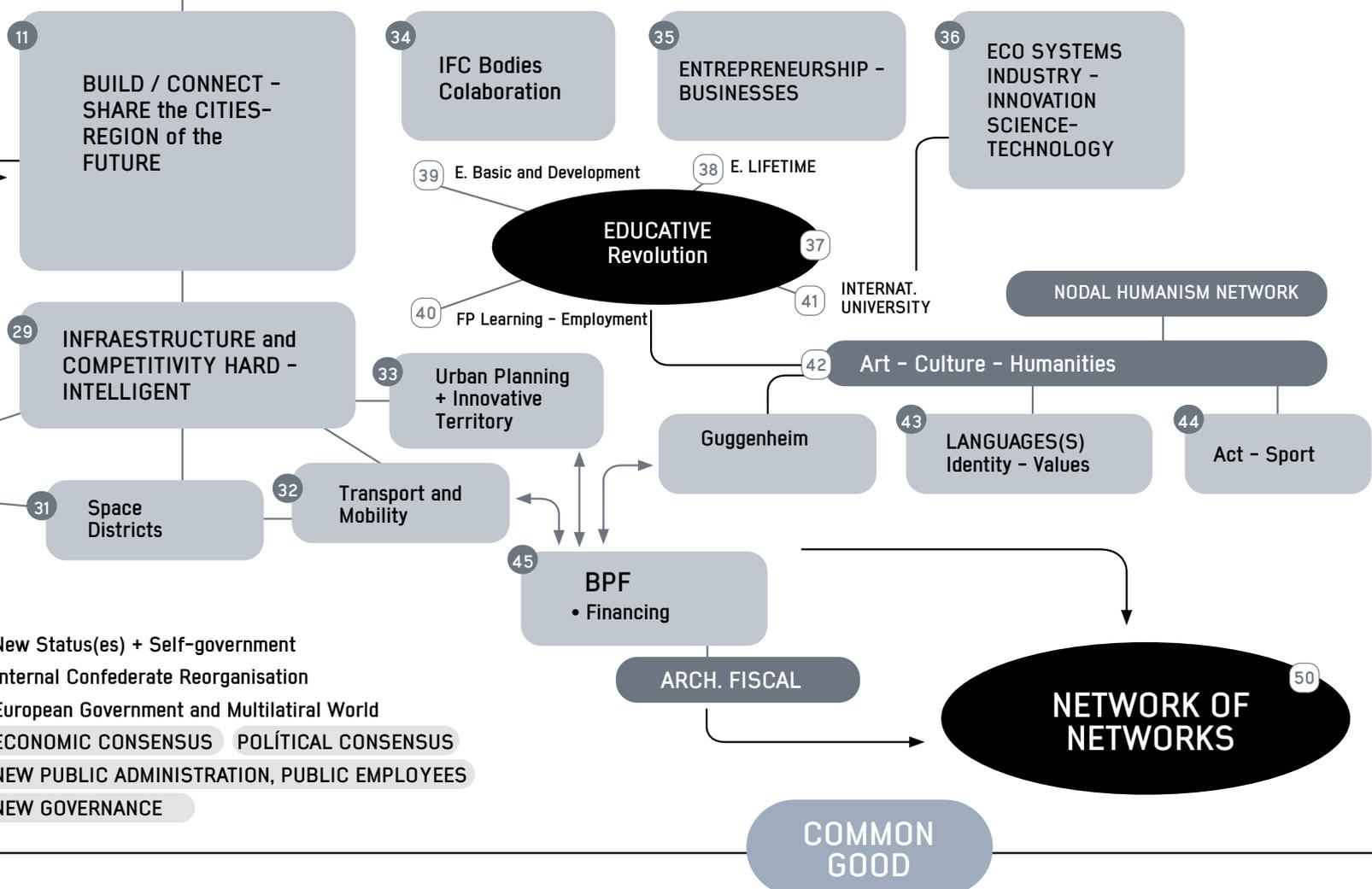
SO IF WE'RE ABLE TO INCLUDE IT IN OUR AIM FOR PROSPERITY?



BIZKAIA 2050: A NEW COMPETITIVE SPACE IN SOLIDARITY FOR PROSPERITY AND INCLUSIVE DEVELOPMENT (50 CONNECTOR ELEMENTS FOR ITS CONSTRUCTION)



DIGITALIZATION - NEW TECHNOLOGIES - PINK COLLAR - GOVERNANCE (28)



YEAR	EXPECTED RESULT	COVERAGE	LEGISLATIVE ACTS PLANS AND STRATEGIES
2023	Europe after COVID-19 will be more organic, more digital, more resilient and better prepared for current and future challenges. Next Generation EU will have mobilised European public resources to meet the economic and social consequences arising as a result of the COVID-19 crisis so that recovery of the economy of European countries is as speedy as possible.	EUROPE	Next Generation EU
2024	The work of the institutions in the coming years (2019 - 2024) will be focused on 4 main priorities, according to the Strategic Agenda: priorities of the EU for 2019 - 2024: 1) Protection of citizens and freedom; 2) Develop a solid and economical base; 3) Construct a Europe that is climate neutral, ecological, fair and social; 4) Promote European interests and values on the international stage	EUROPE	Strategic agenda: Priorities for 2019-2024
2024	The Strategy for the Digital Transformation of Euskadi 2025 will accelerate the adoption of the incipient technological levers, strengthening development and making use of the potential shown by enablers as well as activating and boosting their rapid incorporation into the essential application contexts, contributing therefore, to the technological-digital transition, the energy-environment transition and the social and health transition	EUSKADI	Strategy for the Digital Transformation of Euskadi 2025
2025	Agenda España Digital 2025 has driven a more sustainable and inclusive growth, boosted by the synergies from digital and environmental transitions to affect the whole of society and meet the new opportunities offered by the digital world regarding constitutional values and protection of individual and collective rights	SPAIN	Agenda Digital Spain 2025
2025	España Puede: Plan for Recovery, Transformation and Resilience has had a lasting effect on potential growth, mainly by means of a sustained increase in productivity through: the strengthening of the business fabric and human capital, technological, scientific and natural, an improved operation of the labour market, modernisation of the Public Administration. The social and territorial backbone of the land, updating the taxation system have similarly been improved. A potential growth in excess of 2% will be achieved that is sustained and enriched by the creation of quality employment, that will lead to European levels of investment and recover the rate prior to the financial crisis, will create more than 800,000 jobs in sectors of the future, reduce job insecurity, temporary jobs, structural and youth unemployment, school dropouts and thus seek to resolve the fiscal imbalances inherited.	ESPAÑA	España Puede: plan for recovery, transformation and resilience of the economy
2026	With the Horizon Europe Programme, the scientific, technological, economic and social horizon will be reached from the EU investments in Research and Innovation, boosting the scientific and technological bases and encouraging competitiveness in all EU Member States. Horizon Europe will generate 11 Euros in additional GDP (Gross Domestic Product) for every Euro invested, will create up to 320,000 highly qualified Jobs and consolidate Europe's leadership in Research and Innovation.	EUROPE	Horizon Europe
2027	Euskadi will be among the most advanced regions of Europe in terms of innovation by 2030 due to the Science Technology and Innovation Plan 2030. Living standards and employment quality in Euskadi will have improved through a shared strategy in which public institutions, businesses, universities, research centres, technology centres and socio-economic agents will take part under the philosophy of 'auzolana' to drive the pairing 'expertise + innovation' at the service of development and improvements to global competitiveness. The orientation of Basque Research and Innovation will have been maximised towards results, driven by R & D and innovation in businesses and especially in SMEs. The globalisation of Basque Research and Development and Innovation will have been boosted and scientific-technological talent promoted, in particular among females.	EUSKADI	Euskado science, technology and innovation Plan 2030
2030	The National Integrated Energy and Climate Plan 2030 will transform the energy industry towards greater energy self-sufficiency on the basis of effectively applying existing renewable potential in the country, in particular solar and wind. Said transformation will positively affect national energy security by significantly reducing dependence on imports of fossil fuels that imply a significant economic cost that is subject to geo-political factors and a great deal of price volatility. As a result of the application of the National Integrated Energy and Climate Plan, the presence of renewable energy in the final use of energy will be 42%, due to the forecast investment in electrical and thermal renewables, together with a notable reduction in the consumption of energy as a result of the savings and efficiency measures in all sectors of the economy. The drive towards the introduction of renewable energy, distributed generation and energy efficiency, is characterised by being linked to the territory. As a consequence, its introduction will produce major investment and employment opportunities.	SPAIN	El Plan Nacional Integrado de Energía y Clima 2021-2030

YEAR	EXPECTED RESULT	COVERAGE	LEGISLATIVE ACTS PLANS AND STRATEGIES
2030	The SME 2030 Policy will have improved the competitive capabilities of businesses, as well as contributed to creating a climate suitable to encouraging growth in the fields of entrepreneurship, business management and talent, regulatory framework, finance, innovation and computerisation, sustainability and globalisation.	SPAIN	SME Policy 2030
2030	With the Euskadi 2030 Energy Strategy, there will be a social and economic system that requires less energy to produce goods and services in businesses, homes and transport, encouraging savings and energy efficiency. More renewable energy will be produced and consumed, replacing fossil fuel energy that is compatible with the conservation of the environment, preparing a long-term future where renewable energy will be the only ones available. The energy system will be fitted to the needs of consumers, influencing markets and norms within competencies and contributing to a guarantee of supply. The potential for the development of new products and new markets provided by new technologies in energy efficiency and renewable energy will be used.	EUSKADI	EUSKADI 2030 ENERGY STRATEGY
2030	On the basis of Euskadi 2030 Circular Energy Strategy, there will be an economy that is more efficient in the use of resources, by means of innovation oriented towards a new model of production and consumption and through a political-private collaboration that effectively includes the population, business and the government in the achievement of the common objective. Euskadi will be a benchmark at the European level for the circular economy, where the environment becomes a key sustainability, competitiveness and employment creation factor, where economic growth is uncoupled from the consumption of natural resources, the generation of waste and the emission of greenhouse gases.	EUSKADI	EUSKADI 2030 CIRCULAR ECONOMY STRATEGY
2050	The implementation of the 2030 Long-term Strategy will lead to an uncoupling of economic growth from energy consumption. The GDP produced per unit of energy consumption will be multiplied by 2.5 between 2017 and 2050. In addition, the contribution from renewable energy against total energy will be around 97%. The electricity sector for its part, will be 100% renewable by the middle of the century, while the contribution from renewable energy in transport and mobility will reach 79%, reaching 97% in the heating and refrigeration sector. Mobility and transport will reduce their emissions some 98% against current levels, whilst industry will achieve more than 90% and the farming and cattle-raising and waste sector will achieve a reduction of some 60%. The building industry will be 100% carbón free by 2050. The consumption of primary energy will be reduced by some 40%, due to the energy efficiency policies, changes in habits and the circular economy, resulting in a reduction of over 30% in the final consumption of energy.	SPAIN	Long-term decarbonisation Plan (ELP 2050)
2050	By fulfilling the Green Pact, the EU will be an equitable and prosperous society with a modern economy that is efficient in the use of resources and competitive, where there will be no net greenhouse gas emissions in 2050 and economic growth will be distanced from the use of resources. The Green Pact will protect, maintain and improve the natural capital of the EU, as well as protecting the health and wellbeing of its citizens against environmental risks and effects. At the same time, this transition will be fair and inclusive, giving priority to the human dimension and giving attention to the regions, the sectors and the workers exposed to the greatest challenges.	EUROPE	Green Pact Europe
2050	Euskadi will have a competitive economy that is low carbon and adapted to the effects of the climate, deriving from the consolidation of a climate change policy based on expertise that has permitted the application of opportunities provided by innovation and technological development as was set out in Klima 2050 Basque Country. All of this has been possible as a result of the joint responsibility of all agents in Basque society, driven by the example given by the Public Administration. Greenhouse gases in Euskadi will be reduced by at least 40% by 2030 and at least 80% by 2050 compared with 2005 and renewable energy consumption will stand at 40% by 2050 compared with final consumption, ensuring the resilience of the Basque Country to climate change.	EUSKADI	KLIMA 2050 BASQUE COUNTRY
2050	By the Euskadi Bultzatu Urban Agenda 2050, there will be a new economic fabric with new visions to respond to the challenges of the future. Mobility will play a key role in the framework of more friendly and resilient cities, that are technologically advanced to meet urban challenges. The housing model will likewise be conditioned by demographic and cultural changes. Increasingly, health technologies will be incorporated into housing with an advance towards formulas for shared occupation. Measures will have been adopted to mitigate the risks deriving from climate change, moving towards the decarbonisation of the economy and preventing the risk of energy exclusion during the transition, together with other unwanted social effects.	EUSKADI	Urban Agenda Euskadi Bultzatu 2050