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1. INTRODUCTION

Knowledge is the foundation of welfare. Our understanding of the universe and how we live are closely related to the questions asked by those who came before us, and the answers they discovered. The search for new knowledge constantly generates valuable answers and a multitude of new questions. Science is that collective challenge, curiosity converted into the driver of progress.

In 2007, the Basque Government launched Ikerbasque to help develop scientific research by attracting outstanding researchers and recovering talent for the region. Ikerbasque's mission is therefore to contribute to strengthening science in the Basque Country.

In recent years, our activity has been guided by three strategic plans (2007-2009, 2010-2013 and 2014-2017). At the end of this last period, the Governing Board of Ikerbasque established a process of strategic reflection that has culminated in the creation of this 2018-2021 Strategic Plan, which will shape Ikerbasque activities over the coming years.

This Strategic Plan analyzes the current situation and the challenges facing the Basque Science System and compares them with the international context. It studies internal Ikerbasque performance data, performs benchmark comparisons with other international organisations and identifies the needs of stakeholders in the Basque Science System to establish the main strengths, weaknesses, opportunities and threats that Ikerbasque needs to face.

This analysis has redefined the mission, vision and values that will guide the work of Ikerbasque over the next 4 years. This plan sets out six strategic objectives, which have been divided into actions using the processes defined at Ikerbasque and for which budget projections have been set until 2021.

Because something incredible is waiting to be discovered.

2. PARTICIPATORY PROCESS

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Our activity has been guided by **three strategic plans** (2007-2009, 2010-2013 and 2014-2017). The new 2018-2021 Ikerbasque Strategic Plan has been developed through a participatory process of strategic thinking, to answer the needs of our stakeholders, especially those comprising the Basque Science System.

PRELIMINARY PHASE (January - March 2017)

- Final assesment of the 2014-2017 strategic plan
- Definition of the participatory process of strategic thinking
- Initial strategic lines proposal
- Comparative analysis of the strategic plans used by other scientific institutions

STAGE 1 - DEVELOPMENT (April - September 2017)

- Stakeholder participation (individual and group)
- Internal seminars
- Analysis of contributions, definition of objectives and actions
- Hearing to discuss the main ideas in the Plan with senior executives from the Basque Science System

STAGE II - VERIFICATION AND APPROVAL (October - December 2017)

- Draft 2018-2021 Strategic Plan
- Presentation and adoption of the draft by the Executive Committee
- Review of contributions by the Executive Committee and the Governing Board
- Final draft of the 2018-2021 Strategic Plan
- Final approval by the Governing Board
- Open communication to stakeholders

STAGE III - MONITORING (2018 - 2021)

- · Annual monitoring and evaluation of key indicators
- Publication of the results

3. GLOBAL SCIENCE

Science (from the latin word *Scientia* meaning knowledge) can be defined as knowledge discovered using specific methods and processes, techniques and tools to understand past, present and future events and to resolve current and future situations.

Scientific knowledge is extraordinarily important for humanity, our society and each citizen, as it allows us to constantly grow and develop culturally, socially and economically. Regional and national development depend largely on their scientific and technological progress and how this progress is used.

Scientific knowledge is generated through a long process of scientific research involving two key factors: people and tools or infrastructure. As a result, reinforcing both these factors is the cornerstone that enables the development of scientific knowledge and consequently of cultural, social and economic progress.

Throughout the history of human development, scientific activity has had different characteristics. Initially, science was practiced by those with enough resources to perform research as a hobby. In this initial period 'science' was more like speculation, based on the observation of the external characteristics of objects and phenomena, leading to brilliant ideas, many of which are still valid today, but that were not demonstrated in practice. These early stages were also a time in which large quantities of erroneous knowledge were accumulated, entirely distorting our understanding of reality.

Religious ideas prevailed during the Middle Ages, and science made little progress. It was only in the 17th century when experimentation supported by mathematical methods came into regular use as a major part of scientific methodology - which is one of the reasons why Galileo is known as the father of modern science.

Today, science is a major productive force. It's no longer the work of a few isolated individuals with enough finance to cover their personal and other scientific expenses. It has become an activity carried out by nation states and major corporations in which teams of researchers or research groups work on well-defined proposals, using substantial resources and complex, large-scale facilities. Any country that wishes to maintain a top position with competitive industries and acceptable levels of technology has to strengthen its science capabilities, from teaching to the highest standards of implementation, exploitation and application.

While the time between a scientific discovery and its practical application used to be considerable, these days the process is now practically immediate. The development of communications and the ways in which information is distributed now mean that any discovery or invention in any part of the world is immediate knowledge anywhere else. Today, nobody is unaffected by the influence of scientific results - the impact of science is so great that almost no modern citizen can perform their daily activities without some basic scientific knowledge.

Scientific research is carried out in a global, interconnected and complex environment involving all kinds of players in the fields of research, development and innovation.

This is why science policy must be designed in consideration of global R&D&I trends and every region's place in the international dynamics. The following pages describe the main trends in science policy and analyse the role of Euskadi in global science.

3.1. Global trends

Ikerboost, the Basque Observatory of Science and Technology, continuously monitors various sources of socio-economic and bibliometric information in order to analyse international R&D trends. These have also been discussed with the various stakeholders involved in the strategic reflection process.

1. Overall R&D spending will continue to grow

R&D investment holds a privileged position in overall spending. Governments recognize that R&D is a crucial investment in national progress, international competitiveness and public benefit.

The recent report by the International Association of STM Publishers, and indicators compiled by the OECD (Organization for Economic Cooperation and Development) provide detailed information and projections for global R&D spending. R&D spending has increased constantly at global level. Expenditure rose from \$522 billion in 1996 to \$1.3 trillion in 2009. The STM report states that R&D spending was approximately \$1.6 trillion in 2014. North America, the EU and Asia are responsible for up to 92% of global R&D spending.

2. Redistribution of global science leadership

The 2008-2009 recession had a marked impact on global R&D spending. According to the 2014 OECD report, annual growth in OECD countries over the 2008-2012 period was only half that achieved between 2001-2008. However, the recession hit the USA and the EU more than other nations such as China, India and Brazil.

China is the emerging leader in terms of global R&D expenditures and is soon set to become a bastion for science and research, if we look at several indicators. China's spending on R&D has grown at an unprecedented rate. While spending by the US (down from 37% to 30%) and the EU (down from 26% to 22%) shrinks as a percentage of global R&D investment, Chinese spending has increased exponentially from 0.6% of GDP in 1996 to 2.1% in 2015, according to data from the World Bank. China plans to invest up to 2.5% of its GDP in R&D by 2020, prioritising energy, water resources and environmental protection.

China is also one of the nations posting the fastest growth in researcher numbers and has ousted the UK as the second largest producer of research studies with 11% of global scientific production (National Science Foundation - NSF, 2014) and will probably push the US out of the top spot by 2020. The quality of Chinese research is also improving. The proportion of Chinese articles among the most cited studies increased six times between 2002 and 2012 (NSF, 2014).

Ten countries (USA, UK, France, Australia, Canada, Germany, Switzerland, Japan, Malaysia and Sweden) welcome 89% of international PhD science students. But these proportions may vary when changes in recent R&D investment are reflected.

These investment trends and results mean that increasingly, companies are relocating their R&D departments to different countries and that relatively new universities with no real academic tradition are creating leading roles for themselves. As a result, the market for researchers is increasingly global and more mobile.

3. Growth in knowledge-intensive industries

The latest Science and Engineering Indicators (*National Science Foundation*, USA) emphasise how the global map of economic activity related to science and technology changed after the 2008-2009 recession.

The general trend is still for increasingly important contributions by knowledge intensive economies. Knowledge and technology intensive industries (KTI) increased their share of developed economies from 29% to 32% between 1997 and 2012.

The growth of KTI industries in the developed world was most evident in China, where high-tech manufacturing increased more than five times between 2003 and 2012, resulting in their overall share increasing from 8% to 24% in 2012.

4. The global expansion of the research community will continue

It is hard to compile complete figures for the number of researchers in the world as each country uses different statistical systems. For example, the OECD Statistics Report shows that the number of researchers in OECD countries increased from 4.2 million in 2007 to 8.4 million in 2011, while UNESCO data states that there were 7.2 million in 2007, an increase of 5.7 million from 2002.

However, these and other reports reflect a steady growth in the number of researchers around the world of approximately 4%. Emerging economies like Asia are seeing greater annual growth in researcher numbers - estimated at around 8-12%, while the growth rate in developed nations like the USA and EU fails to scrape past 1% in some cases.

5. Recognition of the role of science in democratic societies

The role of science is being questioned and its contribution to our societies played down as a mere generator of ideas that feed the economic cycle in many parts of the world. However the international scientific community claims that science is a fundamental part of democratic societies, driving innovation and critical thinking and giving us a better understanding of our surroundings.

On 22nd April 2017, these campaigning movements held a simultaneous March for Science involving scientists and citizens in 600 cities around the world. They did so as "Science is critical for our health, economy, food safety and security. We are marching to defend the role of science in politics and society."

This global movement defends the following principles:

- a) Science to serve the common good
- b) Evidence-based policies and regulations

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- c) Quality scientific education
- d) Diversity and inclusion in science
- e) Open, honest science that communicates with the public in an inclusive way
- f) Funding for scientific research and its application

3.2. International initiative benchmarking

Numerous international initiatives aim to support their various science systems through a wide range of actions.

Ikerbasque constantly monitors these initiatives and performs international benchmarking to gain a better understanding of the needs of specific stakeholders and to incorporate learnings into our own strategy.

Initiative	Learning
Montreal Neurological Institute (MNI)	In Spring 2016, the Montreal Neurological Institute announced the launch of a 5-year pilot for an Open Science Policy to accelerate research progress and reassess its role in the community. This consisted of open data, patent-free material in all of the institution's activities. This initiative aims to test two hypotheses. Firstly whether it will be able to attract new private partners. And secondly if this new focus will attract companies to the Montreal region, creating a local centre of knowledge around the institution.
The Spanish Association of Researchers Abroad (Asociaciones de Investigadores Españoles en el Extranjero)	Recent years have seen the creation of various associations for Spanish scientists working abroad. These communities unite a large number of scientists working in other countries and aim to make the most of the synergies that arise from networking and to allow the relevant Spanish public institutions to find out what they need and to improve their response to these issues. There are now associations in Italy, Germany, the UK, Denmark, Australia-Pacific, the United States, Japan, Mexico, China, Ireland, Belgium and Sweden. Their objectives include serving as a networking platform for scientists, to disseminate scientific knowledge and to improve the R&D+i system.
Government Office for Science	The UK Government Office for Science employs 80 people and works to ensure that government policy and decisions are based on the best scientific evidence and long-term strategic thinking. Their work is complemented by the Council for Science and Technology, which is responsible for advising the government on British science policy.
European Research Council	The ERC's mission is to promote the highest quality research in Europe through competitive funding and by supporting cutting-edge research led by researchers in all fields, on the basis of scientific excellence.

	The ERC complements other European funding activities such as the national bodies for research financing and is a key tool in the Horizon 2020 Framework Programme for Research and Innovation in the 2014-2020 period. The ERC approach allows researchers to identify new opportunities and directions in any field of research, instead of forcing them to be guided by priorities established by politicians. This ensures that the funds are channelled into new and promising areas of research with a greater degree of flexibility.
PLOCAN	The Oceanic Platform of the Canary Islands (PLOCAN - Plataforma Oceánica de Canarias) is a public consortium created in 2007 by the Ministry for the Economy, Industry and Competitiveness (MINECO - Ministerio de Economía, Industria y Competitividad) and the Autonomous Government of the Canary Islands to build, equip and operate a set of marine infrastructure to carry out research in the fields of science and marine technology.
	PLOCAN is responsible for providing outstanding scientific, technological and innovation development in the marine and maritime fields, and for accelerating the market launch of their findings and products to promote economic growth and employment through efficient access to increasingly deep areas of the ocean in an environmentally sustainable manner. The PLOCAN infrastructure is dedicated to scientific experimentation and technology in all aspects of marine science and technology, particularly those like renewable marine energy that require marine test sites.
CERCA	CERCA (Centres de Recerca de Catalunya or the Agency for the Research Centres of Catalonia) was established in 2010 to "Meet the specific and unique needs of developing monitoring and providing structural financing for Catalan research centres." This institution has progressed towards a coherent centre-based model using agile, independent management structures, capturing research talent and efficient procurement of competitive funds on the basis of high-level scientific activity.
Foundation for Science and Technology (Fundacão	The FCT supports the scientific community in Portugal through various financing instruments for researchers, research equipment and R&D centres.
para a Ciencia e Tecnologia)	These tools support advanced training, research and development, the creation of research infrastructure and access to this infrastructure, the promotion of international networks, conferences and training and business events.

Wellcome Trust	The Wellcome Trust is a biomedical research organisation based in the UK. It was established to finance research to improve human and animal health in 1936 with the legacy of Sir Henry Wellcome and its objective is to "achieve extraordinary improvements in health by supporting brilliant minds and to finance biomedical research and support public understanding of science." The Trust is the main private organisation providing scientific research funding in the UK and is one of the most important institutions of its kind in the world. In the field of medical research, it is the world's second most important private financier, after the Bill and Melinda Gates Foundation.
European and International Associated Laboratories (EAL/IAL)	The French National Institute of Health and Medical Research (INSERM - Institut National de la Santé et de la Recherche Médicale) created the European and International Associated Laboratories (EAL/IAL) as part of its 2016-2020 strategy, to strengthen partnerships with other countries, especially "priority partners." An EAL/IAL is a virtual cooperation structure that looks to develop joint research projects based on new or existing scientific collaboration between Inserm and international research teams. Each EAL/IAL is created through 4-year cooperation agreements that depend on the scientific excellence of the teams involved and the proposed project.
NOW Innovational Research Incentives Scheme	 This talent instrument offers three types of support for talented researchers/creatives wishing to carry out innovative research. The funding allows selected candidates to establish their own line of research in order to promote innovative research and mobility between institutions. It is structured into three stages: Veni: for researchers who have just obtained their PhD. Vidi: for researchers with several years' postdoctoral experience. Vinci: for talented senior researchers who have demonstrated their ability to develop their own lines of inquiry.
Junior Leader "la Caixa"	The new Junior Leader "la Caixa" postdoctoral programme is designed to offer employment to outstanding researchers of any nationality who wish to pursue their research career in any subject in Spain. This programme aims to promote outstanding, innovative research in Spain and support the best scientific talents who will be offered an attractive and competitive environment in

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which to carry out excellent research.

The Junior Leader programme has two different sections:

- Junior Leader "la Caixa"- Incoming: grants for postdoctoral researchers of all nationalities, who have lived in Spain for less than 12 months in the last three years, offering them a 3-year employment contract to carry out research at Severo Ochoa or María de Maeztu accredited centres.
 Junior Leader "la Caixa" Retaining: grants for
- Junior Leader "la Caixa" Retaining: grants for postdoctoral researchers of all nationalities who have lived in Spain for over 12 months in the last three years, to carry out their research at any University or Research Centre in Spain.



3.3. Euskadi's position in the global landscape

We need to define how Science in Euskadi compares with other international benchmarks and how it has evolved in order to analyse the Basque Science System, its instruments and future needs.

According to the Regional Innovation Scoreboard 2017 published by the European Commission, Euskadi is very innovative region with room to improve in several areas in order to catch up with leading regions.

Global scientific production has increased but is now showing signs of a degree of stagnation. Euskadi's national and global importance has grown steadily over the last decade, thanks to higher growth rates. Euskadi is not isolated from global trends and although the number of publications in 2016 increased from in 2015, scientific production is beginning to stabilise.

In 2016, scientific production in Euskadi represented 6.61% of the total output in Spain. Euskadi progressed from publishing 2,100 documents annually in 2007 to 5,212 documents in the year 2016, an increase of 148% in just under a decade.



This increase in scientific production has been accompanied by a greater impact and internationalisation. The percentage of annual publications in partnership with institutions from other countries has steadily increased and is now over 50%, demonstrating that the Basque Science System is connected more dynamically to other science systems.



The Euskadi research community works with a total of 156 countries. The USA, Germany, the UK, France and Italy are the countries most frequently involved when it comes to publishing research results.



4. SCIENCE IN EUSKADI

To make Euskadi an international benchmark in the knowledge society, we need a science system renowned for quality, excellence and its ability to use generated knowledge.

Investments in both R&D and research staff have historically given the Basque science and technology system a marked technological character. However, in recent years, considerable effort has been made to strengthen the various scientific disciplines, to obtain results that benefit society in both fields, in line with the strategy promoted at European level.

4.1. Science policy in Euskadi

The European Research Area (ERA) established five priorities:

- 1. More effective national research systems.
- 2. An optimal level of transnational cooperation and competition (in joint research programmes, major challenges and infrastructure).
- An open labour market for researchers (removal of obstacles to international mobility, open recruitment, innovative PhD training, HR strategies in line with the European Charter and Code of Conduct for the Recruitment of Researchers, mobility between industry and the academic world).
- 4. Gender equality and inclusion of a gender perspective in research (promoting gender diversity to stimulate scientific excellence and relevance).
- 5. An optimal level of movement and transfer of scientific knowledge (to guarantee access to and use of knowledge by all).

Scientific research in Euskadi has changed considerably in a few years, aligning with the priorities of the European Research Area. During the last decade, Euskadi went up several places in the autonomous communities rankings in terms of absolute and per capita production. The map of players has diversified, and institutions dedicated to research like the BERCs and CICs have emerged.

Euskadi now has a considerable core of researchers and a diversified ecosystem of research centres for an area of its size. The results demonstrate a positive trend that improves Euskadi's relative position, although there is still a long way to go to become one of the world's leading regions.

Ikerbasque is a science policy tool that serves Basque society and is located within a more complex framework of tools structured by the Basque Government and designed to strengthen and boost scientific areas of particular strategic interest and to reinforce the scientific capacity of the Science System in Euskadi.

Most science policy initiatives were implemented by the Department for Education, although the Department for Economic Development and Infrastructure is also responsible for major tools to promote science, technology and knowledge and the Health Department has specific tools for the bio-health sector.

The set of Science Policy measures implemented by the Basque Government had a range of purposes, with the ultimate objective being to strengthen the entire Basque Science System. The tools implemented sought to strengthen science in Euskadi through the following main aspects:

- The creation and consolidation of top-flight research infrastructure.
- The training of a broad, structured and powerful critical mass in the field of science.
- Using scientific progress for the economic, social and cultural development of Euskadi.

The main tools of science and technology policy that have jointly contributed to achieving the previous three objectives are set out below:

ENTITY RESPONSIBLE	INITIATIVE	MAIN OBJECTIVES
Department of Education	Pre-Doctoral Programme	Financing doctoral theses through post- graduate PhD contracts lasting up to 4 years.
	Post-Doctoral Programme	Completion of doctoral research training at applied centres in the Basque country and 2-year work placements abroad through employment contracts lasting up to 3 years.

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Research staff mobility	Support to work full-time and exclusively at research centres to promote the geographic mobility of university staff and doctoral researchers at R&D+i centres and organisations for periods lasting between 2-6 months.
Basque Visiting Fellow	Grants to finance time spent as a visiting researcher at the Universities of Oxford, Glasgow and Cambridge.
IKERKETA TALDEAK - Activities by research groups from the Basque University System	Guarantee basic funding that facilitates and foments research activities, and also enhances scientific quality, social impact and international visibility of research carried out by groups from departments and institutes at Basque Universities.
BERC Programme	Financing the non-economic activity of members of the Basque Science, Technology and Innovation Network recognised as Basic and Excellent Research Centres
Grants for scientific equipment	Support for the acquisition of scientific equipment that facilitates the use of major infrastructure by any scientific group in the Basque country that requires it.
Grants for Basic and/or Applied Research Projects	Programme for carrying out specific basic and applied research projects.
University - Enterprise Projects	Research projects that aim to transfer knowledge from universities to companies
Organisation of congresses	Grants for organising scientific congresses and meetings in the field of research in which participants are invited to Euskadi.

	Euskadi Research Prize	Award seeking to recognise researchers who have had an outstanding positive influence, i.e. who have helped generate long-lasting research infrastructure or teams.
Department of Economic Development	Elkartek	Support for collaborative research in strategic areas.
and Infrastructure	Berrikertu	Recruitment of human research capital by companies and stakeholders belonging to the Basque Network of Science Technology and Innovation.
	Hazitek	Support for Industrial Research or Experimental Development Projects in the business sector in the Autonomous Community of Euskadi that are both competitive and strategic, in the specialist fields covered by the Science, Technology and Innovation plan.
	Emaitek Plus	Instrument used to finance Technology Centres and Collaborative Research Centres (Centros de Investigación Colaborativa - CICs).
Department for Health	Grants for research and development projects in the field of health - Promotion of health research	Promotion of health research through R&D projects to strengthen the capacity of the health system and its contribution to generating and integrating knowledge needed to provide better answers to the needs of the health system and society.
	Strengthen strategic health research	Enhancing strategic health research, through R&D projects arising out of health leadership and using the science and technology capabilities of the Basque Country, to make progress in analysing and developing new products, processes or services.

There are also national and international financing mechanisms. Spain's science funding is mainly organised through the 2017-2010 National R&D+i Plan which articulates actions under the Spanish Strategy for Science, Technology and Innovation.

The European Union concentrates much of its research and innovation activities under the Framework Programme currently known as Horizon 2020 (H2020). For the 2014-2020 period, the implementation of three pillars allows the programme to address the main social challenges, promote industrial leadership in Europe and reinforce the excellence of Europe's research base. A total budget of €76.880 billion is available.

4.2. Principle scientific players

The main players in the Basque Science System are:

- **The Basque University System**. Its objectives include ensuring that Basic Science (fundamental and applied) is carried out in Euskadi. The University System is understood as the group of public and private universities in the Basque Country, and must ensure that science, the generation of scientific knowledge and its use is a real asset allowing Euskadi to become a full member of the Knowledge Society.
- Basque Excellence Research Centres (BERC). These knowledge generation structures in scientific fields stand out for their novelty within the Basque Science and Technology System and for their research excellence. These organisations were created as the spearheads of the Basque university system and scientific research in Euskadi and to act as European knowledge hubs connected to centres across the world.
- Cooperative Research Centres (CIC Centros de Investigación Cooperativa). These institutions are dedicated to specialist research in a particular field of science or technology that's strategically important to the economic and social development of a community. They are designed to share the competitive research resources and work of diverse players.
- **Bio-health Research Centres:** Health Research Institutes are the product of associations between teaching and research hospitals in the National Health System, Universities and other Public and Private Research Centres. The University of the Basque Country

(UPV/EHU) hospital teaching centres, hospitals and GP surgeries are a major source of scientific output.

• **Business Technology Centres and R&D units:** technology centres are very important for scientific production, although this is not their primary function. R&D units at some industrial companies in the Basque country carry out basic research.

4.3. Performance analysis

The Basque Observatory of Science and Technology - Ikerboost, has been managed by Ikerbasque since it launched in 2010 and is a tool that analyses and supports the scientific community in Euskadi. It publishes the main results in its annual Report on Science in Euskadi, illustrating the current situation and trends in local Scientific activity. These indicators allow us to define the Basque Science System using a quantitative and qualitative international comparison.

Over the last decade, the total number and full time equivalent (FTE) number of research staff in Euskadi have both increased. Since 2014, the number of FTE people involved in R&D activities exceeds the 12,000 mark.



Analysis of the relative distribution of men and women involved in R&D in Euskadi, shows that the increase in R&D staff has not led to a significant reduction in the gender gap. On average, over the past nine years, 65% of these posts were held by men and 35% by women.



If we examine R&D spending as a percentage of GDP in each Autonomous Community, in 2015, Euskadi took first place at 1.93%, surpassing Madrid, Navarra and Catalonia. Along with Euskadi, these three communities are the only ones to have achieved over the Spanish average (1.31% GDP) in the past nine years. Eleven Autonomous Communities did not spend over 1% of GDP on R&D in 2015.



One of the economic lines of the Euskadi 2020 Plan for Science Technology and Innovation is directed at increasing and consolidating Basque Government efforts and resources in terms of R&D funding, to ensure a coordinated and stable budget commitment.

Euskadi is the number 3 Autonomous Community in terms of capturing competitive funding (\in 303 million) from the H2020 framework programme, surpassed only by Catalonia and Madrid. Euskadi obtained approximately twice as much funding as fourth place Autonomous Community of Valencia.



If we break down R&D investment as a percentage of GDP in Euskadi, 16.46% of this investment was spent on basic research, 39.38% on developing technology and 44.16% on applied research. These amounts include both public and private funding, although basic research is mostly financed by the public purse.



If we focus on research results, as mentioned earlier, Euskadi has progressed from publishing 2,100 documents a year in 2007 to 5,212 documents a year in 2016, achieving fifth position in terms of absolute output among the Autonomous Communities. However, it achieves 7th position in terms of the number of publications per capita.



On the other hand, the quality of the publications has increased significantly: the percentage of scientific production published in first quartile journals has steadily increased in Euskadi, moving from 42.6% to 51.62% over the past decade.



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Universities produce nearly 57% of Euskadi's total scientific output - led by UPV/EHU, which contributes 2,741 of the indexed publications, followed by the health sector and technology centres. New players have emerged (BERCs and CICs) in recent years and have an increasing weight in the Basque Science system. Various recent BERC and CIC centres have surpassed the 100 indexed scientific publications a year barrier and receive the greatest number of citations per document.



5. THE CURRENT SITUATION

This chapter discusses the main results obtained by Ikerbasque during the implementation of its 2014-2017 Strategic Plan, to reveal the organisation's current situation and the aspects to develop and strengthen in subsequent phases. This results diagnosis, together with the identification and analysis of the main Ikerbasque stakeholders and contextualisation with the fundamental peculiarities of the Basque Science System allows us to analyse the future needs that will guide our future strategy.

In December 2013, the Governing Board of Ikerbasque approved its strategy for 2014-2017. The plan analysed the status of science in Euskadi and highlighted that Euskadi had room to quantitatively and qualitatively improve its position given the strengths and weakness of the Basque Science System.

Thanks to improved productivity (publications/1,000 inhabitants), Euskadi has improved its position in the Autonomous Community rankings since 2004, but the starting point was below the economic reality and scientific potential of Euskadi.

The 2017 Strategic Plan set the following **7** challenges for the 2017 horizon, in which Ikerbasque should play a facilitating role, helping the various organisations to achieve their objectives:

- 1. Euskadi achieves 7,000 scientific publications.
- 2. The **productivity** of the Basque Science System improves, moving up **three positions** in the national ranking.
- 3. The **impact** of scientific publications from Euskadi improves.
- 4. Ikerbasque hires **140 new researchers**.
- 5. Ikerbasque researchers publish over **1,000** articles in 2017 and achieve an H index of over **65**.
- 6. Ikerbasque achieves a return of **90 million euros** in the 2014-2017 period.
- BERCs publish 1,000 articles, 15% of the total amount produced in Euskadi.

During this period, five of the seven strategic objectives were achieved while the scientific publications objective was revised due to changes in international trends.

The last Strategic Plan (2014-2017) was structured around three major areas and contained related objectives.

Talent: Since its birth in 2007, Ikerbasque has backed research talent as the main instrument for improving the capabilities of the science system, by attracting, repatriating and consolidating researchers.

TALENT				
Relevant indicators	2014	2015	2016	2017*
Total research staff on permanent contracts (cumulative)	146	155	164	172
Satisfaction Index of Research Professors	7.9	8.1	8.6	8
Nº Research Fellows hired (cumulative)	44	62	70	85
Satisfaction Index of Research Fellows	8.3	7.4	7.8	8
% of women among the research staff recruited during the year	27%	20%	55%	35%

Now, at the end of 2017, the Ikerbasque research community comprises over 200 people, divided into the following categories: Research Professor, Research Associate and Research Fellow.



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Dynamising the Basque Science System: Ikerbasque can provide added value in areas that require scale, as well as the talent we have already described.

DYNAMISING THE BASQUE SCIENCE SYSTEM				
Relevant indicators	2014	2015	2016	2017*
Total annual number of indexed publications from the Basque Country	5,220	5,450	5,376	5,650
Total annual indexed Social Sciences and Humanities publications from the Basque Country	555	620	672	715
Total annual Ikerbasque Scopus publications	782	843	970*	1000
Ikerbasque H Index	47	69	78	80
Average indexed articles and proceedings per Ikerbasque researcher	5.88	5.9	5.74	5.5
Average funds attracted per Ikerbasque researcher (€M)	145	160	138	140
% BERC/total Basque Country publications	13%	16%	17%	15%
New ERCs achieved during the year	2	5	2	3

Excellent Management: maintaining efficient and dynamic management tools is key to achieving the organization's other objectives.

EXCELLENT MANAGEMENT				
Relevant indicators	2014	2015	2016	2017*
Score under the advanced management model	475	490	500	510
Host Group Satisfaction Index	8	7.7	8.4	8
Number of innovations (A category)	14	13	10	12
Staff Satisfaction Index	8.8	8.8	9.2	8.5
% of non Basque Government financing	20%	14%	5%	10%

* 2017 data estimated at the time of writing this strategic plan.

5.1. Internal and external diagnosis

Throughout the strategic reflection process, Ikerbasque has used the organisation's various monitoring tools (performance indicators, satisfaction indexes, interviews, group sessions) to carry out various internal and external analyses that have produced the following SWOT analysis:

WEAKNESSES	STRENGTHS
Limited financial resources	Transversal role in the Basque Science System
Slowing growth	Agile, cohesive and effective management team
Completion of COFUND projects	Ikerbasque researchers are proud of belonging to the institution
Reduced appeal of co-financing competitions	Institutional and financial support from the Basque Government
Difficulty in implementing schemes in which the budget responsibility is shared with public institutions	Prestigious, recognised Scientific Advisory Board with extensive experience
Ikerbasque research community contains few women	Important Ikerbasque research community in terms of size and capability
Reduced management team	Fluid relationships with key partners
Lack of knowledge of public opinion	Prestigious brand in the field of national science
Little known by the international scientific community	Excellent scientific results
	Effective tools for communicating with stakeholders
	Experienced in attracting talent

THREATS	OPPORTUNITIES
Complexity of consolidating scientific careers	New opportunities in key partnerships
Saturation of senior staff at institutions	Improvement in the economic cycle
Relationship management with key partners	Discourse on science in society
Similar initiatives in other locations	The ability to adjust specific funding rounds to centres
Increase in legal limitations on public authorities	Continue to refine the assessment process
Trends of moderate growth in public R&D investment	
Lack of state support	

5.2. Stakeholders

Having a fluid relationship with stakeholders provides knowledge of their expectations of the organisation in subjects that interest them. The organisation hopes to use this to increase mutual trust and contribute to the ability to create value and generate lasting competitive advantages based on distinctive capabilities. Stakeholder analysis is a basic element used to generate the organisation's distinctive capabilities and therefore for the successful implementation of its activities and achievement of its strategic objectives.

Ikerbasque has identified a number of key stakeholders. We have analysed each of these groups below:

STAKEHOLDERS		ERS	NEEDS, REQUIREMENTS AND EXPECTATIONS	INFORMATION AND MONITORING SOURCES
SQUE SCIENCE SYSTEM UD, MU, alth Centres, Technology Centres	Administrative Directorates	Increase the number of research staff and prestige of their centres by hiring Ikerbasque scientists. Suitable on-boarding for these researchers.	Ikerbasque opinion polls. Individual interviews. Discussion meetings.	
	UD, MU, ealth Centres, Techno	Scientific Directorates	Help to identify and attract interesting scientists to increase their centre's scientific excellence without distorting research careers. Provide solutions to problems of scale. Act as a spokesperson in contact with all the other players.	Ikerbasque opinion polls. Individual interviews. Regular discussion meetings.
BA	CICs, Bio-he	Researchers from the System	Clear idea of what Ikerbasque offers and how it can help.	Interviews with local researchers. Basque Science Survey. Social Media Channels.

	BERCs	Administrative Directorates	Increase the number of research staff and prestige of their centres by hiring Ikerbasque scientists. Suitable on-boarding for these researchers. Support in issues of scale.	Ikerbasque opinion polls Individual interviews. Discussion meetings.
		Scientific Directorates	Help to identify and attract interesting scientists to increase their centre's scientific excellence without distorting research careers. Provide solutions to problems of scale. Act as a spokesperson in contact with all the other players. Collaboration on strategic issues.	Ikerbasque opinion polls. Individual interviews. Regular discussion meetings.
		Researchers from the System	Clear idea of what Ikerbasque offers and how it can help.	Interviews with local researchers. Basque Science Survey. Social Media Channels.
	the Basque	Rectory team	Increase the number of research staff and prestige by hiring Ikerbasque scientists without distorting research careers. Suitable on-boarding for these researchers.	Individual interviews. Discussion meetings. Ikerbasque opinion polls.
	niversity of Country	Administrative Staff	Improve the international prestige of the UPV/EHU. Avoid complicating management responsibilities.	Basque Science Survey
	UPV/EHU UI	Teaching and Research Staff	Facilities for developing their own research career. Ensuring that Ikerbasque researchers do not entail management complications or wasted resources.	Interviews with local researchers. Basque Science Survey. Faculty Meetings.
PEOPLE	IKERBASQ UE	Staff	Opportunity for a career in an environment consistent with life ambitions. Combined with fair remuneration within market parameters.	Satisfaction Survey. Personal interviews. 360 Leadership Survey.

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		Research Fellow	The ability to develop a scientific career in a suitable personal and professional environment. Career consolidation process with clear assessment criteria. Fluid relationship between the host centre and Ikerbasque.	Gorbea Satisfaction Surveys. Workshops with Ikerbasque Researchers.
		Research Associate / Research Professor	The ability to develop a scientific career in a suitable personal and professional environment. Fluid relationship between the host centre and Ikerbasque. Maintenance of competitive conditions.	Personal interviews. Phone and email conversations. SQR.
INAL IERS	Partners	Third party suppliers	Companies that provide profitability, loyalty and good communication.	Individual interviews and communications.
EXTE	External	Assessment Committees	Clear communication and suitable planning that allows understanding and assimilation of the objectives.	Evaluator Satisfaction Surveys. Individual conversations.
DIDATE ARCHERS	Ineligible candidates		Clear information about the selection criteria used in calls for proposals.	K2 Satisfaction Survey. Interviews with researchers. Basque Science Survey
CANI RESEA	Eligible candidat es	Already in the system	Specific information, clear and agile procedures, suitable financial-technical offers, security, lack of uncertainty.	K2 Survey. SQR. Basque Science Survey

		Outside the system	Specific information, clear and agile procedures, suitable financial-technical offers, security, lack of uncertainty. Ease the tender process.	K2 Survey. SQR. Calls for proposal webinars. National Contact Point for The Spanish Foundation for Science and Technology (FECYT - Fundación Española para la Ciencia y la Tecnología)
GVERNING BOARD	Governing Board	President, Vice-President, Secretary and Voting Members	Analysis of the results indicators and economic and financial monitoring. Responsible for the foundation's image and reputation.	Interviews with Board members. Board Meetings.
) ETITION	Within Spain	ICREA, ARAID, FICYT, GAIN, CSIC, Universities and Research Centres	Ikerbasque should improve national scientific capacity without distorting research careers.	Monitoring websites, calls for proposals and information in the public domain. Interviews. Euraxess Meetings. Organisational reports. The RADAR Tool. Ikerboost.
СОМ	International	Universities, Research Agencies and Centres	Ikerbasque should improve Europe's scientific capacity without distorting research careers.	International initiative benchmarking. Informative newsletters. Company annual reports. The RADAR Tool. Ikerboost
FACILI TATORS	The Media	Means	Provide comprehensible, appealing and complete information about Ikerbasque activities. Provide fast and satisfactory answers.	Company interview. Individual conversations. Press conferences.

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	Public Administrations	Basque Government	Ikerbasque should be an ally for the Basque Government, helping implement its science policy and support its work.	Basque Government opinions of Ikerbasque. Monitoring Basque budgets.
		MINECO	Ensure Ikerbasque work is coordinated with the work of MINECO.	Information about MINECO initiatives. Coordination meetings.
	European Commission	DG Research	Ikerbasque work should align with EU strategy and promised programmes should be completed.	Discussion meetings. Co-financed project assessments. HRS4R monitoring.
		ERC	Ikerbasque should improve Europe's scientific capacity without distorting research careers.	Indicators of success in ERC competitions. Ikerboost
SOCIETY	The General Public	Society	Improve Euskadi's scientific capacity and the appropriate use of Public Funds.	Social Satisfaction Survey. Individual Meetings. Forums. Focus groups.



5.3. Future needs

The 2020 Plan for Science, Technology and Innovation establishes the following mission:

"Improve well-being, sustainable economic growth and employment in the Basque Country through a research and innovation policy based on intelligent specialisation and improving the efficiency of the Science, Technology and Innovation System."

This plan also functions as a *Research and Innovation Strategy for Smart Specialisation* or RIS3. The implementation of RIS3 methodology translates into a Plan for Science, Technology and Innovation that considers Euskadi's science and technology capabilities, strategic activities and its local and international market orientation.

As a result of the participatory process used to draft this strategy, the Euskadi 2020 Plan for Science, Technology and Innovation sets out a research and innovation policy based on intelligent specialisation and improved efficiency in the Science, Technology and Innovation System, using four strategic and two transversal lines:



Ikerbasque's current capabilities and mission allow the organization to be a key player in implementing Strategic Line 3 (Excellence) and Transversal Line 1 (Internationalisation).

INCREASE THE EXCELLENCE OF THE BASQUE SCIENCE, TECHNOLOGY AND INNOVATION SYSTEM

Euskadi has the infrastructure and a highly developed science and technology network whose results determine the level of excellence achieved by the entire system and which we aim to improve by establishing suitable indicators. This improvement will allow us to facilitate knowledge transfer to companies and the subsequent reductions in reliance on public funding. One of the priority lines of action is "to increase Euskadi's scientific production." This largely involves improving the efficiency of basic research activities to increase scientific production both in qualitative and quantitative terms and to improve our position in comparison with other regions.

OPENING AND INTERNATIONALISATION OF THE SCIENCE, TECHNOLOGY AND INNOVATION SYSTEM

We need to internationalise the Science, Technology and Innovation System to make it easier to capture and generate new knowledge, to identify trends that promote technological development and business opportunities and to position the system itself on the international scene. This involves taking part in international networks, attracting foreign investment capital and making the most of the various existing programmes to promote science, technology and innovation, both in Europe and in other countries.

The momentum generated by Basque participation in Horizon 2020 is an opportunity to capture and generate new scientific and technological knowledge and to make it easier for companies to increase their technological intensity to improve competitiveness. It also allows them to carry out targeted research to reinforce the strategy of intelligent specialisation, by participating in the European areas most connected to the established priorities.

6. CHALLENGES FOR 2021

Projecting current trends and maintaining support for scientific research, Euskadi can set itself the following **12 challenges** for 2021:

- 1. Euskadi achieves 7,000 scientific publications.
- 2. Euskadi continues to increase its weight in national scientific production, reaching **7.25%** of the total output.
- The productivity of the Basque Science System improves, moving up to 5th place in the national ranking.
- The normalised impact of Basque scientific publications improves, moving up to 2nd place in the national ranking.
- 5. 25% of publications from Euskadi appear in **maximum impact** journals (1D).
- Production in the fields of Social Science and the Humanities continues to increase and exceeds 1,200 annual scientific publications.
- 7. Scientific research in Euskadi **converges** on the fields defined in the RIS3 strategy.
- 8. BERCs publish **1,200 scientific articles**, 17% of the total produced in Euskadi.
- 9. Ikerbasque hires **120 new researchers in the** 2018-2021 period.
- 10. **40%** of the research staff hired by Ikerbasque in 2021 **are women**.
- 11. Ikerbasque researchers publish over **1,250** articles a year and increase the number of high impact publications.
- 12. Ikerbasque achieves a return of **80 million euros** in the 2018-2021 period.

7. 2018-2021 ACTION PLAN

7.1. Mission, Vision and Values

MISSION

Ikerbasque is the organisation promoted by the Basque Government to strengthen science in Euskadi through programmes to hire and consolidate the careers of researchers, to dynamise research in cooperation with research centres and universities and a commitment to excellence.

VISION

In 2021 Ikerbasque aspires to be:

- A dynamic hub in the Basque Science System.
- Behind a dynamic and productive Ikerbasque scientific community, thanks to its demonstrated ability to hire and consolidate the careers of scientific talent.
- In close partnership with universities and scientific institutions.
- Recognized by society, the public authorities and its Governing Board for its contribution to improving science in Euskadi, for its management model, transparency and sustainability.
- A place where people can fully develop their careers.

VALUES			
Efficiency	We are committed to outperforming our results by using the resources available to us in an optimal manner.		
Accountability	Society must be able to access the strategy we implement and results obtained in a transparent manner.		
Cooperation	We are an extended organization that works closely with our stakeholders and works as a team.		
Commitment	We proactively and enthusiastically dedicate all our working capacity to fulfilling our objectives.		
Equality	We value each person's merit and abilities and work to ensure equal opportunity and treatment in all our activities.		
Respect	We are considerate and attentive to the people and institutions with whom we interact.		

7.2. Critical Factors for Success

Ikerbasque strategy for the 2018-2021 period has been designed having identified and analysed a series of critical factors on which the proper functioning of the organisation and achievement of our objectives depend.

CRITICAL FACTORS FOR SUCCESS		
Institutional Support	The success of Ikerbasque in implementing its strategy and carrying out its main activities is largely due to the fact that it can count on firm institutional support. We need commitment, collaboration and support from the Public Authorities, universities and research centres to implement our policies and achieve Ikerbasque's principal objective: to strengthen the Science System in Euskadi.	
Solvency	Ability to deploy strategy and comply with our existing commitments. For Ikerbasque to carry out its activities and comply with its founding goals, it needs suitable financial resources for achieving its target objectives.	
Prestige	Reputation for excellence that allows us to create a bond of trust with the various stakeholders, notably the scientific community and Basque society.	
Interest	The appeal of Ikerbasque programmes and the degree to which they fit in with the needs of the scientific institutions in Euskadi.	

7.3. Overall suitability of our strategy

Ikerbasque's principal objective is to strengthen the Science System in Euskadi. Six strategic objectives were set in three main **areas to achieve this goal:**

- **Talent:** Since its birth in 2007, Ikerbasque has backed research talent as the main instrument for improving the capabilities of the Science System, by attracting, repatriating and consolidating researchers.
- Excellent Management: maintaining efficient and dynamic management tools is key to achieving the organisation's other objectives.
- **Support the Basque Science System**: due to its position at the heart of the Basque Science System, Ikerbasque can provide added value in areas that require scale as well as the talent described above.

TALENT

- **IK.1** Strengthen the Basque Science System by hiring senior research staff.
- **IK.2** Complete the scientific career of established researchers.
- **IK.3** Promote a pool of future science leaders for the Basque Science System.
- **IK.4** Foster a connected and productive Ikerbasque science community.

EXCELLENT MANAGEMENT

IK.5 Promote excellent, open and committed management.

SUPPORT THE BASQUE SCIENCE SYSTEM

IK.6 Support the Basque Science System in achieving its objectives.

7.4. Strategic Objectives

IK 1 - Strengthen the Basque Science System by hiring senior research staff.

The Ikerbasque Research Professor Programme has been the fundamental axis of Ikerbasque intervention from the outset. These researchers currently contribute to over 10% of scientific production in Euskadi.

Ikerbasque Research Professors have also been major agents for attraction of external resources, and have had direct impact on improving the system's capabilities by hiring research staff and improving scientific infrastructure.

STRATEGIC OBJECTIVE	LINES OF ACTION
ence staff	Recruit top-level scientific staff to scientific institutions in Euskadi through the Research Professor programme.
isque Sci research	Launch dedicated calls for proposals for the senior profiles needed in the Basque Science System.
then the Ba ing senior	Recruit top-level scientific staff to scientific institutions in Euskadi by capturing researchers with top-level international competitive funding such as from the ERC.
- Strengt em by hir	Identify strategic areas for dynamising the Basque Science System by hiring scientists.
IK 1 Syste	Develop a competitive career plan for established Ikerbasque researchers.

IK 2 - Complete the scientific career of established researchers.

Research career continuity is key to consolidating Euskadi as a centre that attracts talent, which is why the Basque Government and Ikerbasque launched in 2016 the Research Associate Programme extending the Research Fellow Programme for young researchers to guarantee a complete scientific career.

STRATEGIC OBJECTIVE	LINES OF ACTION
ireer of	Consolidate the research career of Ikerbasque Research Fellows through the Research Associate Programme.
scientific ca esearchers	Allow Ramón y Cajal and Miguel Servet researchers in the Basque Science System to consolidate their careers through the Research Associate Programme.
omplete the sectablished r	Recruit promising scientific staff to scientific institutions in the Basque Country by capturing researchers who have secured major international competitive funding from institutions like ERC.
IK 2 - C	Deploy instruments of talent attraction and management for the Research Associate Programme.



IK 3 - Promote a pool of future science leaders for the Basque Science System.

Ikerbasque launched the Research Fellow call in for the first time in 2012. The initiative was specifically designed to attract and keep young researchers in the Basque Country, to create a pool of research talent. The initiative aims to complement the recruitment of senior scientists with other profiles to ensure the continuity of Basque research.

Given the good results obtained in previous calls and the welcome from various research centres and universities in the system, support for this programme is being strengthened.

STRATEGIC OBJECTIVE	LINES OF ACTION
a pool of eaders for cience	Recruit future scientific leaders to work at scientific institutions in Euskadi through the Research Fellow programme.
Promote science le Basque S System	Promote the return of junior scientific talent trained in Euskadi - Basque Fellows.
IK 3 - I future s the E	Create a suitable environment for the scientific development of young researchers.

IK4 - Foster a connected and productive Ikerbasque science community.

The various programmes to attract research talent carried out by Ikerbasque since its launch in 2017 have created a research community that now comprises over 220 scientists at 21 research centres and universities in the Basque Science System.

This community has great potential for dynamising local science and specific needs for Ikerbasque to address.

STRATEGIC OBJECTIVE	LINES OF ACTION
ive	Work on the complete integration of research staff at scientific institutions in Euskadi.
producti munity	Provide support and assistance to Ikerbasque researchers.
cted and ince com	Reinforce the mechanisms in the Three-Year Development Plan.
r a conne sque scie	Encourage the dissemination of research results to achieve greater social recognition for science.
4 - Fostei Ikerba	Complete the implementation of a European OTM-R policy for research staff.
IK	Promote the creation of instruments to improve the productivity of the Ikerbasque community.

IK 5 - Promote excellent, open and committed management.

Maintaining efficient and dynamic management tools is key to achieving the organisation's other objectives. In 2011 and again in 2015, Ikerbasque won the silver Q for excellent management and it plans to maintain this management model over the next few years.

STRATEGIC OBJECTIVE	LINES OF ACTION
itted	Promote continuous improvement and innovation at Ikerbasque.
and comm	Guarantee the financial resources necessary to support Ikerbasque policies and for efficient financial management.
ent, open gement	Boost participation and accountability tools to strengthen relationships with stakeholders.
e excelle mana	Promote equal opportunities at the organisation by implementing a Plan for Equality.
5 - Promot	Develop the various areas of knowledge covered by Ikerbasque actions in a balanced manner, boosting least represented areas.
ЯІ	Support the development of socially responsible actions.

IK 6 - Support the Basque Science System in achieving its objectives.

Due to its position at the heart of the Basque Science System, Ikerbasque can take part in initiatives to improve the overall performance of the system, such as the attraction of external resources.

STRATEGIC OBJECTIVE	LINES OF ACTION
es	Monitor and follow-up scientific activity in Euskadi.
ts objectiv	Update and manage the science.eus website promoting high-level capabilities from the science and technology network in Euskadi.
hieving i	Create BIHAR: supporting infrastructure for research initiatives.
em in ac	Strengthen the Basque Science System through management support for the BERC network.
nce Syst	Enhance support for the research community in Euskadi through the Euraxess Service Centre.
ie Scie	Provide tools to assist competitive financing.
: the Basqu	Provide ICT infrastructure and services to members of the Basque Science and Technology Network through the i2Basque network.
- Support	Enhance the international reputation of the Basque Science System.
IK 6 .	Support transversal initiatives to create tools to facilitate this process.

7.5. Process Map

Since its inception, Ikerbasque adopted a process management model, initially based on EFQM and more recently on the Advanced Management Model (AMM) that answers the organisation's Mission and Vision and supports the Strategy and the management of the objectives in this plan.

The Ikerbasque strategy and objectives for the 2018-2021 period are implemented as processes that support key and supporting strategic aspects. These processes are:





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The main indicators in the Integrated Dashboard for the 2018-2021 period are:

		Cuadro de Mando Integral 2018	-2021							
			2017	2018	2019	2020	2021			
	Strategic objectives	Key indicators	Obj	Obj	Obj	Obj	Obj			
1	Strengthen the Basque Science	1 Nº RP recruited in the year	10	10	10	10	10			
Ĩ	staff	2 N° RP recruited (cumulative)	150	160	170	180	190			
2	Complete the scientific career of	3 Nº RA recruited in the year	10	10	10	10	10			
	established researchers	4 Nº RA recruited (cumulative)	10	20	30	40	50			
2	Promote a pool of future science leaders for the Basque Science System	5 Nº RF recruited in the year	15	20	20	20	20			
		6 Nº RF recruited (cumulative)	75	85	90	95	100			
		7 Annual total nº Ikerbasque Scopus publications	1000	1055	1120	1185	1250			
		8 Annual total nº Ikerbasque publications aligned with RIS3	500	528	560	593	625			
		9 Annual increase in ^o Ikerbasque Scopus publications	10%	6%	6%	6%	6%			
		10 Ikerbasque H Index	80	85	90	95	100			
		11 Total funds attracted by Ikerbasque researchers (EUR M)	21	22	24	26	28			
		12 Average articles and indexed proceedings per RP researcher	5,5	5,5	5,5	6	6			
		13 Average funds attracted per RP researcher (EUR)	140.000	140.000	145.000	145.000	150.000			
4	Foster a connected and productive Ikerbasque science community	14 Researchers in groups led by RP	750	850	900	950	1.000			
		15 Average articles and indexed proceedings per RA researcher	-	4,5	4,5	5	5			
		Average funds attracted per RA researcher (EUR)	-	30.000	30.000	35.000	35.000			
		17 Average articles and indexed proceedings per RF researcher	3	3,5	3,5	4	4			
		18 RP Satisfaction Index	8	8	8	8	8			
		19 RA Satisfaction Index	8	8	8	8	8			
		20 RF Satisfaction Index	8	8	8	8	8			
		21 Satisfaction Index of Ikerbasque researcher host institutions	8	8	8	8	8			
	Promote excellent, open and committed management	22 Score using the Adv Management Model	500	500	500	500	500			
		23 % women in the research staff recruited during the year	35%	37%	38%	39%	40%			
5		24 Staff Satisfaction Index	8,5	8,5	8,5	8,5	8,5			
		25 % coverage of funds captured compared with those provided by the Basque	1,5	1,5	1,5	1,5	1,5			
		26 % non Basque Government financing	10%	10%	10%	10%	10%			
	Support the Basque Science System in achieving its objectives	27 Annual total indexed publications from Euskadi (previous year)	5.500	5.875	6.250	6.625	7.000			
6		Annual increase in indexed publications from Euskadi (previous year)	5%	6%	6%	6%	6%			
		29 Annual total indexed publications from Euskadi in SSH (previous year)	900	1.010	1.090	1.170	1.250			
		30 Total number indexed publications from BERC cenrtes (previous year)	1.000	1.050	1.100	1.150	1.200			
		31 % BERC publications / total Basque Country publications (previous year)	18%	18%	18%	18%	18%			
		32 New ERCs achieved during the year	3	3	3	3	3			

The Ikerbasque budget is strongly connected to projected research staff growth and currently has **three main sources** of funding:

- The **Basque Government**, through the Department of Education and the Innovation Fund.
- The **European Union** through funding from various competitive calls for proposals.
- The scientific institutions in the Basque Science System, who co-finance the employment contracts of Ikerbasque researchers.

We have estimated that the following investment and expenses budget is required to carry out the lines of action identified in this Strategic Plan for the 2018-2021 period.

EXPENSES/INVESTMENTS	2017	2018	2019	2020	2021
Partnerships with the Basque Science Systen	1 2,600,000	2,500,000	3,000,000	3,500,000	4,000,000
Staff	12,500,000	13,000,000	13,600,000	14,100,000	14,600,000
Operating expenses	900,000	900,000	900,000	900,000	900,000
Amortizations	200,000	200,000	200,000	200,000	200,000
Subtotal expenses	16,200,000	16,600,000	17,700,000	18,700,000	19,700,000
Assets Purchase	250,000	300,000	100,000	50,000	50,000
Subtotal investments	250,000	300,000	100,000	50,000	50,000
TOTAL EXPENSES/INVESTMENTS	16,450,000	16,900,000	17,800,000	18,750,000	19,750,000

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