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ikerbasque Basque Foundation for Science







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Strategic plan 2024











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Strategic plan 2024 •





Ikerbasque was launched by the Education Department of the Basque Government in 2007, with the aim of contributing to the development of scientific research by attracting outstanding researchers and by reestablishing scientific talent in the Basque Country.

Since then, our activity has been guided by four strategic plans (2007-2009, 2010-2013, 2014-2017 and 2018-2021) which have allowed Ikerbasque to consolidate itself as a scientific model of excellence in the attraction of talent with close to 300 outstanding researchers. It has also contributed to the creation and development of BERC centres.

Soon after finalising the last plan, Ikerbasque's Governing Board set out on a process of strategic reflection culminating in the creation of this 2021-2024 Strategic Plan, which will shape Ikerbasque's activities over the coming years.

The Strategic Plan 2024 starts with an analysis of global trends in science and political science, after which it analyses the current state of science in the Basque Country. With this overview of the context in which we place ourselves, it analyses the organisation of Ikerbasque itself by studying the principal indicators of success, as well as the needs and expectations of our stakeholders, which have been compiled through a process of open and participatory strategic reflection. The conclusions of all of this are covered by the SWOT analysis, which outlines the principal strengths, weaknesses, opportunities and threats facing lkerbasque in the coming years.

Through our analysis, we have redefined the mission, vision and values that will guide the work of Ikerbasque over the next four years. This Plan establishes 12 challenges for 2024. To achieve them, it proposes seven strategic objectives divided into 40 paths of action for which we have included concrete and ambitious objectives in line with the Science, Technology and Innovation Plan for 2030 (PCTI 2030) and the Sustainable Development Goals (SDGs). It also defines the process model to follow for the execution of the Strategic Plan, including a budget forecast for its completion and a full time frame.









COMPANIES OF **TECHNOLOGICAL BASIS**

EUROPEAN RESEARCH COUNCIL GRANTS

PREPARATION OF THE PLAN

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PREPARATION OF THE PLAN



Since our foundation, our activity has been guided by four strategic plans (2007-2009, 2010-2013, 2014-2017 and 2018-2021).

The new 2021-2024 Ikerbasque Strategic Plan has been developed through process of strategic thinking in which all our stakeholders have participated, with the aim of answering their needs, especially those who are part of the Basque Science System. **PRELIMINARY PHASE** DECEMBER 2020

• Defining the participatory process of strategic thinking and the stakeholders

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 Comparative analysis of strategic plans used by other scientific institutions





Stage I

ANALYSIS JANUARY - MARCH 2021

- External analysis with stakeholder participation
- Internal analysis of Ikerbasque: self-evaluation, risk analysis, performance analysis
- Strategic reflection on the Mission, Vision, Values and the Key Success Factors
- Development of Strategic Objectives, action points and the balanced scorecard

Stage II

VERIFICATION AND APPROVAL MARCH - MAY 2021

- Draft of the 2021-2024 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 2021-2024 Strategic Plan
- Final approval by the Governing Board

DEPLOYMENT AND MONITORING 2021 - 2024

- Dissemination of the 2021-2024 Strategic Plan to stakeholders
- Annual monitoring and evaluation of key indicators
- Publication of the results

Stage III

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EXTERNAL ANALYSIS: SCIENCE

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EXTERNAL ANALYSIS: SCIENCE



In developing the Strategic Plan, it is necessary to undertake an analysis of our environment to identify and understand the trends in the world of science and the role that Ikerbasque can play in the coming years.

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2.1 Global trends

Scientific advances allow us to find answers to the social, economic and environmental challenges facing humanity. This scientific advancement presents some trends at a global level of which we must be aware:

2.1.1

Booming research and development areas

In the 21st century, research and development has intensified in new areas of scientific inquiry in line with the social challenges that the world is confronted with and which carry increasing importance, largely because of their high potential to be used by society.

- Nanotechnology: The technology of the new millennium has high potential to be applied in diverse areas. The advances in this field are having an impact on all industries and sectors.
- The rise of data: The possibilities presented by Artificial Intelligence, robotics, digitalisation and supercomputing have both technical and ethical implications. Their impact transcends the scientific-technological sphere, even affecting the social model.
- Health and Biotechnology: Medical advances are seen as a necessity for improving the quality of human life, so research in these areas will continue to be of great scientific interest. It is expected that huge advances will be made in all specialised fields, although the big challenge will be to understand the great unknown of the human body: the brain.
- Conservation of the natural world and clean energy: Climate change and energy transition are some of the principal challenges facing society and, as such, huge scientific efforts are being dedicated to this area. In addition, new movements such as *Do No Significant Harm* (*DNSH*) promote environmentally responsible research in all scientific disciplines.

2.1.2 Decentralisation of world leadership in science

In recent years, Europe, United States, and Japan have led scientific progress. However, with the development of emerging countries the global balance in science has shifted.

Although Europe and North America still participated in more than 30% and 20% of global production respectively in 2020, their dominance is decreasing in favour of these new global players. This leads us to understand that global scientific production is becoming increasingly spread out.

As an example of the relevance that emerging countries are acquiring, it should be noted that in 2020 China had already become the leading country in terms of absolute scientific production, being involved in more than 20% of world scientific production in 2020. This upward trend is also seen, to a lesser extent, in India, Latin America, the Middle East and Southeast Asian countries, and is in contrast with the diminishing importance that Western countries hold. As far as top-quality production is concerned, consisting of that which is published in 1% of the best reviewed scientific journals in the world, the US still maintains its leadership, contributing to more than 40% of that production (Figure 1). China, with its contributions at just 20%, is still far from the combined production of European countries or of the United States. However, China's exponential growth contrasts with Europe's plateauing and even the United States decline in recent decades, which opens the possibility that China could catch them up in the next ten years.



Percentage of high quality production of the world spanning Europe, USA and China.

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2.1.3 Convergence of scientific disciplines

The traditional model classifies scientific knowledge into distinct fields of inquiry in which research activity is carried out. Better knowledge of these disciplines has led to specialisation in all of them, which has made it increasingly difficult for a researcher to embrace a wide range of knowledge in distinct specialised fields.

While scientific knowledge increases, the challenges which science faces become more and more complex. This means that collaboration between experts of distinct fields is increasingly necessary to find the answers to increasingly advanced questions. In this way, multidisciplinarity in research projects is becoming more and more important, as it allows the combination of expert knowledge from different fields and the ability to tackle problems from distinct points of view, paving the way to a greater variety of solutions.

This means that the multidisciplinary research model is being developed by institutions, driving the formation of synergies between different fields of knowledge and their transversality.

2.1.4 Promoting social impact of science

The growth of scientific knowledge has always been the lever that has generated technological and social progress, which has allowed humanity to advance. This transfer, however, has not always been considered as an intrinsic role of scientific labour, which on occasions has focused exclusively on the generation of knowledge and not so much on its subsequent applicability. The transfer of new knowledge in order to have a direct impact on society is considered to be more and more necessary, highlighting that putting scientific knowledge at the service of society is also part of the work of researchers. This does not mean that science should focus on purely utilitarian criteria, with value only given to its practicality, but the idea that scientific publications are an end in themselves is valued less and less. Instead, it is the effect on future jobs and the social impact of the research which are being sought out. In this way, science is moving towards a model in which things are *useful* and not merely *interesting*.

In this context, concepts such as translational medicine (*from bench to bedside*), technoscience, and Responsible Research and Innovation have been gaining more relevance. This is steering scientific policies towards social needs and demands, and supports the instrumentalisation of scientific knowledge as a means to promote technological innovation and social return on research.

2.1.5 Science and politics

Scientific understanding can help political decision makers make decisions based on scientific evidence. In advanced societies there have been recurrent calls to strengthen the relationship between science and politics, with varying results across the globe.

However, the recent coronavirus crisis has led scientific criteria to permeate political decisionmaking, a result of the need that the pandemic has created. This crisis has furthermore made clear the need for a strong scientific system as a tool to tackle societal challenges.

2.1.6 Sustainable Development Goals

The Sustainable Development Goals (SDGs) act as an agenda to follow for 2030 and were approved in September 2015 by the Member States of the United Nations in order to eradicate poverty, protect the planet and ensure peace and prosperity for everyone. This agenda is structured around 17 universally applicable goals in which all countries must move forward.

Driven by governments, all areas of our society seek to support the progress of these goals and achieve the proposed targets. In this context, science and technological development constitute a fundamental tool for the advancement of the SDGs, since they play a strategic role in our society as the drivers of the so-called knowledge society. Scientific players can act as catalysts for the analysis of the challenges which need to be addressed, and can form an active part in the development of tools for their execution (technology, applied science or social innovation).

2.1.7 Evaluation of scientific production

The evaluation of scientific production has always been complex. To do it, a series of bibliometric indicators have been developed which attempt to measure the impact created by new knowledge based on various characteristics of the publication such as the journal in which it is published, the number of times it is cited by other works, or its research field.

These bibliometric indicators are often used by agencies and organisations as a tool to evaluate scientific output. This has led to the bibliometric indicators acquiring, on occasion, an even greater importance than the actual content of the published work. *The 17 Sustainable Development goals defined by the United Nations.*



However, there are a growing number of voices who oppose this system, given that the relevance of an article does not always align with its bibliometric indicators. A clear example of this is online publications, a new trend of which the bibliometric value is very low and sometimes not pertinent to the content of the work. For this reason, it is important to assess the value of the "discovery", and focus less on its bibliometric indicators.

This trend has been represented by diverse initiatives across the world, a few of which we would like to highlight.

- The San Francisco Declaration on Research Assessment (DORA) was published in 2021.
 It establishes some guidelines through which to avoid a strictly bibliometric assessment in the evaluation of scientific production.
- The Leiden Manifesto is a set of guidelines published in Nature in 2015 by Diana Hicks and Paul Wouters in collaboration with other scientists. This manifesto seeks to prevent the excessive use of bibliometric indicators for the evaluation of scientific production, and promotes more qualitative assessment.

2.2 Science in Euskadi

Having analysed the overall trends in science worldwide, we are going to focus on Euskadi to study the current situation as well as the instruments and capacities at its disposal to meet future needs.

2.2.1 Scientific Policy

Scientific policy in Euskadi is coordinated by the Science, Technology and Innovation Plan for 2030 (PCTI 2030) which forms the framework that integrates and coordinates all policies and activities to support R&D&i developed by the Basque Government.

As well as being linked to other plans as part of the country's overall strategy *Agenda Basque Country 2030*, the PCTI 2030 is in line with the new European framework programme *Horizon Europe*, and revolves around a central tenant, *talent*, which is underpinned by three strategic pillars:

- Scientific excellence
- · Industrial and technological leadership
- Open innovation

To address the PCTI 2030, four operational objectives have been defined which will be fulfilled through a series of tools put together principally by the Basque Government to strengthen the Basque Science, Technology and Innovation Network (RVCTI, Red Vasca de Ciencia, Tecnología e Innovación), and to reach the objectives outlined in the plan through the following key points:

- The formation of an extensive body of people in science and technology.
- The creation and consolidation of high level research infrastructure.

• The harnessing of scientific advances for Euskadi's economic, social and cultural development.

Most scientific policy initiatives have been launched by the Department of Education. However, the Department of Economic Development, Sustainability and the Environment is also in charge of important means of promoting scientific and technological capacities, along with the Department of Health, which has at its disposal specific tools for R&D in the bio-health sector.

2.2.2 Principle players

To execute scientific policy, the Basque Country has a series of centres and institutions that are divided into five types of entities or sectors. Each entity occupies a specific space in order to span the entire scientific-technological spectrum, from the initial stages of basic research to the transfer of such research to society through technological-industrial development:

- Universities: Their objectives include ensuring the development of fundamental and applied science in Euskadi, driving the generation of scientific knowledge and its appreciation as an active element in social development.
- Basque Excellence Research Centres (BERCs): This network of nine research centres reinforce the Basque scientific system in specific areas, driving outstanding research in the universities.
- Cooperative Research Centres (CIC, Centros de Investigación Cooperativa): These institutions are developing their fundamental and applied research, promoting competitive strategic research and its transfer to industry.

- Health Research Centres (IIS, Institutos de Investigación Sanitaria): The three Health Research Institutes, as well as teaching and research hospitals in the healthcare system (Osakidetza), make up a fundamental part of health research in Euskadi.
- **Technology Centres:** Technological centres are important players in the generation of applied science, through competitive research projects and through agreements and strategic actions with companies. These centres, together with the four CIC, form part of the Basque Research & Technology Alliance (BRTA), a scientific-technological partnership serving to respond more efficiently to Euskadi's technological and industrial challenges.

2.2.3

Performance analysis

For Euskadi to be able to position itself as an international model in the knowledge society, it requires a science system which is characterized by its quality and excellence as well as by its capacity to exploit the knowledge generated.

The evolution of spending on R&D as well as on research staff has historically granted the Basque system of science and technology a strong technological character. However, in recent decades a considerable effort has been made to boost the different scientific disciplines so that the results obtained from excellence in these areas benefit society, in line with European strategy.



Funding

Research funding plays a prominent role in R&D policies, given that one of the bases for the competitiveness of a science and technology system is solid and sustained investment over time.

Investment in R&D in Euskadi shows a very positive trend since the beginning of this century. Although there was a slight reduction between 2010 and 2015, in recent years R&D investment has grown again, reaching more than 1,400 million euros in 2018, a record figure that represents *almost 2% of GDP* in Euskadi.



Investment in R&D in Euskadi in the last few decades.

People

This commitment to science has made possible the integration of people into the Basque Science, Technology and Innovation Network, increasing the number of staff dedicated to R&D, who are the ones driving scientific development in our region. This continuous effort has led more than 20,000 people to dedicate themselves completely or partially to research and development in Euskadi, almost 2% of the active population.

When considering Full Time Equivalence (FTE), Euskadi has more than 13,000 people dedicated to R&D, 1.22% of the active population in FTE. This positions us behind Nordic countries like Denmark, Sweden and Finland, and 40 basis points above the European average, situated at 0.86%.

It is to be noted that the growth in the population of researchers in Euskadi has not contributed to significantly reducing the gender gap in the sector. Consequentially, the percentage of women in FTE in 2018 barely reached 35%, with an increase of only 5% over the last 20 years.



Percentage of the active population in FTE who is researcher, in 2018.



Scientific Production

The rise in research staff in Euskadi has allowed the growth of new knowledge generated in the region, measured through the number of scientific papers published. .









In addition, if we analyse the percentage of publications in reference journals worldwide, we see that the figure has increased, especially since 2010. This suggests that the quality of work published in Euskadi has improved over the last decade, there being a higher percentage in internationally renowned journals.

Percentage of scientific production in Euskadi during the first quarter (Q1), namely, in the top 25% of the best reviewed journals by Scimago Journal Rank (SJR).



2.3 Benchmarking of other initiatives

Ikerbasque's main contribution to strengthening the Basque Science System consists of attracting and consolidating scientists in Euskadi. In this context, we are going to study other programmes that exist at the international, state and regional level that may represent competition for the recruitment of possible candidates to be hired by Ikerbasque.

2.3.1 Positioning of Ikerbasque within Euskadi

Ikerbasque's talent attraction programmes hold a place in the Basque Government's itinerary for the development of research careers in the region.

Thus, the lkerbasque programme for attracting researchers has its own niche in the most advanced stages of the research career, and there are no other Basque Government programmes aimed at these profiles.

There are other state and international programmes for postdoctoral researchers that compete with Ikerbasque programmes and which the Foundation has analysed in order to set out this new Strategic Plan.



Research experience



2.3.2 Analysis of other postdoctoral programmes

There are multiple initiatives which aim to empower different scientific systems through the recruitment of talent. Ikerbasque constantly monitors these initiatives, carrying out international benchmarking actions which allow us to better understand the needs of some stakeholders and incorporate learning into our own strategy.

ENTITY	PROGRAMME
European Commission	The European programme Marie Sklodowska Curie Actions seeks to support professional development and training of researchers in all scientific disciplines. Specifically, the Individual Fellowships (IF) branch finances experienced researchers through the implementation of research projects in Europe. Furthermore, ERC grants finance projects of scientific excellence.
State programmes	At the state level, there are three principle programmes aimed at experienced postdoctoral research staff: the Ramón y Cajal programme, the Miguel Servet programme, and the senior Beatriz Galindo programme. To consolidate research staff in Euskadi, these programmes have been equated to that of the Research Fellows programme, providing researchers in Euskadi on these programmes the chance to be evaluated and to get a permanent position as a Research Associate at Ikerbasque.
Other autonomic programmes	Some autonomous communities have talent attraction programmes in place similar to those of Ikerbasque, for individuals with profiles ranging from our Research Fellows to Research Associates and Professors. These programmes include ICREA in Catalonia, Araid in Aragon, GAIN Oportunius in Galicia, Talentia in Andalusia and Generación Talent in Valencia, to name a few.
Private funding	Some private entities have launched funding programmes to promote high-quality and innovative research in Spain, and to support the best scientific talent by offering them an attractive and competitive environment in which to carry out research of excellence. These programmes include the company grants such as La Caixa's Obra Social (Social Work) or the BBVA Foundation, or non-profit organizations such as the Spanish Association Against Cancer.

INTERNAL ANALYSIS OF IKERBASQUE

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INTERNAL ANALYSIS OF IKERBASQUE



3.1 Stakeholders

Maintaining a fluid relationship with stakeholders allows for awareness of their expectations in terms of company responses to issues that are of interest to them. Through this, lkerbasque wants to deepen mutual trust with its supporters and contribute to the ability to create value and generate lasting competitive advantages based on distinct capacities. Stakeholder analysis constitutes a fundamental element in the generation of distinct capacities in the organisation and, as a consequence, for the successful performance of its activities and the achievement of its strategic objectives.

Ikerbasque has identified a series of key stakeholders with which our activity is interlinked. The analysis of each of these stakeholders is shown below, in which the needs, requirements and expectations by each of these groups are collected:

STAKEHOLDERS			AND EXPECTATIONS
BASQUE SCIENCE SYSTEM	UD, MU, CICs, Bio-health Centres, Techno- logy Centres	Administrative Directorates	Increase the number of research staff and the prestige of their centres by hiring lkerbasque scientists. Ensure suitable on-boarding for these researchers.
		Scientific Directorates	Help to identify and attract interesting scientists to increase their centre's scientific excellence. Provide solutions to problems of scale. Act as a spokesperson in contact with the other players.
		Research staff	Clear idea of what lkerbasque offers and how it can help.
	BERCs	Administrative Directorates	Increase the number of research staff and the prestige of their centres by hiring lkerbasque scientists. Ensure suitable on-boarding for these researchers.
		Scientific Directorates	Help to identify and attract interesting scientists to increase their centre's scientific excellence. Provide solutions to problems of scale. Act as a spokesperson in contact with the other players.
		Research staff	Clear idea of what lkerbasque offers and how it can help.
	UPV/EHU	Management team	Increase the number of research staff and the prestige of their centres by hiring lkerbasque scientists. Ensure suitable on-boarding for these researchers.
		PIs and stablished groups	Improve international prestige of UPV/EHU. In some cases, be able to choose to incorporate lkerbasque research staff into their research groups.
		The rest of the teaching staff	Facilities for developing their own research career.

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STAKEHOLI	DERS	NEEDS, REQUIREMENTS AND EXPECTATIONS	
Ikerbasque	Management team	Staff	Opportunity to develop a career in an environment consistent with life ambitions. Combined with fair remuneration within market parameters.
	Researchers	Research Fellow	Opportunity to develop a scientific career in a suitable professional and personal environment. Career consolidation process with clear assessment criteria. Fluid relationship between the host centre and Ikerbasque.
		Research Associate	Opportunity to develop a scientific career in a suitable professional and personal environment. Career consolidation process with clear assessment criteria. Fluid relationship between the host centre and Ikerbasque. Continuation of competitive conditions.
		Research Professor	Opportunity to develop a scientific career in a suitable professional and personal environment. Fluid relationship between the host centre and Ikerbasque. Continuation of competitive conditions.
CANDIDATES	Candidates	Ineligible candidates	Clear information about the selection criteria used in our calls for proposals.
		Eligible candidates in the system	Specific information, clear and fast procedures, suitable financial-technical offers, security, lack of uncertainty.
		Ineligible candidates not yet in the system	Specific information, clear and fast procedures, suitable financial-technical offers, security, lack of uncertainty. Facilities for integration into the system.



NEEDS, REQUIREMENTS

STAKEHOLDERS AND EXPECTATIONS BASQUE Minister's office, Department That Ikerbasque develop the GOVERNMENT of Deputy minister's scientific policy actions entrusted / GOVERNING **Education** office and to it and set an example for other BOARD management team organizations. Governing Councils, Analysis of result indicators **Board** innobasque and and monitoring of financial and other trustees economic aspects, as well as of the Foundation's image and reputation. Healthcare Other That Ikerbasque enhances the departments and Economic research work promoted by other development departments. Lehendaka-**Basque Council** That Ikerbasque be an ally of ritza for Science, the Basque Government in the (Basque Technology and deployment of its scientific policy Government) Innovation (CVCTI) and support its work. **EXTERNAL Suppliers** Companies that provide profitability, Key **COLABORA**suppliers loyalty and good communication. TORS Assessors Scientific Clear communication and suitable Advisory planning that allows understanding Board (SAB) and assimilation of the objectives. External Clear communication and suitable assessors planning that allows understanding and assimilation of the objectives. Other Spanish That Ikerbasque improves the scientific organisms capacity of the state and contributes to Government achieve their objectives. Ikerbasque's work should be in line with European EU strategy and the programmes it Commission commits to should be met. Ikerbasque should improve Europe's scientific capacity. Ikerbasque should help them reach Fomento their talent attraction and talent Gipuzkoa and Bizkaia Talent repatriation objectives. Support in the resolution of queries.

STAKEHOLI	DERS		NEEDS, REQUIREMENTS AND EXPECTATIONS
SOCIETY	The general public	Society	Improve Euskadi's scientific capacity and the appropriate use of Public Funds.
	Media	Media	Provide comprehensible, appealing and complete information about Ikerbasque activities. Provide fast and satisfactory answers.
OTHER INSTITUTIONS WITH SCIENTIFIC TALENT ATTRACTION PROGRAMS	Within Spain	<i>ICREA, ARAID, FECYT, GAIN, CSIC,</i> Universities, Research Centres	That lkerbasque improves the scientific capacity of the State and the collaboration between centres.
	International	Universities, Research Agencies, Centres of R&D Funding	Ikerbasque should improve Europe's scientific capacity.


3.2 People

Since our founding, the attraction of research talent has been the main axis of work and the hallmark of Ikerbasque. We have worked to attract the best scientific minds to the Basque Country and help them to continue developing their work in any research centre of the Basque Science, Technology and Innovation Network (RVCTI), from Basque university departments to bio-health research centres in hospitals, to BERCs, CICs and technology centres.

In this way, the number of Ikerbasque researchers has increased continuously since its foundation, reaching 290 researchers in 2020 distributed across three categories: Research Professor (leading senior researchers in their research areas), Research Associate (established researchers) and Research Fellow (promising young scientists).



Number of researchers at Ikerbasque, by category.

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Although the gender distribution of research staff is still far from parity, lkerbasque's continued effort in this area has contributed to reducing inequality: 25% of research staff in 2020 were women.







The distribution of Ikerbasque research staff is aligned with the scientific production of each sector. This leads the university sector to be the area where there are the most Ikerbasque researchers, given the substantial presence of the UPV / EHU in the Basque Science System.





3.3 Scientific production

Since its founding, lkerbasque has increased its scientific production year on year, reaching 1,345 scientific publications in 2020.

Number of scientific papers published by Ikerbasque.



Furthermore, it is not only production that has increased, but the quality as well, measured by the percentage of papers published in the top 25% of scientific journals worldwide (first quarter, Q1). As such, more than 80% of Ikerbasque production in 2020 was published in these scientific journals, exceeding the Basque average of 20%.

Percentage of scientific production at Ikerbasque and in Euskadi released in the top 25% of journals worldwide as reviewed by Scimago Jorunal Rank (SJR).





IKERBASQUE

3.4 Analysis of the 2018-2021 Strategic Plan

3.4.1

Analysis of the challenges accomplished

In the 2018-2021 Strategic Plan, 12 challenges were laid out to accomplish by 2021.

As can be seen, lkerbasque has met ten of the above objectives, representing an accomplishment of 80% of the challenges laid out.

CHALLENGES FOR 2021

1.	Euskadi to reach 7,000 scientific publications.	
2.	Euskadi to continue to increase its contribution to national scientific production, to reach 7.25% of the total output.	•
3.	To improve productivity of the Basque Science System, moving up to 5 th place in the national ranking.	•
4.	To improve the standardised impact of Basque scientific publications, moving up to 2nd place in the national ranking.	•
5.	25% of publications from Euskadi to appear in maximum impact journals (1D).	
6.	Production in the fields of Social Science and the Humanities to continue to increase and exceed 1,200 scientific publications annually.	٠
7.	Scientific research in Euskadi to converge on the fields defined in the RIS3 strategy.	•
8.	BERCs to publish 1,200 scientific articles, 17% of the total produced in Euskadi.	
9.	lkerbasque to hire 120 new researchers in the 2018-2021 period.	
10.	40% of the research staff hired by Ikerbasque in 2021 to be women.	
11.	Ikerbasque researchers to publish over 1,250 articles a year and increase the number of high impact publications.	٠
12.	Ikerbasque to achieve a return of 80 million euros in the 2018-2021 period.	



3.4.2 Attainment of strategic objectives

The former Strategic Plan is structured around three main areas, the main results of which we will analyse below:

TALENT

RELEVANT INDICATORS	2018	2019	2020	18-20 OBJECTIVE
No. of Research Professors hired	9	14	8	30
No. of Research Associates hired	8	13	16	30
No. of Research Fellows hired	18	24	19	60
% of women of the research staff hired	18%	40%	39%	40%
Satisfaction index of research staff	8.44	8.45	8.61	8.5
Satisfaction index of Host Centres	8	8	8	8

EXCELLENT MANAGEMENT

RELEVANT INDICATORS	2018	2019	2020	18-20 OBJECTIVE
Satisfaction index of staff	9	9.2	9.2	9
% of funding other than that of the Basque Government	14%	8%	8%	8%
% of compliance with the annual Management Plan	99%	97%	97%	97%



SUPPORT TO THE BASQUE SCIENCE SYSTEM

RELEVANT INDICATORS	2018	2019	2020	18-20 OBJECTIVE
No. of annual indexed publications from Euskadi	6,298	6,657	7,400	18,750
% of BERC publications out of the total in Euskadi	17%	18%	18%	18%
Nº of annual indexed publications from lkerbasque	1,076	1,131	1,345	3,360
New ERCs attained by lkerbasque	6	3	3	9
Funds drawn to Euskadi by Ikerbasque researchers from competitive calls (m€)	28	32	35	72

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SWOT ANALYSIS



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SWOT ANALYSIS

For strategic reflection, lkerbasque has used the different monitoring tools of the organization (performance indicators, satisfaction surveys, personal interviews, and participatory sessions) to carry out internal and external analyses, which have resulted in the following SWOT analysis:



Support from the Basque Government to Ikerbasque

Recognition and prestige of Ikerbasque

Consolidated project and team

Excellent scientific results

Positive economic return on the investment

Scientific Advisory Board de renowned prestige

Experienced in attracting and evaluating talent

The pride of belonging to the lkerbasque community

Fluid relationships with stakeholders

Flexible organisation open to change

Transversal role in the Basque Science System

Nationally competitive offer

Work culture that promotes agility and simplicity in line with the European standard

OPPORTUNITIES WEAKNESS Commitment of the Basque Government to research Social discourse in favour of science Opportunity for Ikerbasque to be a benchmark for gender equality in science in Euskadi New action areas in research Demand for new specific research profiles community

Certification of Ikerbasque research staff as i3

New European COFUND programme

New PCTI 2030

New European framework programme Horizon Europe

Positioning ourselves as a body of scientific excellence in Europe

New sources of funding

Digitalization Plan of the Basque Government -Open Science Euskadi

Boost of the supercomputing in the Basque Country via i2basque

Lower attractiveness of calls due to co-financing

Gender gap in the Ikerbasque community

Reduction in demand for the most senior calls

Insufficient variety of funding sources

Limited public knowledge about Ikerbasque

Little known by the international scientific

Imbalance across research areas

Difficulty in science transfer

Difficulty in supervising research staff



New initiatives similar to Ikerbasque in Spain

Increased competition when it comes to spreading our messages in the media

Possible changes in legal and labour regulations in the field of science

Increased international competition in science

THE TWELVE CHALLENGES FOR 2024

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THE TWELVE CHALLENGES FOR 2024

Based on current trends and by maintaining support for scientific research, Euskadi can set itself the following **12 challenges** for 2024:





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THE 2021.2024 STRATEGIC PLAN

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⁶¹ MISSION, VISION AND VALUES









In 2024 Ikerbasque aspires to be:

- An international model example in the attraction and retention of scientific talent
- A community of scientific, dynamic and productive excellence
- A dynamic hub in the Basque Science System
- Strategically aligned with universities and scientific institutions of Euskadi
- Recognised for its advanced management model

Efficiency

We are committed to achieving the objectives that we have set ourselves, using the resources that we have at our disposal as efficiently as possible.

Transparency

Our stakeholders must be able to know how we deploy our strategy (what we do), the means used and the results obtained.

Consideration

We treat all people and institutions with whom we interact with respect and care.

Equity

We value the merit and ability of each person, and we work to guarantee equal opportunities and conditions in all the activities of the organization.

Innovation

We have a work environment in which creativity and an approach to innovations that improve and streamline our processes are promoted.

Cooperation

We are an extended organization, which cooperates closely with its stakeholders and works as a team.





6.2

KEY FACTORS FOR SUCCESS

The internal and external analysis carried out have allowed us to identify a series of critical factors on which the proper functioning of the organisation and the achievement of the proposed objectives depend.

The key factors for the attainment of those objectives are:







⁶³ IKERBASQUE'S STRATEGIES

Ikerbasque's principle aim is to strengthen the Basque Science System in Euskadi. To do so, we have outlined seven strategic objectives divided into three action areas:

1. Development of scientific talent:

Since its foundation, Ikerbasque has backed research talent as the key instrument in improving the capacities of the Basque Science System, through the attraction, repatriation and consolidation of researchers.

2. Promotion of the Basque Science System:

due to its central location within the Basque Science System, Ikerbasque, in addition to the scientific talent already mentioned, can bring added value in areas that require transversality and scale to the different players.

3. Development of excellent management:

maintaining efficient and dynamic management practices is key to achieving the foundational and strategic objectives of the organization.





BASQUE IK.5 Support the Bas and strategic pr SYSTEM IK.6 Increase the sci

Support the Basque Science System in its projects and strategic programmes

Increase the scientific, social and economic impact of the Basque Science System

EXCELLENT MANAGEMENT

IK.7

Promote excellent, open and committed management

[™] STRATEGIC OBJECTIVES

IK 1 STRENGTHEN THE BASQUE SCIENCE SYSTEM BY HIRING SENIOR RESEARCH STAFF

The Ikerbasque Research Professor Programme has been the backbone of Ikerbasque's talent attraction since its inception.

The Ikerbasque Research Professors have been an important source of gaining external resources, which have an impact on improving the capacities of the system through the hiring of research personnel and the improvement of scientific infrastructures.

This strategic objective is achieved through the following lines of action:

STRATEGIC OBJECTIVE	LINES OF ACTION
IK 1 Strengthen the Basque	Recruit top-level scientific staff to scientific institutions in Euskadi as Research Professors.
Science System by hiring senior research staff	Launch dedicated calls for the senior profiles needed in the Basque Science System.
	Recruit top-level scientific staff to scientific institutions in Euskadi by attracting researchers with top-level international competitive funding such as from the ERC.

IK 2 STRENGTHEN THE BASQUE SCIENCE SYSTEM BY HIRING ESTABLISHED RESEARCH STAFF

The continuity of the research career is key to consolidating scientific talent in the Basque Country and fulfilling talent attraction policies through the preservation of established researchers.

To respond to this growing need, the Basque Government and Ikerbasque launched the

Research Associate programme in 2016 to give continuity to the postdoctoral programmes (lkerbasque Research Fellow, Ramón y Cajal and Miguel Servet) in Euskadi, and to secure their positions by guaranteeing a comprehensive scientific career for excellent researchers.

STRATEGIC OBJECTIVE	LINES OF ACTION
IK 2 Strengthen the Basque Science System by hiring established research staff	Consolidate the research career of Ikerbasque Research Fellows.
	Hiring established researchers in Basque scientific institutions as Research Associates.
	Launch dedicated calls for the established profiles needed in the Basque Science System.
	Allow Ramón y Cajal and Miguel Servet researchers in the Basque Science System to consolidate their careers through the Research Associate Programme.
	Recruit promising scientific staff to scientific institutions in Euskadi by attracting researchers with relevant international competitive funding such as from the ERC.

IK 3 DEVELOP A RESERVE OF FUTURE SCIENTIFIC LEADERS FOR THE BASQUE SCIENCE SYSTEM

Ikerbasque launched the Research Fellows call for the first time in 2012. The initiative was specifically designed to attract and keep young, outstanding researchers in the Basque Country, with the aim of creating a pool of researchers. The aim is to strengthen the Basque Science System with promising young researchers who can ensure the continuity of Basque research in the long term.

STRATEGIC OBJECTIVE	LINES OF ACTION
IK 3 Develop a reserve of	Recruit future scientific leaders to work at scientific institutions in Euskadi.
future scientific leaders for the Basque Science System	Encourage the return of junior scientific talent trained in Euskadi.
	Create a suitable environment for the scientific development of young researchers.

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IK 4 FOSTER A CONNECTED AND PRODUCTIVE IKERBASQUE SCIENCE COMMUNITY

The various programmes to attract research talent developed by Ikerbasque since its foundation in 2007 have created a research community that now comprises over 290 scientists across 23 research centres and universities in the Basque Science System. This community has a large, energising potential as well as some specific needs which lkerbasque must respond to.

STRATEGIC OBJECTIVE	LINES OF ACTION
<section-header></section-header>	Aid the complete integration of research staff at scientific institutions in Euskadi.
	Provide support and assistance to Ikerbasque researchers.
	Execute the mechanisms of the Triennial Career Development Plan.
	Promote the recruitment of women in all calls.
	Stimulate the dissemination of research results and our researchers' impact.
	Develop a competitive career plan for Ikerbasque researchers.
	Complete the implementation of the European HRS4R policy for research staff.
	Promote comprehensive development of our researchers' skills.
	Stimulate the productivity of the Ikerbasque community.

IK 5 SUPPORT THE BASQUE SCIENCE SYSTEM IN ITS PROJECTS AND STRATEGIC PROGRAMMES

Due to its central position within the Basque Science System, Ikerbasque can instigate scientific policy initiatives to improve the overall performance of the system in points of strategic interest.

STRATEGIC OBJECTIVE	LINES OF ACTION
IK 5 Support the Basque Science System in its projects and strategic programmes	Promote new BIHAR research spaces and laboratories.
	Deploy the IKUR collaborative research strategy in key scientific areas.
	Promote new infrastructures and scientific equipment in the LINKER program.
	Strengthen the Basque Science System through management support for the BERC network.
	Enhance support for the research community in Euskadi through the Euraxess Service Centre.
	Provide ICT and supercomputing infrastructures to members of the Basque Science and Technology Network through the i2Basque network.



IK 6 INCREASE THE SCIENTIFIC, SOCIAL AND ECONOMIC IMPACT OF THE BASQUE SCIENCE SYSTEM

The transversality of Ikerbasque and our scale provide us with an ideal position to develop initiatives that favour the visibility and attractiveness of the Basque Science System, both locally and internationally.

STRATEGIC OBJECTIVE	LINES OF ACTION
IK 6 Increase the scientific, social and economic impact of the Basque Science System	Increase the scientific impact of the Basque Science System.
	Launch initiatives for social dissemination of science.
	Promote the transfer of the knowledge generated to society and the economic fabric.
	Promote the attraction of funds to the Basque Country for research of excellence.
	Monitoring, follow-up and communication of scientific activity in Euskadi.
	Expansion of the functionalities of the science.eus web portal, which includes the capacities of the scientific-technological network of Euskadi.
	Offer informative tools on competitive funding.

IK 7 PROMOTE EXCELLENT, OPEN AND COMMITTED MANAGEMENT

Maintaining efficient and dynamic management tools is key to achieving the organisation's other objectives.

LINES OF ACTION
Promote continuous improvement and innovation at lkerbasque.
Guarantee the financial resources necessary to support Ikerbasque policies and to carry out efficient financial management.
Develop participation and accountability tools to strengthen relationships with stakeholders.
Promote equal opportunities at the organisation by implementing and developing an Equality Plan.
Develop lkerbasque's various areas of knowledge in a balanced manner.
Support the development of socially responsible actions.
Manage the co-financing of the ikerbasque calls with the Basque Science System entities



6.5

ALIGNING THE STRATEGY WITH THE PCTI 2030

Ikerbasque's strategy and activity are closely aligned with the Basque Science, Technology and Innovation Plan for 2030, better known as the PCTI 2030.
The talent of people who research and innovate, one of Ikerbasque's hallmarks, is the central element on which the PCTI 2030 revolves. That is why Ikerbasque's first attraction, repatriation and retention of talent strategy is a direct boost to the central element of the Plan.

This central element of the PCTI 2030 is in turn held up by three pillars. Of these, lkerbasque plays an active part in the fulfilment of the first pillar of scientific excellence, focused on improving the scientific base and the creation of knowledge through outstanding research, as well as increasing the scientific and technical capacities and competencies in Euskadi. At the most operational level, the three pillars of the PCTI 2030 and its central element are coordinated through four operational objectives. Among these operational objectives, Ikerbasque can play a relevant role in the first, maximizing the results of the Basque Science System; the third, supporting the internationalization of the Basque R+ D+i system by attracting foreign talent and raising funds; and the fourth, promoting the promotion of research talent, especially among women.

Below is a summary of the impact that Ikerbasque's activity and strategy can have on the pillars and operational objectives defined in the PCTI 2030:



THE 2021-2024 STRATEGIC PLAN

6.6

ALIGNING THE STRATEGY WITH THE SDGS

Ikerbasque's strategy has a high impact on most of the SDGs. In addition to our own activity as an organization, the Ikerbasque community works to expand knowledge in all scientific fields.

This means lkerbasque contributes to 14 of the 17 strategic objectives:





03.

Currently, 25% of the Ikerbasque community carries out their research in health and life sciences.



04

We drive the participation of the Ikerbasque community in the training of future researchers, promoting quality education.



05.

We promote gender equality in our calls, guaranteeing equal opportunities.



07.

Some of the Ikerbasque researchers carry out their research around **clean** and efficient energies.



08. We are committed to dignified

working conditions.



09. We support development of infrastructure and knowledge

transfer to industry.



10.

We promote equality of opportunities and conditions in all areas.



11. Sustainable cities and communities:

Some Ikerbasque researchers in universities and BERCs carry out work in this area.



12.

13.

We ensure responsible and efficient **use** of the resources we have.



14.



The research staff of the PIE, some of the universities and some technology centres study underwater life.

Ikerbasque carries out its activity with

minimised environmental impact.



15.

A part of the Ikerbasque community, especially in the BC3 and the universities, carries out research on the life and rehabilitation of terrestrial ecosystems.



16.

As well as developed research on peace and justice, we contribute to institutional **stability** through professionalism and transparency.



17.

We carry out our work through mutually beneficial alliances with our stakeholders.





THE 2021-2024 STRATEGIC PLAN

" PROCESS MAP

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

The Ikerbasque strategy and objectives for the 2021-2024 period are implemented as processes that uphold key and supporting strategic issues. Ikerbasque's process map is reviewed annually. The processes currently defined in Ikerbasque are the following:



INDICATORS ON THE BALANCED SCORECARD



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INDICATORS ON THE BALANCED SCORECARD

Below are the main indicators of the Balanced Scorecard for the period 2021-2024:

lkerbasque / Balanced Scorecard for the period 2021-2024

Strategic Objectives

1	Strengthen the Basque Science System through the incorporation of senior scientists
2	Strengthen the Basque Science System through the incorporation of consolidated scientists
3	Promote a pool of future research leaders for the Basque Science System
4	Promote a connected and productive Ikerbasque scientific community
5	Support the Basque Science System in strategic projects and programs
6	Increase the scientific, social and economic impact of the Basque Science System
7	Promote excellent, open and committed management

		2021	2022	2023	2024	21-24
Ba	llanced Scorecard Indicators	Obj.	Obj.	Obj.	Obj.	Obj.
1	No. of RP incorporated in the year	5	5	5	5	20
2	No. of RA that promote to RP	1	1	1	1	4
3	No. of active RP	180	185	190	195	195
4	No. of RA incorporated in the year	5	5	5	5	20
5	No. of RF that consolidate as RA	5	5	10	10	30
6	No. of active RA	50	65	80	95	95
7	No. of RF incorporated in the year	15	15	15	15	60
8	No. of Basque Fellows incorporated	8	7	8	7	30
9	No. of active RF	80	80	80	80	80
10	Total number of active researchers	310	340	370	400	400
11	Percentage of women researchers	24%	25%	26%	27%	27%
12	No. of Ikerbasque publications (Scopus)	1,400	1,470	1,530	1,600	1,600
13	Annual increase in Ikerbasque publications (Scopus)	7%	7%	7%	7%	25%
14	Percentage of Ikerbasque publications of excellence (D1)	50%	50%	50%	50%	50%
15	Ikerbasque H index	160	170	180	190	190
16	New ERC grants obtained by Ikerbasque	3	2	3	2	10
17	Total funds raised by Ikerbasque researchers (million €)	35	37	38	40	150
18	Average number of documents indexed by RP	5.5	5.5	5.5	5.5	5.5
19	Average funds raised by RP (m€)	140	140	140	140	140
20	Average number of documents indexed by RA	3.5	3.5	3.5	3.5	3.5
21	Average funds raised by RA (m€)	120	120	120	120	120
22	Average number of documents indexed by RF	2.5	2.5	2.5	2.5	2.5
23	Average funds raised by RF (m€)	40	40	40	40	40
24	Research personnel in the research groups led by lkerbasque researchers	1,200	1,300	1,400	1,500	1,500
25	RP satisfaction index	8	8	8	8	8
26	RA satisfaction index	8	8	8	8	8
27	RF satisfaction index	8	8	8	8	8
28	Satisfaction index of the entities that host lkerbasque researchers	8	8	8	8	8
29	No. of indexed publications of the BERC centres	1,400	1,500	1,600	1,700	1,700
30	Percentage of BERC publications out of the total of the Basque Country	18%	18%	18%	18%	18%
31	Percentage of BERC publications of excellence (D1)	50%	50%	50%	50%	50%
32	RVCTI users connected to the i2basque network	12,000	12,500	13,000	14,000	14,000
33	Total number of indexed publications in Euskadi	7,500	8,000	8,500	9,000	9,000
34	Annual increase in publications in Euskadi (Scopus)	10%	7%	7%	7%	30%
35	Percentage of publications of excellence (D1) in Euskadi	30%	31%	32%	33%	33%
36	New ERC grants obtained in Euskadi	3	3	3	3	12
37	New spin-offs with a scientific-technological base with Ikerbasque researchers	1	1	1	1	4
38	Percentage of women among the researchers incorporated in the year	40%	40%	40%	40%	40%
39	Staff Satisfaction Index	8.5	8.5	8.5	8.5	8.5
40	Percentage of coverage of funds raised in relation to the contribution of the Basque Government	1.5	1.5	1.5	1.5	1.5
41	Percentage of funding not from the Basque Government	10%	10%	10%	10%	10%

Strategic plan 2024

BUDGET



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BUDGET

The Ikerbasque budget is strongly linked to projected growth of research staff 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 recruitment of lkerbasque researchers.

In order to carry out the lines of action as identified in this Strategic Plan, we have estimated the following investment and expense budget for the 2021-2024 period, broken down into three areas of action:



ACTION AREA	2021	2022	2023	2024	WHOLE PERIOD
1. Development of scientific talent	20,000,000	21,500,000	23,000,000	24,500,000	89,000,000
2. Driving the Basque Science System	7,500,000	7,500,000	7,500,000	7,500,000	30,000,000
3. Execution of excellent management	550,000	600,000	650,000	700,000	2,500,000
ANNUAL TOTAL	28,050,000	29,600,000	31,150,000	32,700,000	121,500,000



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