# **BIGIITTIE** BASQUE COUNTRY



2019

# **EUSKADI** BASQUE COUNTRY







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# L A big little country



VAND

Bilbao International Airport

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# 1 A big little country

BIGlittle Basque Country expresses the strength and energy of this small country, with its natural inclination to tackle the most complex challenges.







The Basque Country, Best Medium-Sized European Region in Connectivity (Financial Times 2016), represents one of the largest industrial concentrations in Spain and its quality levels place it at the forefront of Europe.

Based on its experience and tradition, the Basque Country is involved in the race towards competitiveness in a global and highly industrialised economy, in which it currently boasts 1,660 enterprises operating internationally and more than 5,000 companies with the highest quality certifications.

Thanks to a committed industrial fabric and strong institutional commitment to a serious industrial policy, the Basque Country has managed to become a world reference in various industrial sectors:

- Advanced Machinery: one of the biggest European producers of machine tools.
- **Automotive:** more than 45% of the production volume of the Spanish automotive industry is carried out in the Basque Country.
- **Aerospace:** half of all large commercial aircraft have an engine made in the Basque Country (ITP/Rolls-Royce).
- **Energy:** the global wind power leader, Siemens Gamesa, has its headquarters in the Basque Country.
- **Maritime industry (Shipbuilding):** one of the few places in the world with such a large concentration of shipbuilding industries.
- **Railway industry:** the railway systems of many cities worldwide bear the stamp of a Basque company, CAF
- **Eco-industries:** a reference region in Europe in the field of Eco-industries and the Circular Economy.

This has all been possible thanks to the Basque Country's fiscal autonomy, its own taxation system granting regulatory and administrative powers.

**BIGlittle Basque Country** expresses the strength and energy of this small country, with its natural inclination to tackle the most complex challenges and with performance indicators above the European average.





Smart specialisation in energy, 4.0 advanced manufacturing and biosciences has become the major commitment of the Basque Country for the forthcoming decades



# 2 Competitiveness Pole

The Basque Country has a solid industrial base, a sector that represents 24.6% of GDP, making it a magnet area for competitive companies where there is firm backing for Industry 4.0.

Basque industry, representing 24.6% of GDP, has become consolidated in its commitment to efficiency, quality, technification and internationalization.

At present, faced with the new scenarios created by the socalled *Fourth industrial revolution*, a shared vision of industrial development has been defined in order to foster every aspect of a competitive industrial ecosystem.

Among the challenges of these new times, the so-called Industry 4.0 has taken on a special role, with a paradigm shift that requires Basque industry to adopt a new conceptual and strategic approach.

In this new scenario, the Basque Country is currently focusing its efforts on **Smart Specialisation**, identifying those fields on which to concentrate human and financial R&D&I resources, namely Advanced Manufacturing 4.0, Energy and Biosciences for Health - three strategic sectors. Basque industrial companies are already working on the extension of excellence beyond metallurgical manufacturing, with the mastery of new materials, the design and development of their own products, the incorporation of high added value services and EICTs and the integration of value chains, i.e., Industry 4.0.

### **Basque Industry 4.0**

The advanced manufacturing strategy, Basque Industry 4.0, is building the foundations to support the development of the factory of the future in the Basque Country. Among other factors, it means a commitment to the incorporation of intelligence into production means and systems, the use of emerging technologies and capabilities in new products and processes, and the integration of advanced materials into higher value added solutions or improved processes.

Basque Industry 4.0 is based on three strategic pillars: Basque Digital Innovation Hub (Connected asset network), Training for employment and New business models.

### **Basque Digital Innovation Hub**

This is a network of R&D facilities, pilot plants and technical expertise specialising in different fields of advanced manufacturing, a digitally connected network that belongs to R&D centres, vocational training centres and universities, and is supported by public institutions. The network is used for carrying out R&D projects, scaling up industrial projects, exhibiting cutting-edge technologies and also as a training resource and start-up accelerator.

# **Basque Cybersecurity Centre**

The Basque Country has created the Basque Cybersecurity Centre (BCSC) to promote the incorporation of cyber security into Basque companies, as a fundamental element for innovation in management and to exercise responsible governance by raising the cyber security culture in Basque society.

The Basque Cybersecurity Centre provides companies with centralized advice on action guidelines in case of cyber incidents, as well as services that allow cyber threats to be anticipated, thanks to which the response capability is improved. The BCSC is the meeting point between those supplying and requesting cyber security services, with the dual objective of boosting the sector that offers services of this type and encouraging the rest of local industry to be protected. In the same way, the BCSC boosts the innovation and research capability for the development of industrial cyber security solutions, promotes the creation and consolidation of specialized start-ups, collaborates with the Basque autonomous police force (Ertzaintza) to pursue cybercrime and ensure sensitive facilities are better protected, and with the Department of Education to encourage the creation of a professional cyber security network. The BCSC also collaborates with other public players that offer cyber security services to citizens related to the personal or domestic environment.

# AUTOMOTIVE

AIC Automotive Intelligence Center, Amorebieta-Etxano

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More than 45% of the production volume of the Spanish automotive component industry is carried out in the Basque Country.

Basque component manufacturers are present in 29 countries with 284 production plants.

# AIC – AUTOMOTIVE INTELLIGENCE CENTER

AIC is a specialised automotive global competence centre, which aims to stimulate sectoral knowledge, increase basic and applied research related to the sector, foster automotive training at all professional levels, encourage the endogenous creation of new business projects with high added value in the sector and attract innovative projects. AIC has five main lines of work: Competitive intelligence, Research, Industrial development, New business and Training.

The centre is managed by the automotive cluster, **ACICAE**, one of the first clusters to be set up in Europe. This business association is devoted to improving the competitiveness of the automotive industry and structures its activity around different fields: Strategy, Internationalisation, Communication, R&D&I, Management, Quality and Training.

The Basque Country's automotive sector is innovative, competitive and comprehensive. Its high level of efficiency and effectiveness means that its management levels are comparable to the most advanced countries in the world.

The whole value chain is well represented, with two manufacturers (OEMs), namely **Mercedes-Benz** (Daimler) and **Irizar** (bus and coach manufacturer) and a large number of component producing companies that work with the leading international manufacturers.

The **Mercedes-Benz** factory, located in Vitoria-Gasteiz and with a workforce of 5,500 employees, has an excellent network of local suppliers and is extremely competitive. It produces luxury people carriers and vans (Vito and V-Class models) and has an annual production of more than 145,000 vehicles, 90% of which are exported.

The most important Basque companies in the sector are:

**GESTAMP:** Gestamp is a world leader in the design, development and manufacture of metal components for the major car makers. It has more than 100 industrial plants in 22 countries, 13 R&D centres and a global workforce of 40,000 people. **CIE AUTOMOTIVE:** Global supplier of components and subassemblies for the automotive market, through 98 production centres in 90 locations. It offers integration of a full range of different technologies in key global automotive markets. It has a workforce of 26,072 people.

Several important multinationals in the automotive sector are installed and operating in the Basque Country, among which we can highlight **Mercedes-Benz**, **Michelin**, **Bridgestone**, **ZF**, **GKN**, **SACHS** and **Dana**.

### Bay of Biscay

Energy efficiency, diversification of energy sources and the promotion of renewable energies are the basis of the energy policy in the Basque Country.

### ACE, ENERGY CLUSTER ASSOCIATION

ENERG

It is made up of the Basque Country's leading companies in the energy sector value chain (energy operators, equipment and component manufacturers and services companies), players in the Basque scientific-technological field and public administration bodies with responsibilities in the energy sector.

The energy sector in the Basque Country is strategic and highly dynamic throughout the value chain, such as in the manufacture of capital equipment and providing services for the installation and maintenance of energy infrastructures. The Basque Country is internationally positioned as a knowledge hub and a centre of world-class industry.

**EVE,** the Basque Energy Agency, is the Basque Government agency responsible for developing projects and initiatives in line with the policies defined by the government for an energy policy based on energy efficiency, the diversification of our energy sources and the promotion of renewable energies. It proposes strategies and is actively involved in their development. Basque companies in the energy sector are backed by a robust scientific-technological infrastructure, led by the **CIC Energigune** Cooperative Research Centre, specialising in **energy storage**, which is an example of the commitment to knowledge generation and innovation in this sector. The Centre is equipped with innovative facilities and state-of-the-art equipment, including one of the most modern prototyping lines in Europe, and has a scientific committee made up of international experts.

Furthermore, the Basque Government has promoted an Advanced Manufacturing Centre for the wind power sector (WINDBOX) to enhance the technological positioning and international competitiveness of suppliers of subsystems and products for the wind power sector. WINDBOX provides testing facilities to promote and enable the development of optimized design and highly reliability products, while at the same time developing and validating the design and manufacturing processes themselves. It is backed by the Basque companies Adwen, Antec, Erreka, Siemens Gamesa, Hine, Glual, LauLagun and Wec, with the pull-power of the Energy Cluster, the logistical support of IK4-Tekniker and funding from the Basque Government Department of Economic Development and Competitiveness and from SPRI.

The following leading international Basque driver companies can be highlighted:

# 2 Competitividad ENERGY

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**Siemens Gamesa,** the world leader in the wind power industry, employing more than 27,000 people and with 75 GW installed in over 90 countries, both onshore and offshore.

**Iberdrola** in the production, distribution and sale of energy at an international level, as the leading energy group in Spain, world leader in renewable energy and one of the largest electrical companies worldwide.\*

**Petronor - Repsol** represents the industrial avant-garde of the oil sector and champions the spirit of tradition and proximity to the environment in which it is located, and to which it owes its productive power. With a potential output of 11 million tonnes per year, it is the largest refinery in Spain and exports somewhat more than a third of its production. It provides direct employment for 945 people and induced employment for a further 6,200 people.

**SENER Power Oil&Gas**: A company providing technology solutions and EPC projects, recognized worldwide for the execution of technologically complex turnkey projects. It builds plants in the fields of solar energy, combined cycle, cogeneration, biomass, waste to energy, etc. and develops processes in LNG, downstream and petrochemical plants.

**Velatia** industrial and technology group operates in the area of power grids, electronics and communication networks. It has 15 manufacturing plants, an R&D centre with the world's most modern High Power Laboratory and employs 3,000 people.

**Ingeteam** is a company specialising in the design of power and control electronics, electrical machinery, electrical engineering

projects and automation. The company operates worldwide with a workforce of over 3,800 professionals and with an important R&D base.

**Arteche** has over 70 years experience in the electricity sector. It is an international reference, with teams operating in over 150 countries and companies in Europe, America, Asia and Oceania, and provides service through over 80 technical-commercial offices.

The Basque energy sector also has a strong presence of major international companies with manufacturing plants and R&D centres in the Basque Country, such as **ABB** and **Schneider**.

\* The Basque companies Gamesa and Iberdrola, through their subsidiaries Gamesa Wind and Iberdrola Renewables respectively, signed in 2016 an agreement for the supply of 208 megawatts in the United States.

# STRATEGIC SECTORS

### Electrical Networks

- Bidelek Project: Implementation of smart grids.
- Ingrid project: High power and high voltage labs.

### · Wind power

- Off shore wind Basque Country.
- Wind Box Advanced Manufacturing Centre.
- Marinel project.

# · Wave energy: Wave Energy Basque Country

- BIMEP: Open sea testing platform for prototype devices for harnessing ocean energy.
- Mutriku Breakwater Wave Plant: Electrical power generated by wave movements.

• Thermoelectric solar energy. CSP Basque Country.

### · Energy storage

- CIC Energigune Cooperative Research Centre.
- Electric vehicle
  - IBIL project: Charging points (Repsol+EVE).
  - Azkarga project.

### Energy Efficiency in Industry

(Calor & Alepre project).

### · Oil& Gas

# ADVANCED MACHINERY

DANOBATGROUP

DANOBAT

The Basque Country is one of the leading European producers of advanced machinery and capital equipment, with a network of qualified suppliers within a radius of less than 300 km. The largest hybrid machine that combines Additive and Machining Manufacturing was created in the Basque Country.

# AFM ADVANCED MANUFACTURING TECHNOLOGIES

AFM Advanced Manufacturing Technologies. The Spanish association of manufacturers of machine tools, accessories, parts and tooling, AFM, represents 90% of machine-tool and advanced manufacturing technology companies in Spain. From its headquarters in San Sebastian and its office in China (Tianjin), it works to promote internationalisation and the technological innovation of its member companies, through its **INVEMA (Foundation for Machine Tool Research)** technology unit.

**ADDIMAT**, the Spanish Association for Additive and 3D Manufacturing Technology, located in the Basque Country, brings together all stakeholders with interests in the development and promotion of additive and 3D manufacturing, and aims to promote business cooperation, creating networking opportunities between different market players. ADDIMAT already has 59 member companies.

Two characteristics define the Machine-Tool sector in the Basque Country: its level of internationalisation and its innovative nature. One of the cornerstones of development in this sector is its firm commitment to innovation and technological development, which has led to the existence of specialised technology centres, for example **INVEMA** – Foundation for Machine Tool Research, and specialised training centres, such as **IMH** -**Machine Tool Training and Innovation Institute**.

The companies working in this sector produce all types of components for aerospace, automotive companies, etc., producing over 2,000 machine models and a wide range of highly competitive products. These products are exhibited at

# 2 Competitividad ADVANCED MACHINERY

# **BIGLITTLE** BASQUE COUNTRY



the **BIEMH - Machine-Tool Biennial,** one of the sector's most important fairs in Europe; its 29th edition received more than 40,000 visitors and generated an economic impact of more than 30 million euros.

The largest hybrid machine that combines Additive and Machining Manufacturing was created in the Basque Country. **ADD+PROCESS**, developed by IBARMIA in collaboration with the University of the Basque Country and Tecnalia technology corporation, is a new concept in Multiprocessing Machining Centres and it is set to revolutionise the industry.

Basque companies in the sector are in contact with producers in the most competitive sectors, such as the mineral extraction, automotive, aviation and space sectors. Their parts and solutions perforate the subsoil up to 15 km., transport millions of passengers all over the world and generate energy in the most demanding conditions. They offer advanced manufacturing solutions, engineering and smart manufacturing processes.

The most representative Basque companies in this sector are **DANOBATGROUP**, **IBARMIA, IZAR Cutting Tools, FAGOR ARRASATE, GOIZPER, LAZPIUR, LANTEK, ONA, ZAYER** and **BOST.** 

### DANOBATGROUP (DANOBAT and

**SORALUCE)** is one of the largest producers in the sector, a benchmark in the international arena, offering highly innovative technological solutions. It exports more than 90% of its products and has high level production plants in countries including Germany, England and the United States that enable it to provide an efficient production model.

It also has a workforce of more than 1,300 people, of whom 30% are dedicated to R&D activities, and has its own Research and Development Centre, aimed at specialised innovation and the creation of high tech machine-tool products.

DANOBATGROUP is a competitive, profitable, innovative, cooperative group and forms part of the Mondragon Corporation.

# AEROSPACE

The Aeronautics Advanced Manufacturing Centre is a reference centre for suppliers and manufacturers of equipment for aerospace manufacturing, contributing with its equipment and know-how during the implementation of advanced technology projects for international consortia.

# **HEGAN - AEROSPACE CLUSTER**

Its aim is to promote the sector, ensuring its competitiveness through cooperation and innovation among companies and other players. The HEGAN cluster is made up of Aernnova, ITP, Sener and over 40 SMEs, which have obtained record figures in terms of turnover, exports and employment.

The aerospace industry is one of the strategic sectors in the Basque Country, both for high added value product development and for generating skilled employment. Thanks to its extensive experience in the sector, the concentration of suppliers along with ambitious technology plans and R&D projects, its level of internationalisation and foreign relations, the Basque Country is set to become a pole of excellence in aeronautics.

### ITP, Industria de Turbo Propulsores

The ITP Group, belonging to the multinational **Rolls-Royce**, is a leader in its market segment, currently ranked 9th aeroengine and aircraft component company in the world by sales and among the top 100 companies in the aerospace industry (Top 100 Aerospace Companies, PwC and Flight International, 2015). The company has production centres in Spain, Great Britain, Malta, the United States, India and Mexico, and a workforce of more than 3,000 people. ITP activities include the design, research and development, manufacture and casting, assembly and testing of aeroengines.

**Aernnova** – Leader in the design and manufacture of aerostructures such as wings, empennages and fuselage sections, both in metal and composites, for the main OEMs. Aernnova designs and/or manufactures aerostructures for more than 20 programmes and a wide range of customers.

# **AERONAUTICS ADVANCED MANUFACTURING CENTRE**

# The Aeronautics Advanced Manufacturing Centre (CFAA)

represents an international milestone. It is located in the Bizkaia Science and Technology Park and was created through the agreement signed in 2015 between a group of companies and the University of the Basque Country to establish a centre for the development of technology applicable in the short term to the key processes in the sector of components for aircraft engines and aerospace propulsion systems.

The centre seeks to optimize the potential of Basque industry to provide high added value products and services, enabling the validation of advanced technological developments in the sector's auxiliary industry, thereby ensuring its transfer to the market for later better marketing. It is a space representing the whole of the Basque Country, where the benefits of activities with a cost that can only be borne collectively between companies in the aeronautical and advanced machinery sector will be shared.

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AD@2020: encouraging digitization is a successful disruptive tactic for Basque society in 2020, with the synergistic, proactive, coordinated support of all players involved.

Gaia, Association of Electronic and Information Technologies in the Basque Country, brings together over 280 companies in this sector. Its goal is to be a leader in Collaborative Innovation for the creation and implementation of comprehensive competitive solutions, based on proprietary knowledge and technology (Consulting, Engineering, Electronics, Information Technology, Telecommunications, and Gamification). It seeks to encourage the participation of companies in the sector in all economic and social spheres, promote collaboration with other sectors and foster the development of new products, technologies and markets. GAIA is a member of several local and international networks.

The ICT industries in the Basque Country provide products and services which are integrated solutions aimed at the development and evolution of organizations, infrastructures and processes. These solutions can be used in spheres of advanced applications and there is a very high level of specialization in fields such as:

- Equipment and Systems for Energy and Electricity Networks: Arteche, GE Power Management, Iberdrola Ingeniería y Construcción IIC, Inecosa, Ingeteam, Miesa, Omexon, Ormazábal, POC, ZIV,...
- Telecommunication Services and Telecommunication Network Processing Centres: Dominion Digital, Euskaltel, GFI, Ibermática, Mas Móvil, Sarenet, ...
- Models and Systems for Industry 4.0: IDS, i68, Semantic, Sisteplant, Spyro, ...
- Models and Systems for Smart Transport and Networks: Adur Software, CAF, Idom, Igarle, Ikusi, IK4, Jema, Leber, LKS Ing, Ondoan, ...
- Cyber security, Physical Security and Logic: Derten, Entelgy, ITS, Nextel, S21sec, Tecnalia, ...

Master guidelines of activity in the Sector:

**Smart Industry** Models and systems of process, product and organization management and improvement. **Smart Territory** Advanced infrastructures and platforms. **Smart Society** Advanced systems for the promotion and improvement of citizen-centred spheres.

Smart Society Advanced systems for the promotion and improvement of cluzen-centred sphere

# BASQUE DIGITAL AGENDA - AD@2020

The Basque Digital Agenda 2020 is designed for a society with an already high level of digital positioning, which can and must move to a higher level.

The priority actions of this Agenda are as follows:

- To build the Basque industry of the future defined in the Basque Industry 4.0 Strategy.
- · To promote people's essential digital skills as well as their improvement, validation and enhancement.
- · To move towards a unified, efficient and updated model of technological management in the Basque public sector.
- To provide the Basque Country with new generation broadband infrastructures throughout the country so that this cohesion and development is based on high connectivity.

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The Suburban Railway System of Mexico City, driverless metros in Helsinki and Santiago de Chile and trams in Canberra (Australia) and Medellin (Colombia) bear the stamp of CAF.

The Basque rail industry is identified as one of the most pioneering, with solutions and services adapted to the specific requirements of each operator and project. In this heavily internationalised sector, the ongoing commitment to innovation and technological development in recent years has been key. This industry has strengthened its role as supplier of technology, equipment, engineering and construction works for railway transport networks worldwide, highlighting the recent award of both high speed and local networks, metros and trams to cutting edge companies with plants in the Basque Country, which has contributed to the international consolidation of the Basque sector. These contracts brought about an acceleration of industrial activity in 2013 and for the forthcoming years for the leading railway sub-sectors, such as engineering, construction, signalling, electrification, tracks, equipment and rolling stock.

The headquarters of the **Spanish Railway Association, MAFEX** is located in the Basque Country, which is proof in itself of the specific weight of this sector.

The rail industry in the Basque Country bears

the undisputed stamp of one company, CAF-Construcciones y Auxiliar de Ferrocarriles, a benchmark and one of the leaders of the international rail industry. The company provides comprehensive global rail solutions which, in addition to the supply of trains, include viability studies, civil works, electrification, signalling, maintenance and system operation. CAF has production facilities in Europe and America and is present in 18 countries worldwide. It has participated in the construction of the suburban railway system in Mexico City, driverless metros in Helsinki and Santiago de Chile and trams in Canberra (Australia) and Medellin (Colombia), among others. The company is progressing to world leadership in the manufacture and supply of railway rolling stock with cutting-edge technology of maximum reliability.

**Green seal technologies.** With the aim of providing more efficient and environmentally-friendly means of transport, CAF is involved in the implementation of the Product Sustainability Function, incorporating ecodesign methodologies into engineering processes to optimise and monitor the environmental impact of products throughout their entire life cycle.

**The transport of the future that respects the past.** CAF, through CAF Power & Automation, has developed the Rapid Charge Accumulator (ACR), an innovative solution for catenary-free trams. This energy storage system on board the train accumulates energy from braking and allows the movement of catenary-free trams between stops, and saves energy by the recovery of all energy

The railway industry in the Basque Country also includes prestigious international companies such as **Talgo**, **Vossloh Cogifer (Amurrio de Ferrocarril), Bombardier** and **JEZ**.

during braking.



The Basque Maritime Forum has promoted, together with the Energy Cluster, the Wave Energy Basque Country initiative, in which companies from both sectors will work on joint projects.

### FMV - BASQUE MARITIME FORUM.

The cluster association of the Basque maritime sector is responsible for fostering and increasing the competitiveness of companies in the sector. It has become the main reference for the sector in the Basque Country and one of the most widely-recognised associations internationally.

The Basque Country is a territory of customs and traditions closely linked to the sea. It is not surprising, therefore, that the maritime sector has an important weight in the Basque economy, where it makes up 1.74% of GDP. The Basque shipbuilding industry, with great recognition in the international market, specialises in high-tech and added-value vessels: the best tuna seiners in the world, technologically advanced vessels for the Oil & Gas market, etc. with which they compete in emerging niche markets internationally, for example:

Marine energy (mainly offshore wind)

Super yachts

Oil & Gas Subsea

**State Action Ships** 

Medium-sized cruise ships

The Basque Country also has an auxiliary industry which manufactures marine equipment and subcontracts high-tech services. This makes it one of the few places in the world with such a large concentration of shipbuilding industries together.

Companies in the Basque Maritime Forum, together with those in the Energy Cluster, are working on joint offshore wind, marine energy and Oil & Gas projects. They have created the **"Wave Energy Basque Country"** brand, in which companies and scientific-technological players are collaborating in R&D projects related to wave energy, in order to achieve technical and economic viability, which will make it possible to implement wave energy in the marketplace in the near future.

**ADIMDE** - the Basque Maritime Industries Association, which aims to promote the maritime activity and culture of the Basque Country. It consists of more than 160 partners, including merchant and fishing vessel owners, shipyards and auxiliary industry, subcontractors and equipment manufacturers. The most representative companies of this sector, a reference in the international market, are **SenerNaval**, which designs more efficient and environmentally friendly ships, develops naval engineering projects and consultancy; and **Vicinay Cadenas**, world leader in the manufacture of mooring systems for maritime applications, and the manufacture of chains for oil rigs

The following shipyards can be highlighted: **Balenciaga**, **Murueta** and **Zamakona** are all technologically positioned and competitive at an international level.

# ECO-INDUSTRES

The Basque Country is a world-class European region in the field of Ecoindustries and the Circular Economy.

# ACLIMA-BASQUE ENVIRONMENT CLUSTER

Is a pioneer cluster founded in 1995 and is leader in the Basque environmental sector. It represents companies, public entities, agents in the Basque Science and Technology Network and university training centres who, in collaboration with other public and private players, are facilitating the transition of all Basque industrial sectors to a Circular Economy Model.

The Basque Country is committed to a new economic model based on the Circular Economy, facilitating the production of goods and services while reducing consumption and waste of raw materials, water and energy sources. A new economy based on the principle of "closing the life cycle" of products, services, waste, materials, water and energy.

It also presents a series of far-reaching competitive advantages, to position itself as a European reference region in the circular economy and it facilitates the attraction of investment, talent, technology, and development of new strategic projects.

**Basque Ecodesign Center,** is a centre constituted in collaboration between private sector companies and the Basque Government, to boost product ecoinnovation in the supply chain of the Basque industrial sector, through collaboration between companies, the University of the Basque Country (UPV-EHU) and leading international knowledge centres.

**Basque Centre on Climate Change** (BC3), is a research centre of excellence that focuses on research into the causes and consequences of climate change. BC3 is regarded as the second most influential think tank in the world on the subject of economy and climate change.

Main Basque companies:

**INDUMETAL RECYCLING:** Industry specialist with extensive experience in the management of WEEE (Waste Electrical and Electronic Equipment) and complex scrap metals, including logistics services, on-site dismantling of industrial facilities and recycling in its treatment plants.

**IDOM:** Multinational company that offers integrated services in Engineering, Architecture and Consulting, with more than 40 offices in 24 countries (Europe, Asia, America, Africa and the Middle East). It provides services in Industrial Engineering and Energy, Civil Engineering, Environment, Systems and Telecommunications, Advanced Analysis, Consultancy and Architecture.

**FCC - ÁMBITO:** A subsidiary of FCC-Servicios Ciudadanos (Citizen Services), dedicated exclusively to the management of industrial waste of all kinds, both hazardous and non-hazardous, as well as all kinds of projects for recovery and remediation of contaminated soil and other environmental liabilities.

**EKO REC:** Company specializing in the recycling of PET; starting from post-consumer bottles, it produces 100% recycled and 100% recyclable materials for the automotive, food and packaging industries, ensuring improvement of the environment and reduction of CO2 emissions. Its R&D department is involved in research into new applications for materials that are not yet recyclable.

**ACCIONA AGUA:** Leading company in the Water Cycle. Design, construction, operation, maintenance and management of infrastructure services for water treatment and distribution. International presence in over 20 countries worldwide with reference projects in the field of water treatment and desalination by reverse osmosis.



# The biosciences sector has emerged as a successful move, able to add value and generate wealth for the Basque Country.

# **BASQUE HEALTH CLUSTER - BASQUE ASSOCIATION OF BIOHEALTH COMPANIES**

Its main areas of activity (59%) are biotechnology applied to health, both human and animal, as well as the agrifood sector, cosmetics, management and cross sectional services. Within its areas of action, the most important is diagnostics. A strategy to develop companies in the medical equipment sector is currently being established, thanks to our capability to manufacture all types of devices in the Basque Country.

The Basque bioregion, known as **BioBasque**, is characterised by collaboration between academia, the healthcare system and industry, backed by an extensive network of infrastructures and public authorities that foster business activity.

Based on its long history of industrial success, the Basque Country has managed to transform itself into a small but dynamic bioregion, with a growing Cluster of Bio Health companies in a renewed research and innovation system.

Within the bioregion, the business sector benefits from strengthening different knowledge areas and technology convergence. Therefore, the biological know-how is complemented with a long tradition in engineering, manufacturing, microtechnology, electronics, robotics and automotive, and with the new nanotechnology possibilities.

It is an important sector that brings wealth and added value to the Basque Country thanks to its heavy investment in R&D&I, the offer of highly qualified employment and its international focus. This industry is made up of companies, research centres, universities and leading hospitals in Spain. Basque pharmaceutical companies with biotechnological developments include **FAES FARMA**, a company with an international vocation that researches, manufactures and commercializes pharmaceutical products and raw materials, which are exported to more than 60 countries; **ROXALL**, a multinational pharmaceutical company which has its allergy excellence centre in the Basque Country and; **PRAXIS Pharmaceutical**, a Basque pharmaceutical company devoted to Health Sciences.

On the other hand, the following biotechnology companies can be highlighted: **Progenika Biopharma**, pioneer and expert in molecular biology, with the multinational **Grifols**, **BTI- Biotechnological Institute**, specializing in implantology and regenerative therapies, **AJL Ophtalmics**, manufacturer of ophthalmology products and **Grupo Noray Biosciences (Noray BG)**, focusing on biosciences with NorayBio, Histocell and **VIRALGEN**, a pioneering centre in the production of gene therapy viral vectors unique in Europe.

The biohealth sector is backed by an extensive R&D infrastructure.

**CIC bioGUNE** is a benchmark centre in Cellular, Molecular and Structural biology, the only facility of its kind in the State and a European leader. Furthermore, bioGUNE also carries out its activity in the field of biotechnology applied to health, such as functional genomics, proteomics and metabolomics, among others.

**CIC biomaGUNE**, is a pioneering research centre in Bionanomaterials, best known for the Molecular Imaging Facility, Biofunctional Nanomaterials Unit and Biosurfaces.

Moreover, three of the basic research and excellence centres (BERCs) in the Basque Country carry out their research activity in the field of life sciences: the Basque Center on Cognition, Brain and Language (BCBL) focusing on interdisciplinary research for the study of cognition, brain and language; Achucarro, in the field of neurosciences and dedicated to basic and translational research in glial cell biology; and **Biofisika**, which performs cutting edge research to achieve scientific excellence in the field of molecular and cellular biophysics. At the clinical level, the Biodonostia, Biocruces and Bioaraba health research institutes stand out as organizational structures for the promotion and development of research in hospitals in the Basque public health system.





 Basque Science, Technology and Innovation Network

 BRTA - Basque Research and Technology Alliance

Technology Parks
 Creation of new enterprises

The Basque Country is at the same level as European countries with high innovation.

(European Innovation Index - EIS 2018)



# ح R&D Innovation

The European Innovation Scoreboard – EIS, which measures the degree to which the economies of countries are capable of and perform innovation activities, ranks the Basque Country at the same level as European countries with high innovation.

Commitment to innovation is the hallmark of the Basque Country and has brought in recognition and resources at European level. In addition to being the autonomous community that assigns the highest percentage of it GDP to R&D, 1.88%, its scientific, technological and business capabilities have placed it among the European **high innovation** countries. Among the indicators considered by the EIS panel in its measurement framework, the Basque Country stands out in three factors with regard to the European average: Human resources, Linkages and entrepreneurship, and Open, excellent research systems.

The Basque Country is currently involved in the **Science, Technology and Innovation Plan 2020** to improve welfare, sustainable economic growth and employment in Basque society through the development of a research and innovation policy based on smart specialisation and improvement of the Science, Technology and Innovation system, aligned with the European Horizon 2020 programme.

The Basque Country has the scientific and technological potential required, such as those linked to a worldrenowned business community, to focus its efforts and take up global leadership positions in some of the priorities identified as strategic: **Advanced Manufacturing, Energy** and **Bioscience/Health.** 

# BASQUE SCIENCE, TECHNOLOGY AND INNOVATION NETWORK

The **Basque Science**, **Technology and Innovation Network** is a group of Science and Technology agents working together, developing specialised, world-class, market-oriented research that contributes to the creation of wealth and wellbeing in the Basque Country.

The network consists of 120 accredited Members: Singular Agents, Basic and Excellence Research Centres (BERC), the Research Structures of the Universities, Cooperative Research Centres (CIC), Multifocused Technology Centres, Sectoral Technology Centres, Agents for the Dissemination of Science, Technology and Innovation, Supply/Demand Intermediation Agents, Corporate R&D Units, Health R&D Organizations and Health Research Institutes.

It has a complete map of technological infrastructure at the service of companies: universities, hospitals, worldclass research centres, cooperative research centres and technology centres, etc.

# BASOBE BA

CIC nanoGUNE

BGlittle

**BASOUE COUNTRY** 

The Scientific-Technological Consortium has emerged as a driver for the dynamics of cooperation in order to meet the technological and industrial challenges of the Basque Country and improve its international positioning.

The Basque Research and Technology Alliance consortium has been created to promote the coordination of Basque technology agents; make their activities aligned and compatible; strengthen the conditions for generating and transmitting knowledge to companies, and project its own brand with international projection in the technology field. In addition, BRTA is responsible for formulating a Research Agenda and a Transfer and Market Agenda, in coordination with the different units of the players that make up the consortium. Basque Research and Technology Alliance is composed of the Basque public administrations (Basque Government and Regional Governments of Álava, Bizkaia and Gipuzkoa) as well as the technology centres and research centres Azterlan, CEIT, Cidetec, Gaiker, Ideko, Ikerlan, Lortek, Tecnalia, Tekniker, Vicomtech, Azti, Neiker, CICbioGune, CICbiomaGUNE, CICenergiGUNE and CICnanoGune. In all, they total more than 3,500 researchers and 265 million euros in turnover.

# **BASIC AND EXCELLENCE RESEARCH CENTRES**

The Basque Basic and Excellence Research Centres (BERC) are knowledge generation facilities in fields of scientific interest for the Basque Country. They are linked to the university environment and together with their research work, work on attracting and retaining talent and on advanced training for professionals, in collaboration with the university.

FBB Bizkaia Biophysics Foundation

BCAM Basque Center for Applied Mathematics

BCMaterials Basque Center for Material Applications and Nanostructures
DIPC Donostia International Physics Center
BCBL Basque Center for Cognition, Brain and Language
MPC Material Physics Center
Achucarro Basque Center for Neurosciences
BC3 Basque Center for Climate Change
Polymat Basque Center for Macromolecular Design and Engineering

# CREATION OF NEW ENTERPRISES

BIC Araba

# **BUSINESS AND INNOVATION CENTRES**

The Business and Innovation Centres (BICs) in Alava, Bizkaia and Gipuzkoa promote the creation and incubation of innovative and technology-based enterprises. They provide premises adapted to the needs of new projects, management and technological guidance, possibility of access to seed capital, preferential funding in conjunction with diverse players and access to institutional support programmes. Since they were launched, these Centres have supported the creation of 2,000 businesses, which have generated 10,500 jobs, and have tutored more than 4,000 entrepreneurs.

### **BIND 4.0**

This is an acceleration programme developed within the framework of the Advanced Manufacturing Strategy, an international publicprivate initiative aimed at attracting and supporting the best innovative start-ups with Industry 4.0 solutions applied to the sectoral fields of Advanced Manufacturing, Smart Energy, Health Tech and Food Tech. Bind 4.0 is positioned as a powerful open innovation platform that seeks to accelerate the development and growth of start-ups participating in the Basque ecosystem. Bind 4.0 provides the contact between industrial companies installed in the Basque Country and the best global talent, favouring the development of innovative projects and contributing towards position the Basque Country as a benchmark in industrial entrepreneurship. In this way, collaborating companies have the possibility of incorporating the talent and technology of start-ups in the sphere of Industry 4.0, and the start-ups have the opportunity to accelerate their development and obtain a real contract with an internationally recognised industrial company.

ABB, Aernnova, ArcelorMittal, Batz, Biele, Bridgestone, BTI, CAF, CIE Automotive, Cikautxo, DanobatGroup, Egile, Euskaltel, Faes Farma, Fagor Ederlan Taldea, Gestamp, Grupo Alcor, Grupo Elecnor, Grupo IMO, Grupo Ulma, Iberdrola, ITP Aero, Keralty, Maier, Mercedes-Benz Vitoria, Michelin, Mondragon BDC, Nem Solutions, Orona, Quirón Salud, Onkologikoa, Repsol-Petronor, Roxall, Reiner, RPK, Sener, Siemens Gamesa, Sidenor, Tubacex and Viuda de Sainz are the driver companies taking part in the programme.





# SCIENCE AND TECHNOLOGY PARKS

Alava Technology Park

The Network of Basque Science and Technology Parks is a catalyst for innovation and technological development in the Basque Country, favouring knowledge exchange and technology transfer between companies, technology players and universities, promoting the creation and growth of innovative companies and offering quality spaces and facilities and value-added services in a sustainable manner.

The Parks in Álava, Bizkaia and Gipuzkoa make up a true ecosystem of scientific and technological knowledge and development that brings together 530 companies, research foundations and innovation centres, plus large corporations and start-ups. Located in strategic sustainable environments, the Basque Science and Technology Parks promote the transfer of knowledge and R&D to the business fabric, networking and offer a wide range of value-added services to companies.

In 2017, companies in the Parks invested 515 million euros in R&D, more than 40% of the total research and development expenditure of the Basque Country, and had joint turnover of 4,974,000,000 euros. In total, the Technology Parks in Álava, Gipuzkoa and Bizkaia employ more than 17,200 people, more than 46% of whom are university graduates.



# Talent development

· Universities

· Vocational training

**48.9%** of young people have higher level studies.

# **BIGIITTIE** BASQUE COUNTRY

# 4 Talent development

# Investing in training is investing in the future. Training and excellence of people is a key strategic factor for the competitiveness of the Basque Country.

Training is the key that opens the doors to a competitive future. That's why the Basque country directs its efforts toward implementing a clear, close educational model, providing value and quality assurance. Its commitment to developing talent in people, concentrated in a nursery for highly qualified professionals, who are prepared to take the reins of the future, both locally and internationally, has been reinforced.

**48.9% of people aged between 30 and 34 have higher education,** a higher percentage than the average of the European Union (37.9%) and Spain (42.3%). With a public University (Public University of the Basque Country/Euskal Herriko Unibertsitatea), where eight out of ten students are concentrated, three private universities (University of Deusto, Mondragon Unibertsitatea and the University of Navarra - which has one of its faculties located in Donostia-San Sebastian), almost a hundred Occupational Training Centres, five international schools, more than a dozen official language schools, the first Gastronomic University in the world (Basque Culinary Center), DigiPen (Institute of Technology Europe Bilbao) and the Machine Tool Institute (IMH), the Basque

Country is the autonomous community with the most educational technology in its classrooms.

# Ikerbasque, the Basque Foundation for Science,

was created by the Basque Government in 2007 to strengthen the Basque Science System through programmes to attract and consolidate research talent, as well as actions to make research more dynamic. Ikerbasque hires established researchers on full-time contracts and also promising young researchers, who perform their work at universities and research centres in the Basque Country. This scientific community, comprised of some 150 fulltime researchers and around 70 junior researchers from 30 different countries, has published over 4,500 articles in indexed publications and has obtained more than 120 million euros for research projects. These resources are used to boost research in the Basque Country through the recruitment of researchers and investment in equipment and infrastructure.

# 4GUNE CLUSTER FOR UNIVERSITY TRAINING IN ENGINEERING, SCIENCE AND TECHNOLOGY

Created in 2017, this is a pioneering cluster that establishes a close, direct relationship between university and business, so that university training responds to the real requirements of the production fabric, through university-industry partnerships that generate and transfer knowledge, in addition to promoting degrees-masters-doctorates that form versatile professionals who are highly employable.





Dual university training and Basque University-Business strategy: Almost all degrees in the Basque university system include an agreement with companies that allows practical training to take place in a company.

# UNIVERSITY OF THE BASQUE COUNTRY / EUSKAL HERRIKO UNIBERTSITATEA (UPV/EHU)

The University of the Basque Country/ Euskal Herriko Unibertsitatea (UPV/EHU) is the leading higher education institution in the Basque Country and one of the most important in Spain in terms of volume of teaching results, research, innovation and technological development. It is currently classed among the 400 best universities in the world, according to the Shanghai Ranking.

The UPV/EHU has facilities in all the territories of the Basque Autonomous

# MONDRAGON UNIBERTSITATEA

- Private university belonging to Corporación Mondragón, created by the merger of three educational cooperatives.
- · 3 Faculties and a Polytechnic School.
- 30 degrees related to the fields of Engineering, Business Management, Education, Communication, Gastronomy, Entrepreneurship and Cooperativism.
- · 4,804 undergraduate and graduate students.
- · 474 professors.

Community. It is a public university with a vocation for research, deeply rooted in Basque culture yet open to the world, which plays an important role of intellectual leadership within the society of which it is part, with a clear ethical and social commitment.

Three campuses, twenty study centres and an extensive academic offer of undergraduate and graduate courses are its academic references.

More than 50,000 people attend the university daily, either as students or as faculty, research and management staff, to perform their tasks.

The UPV/EHU is a Campus of International Excellence, a status awarded by the Ministry of Education after an independent international assessment. In collaboration with Bordeaux University, it has been the driving force in setting up a cross-border campus that is unique in Europe.

# UNIVERSITY OF DEUSTO

- $\cdot\,$  Founded in 1886 by the Society of Jesus.
- · Private university.
- · 2 campuses: Bizkaia and Gipuzkoa.
- · 6 Faculties.
- 42 degrees and double degrees, 44 university master's degrees and 8 doctorates.
- Degrees in Law, Business, Humanities, Engineering, Language and Communication, Psychology and Education, International Relations, Theology, Social Work and Tourism.
- 8,232 undergraduate students, 2,341 graduate students, 8,119 in executive education, 322 in doctorate programmes, 1,089 in citizenship school, 1,297 in languages and 263 in others.
- · 661 teachers, 150 researchers, 518 administrative staff and others.

Comprising more than 50,000 people, it is responsible for 70% of the research carried out in the Basque Country and has already generated a quarter of a million graduates in the most diverse areas of knowledge.

- · Public university.
- Three campuses: Álava, Bizkaia and Gipuzkoa.
- · 20 Faculties and Schools.
- 66 degrees, 7 double degrees,
   106 master's degrees, 46 own degrees and 66 doctorate programmes.
- Responsible for 70% of research in the Basque Country.
- · 44,500 undergraduate and graduate students.
- · 5,700 teachers and researchers
- · Campus of International Excellence: Euskampus.
- · Campus of International Excellence: Aristos Campus Mundus
- Among Top 6 in Global Teaching Excellence Award 2018 (GTEA)
- Among the 80 best universities in the world, according to the Times Higher Education World University Rankings.

# UNIVERSITY OF NAVARRA - TECNUN

- · Founded in 1961.
- · Private university.
- · Campus in San Sebastian.
- 9 EHEA (European Higher Education Area)-adapted degrees.
- · 6,424 undergraduate and graduate students.
- · 140 professors.



Vocational Training of the Basque Country is the EU benchmark due to its ability to provide concrete answers to real needs and demands.

A new model of Vocational Training was launched in order to substantially transform a system that not only provides answers to training itself, but also takes on the responsibility for developing applied innovation, both in the very Vocational Training and in collaboration with SMEs and MicroSMEs, by supporting them in applied innovation processes so as to improve their products and production processes. Vocational Training is working on entrepreneurship, having to direct efforts to the acquisition and improvement of the entrepreneurial culture of the teaching staff and of the students receiving such training. Some of the goals and measures established in the Plan have been reinforced by the legal framework provided by the Vocational Training Law of the Basque Country.

The advance of the 4th Industrial Revolution obliges us to respond to changes in large disruptive measures. These changes need new transformations, both in the field of competitiveness and in employability. Transformations that must be assumed from different areas that are strategic, including Vocational Training.

The 5th Basque Vocational Training Plan, launched by the Basque Government, is a plan designed specifically to respond to the challenges of the 4th Industrial Revolution: 4.0 environments, smart systems, digitalization and connectivity, artificial intelligence, complexity management, sustainability, the field of biosciences and biotechnology, as well as new advanced processes in applied innovation in Vocational Training. All this has meant the implementation of new methodologies aimed at High Performance Vocational Training.

Vocational Training has different organizations for the development, coordination and deployment of these lines of action. One of these is **TKNIKA**, **the Centre for Research and Applied Innovation in Vocational Training**, which has been transformed with the creation of new areas, including Technological Innovation and Smart Systems, Applied Innovation in Strategic Environments or Biosciences and Sustainability. In turn, Vocational Training has created the **Basque Talent Institute** to develop talent, collaborative learning, creativity, thinking, intelligence and 4.0 values.

In addition, the Basque Institute of Future Learning is responsible for research into future skills, the modelling of professional profiles in emerging sectors and smart learning. Likewise, it establishes the procedures for Talent accreditation.

We have Smart Vocational Training, Sustainable Vocational Training, Integrative Vocational Training and Solidary Vocational Training that responds to current and future requirements.





FINNTIDE

IRAL

The best European region in Connectivity

(Financial Times - Ranking 2016-2017)



# 5 A well-connected country

# The Financial Times ranks the Basque Country as the best mediumsized European region in Connectivity and one of the best in its foreign investment strategy (2016-2017 ranking)

The Basque Autonomous Community- is strategically located in the centre of the European Atlantic Axis. This position, as a point of passage between peninsular markets and the rest of Europe, puts this community at the heart of an area of influence which covers:

- A 2,000 km corridor connecting more than 10 EU regions.
- 80 million people: 25% of the population of the eurozone.
- More than 2 billion euros in GDP: 30-40% of GDP of the eurozone.
- A corridor between ports: more than 60 ports with total traffic of over 650 million tonnes per year.

Its location, along with its network of first-class logistics and transport infrastructures, perfectly coordinated and interconnected with each other and with the major European networks, makes the Basque Country an irreplaceable Multimodal Logistics Platform for the transport of goods and people in south-western Europe. The Basque Country is the gateway to Europe as a logistics hub on the European Atlantic Arc and to the rest of the world, especially Latin America, where there is a strong presence of Basque companies and institutions.

The fDi report by the British publishing group Financial Times has ranked the Basque Country as the best mediumsized region in all Europe in connectivity (logistics) and as sixth with the best foreign investment strategy. In addition, it is the fifth best region in Southern Europe in all indicators for attracting investment as a whole.

**MAREA** the largest capacity subsea cable, linking the US and Europe through the Basque Country. A town close to Bilbao, Sopela, will be the connection point for the highest capacity subsea cable to cross the Atlantic, between Virginia and the Basque Country, backed by Microsoft and Facebook. The cable is 6,600 kilometres long, with eight pairs of fibres and a speed of 160 TBps.




**The Basque transport, mobility and logistics cluster** constitutes a competitive offer of companies and knowledge agents: technology developers (ITS intelligent transport systems), suppliers of products and services, logistics and transport operators for goods and passengers, and infrastructure managers; offering multimodal solutions to optimize the transit of people and the flow of goods throughout the entire supply chain.

**Port of Bilbao:** The Port of Bilbao is one of the most important logistics centres on the Atlantic route for access to the European market. It provides regular maritime services with connections to 800 ports around the world. Standing on a land surface area of 350 hectares (865 acres), it boasts logistics operators specialising in different multimodal transport chains and sectors as diverse as petrochemicals, raw materials, steel products, foodstuffs, etc.

**Port of Pasajes (Pasaia):** The Port of Pasajes is a natural harbour, formed by a bay that provides total shelter for vessels. This means that loading and unloading work can be performed safely throughout the year, regardless of the condition of the sea.

Along with ports, other essential infrastructures include **Bilbao International Airport**, the largest airport in northern Spain, connected with major European cities (with more than 4 million passengers per year), **Vitoria airport** (one of the most important freight airports in Spain and DHL hub for southern Europe) and **San Sebastián airport** (located in Hondarribia).

In addition, the Basque Country has a new **high-speed rail network** and the most modern and extensive road system, making up the multimodal integrated infrastructure network of the Basque Country.

Within the wide range of logistics in the Basque Country, **VIAL - Vitoria Álava Logistics Solution** stands out. With a surface area of more than 9 million square metres, it is the most important logistics space in south-western Europe, and aims to be the key link in the logistics chain.





The Basque Country has its own financial system, giving it regulatory and management capability.

### **BIGLITTLE** BASQUE COUNTRY

### 6 Business friendly administration

### The Basque Country has capacity for self-government thanks to its own financial system.

Euskadi, the Basque Country, enjoys a high level of selfgovernment in issues as important as healthcare, education, safety, housing and taxation, autonomy derived from the Gernika Statute, one of the fundamental pillars of selfgovernment.

Another fundamental pillar of Basque self-government is the 'Economic Agreement', the financial foundation of the Autonomous Community, which gives the Basque institutions autonomy to collect and manage citizens' taxes depending on its own budgets and on agreements signed with the Spanish central administration. All these circumstances have enabled the creation of local organisations, such as EITB - Basque Radio and Television; the Ertzaintza, the autonomous police force, with more than 7,000 agents, and full authority over road and hydraulic infrastructure, economic and industrial promotion, territorial planning and training.



# INSTITUTIONS SUPPORTING BUSINESS DEVELOPMENT

Business development and promoting the creation of new enterprises and ventures are two of the most important commitments of the Basque institutions. These commitments have given rise to instruments that the Basque public administrations make available to people to create, develop and consolidate businesses.

### SPECIFIC PUBLIC FUNDS FOR Each stage of the company Life cycle

### PRIVATE FUNDS PROACTIVE To investing in Businesses

- $\cdot$  Refundable advances
- · Low interest loans
- · Tax incentives
- Occupational training of workers to suit their needs
- · Subsidies for R&D projects
- · Reciprocal guarantee companies
- · Financial institutions
- Social entities
- · Specific funds
- Business Angels network

Basque Parliament

ttle

SOUE COUNTRY

· Seed funds

#### TAX INCENTIVES AND DEDUCTIONS

General taxation: 24% - 20% for SMEs

Research, development and innovation

Investments in environment and sustainability

#### Startups:

Reduction in the tax base and share purchasing as investment

Patents

- Job creation
- New non-current assets

Financing-related incentives





A country with one of the highest Human Development Index (HDI) rankings in the world



### 7 A place to live

Tradition and innovation, prehistory and modernism, mountains and sea, green and blue. The Basque Country has its unique outlook on the world from its small territory full of colours, aromas and flavours, inviting you to come, learn and discover unique experiences. Euskadi, the Basque Country, receives more than 3,600,000 visitors every year.

Socially, as well as economically, industrially and culturally, the Basque Country is unique. Balanced social and economic development, the pursuit of excellence, transformation processes in cities, business internationalisation and firm commitment to innovation, placing it among the best in the world, make the Basque Country one of the most attractive places to live and to invest. **The Human Development Index (HDI) for the Autonomous Community of the Basque Country ranks Basque society among the most developed on the planet**, according to data produced by Eustat by applying the methodology of the United Nations Development Programme (UNDP). With an HDI of 0.922, it stands in eighth position in the world. Euskadi has an extensive healthcare system that covers the requirements of citizens through the **Basque Health Service-Osakidetza**, a public service dependent on the Basque Government, as well as private centres. In the **Basque Education System**, schooling is compulsory from age 6 and free from 3 to 16 years old. Euskadi has the lowest dropout rate (7.7%) for young people between 18 and 24 years old. As regards safety, it is one of the safest regions in Europe, with a rate of 37 crimes per 1,000 population, compared to 43 in Spain and the EU 27 average of 56.





### The Basque language, Euskera, the oldest in Europe and the main feature of its particular, distinctive culture, remains alive.

Culture reaches all corners of the Basque Country through various first rate festivals, such as the San Sebastian International Film Festival, the Jazz Festivals in Vitoria-Gasteiz, Getxo and San Sebastian and the Bilbao Opera Season. Tradition and innovation merge in an amalgam of shapes and colours. Getting to know the Basque Country provides an insight into the Basque people. It is a way of life, a character and an understanding that combines history and modernity, audacity and nobleness, fun and hard work



#### Arzak, Berasategi, Subijana, Atxa, Aduriz and a long list of top chefs have made the Basque Country the region with the highest concentration of Michelin Stars in the world, 32.

The Basque County has a long-established culinary culture, one of its hallmarks, reflected in the quality of its products and the excellent skill of its chefs, who have been awarded 32 Michelin stars. Basque cuisine is internationally recognized, as proven by the holding of The World's 50 best restaurants gala in Bilbao in 2018.

**BCC, Basque Culinary Center** is the first Gastronomy University in the world, a research and innovation centre into food and cuisine, firmly committed to ensuring the continuity of cuisine as a centre for innovation in the future, in addition to generating high-level knowledge and training for qualified professionals.

#### Rioja Alavesa, a unique region.

Reds and ochres colour this land, its wines and its villages. Traditional wineries and others designed by famous architects can be visited. 12,000 hectares of vineyards offer wines from a denomination of origin recognised as one of the best in the world.

### Climate

Average annual temperature: 14° Hours of sunshine per year: 2,000

#### **3,600,000** visitors per year Tourism 6.1% of GDP

# **11** The WWF Naturómetro 2016 report gives the Basque Country the best overall rating for its management plans for protected

Ataria

Basque mountains and valleys, with quintessential villages scattered throughout, reflect the thousand-year-old history and traditions still kept alive, an incomparable backdrop highlighted by every shade of green and life going on all around. The Basque Coast with its 250 km of beaches, estuaries, salt marshes, cliffs and fishing villages, reflecting nature which is abrupt yet generous, with a living and intensely blue sea; a coast where flysch is the highlight, an incredible formation with millions of years of geological history, providing

areas in the Natura network.

information about the biological, geological and climatic changes of the last 50 million years.

The Basque Country obtained the best overall assessment by the WWF in 2016 for its development of management plans for protected areas in the Natura network. With 59 spaces included in this Network, the percentage of protected areas covers up to 23% of the Basque Country.

# SPORTS AND TRADITIONS

Cesta Punta - Jai Alai

On many occasions, the Basque people have made their leisure time an extension of their work. For this reason, all types of rural sports in the Basque Country are related with a trade or with the traditional tasks of the farmhouses. Furthermore, traditional sports, such as pelota (Jai-Alai), rowing and cycling occupy a privileged place in the annual sporting calendar, alongside more international sports, such as football, basketball, golf and surfing.



From the most ancient artistic expressions to the most avantgarde museums, the Basque Country has priceless treasures, giving it a unique personality. It boasts themed museums related to the region's economic development, such as the Railway Museum and the Mining Museum; others of international prestige, such as San Telmo and Fine Arts, as well as museums that have put Bilbao on the world map of museums, namely the Guggenheim, Balenciaga, Artium and Chillida Leku.



The **Guggenheim Museum Bilbao** is one of the most ambitious cultural projects of the 20th century. Its doors opened in 1997 and it became the forerunner for the transformation of the whole city. It is the symbol of the new Bilbao. Its permanent collection essentially consists of works by the most prominent artists of the past four decades and is supplemented by works on loan from the Solomon R. Guggenheim Foundation and special programmes sponsored by the Foundation.

**Cristóbal Balenciaga Museoa** is devoted to the famous designer from Getaria, considered to be a genius of international haute couture. The museum consists of two buildings: the 19th century Aldamar Palace, which is home to the temporary exhibitions and the documentation centre; and the new annex. The Cristóbal Balenciaga Museum collection consists of around 1,600 items and is not only the largest collection of Balenciaga creations in the world but also the most representative.

**Artium** is a museum and centre for cultural activities, devoted to the collection, production, dissemination, research and diffusion of contemporary art, educating in contemporary culture and fostering the development of experiences through present-day creation. Through the experience of present-day art and culture, Artium develops the critical awareness of society and projects an image of a contemporary Alava and Vitoria-Gasteiz committed to art and culture.

## SPRI, BASQUE BUSINESS DEVELOPMENT AGENCY: YOUR GATEWAY TO INVESTING IN THE BASQUE COUNTRY





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