

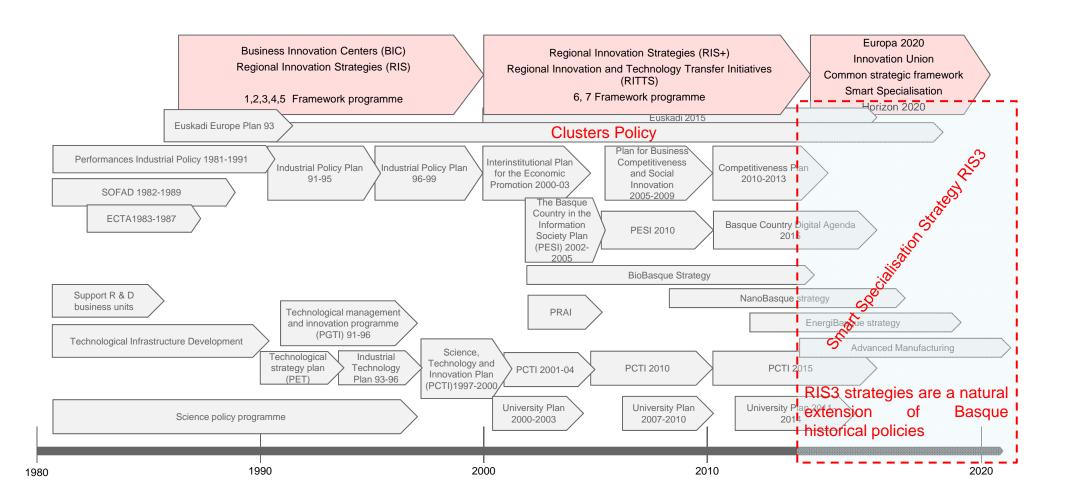
STRATEGIC CLUSTER POLICIES FOR NEW GROWTH SHAPING STRATEGIC PARTNERSHIPS FOR THE TRANSFORMATION OF OUR ECONOMIES

The evolution of Cluster policies in the Basque Country

Background

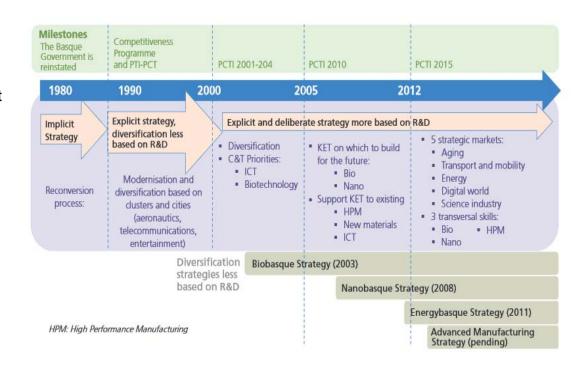
Basque Country has a **long history** defining economic development strategies over the past 35 years. The continuousness of plans and strategies, responding to **specific needs at each stage**, have progressively sought modernisation, competitiveness, specialisation, diversification and sophistication of the Basque economy based on **existing capacities and exploitation of greatest potential opportunity areas.**

The Basque Country has been at the forefront of the design and implementation of **cluster policy since the early 1990s**, when it embarked on a strategy to transform its economy in response to deep economic crisis and high levels of unemployment. Policy responses were sought to construct new competitive advantages, and the Basque government was a **pioneer in the establishment of a Porterian cluster policy**.



The Basque Country applies strategies for regional development since the 80s. The cluster policy and the specific cluster associations that it supports have been remarkably stable during the more than twenty-year life of the policy and have run in parallel to the different R&D strategies

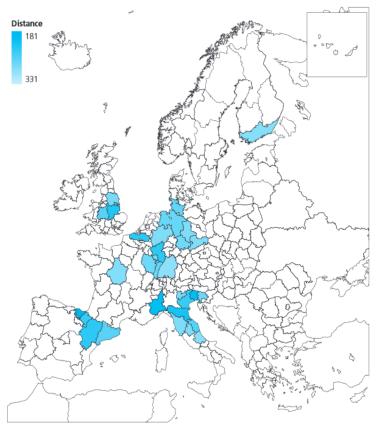
- . During this time three key milestones can be identified:
- 1992: Following a mapping of industrial sectors, instruments were developed to support the development of new associations based on the weight of the identified clusters in the regional economy and to support the strengthening of the existing ones. The first two cluster associations were set up, from which another ten followed in the subsequent years.
- 2000: After almost a decade managing cluster agreements, a thorough reflection took place to develop a new framework which put more emphasis on the strategic planning process of the cluster associations in order to better align cluster logic and regional priorities.
- 2009: There was a move to extend the policy to other activities, beginning a 'pre-cluster policy' to identify and develop new clusters. This new scheme was open to existing sectoral associations providing specialized services in markets or technology that voluntary wanted to extend their range of actions to become full cluster initiatives.



Source: The Basque Country Competitiveness Report 2013. Productive transformation for the future. Orkestra

Outcome

MAP 1 The Basque Country Reference Regions



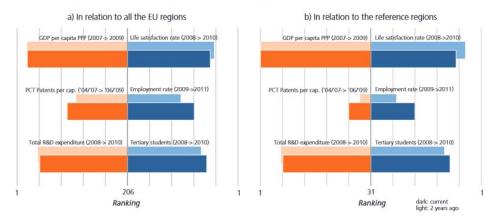
Source: Navarro et al. (2012).

Similar in:

- Demographic structural aspects
- Economic and technological specialisation
- Business structure

The Basque Country is in a better relative position in result indicators and determinants of competitiveness than in indicators of intermediate performance.

GRAPH 2 Relative position of the Basque Country with regards to the selected performance indicators, intermediate performance determinants of competitiveness, relative to all the EU-27 regions and the European reference regions

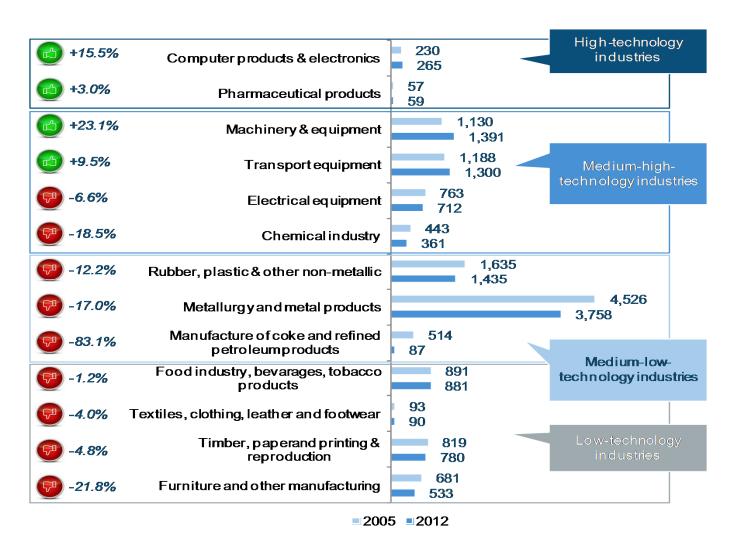


Source: Eurostat, OECD, European Social Survey.

Note: The scale measures the normalised ranking position.

Source: The Basque Country Competitiveness Report 2013. Productive transformation for the future. Orkestra

The Basque Country is an innovation follower according to the Regional Innovation Scoreboard. Medium-low technology intensity activities (OECD 2011) represent the 45% of manufacturing GVA, medim-high technology industries the 34%, low technology industries 20% and high intensity industries reach up to 2%





The existing policy today supports 12 priority clusters associations and 10 pre-clusters. Financial support from the Government is around 2.5 M€year.

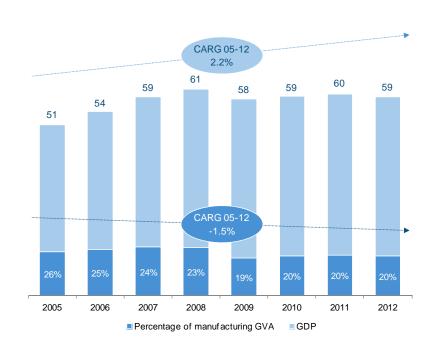
A key concern in undertaking a modernisation of the policy is with how best to use clusters to align Basque industry with a strategy of re-industrialization through upgrading the higher added value manufacturing activities

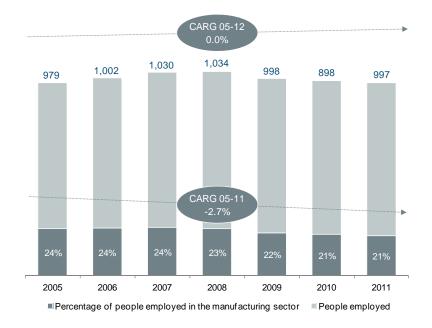


Cluster Policy 2.0



Now in 2014 we find ourselves at a critical moment for reflection and change.





- New challenges are pressing, related to the need to transform Basque industry towards higher-value and more radically innovative activities and to stem the renewed de-industrialisation processes of recent years.
- We are in the task of reviewing not only the temporary scheme launch in 2009, but the very own role of clusters associations and development instruments as multipliers of competitiveness in the new scenario.
- All of this points towards the need to modernise a cluster policy that has been in place for a long period of time and comes with considerable inertias.

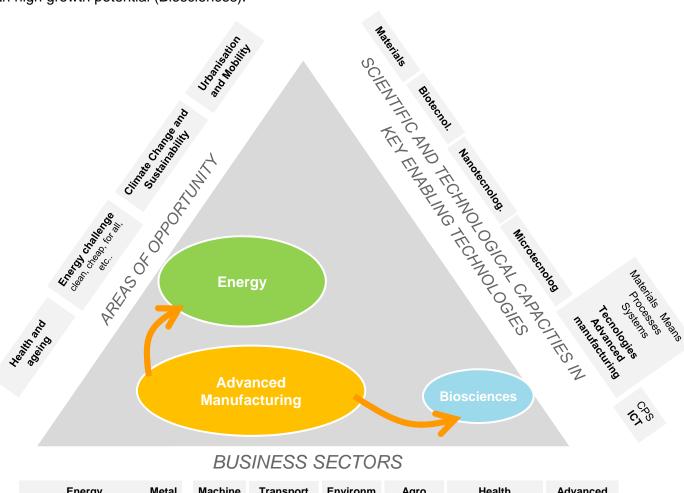


The response to these challenges is strongly connected with an emergent RIS3 strategy that emphasises cross-cutting synergies that are no necessarily well-served by the existing cluster policy.

 Main priorities meet different profile fields that together constitute a solid proposition, diversified and complementary. Priorities are not isolated elections, but a balanced strategy that combines a cross-cutting priority to various sectors in which the Basque Country has strong expertise and capacities (Advanced Manufacturing), and key sectorial area in the Basque Country (Energy) combined with commitment in a diversification field in search of a high-tech businesses with high growth potential (Biosciences).

CRITERIA FOR DEFINING SMART SPECIALISATION PRIORITIES IN THE BASQUE COUNTRY

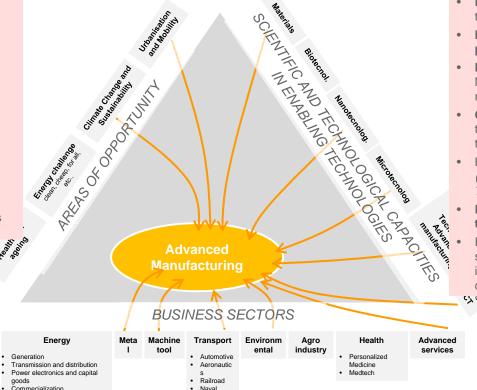
- Be supported by identifiable strengths:
 - A competitive business sector with the ability to exploit innovations and invest in their development.
 - Differential technological and scientific capabilities.
- Address challenges in which **Basque Country has capacity to** provide knowledge-based solutions.
- Count on support tools (strategies, support programmes, etc.).



Energy	Metal	Machine tool	Transport	Environm ental	Agro industry	Health	Advanced services
 Generation 			 Automotive 	Ontai	aaoy	 Personalized 	001 V1000
 Transmission and distribution 	1		 Aeronautics 			Medicine	
 Power electronics and capital 	I		 Railroad 			Medtech	
goods			 Naval 			catcon	
 Commercialition 							

Based on whole cross-sectorial coverage, on the strong industrial tradition in the Basque Country, on the compared strength of a diverse business sector and on the existence of important technological capabilities related to manufacturing.

- Sustainability-related elements that act as driver in the manufacturing industry:
 - Efficient use of resources
 - Process efficiency (in process design and energy)
 - Reducing the overall environmental impact of the activities
 - Creation and use of new materials
 - New ways of manufacturing (3D, ...)
- Smart mobility solutions adapted to the needs and lifestyle of the future
- Design and manufacturing of products that enable sustainable and intelligent development of large urban agglomerations



- Research capabilities in all types of agents of the RVCTI *
- Main area in industrial strategic research projects in the last five years
- High specialisation in Advanced Manufacturing of a number of Basque research centers **
- CIC marGUNE as a specific center oriented to the coordination of Advanced Manufacturing in the metal-mechanical field.
- Higher concentration of R&D business units (about 55% of all business units accumulating 70% of business sector research in R&D units)
- Experience incorporating enabling technologies in products and services
- R&D + innovation Advanced Manufacturing strategy focused in areas such as automation, intelligence, materials, efficiency and emergent capabilities.
 - * RVCTI: Red Vasca de Ciencia, Tecnología e Innovación – Basque Science , Technology and Innovation Network
 - ** In the analysis were included Tecnalia Corporation, IK4 Alliance and CICs.
- **High specialisation** in the industrial sector (126% compared to UE 15), highlighting: metallurgy, transportation, machinery and equipment, energy, in general. Sectors with **medium –level technology**.
- Greater productivity in industrial sector and larger weight in R&D
- Existence of **strong manufacturing clusters** (automotive, aerospace, machine tool), **with an exporting profile** and competitive (in terms of share of global exports).
- Reality of a ICT and electronics cluster with potential capabilities to incorporate these cross sectorial technologies in manufacturing business sectors
- Clusters with an "ecosystem" comprised of SMEs, tractor companies, multinationals and scientifictechnological agents.
- **Consistency** in industrial policy and wide range of support tools.





To build bridges between different value chains and better exploit the transformative potential of cross-cutting technologies

Strategic goals

global value chains

kets

SG2. To promote a structured multidisciplinary and technological convergence to develop manufacturing capabilities and "best in class" solutions, optimizing existing resources

SG3. To integrate value chains in order to meet the advanced manufacturing challenges by adding the unique capabilities of each sector and its companies

SG1. To help basque companies to move towards more knowledge intensive and higher added value value-added manufacturing activities

scaling up

SG4. To promote collaboration and support to accelerate the industrialization of R&D&i results in Manufacturing

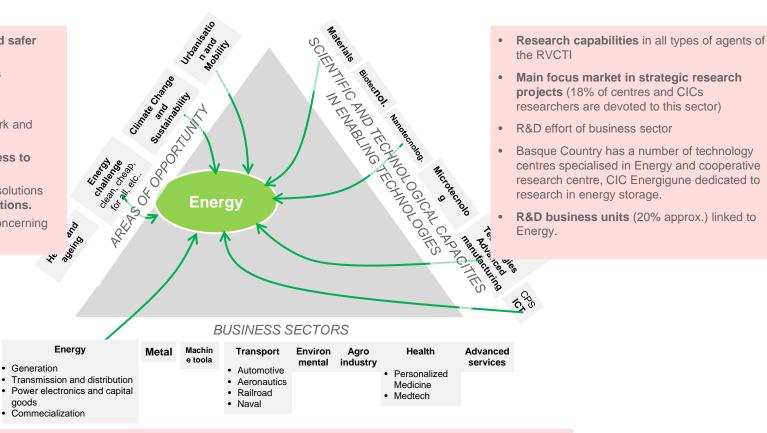
SG5. To support education and practical training in technology and management systems related to advanced manufacturing

social innovation

A sectorial choice that seeks to strengthen a industrial sector that combines all links in the value chain, globally competitive. and that must find answers to highly strategic challenges that provide opportunities at local and international level.

- Challenges related to a cleaner and safer energy, but also a cheaper one:
 - Evolution of renewable energies
 - Energy storage
- Opportunities resulting from the automatization of distribution network and energy transport. (smart grids)
- Solutions to ensure universal access to energy.
- Efficient and sustainable energy solutions for mobility and urban agglomerations.
- Efficient use of energy resources concerning demand.

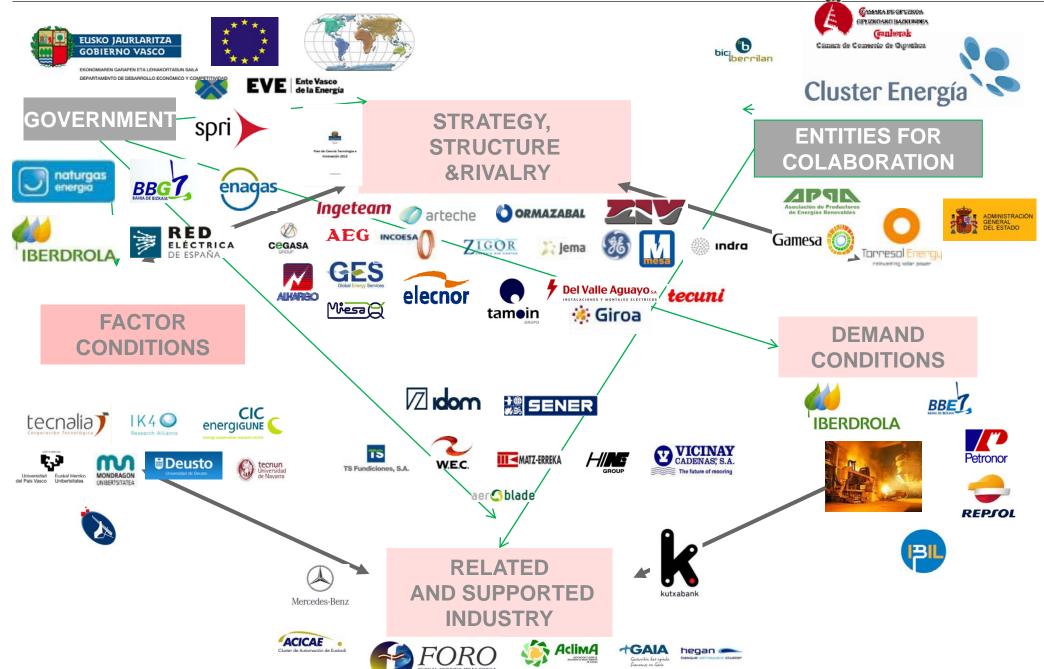
goods



- The energy sector is a key field, representing more than 6% of the total GVA of the Basque Country (17% of the industrial sector).
- The energy sector has 8 of the 25 largest companies in the Basque Country. It also comprises more than 350 companies and R&D agents.
- Sector with significant presence abroad, export share and research activity.
- Basque companies oriented to global market niches with a relatively attractive competitive position.
- The existence of Energibasque strategy oriented to coordinate technological and industrial development, and various support tools. This strategy focuses in areas where capabilities and potential are combined: smart grids, energy storage, wind energy, thermal energy, tidal / wave power, transport electrification.
- Energy companies generate 35% of revenues in the Basque Country, whilst retaining 58% of its R&D activity.

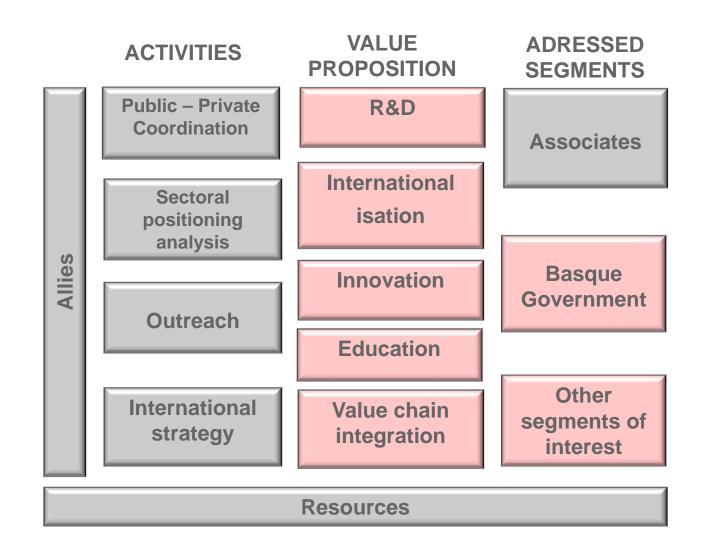






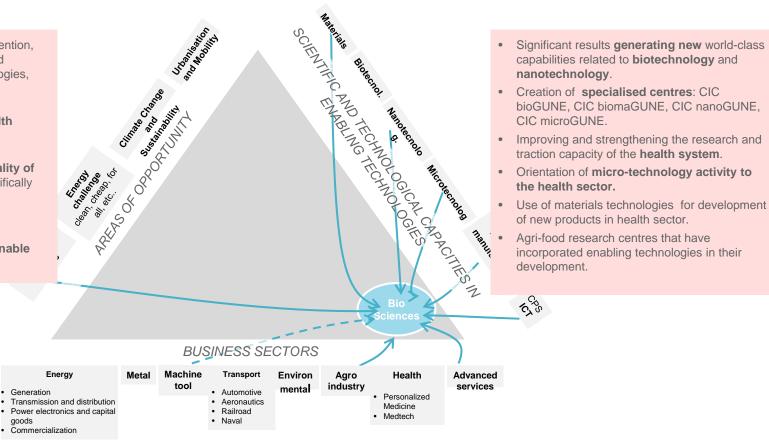
The World Class Cluster business model

- Regional integration:
 - Customised SME support
 - Driving companies anchorage
 - Local added value to multinationals
- International strategy:
 - Cross-border bridge building
- Cross-sectoral collaboration:
 - Specialization patterns diversification
- Near-market cluster-led demonstrators:
 - De-risking the scaling-up
 - User-driven approach
 - Bringing together all relevant public and private players



Based on a sustained commitment where important investments have been made in the creation of new high-level skills that open "windows of opportunity" in new economic sectors and market niches for existing businesses and start-ups.

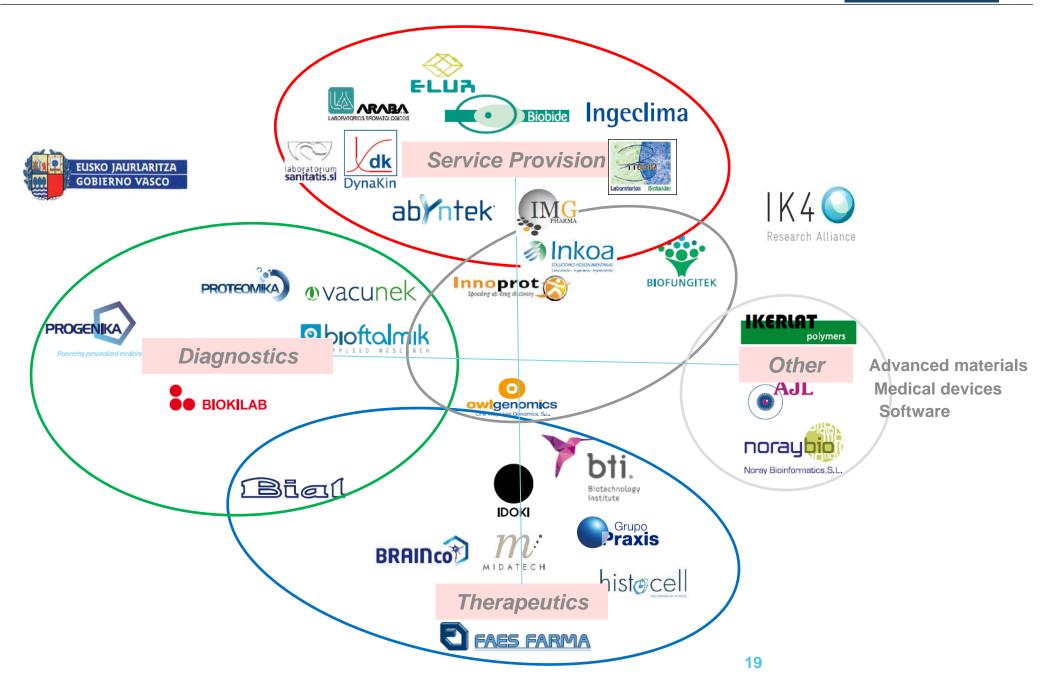
- Facilitate health management (prevention, diagnosis, personalisation in care and treatment, incorporating new technologies, etc..), to address issues related to progressive ageing of population.
- Promoting the sustainability of health systems to meet the demands and requirements of people.
- Contribute to the improvement of quality of life through other elements (not specifically healthcare)
- New environmental management techniques
- Design of more efficient and sustainable industrial processes.



- It is an emerging activity with rapid growth in the number of companies, and with some examples of success an creation of business groups within the sector, with international presence.
- Companies with a high component of R&D.

goods

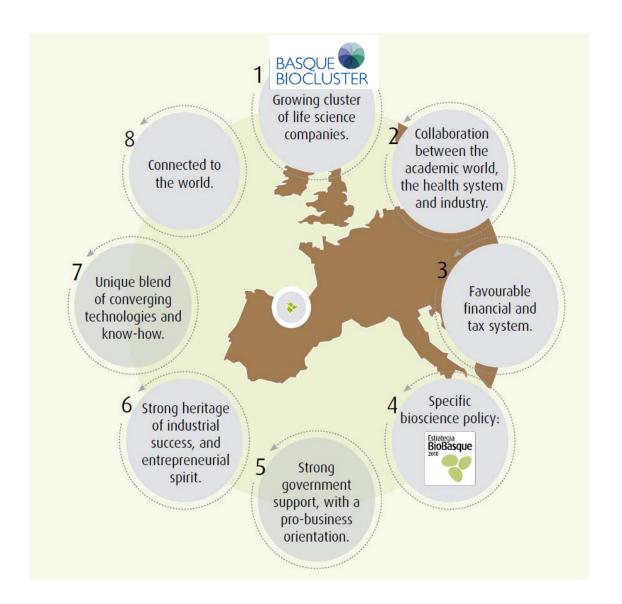
- Orientation to human health, and with minor application to food industry and industrial / environmental industry, and opportunities to deepen in its application in this fields.
- There are opportunities for diversification of certain industrial base traditional sectors (machine tool, rubber and plastic, metal components, etc.).



Shaping the value chain

Taking into account the specific features of emerging industries, such as high technological intensity, global market orientation, mostly newly based companies and capital intensive businesses, cluster services should address:

- Intellectual property protection
- Professional investor analysis
- Design of bundled offerings
- Access to international markets
- Out / In-licensing
- · Leverage capacities to outsourcers
- Cross pollination







CRISTINA OYON

Responsable de Iniciativas Estratégicas Head of Strategic Initiatives Alda. de Urquijo nº 36 48011 BILBAO Bizkaia

Tel.: 944037055 cristina@spri.es www.spri.es