

# Basque Country

*The Great Competitive Transformation and RIS3*

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# BASQUE COUNTRY

## *SOME ECONOMIC REMARKS*

# BASQUE COUNTRY

## *Brief description of Basque Country*

**Industrial activities** (related to metal manufacturing) dominated Basque economic structure during the 20th century, mainly due to the rich iron ore resources found during the 19th century near Bilbao.



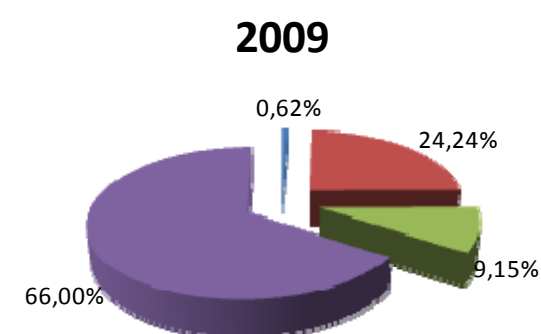
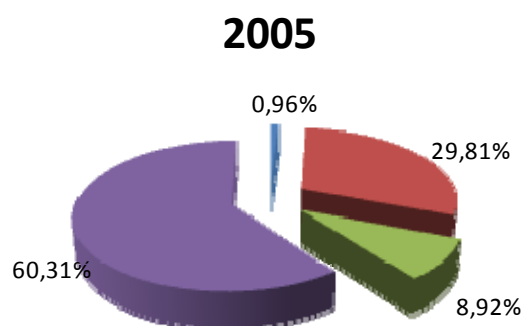
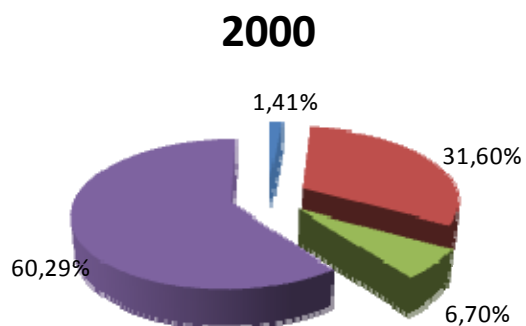
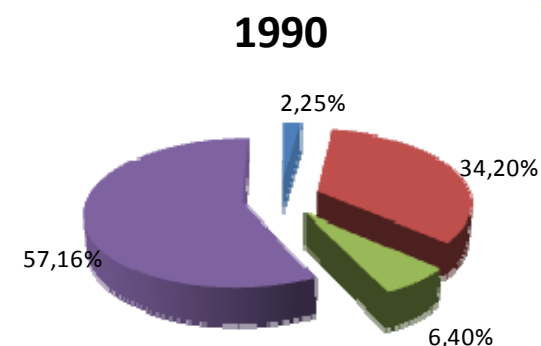
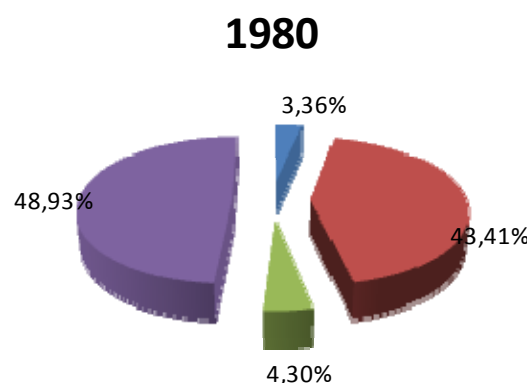
Industrial activities **decayed during the economic crisis of the 70s-80s**, but a sound industrial and technological policy lead to the **modernization and transformation of Basque industry**.

**Nowadays**, Basque Country has an **advance economic profile**, with a **competitive industry**.

# BASQUE COUNTRY

## *The economic transformation of Basque Country (I)*

The crisis during the 80s has led to a sound transformation of Basque economic structure, with an **increasing importance of services and more competitive industries.**



■ Agriculture ■ Industry ■ Construction ■ Services

Source: Eustat 2010

# Introduction (I)

## Basque Country – Regional Profile:

- Population: 2,169,038, extension 7,234 km<sup>2</sup>, pop. density: 299 inhab./Km<sup>2</sup>
- GDP per head: 136% of the EU27 average
- Unemployment rate: 10.6% (2011) (21,5% Spain 2011)
- Industrial sector: 24.5% of the regional GDP (2010) (16.1% in Spain)
- R&D: 2.08% of GDP as R&D expenditure (2010), 10% annual growth in per head R&D expenditure since 1996.

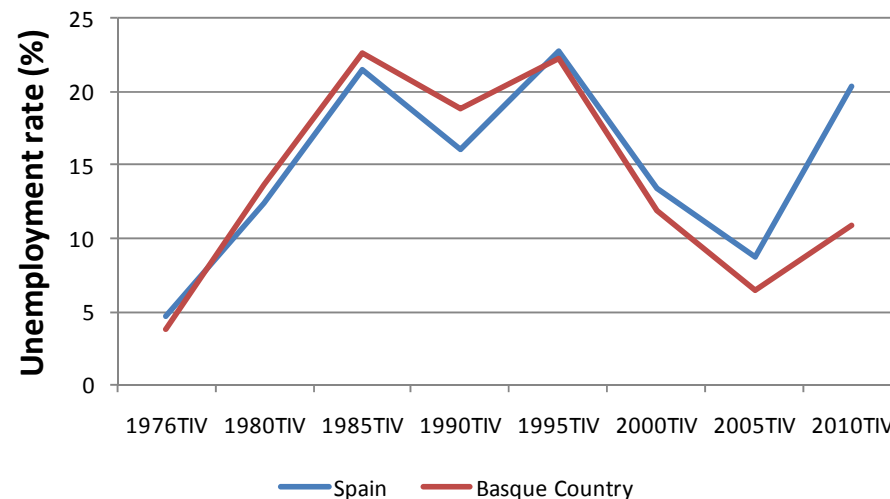
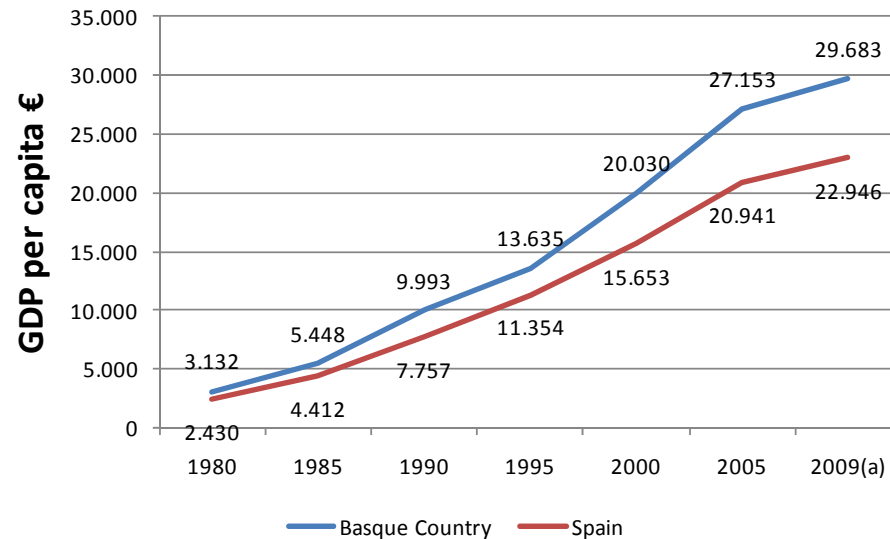


# BASQUE COUNTRY

## The economic transformation of Basque Country (II)

The restructuring of Basque economy after the 70s crisis contributed to a better performance in comparison to Spain.

After it, both wealth generation and jobs creation experimented a significant increase due to a progressive modernization of Basque economic structure



Source: Eustat 2010 & INE 2010

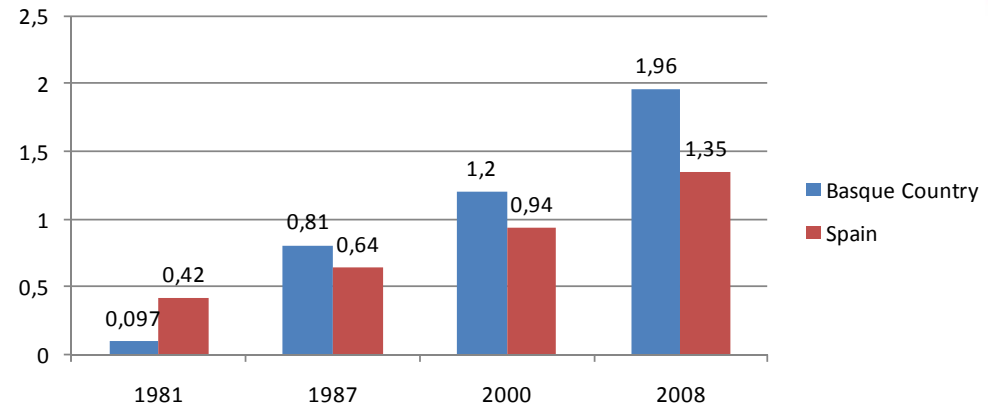
# BASQUE COUNTRY

## The economic transformation of Basque Country (II)

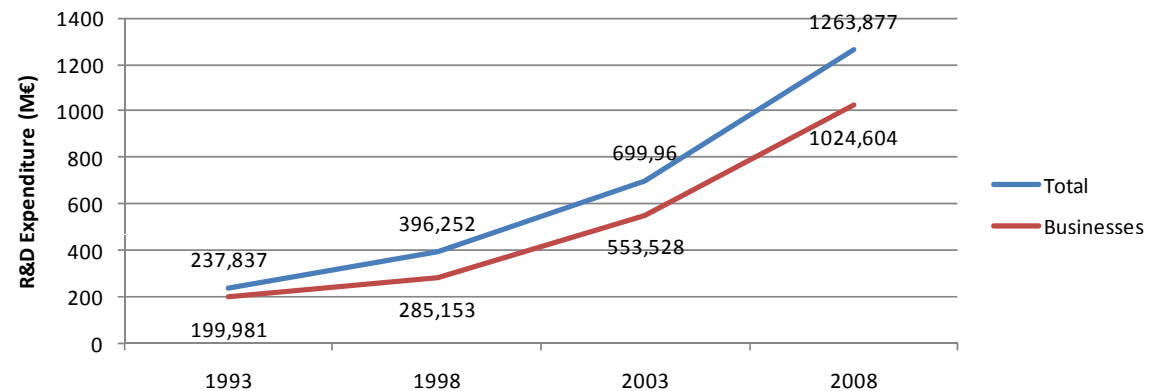
**B**ut the transformation has not only be in terms of business activity nature, but also in terms of knowledge intensity.

R&D has experienced a significant increase (above the average of Spain). This effort was focused mainly in the private sector, with the support and animation of the Basque Government.

### R&D % GDP



### Basque R&D expenditure (M€)



Source: Eustat. Olazarán y Lavia (2000)

# BASQUE COUNTRY



## Main figures of Basque Economy

	Basque Country	Spain	Germany	France	Italy	UK	Sweeden
GDP per capita (PPC – UE27:100) (2009)	136	104	116	107	102	116	120
Labour Productivity (PPC – UE 27:100) (2009)	130.3	110.0	104.6	124.5	108.5	109.2	108.8
R&D investment (%GDP) (2008)	1.85	1.35	2.63	2.02	1.18	1.88	3.75
Degrees in S&T (per 1,000) (2007)	27.2	11.2	11.4	20.7	12.1	17.5	13.6
Employment rate (%) (2009)	65.2	59.8	70.9	64.2	57.5	69.9	72.2
% population secondary education (%) (2008)	78.0	60.0	74.1	83.4	76.5	78.2	87.9
Welfare expend. Per caapita (€) (2007)	5,156 (2005)	3,925	7,408	8,007	5,812	7,291	9,744
Internet at home (%) (2009)	60	54	79	63	53	77	86
Greenhouse emissions (2010)	114.0	115.0	79.0	100.0	93.5	87.5	104.0
Energy intensity (2007)	146.3	184.2	151.5	165.4	142.8	115.5	156.5

Source: Eustat. Euskadi en la UE 27 2010



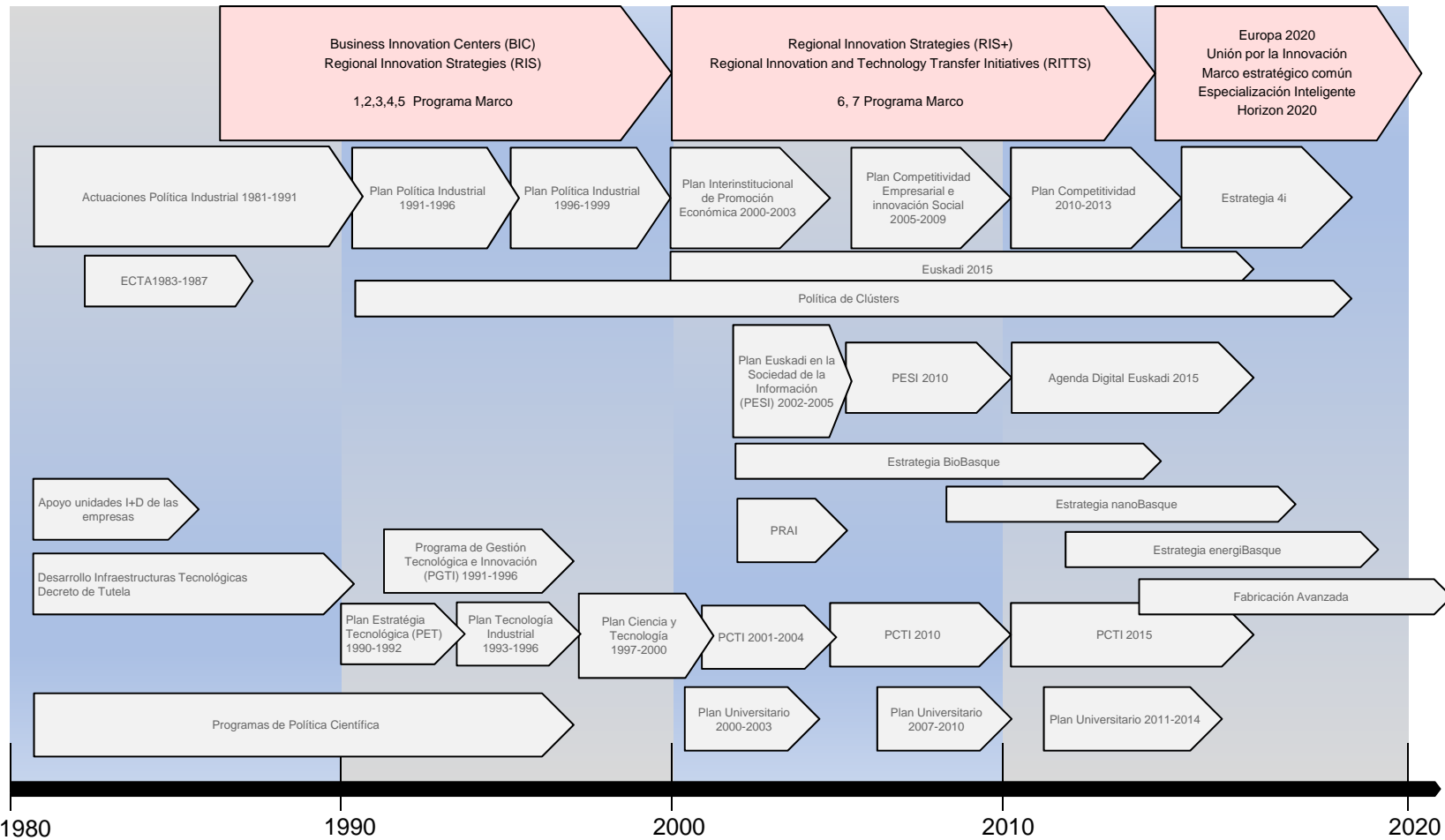
# BASQUE COMPETITIVE TRANSFORMATION

*THIRTY YEARS OF CHANGES*

*1980-2010*



# Historia y políticas de apoyo





# COMPETITIVE TRANSFORMATION

## 1980-2010 THE CONTINUOUS PROCESS OF COMPETITIVENESS

	CONTENTS	FOSTERING FACTORS	DEPLETION FACTORS
Competitive transformation 2010- ...	<ul style="list-style-type: none"> <li>➤ To compete and lead in global markets</li> <li>➤ Sustainability</li> <li>➤ To diversify from competitiveness</li> </ul>	<ul style="list-style-type: none"> <li>➤ Businesses as protagonist of change</li> <li>➤ Governance as a means to change</li> <li>➤ Regional context as engine of economic change</li> </ul>	<p><b>To be determined: RIS3</b></p>
2nd Transformation 2000-2009	<ul style="list-style-type: none"> <li>➤ Towards a knowledge society</li> </ul>	<ul style="list-style-type: none"> <li>➤ Knowledge public commitment</li> <li>➤ Science and Technology Basque System</li> </ul>	<ul style="list-style-type: none"> <li>➤ Global economic crisis</li> <li>➤ Knowledge value chain not articulated</li> <li>➤ R&amp;D public expenditures below the average</li> </ul>
1st Transformation 1986-2000	<ul style="list-style-type: none"> <li>➤ Facing the crisis</li> <li>➤ Facing the economic obsolescence</li> </ul>	<ul style="list-style-type: none"> <li>➤ Tecnology</li> <li>➤ Public support</li> </ul>	<ul style="list-style-type: none"> <li>➤ Traditional economic roots</li> <li>➤ Incremental innovations</li> </ul>

Source: Main findings of the initial reflection during the elaboration of the Business Competitiveness Plan 2010-2013

# COMPETITIVE TRANSFORMATION



**1980-1990**  
**THE REINDUSTRIALIZATION**

1981-1991 MAIN ELEMENTS (I)		
<b>BASELINE</b>	<b>SCIENCE &amp; TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>• Very low levels of R &amp; D levels and general ignorance about the concept of private R &amp; D</li> <li>• Science and technology system virtually nonexistent, with a very young university and no relevant public research bodies.</li> </ul>
	<b>SOCIOECONOMIC CONTEXT</b>	<ul style="list-style-type: none"> <li>• Sound socioeconomic crisis.</li> <li>• A business tissue specialized in traditional/mature activities. Technologically backward.</li> <li>• Widespread businesses ·”individualism”</li> <li>• Unemployment rates above 20%</li> <li>• Young and inexperienced regional government (process of autonomous regime of the new Spanish democracy)</li> </ul>

# COMPETITIVE TRANSFORMATION



1980-1990

## THE REINDUSTRIALIZATION

1981-1991 MAIN ELEMENTS (II)	
POLICY MEASURES	<b>REESTRUCTURE INDUSTRIAL POLICY 1980-1990</b> <ul style="list-style-type: none"> <li>• Central Government restructuring measures</li> <li>• Basque Government initiatives focused in those sector not covered with spanish aid (Exceptional Recovery Plan)</li> </ul>
	<b>INDUSTRIAL &amp; TECHNOLOGY POLICY 1981-1989</b> <ul style="list-style-type: none"> <li>• Consolidation of technology offert: Support to Technology Centres</li> <li>• Technology modernisation support measures managed by SPRI:                             <ul style="list-style-type: none"> <li>• Technology promotion (IMI, CN-100, ECTA)</li> <li>• Training (TEKEL)</li> <li>• Infrastructures (industrialdeak, S&amp;T Parks)</li> </ul> </li> </ul>
	<b>INDUSTRIAL &amp; TECHNOLOGY POLICY 1989-1991</b> <ul style="list-style-type: none"> <li>• Deep reflexion about S&amp;T policies</li> <li>• Technology Strategic Unit (UET) of SPRI</li> <li>• Technology Strategic Plan (PET)</li> </ul>

# COMPETITIVE TRANSFORMATION



## 1980-1990 THE REINDUSTRIALIZATION

### MAIN PROGRAMMES AND MEASURES 80-90

REINDUSTRIALIZATION SPANISH GOVERNMENT		REINDUSTRIALIZATION BASQUE GOVERNEMENT		ECONOMIC PROMOTION BASQUE GOVERNMENT	
PROGRAMMES	YEARS	PROGRAMMES	YEARS	PROGRAMMES	YEARS
Special steel products	1980-1985	Reconverse loans	1981-1984	SOFAD	(1982-1989)
Siderurgia Integral	1981-1986	Sectoral reestructuration	1982-1984	BASKEXPOR	(1981-1987)
Common steel products	1981-1986	PRE	1985-1987	TEKEL	(1983-1992)
Appliances	1981-1984			IMI PROGRAMME	(1983-1992)
Electronic manufactures	1981-1984			CN-100 PROGRAMME	(1982-1983)
Electronic components	1982-1984			ECTA PROGRAMME	(1984-1987)
Sector del cobre	1982-1984			INDUSTRIALDEAK	(1982-now)
Naval industry	1982-1986			FINANCIACIÓN PYMES	(1982-1987)
ZUR Nervión	1985-1988			PAI	(1988-1990)
				SPRINET	(1990-1992)
				ONDA PROGRAMME	(1987-1993)

# COMPETITIVE TRANSFORMATION



## 1990-2000 THE COMPETITIVE APPROACH

1990-2000 MAIN ELEMENTS (I)		
BASELINE	SCIENCE & TECHNOLOGY	<ul style="list-style-type: none"><li>• Consolidation of technological infrastructure</li><li>• Progressive increase in R&amp;D effort by businesses</li><li>• Public support mainly focused on technology</li><li>• Redefinition of the policy towards a competitive approach</li></ul>
	SOCIOECONOMIC CONTEXT	<ul style="list-style-type: none"><li>• Integration and progressive convergence with the EU</li><li>• Diversification of economic activity: service activities</li><li>• Decrease in unemployment</li><li>• Beginning of a expansive economic cycle</li><li>• Increasingly sophistication of the economy</li></ul>



# COMPETITIVE TRANSFORMATION



1990-2000

## THE COMPETITIVE APPROACH

1990-2000 MAIN ELEMENTS (II)	
POLICY MEASURES	<p><b>INDUSTRIAL POLICY GENERAL FRAMEWORK 1991-1995</b></p> <ul style="list-style-type: none"> <li>• Beginning of Basque Cluster policy: first initiatives launched</li> <li>• Top-down &amp; Bottom-up policy approach</li> <li>• Industry &amp; Technology Plan 1993-2996</li> <li>• Sophitication of regional public support: investments, horizontal measures, energy and environment, internationalisation, training and employment.</li> </ul>
	<p><b>INDUSTRIAL POLICY GENERAL FRAMEWORK 1996-1999</b></p> <ul style="list-style-type: none"> <li>• Basically the same orientation as the previous period.</li> <li>• Science &amp; Technology Plan 1997-2000</li> <li>• Progresive integration of science and technology systems: Basque Science &amp; Technolgy Network (1997)</li> </ul>
	<p><b>1999-2001</b></p> <ul style="list-style-type: none"> <li>• PIPE 2000-2003: Interinstitutional Economic Promotion Plan</li> </ul>

# COMPETITIVE TRANSFORMATION



## 1990-2000 THE COMPETITIVE APPROACH

**C**luster policy become one of the most remarkable initiatives developed during the **90s** in the framework of **Competitiveness Policy**.

An initial analysis showed the opportunity in supporting some strategic sectors and since the beginning of the 90s **14 cluster initiatives have been launched**.

CLUSTER INITIATIVES LAUNCHED SINCE 1990		
Machine tools industry	AFM	1992
Appliances	ACEDE	1992
Automotive	ACICAE	1993
Environmental industries	ACLIMA	1995
Bilbao Port	Unipor Bilbao	1995
Knowledge*	Knowledge Cluster	1996
Telecommunications	GAIA	1996
Energy	Cluster de la Energía	1996
Aeronautics	HEGAN	1997
Marine sector	Foro Marítimo Vasco	1997
Papper (wood)	Papper Cluster	1998
Sociolingüística	Soziolingüística Klusterra	2004
Audiovisual	EIKEN	2004
Logistics and transport	ClusterTIL	2005

# COMPETITIVE TRANSFORMATION



**1990-2000**  
**THE COMPETITIVE APPROACH**

## MAIN PROGRAMMES AND MEASURES 90-00

ECONOMIC PROMOTION PROGRAMMES BASQUE GOVERNEMENT					
1991-1996		1996-1999		1999-2002	
3R PLAN	(1992-1993)	EKIMEN	(1996-1999)	BIDERATU	(2000-now)
GARAPEN	(1992-1995)	ADEFIN	(1997-now)	GAUZATU INDUSTRIA	(2000-now)
STRATEGIX PROJECTS	(1992-now)	INDOBASK	(1995-1998)	INTERNATIONALIZATION PROGRAMME	(2000-now)
PIE	(1994-now PIPE 2000)	PROMOWEB	(1997-2000)	ATRERRI PROGRAMME	(2000-now)
INDUSTRIAL DEVELOPEMTN SORTU	(1992-1999)	INTEK	(1997-now)	ELKARTZEN PROGRAMMA	(2000-now)
AFI	(1991-now)			GAUZATU IMPLEMENTATION	(2000-now)
AUTOFINANCE PROGRAMMES	(1994-now)			HOBEDI	(2000-2002)
RETO	(1994-1999)				
PGTI	(1991-1996)				

# COMPETITIVE TRANSFORMATION



*2000-2010*  
**THE KNOWLEDGE ECONOMY**

2000-2010 MAIN ELEMENTS (I)		
<b>BASELINE</b>	<b>SCIENCE &amp; TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>• Innovation (not only technological one) acquires increasing importance in policy definition.</li> <li>• Integration of economic, social and environmental dimensions on competitiveness understanding</li> <li>• R&amp;D infrastructure (and regional innovation system) completely consolidated but with some remarkable bottlenecks</li> </ul>
	<b>SOCIOECONOMIC CONTEXT</b>	<ul style="list-style-type: none"> <li>• Economic performance above Spanish and European average</li> <li>• Search for diversification in new tech sectors: bio, nano.</li> <li>• Low levels of unemployment</li> </ul>
		<ul style="list-style-type: none"> <li>• Expansive economic cycle</li> </ul>

# COMPETITIVE TRANSFORMATION



## 2000-2010 THE KNOWLEDGE ECONOMY

2000-2010 MAIN ELEMENTS (II)	
POLICY MEASURES	<ul style="list-style-type: none"><li>• Elaboration of many Strategic Plans in different competitiveness areas:<ul style="list-style-type: none"><li>• Science, Technology and Innovation Plan 2001-2004</li><li>• Science, Technology and Innovation Plan 2010</li><li>• Euskadi in Knowledge Society</li><li>• Euskadi Entrepreneurial Society 2004-2007</li><li>• Euskadi 2015 Forum</li><li>• Business Competitiveness and Social Innovation Plan 2006-2009</li></ul></li></ul>

ECONOMIC PROMOTION PROGRAMMES BASQUE GOVERNEMENT	
2000-2010	
SAIOTEK	(2002-now)
ETORTEK	(2002-now)
EKINTZAILE	(2004-now)
EMPRESA DIGITALA	(2002-now)
HOBEKI DIGITALA	(2002-now)
KZ MIKROEMPRESAK	(2002-now)
KZ GUNEA	(2002-now)
IT TXARTELA	(2002-now)
KZ LANKIDETZA	(2002-now)
KZ WIFI	(2003-now)

# COMPETITIVE TRANSFORMATION

## 2000-2010 THE KNOWLEDGE ECONOMY

The Basque Government commitment to knowledge society results in the creation of R&D excellence actors: **CICs** (innovation) and **BERCs** (basic research).

In addition to these initiatives, other actor have been created such as **Innobasque** and **Ikerbasque**.



### CENTROS DE INVESTIGACIÓN COOPERATIVA (CICs)

CIC nanogune	2009
CIC biogune	2002
CIC tourgune	2007
CIC biomagune	2006
CIC margune	2002
CIC energigune	2008
CIC microgune	2004

### CENTROS INVESTIGACIÓN EXCELENCIA (BERCs)

BC3	2002
BCAM	2008
BCBI	2009
DIPC	1999
UB – UPV/EHU	1999
MPC – UPV/EHU	1999

# COMPETITIVE TRANSFORMATION



*1980-2010*  
**THE CONTINUOUS PROCESS  
OF COMPETITIVENESS**

## CHANGES IN THE BASQUE GROWTH MODEL (I)

### Late 70s

- Experiences
- Energy intensive
- Resource intensive



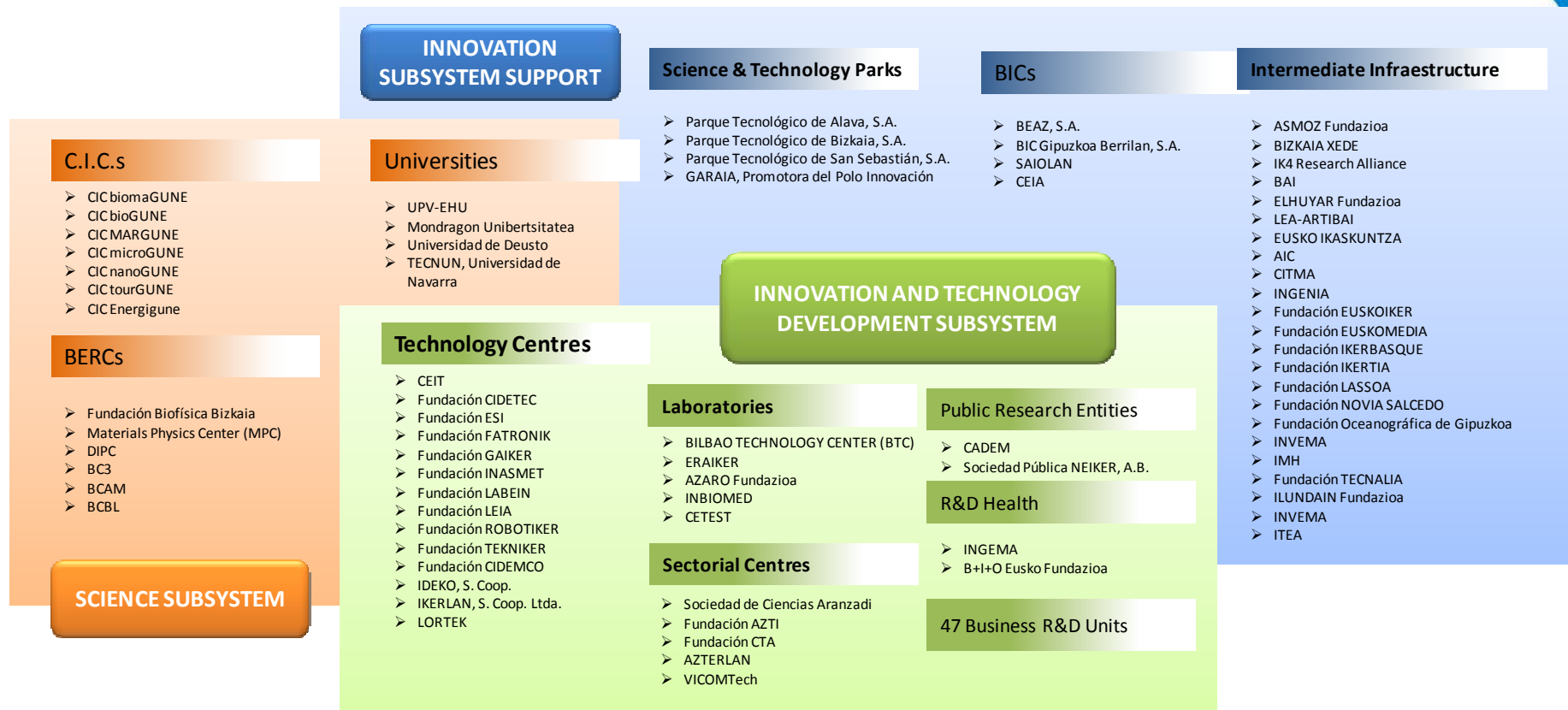
### From the 2000s

- Knowledge
- Energy saving (EVE)
- Environmental sustainability (IHOBE)
  - Production processes less pollutatsns
  - Sanitation networks improvements

# COMPETITIVE TRANSFORMATION



## THE INNOVATION SYSTEM IN 2010





# COMPETITIVE TRANSFORMATION

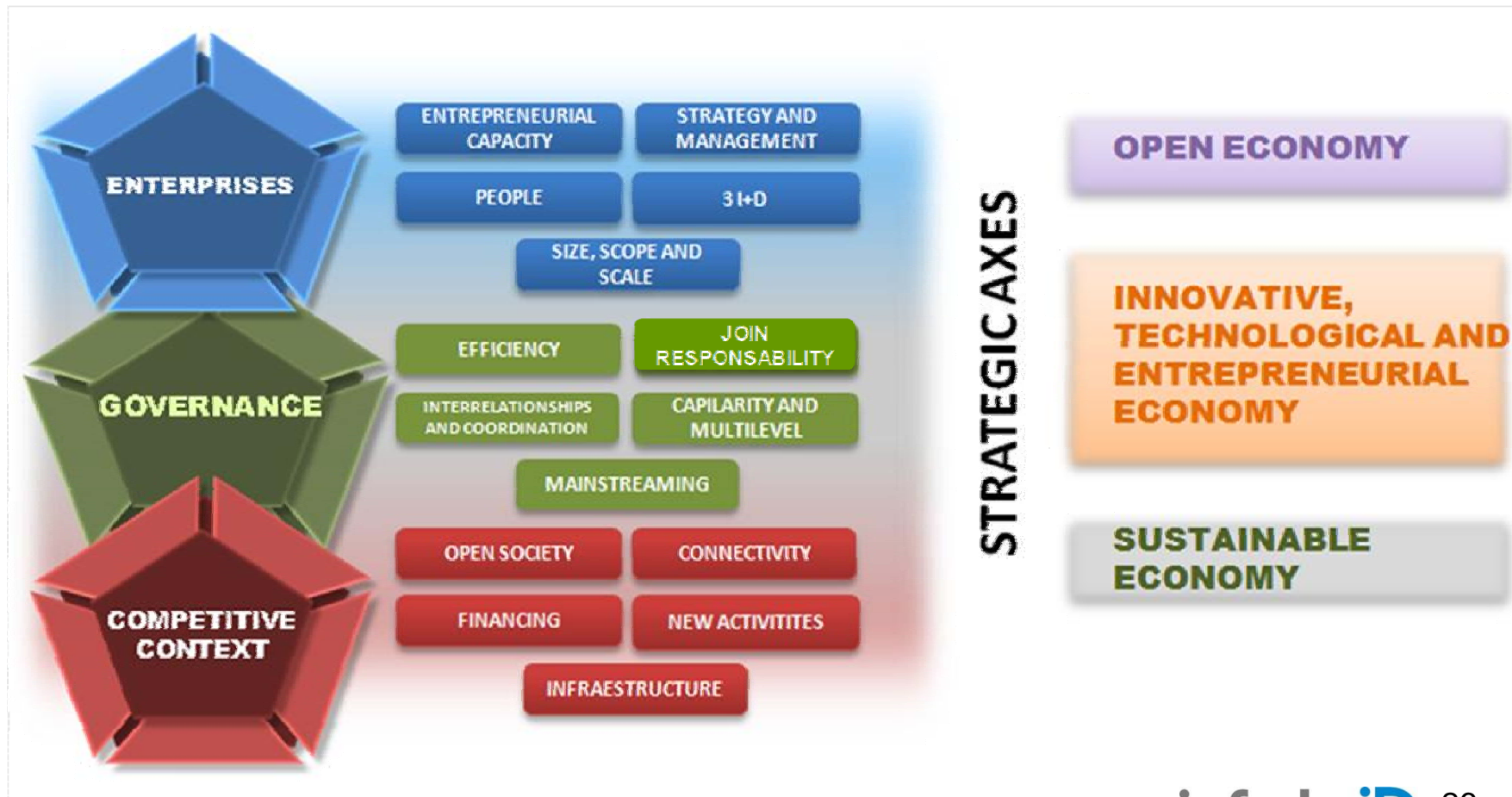
## THE COMPETITIVENESS SUPPORT SYSTEM IN 2010



# COMPETITIVE TRANSFORMATION

2010-...  
**TOWARDS A GREAT TRANSFORMATION**

## Business Competitiveness Plan 2010-2013



# THE GREAT COMPETITIVE TRANSFORMATION

*A MODEL FOR  
SUSTAINABLE GROWTH*

# THE GREAT COMPETITIVE TRANSFORMATION

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*THE MODEL*

1. GLOBALIZATION

2. NEW COMPETITIVENESS MODEL

3. SOCIAL & ENVIRONMENTAL ASPECTS



**SUSTAINABILITY + INNOVATION + TERRITORY**

**Necessity  
and opportunity**

**Within the international  
knowledge flows and  
network**

**Opens to international  
knowledge flows**

# Place based dimension of the RIS3 (I)



## Competitiveness Plan 2010-2013

### AXIS 1: OPEN EUSKADI

To build a society embedded in the global economy, with a R&D system connected and international companies

### AXIS 2: INNOVATIVE, ENTREPRENEURIAL AND TECHNOLOGICAL EUSKADI

The Basque economy will be competitive through:

- knowledge
- creativity
- cooperation

### AXIS 3: SUSTAINABLE EUSKADI

Ensuring a sustainable future in economic, social and environmental terms.  
The emerging opportunity to develop new activities and markets.

# Place based dimension of the RIS3 (II)

Areas of specialisation in the framework of Science, Technology and Innovation Plan 2015



Cross-technology domains

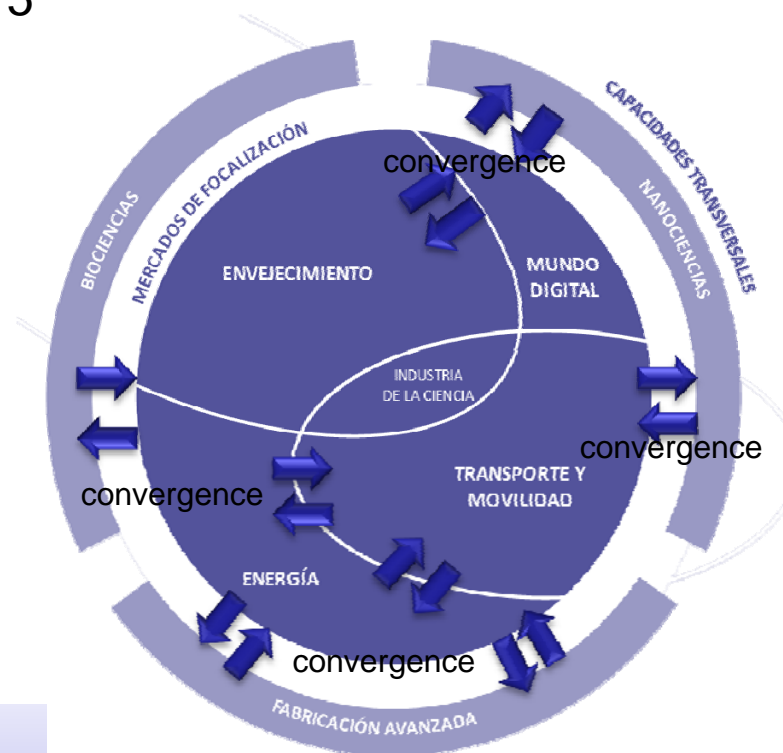
- Biosciences
- Nanosciences
- Advanced Manufacturing



Targeting markets for the future

- Ageing
- Digital world
- Transport and mobility
- Energy (renewable)
- Science Industry

...That through the collaborative structures, the underlying **RELATED DIVERSITY** will be boosted.





# Achieving critical mass (I)

## How are priorities be selected?

- Analysis of Megatrends (possibilities and needs)
- Analysis of regional needs, assets and RTDI capacities
- Definition of Focus areas (prioritization): ***ageing society, digital world, transport and mobility, energy, science industry***
- Regional vision-building process during elaboration of strategy documents (through a **participatory governance process**)

## What methods and criteria are used to select priorities?

- On the base of a long tradition in strategic.
- Facilitated strategic process by the *Basque Council on Science, Technology and Innovation (CVSTI)*: focus groups, interviews, feedback and comments on proposals (Innobasque, Orkestra)
- Prospective analysis of the overall RTDI capacity and overall trends in global society and economy.
- Coordination among Regional Ministries (**inter-institutional**), with provincial and local authorities (**multi-level**) and between public and private actors (**consensus**)

# Achieving critical mass (II)

In the 90s the first Competitiveness Plan was focused on a number of **priority clusters**.

*The first S&T Plan was focused on key sector and technologies (automotive, ICT, machinery tools, advanced materials, production technologies).*

These plans have been updated for over 20 years, and new sectors and technologies have been added until now. The intrinsic logic of them are still the pillar of the current industrial policy.

The Basque industrial policy has contributed to the **smart diversification and the related variety exploitation**



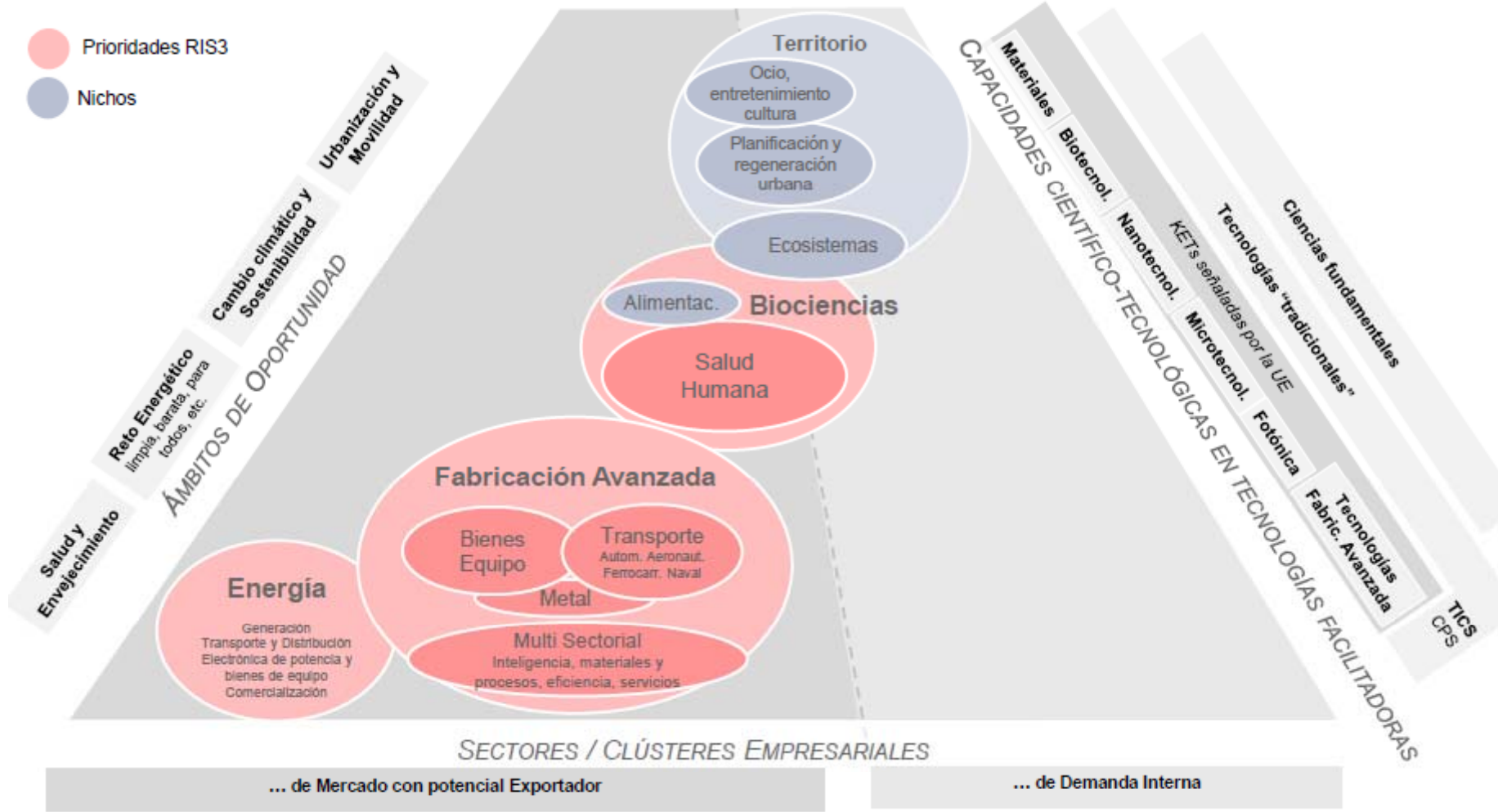
<b>POLICIES 81-91</b>	POLÍTICA DE REESTRUCTURACIÓN INDUSTRIAL 1980-1990
	POLÍTICAS INDUSTRIAL Y TECNOLÓGICA 1981-1989
	POLÍTICA INDUSTRIAL Y TECNOLÓGICA 1989-1991
<b>POLICIES 90-00</b>	MARCO GENERAL DE POLÍTICA INDUSTRIAL 1991-1995
	MARCO GENERAL DE POLÍTICA INDUSTRIAL 1996-1999
<b>POLICY 2000-2010</b>	<ul style="list-style-type: none"> <li>• Plan de Ciencia, Tecnología e Innovación 2001-2004</li> <li>• Plan de Ciencia, Tecnología e Innovación Plan 2010</li> <li>• Plan Euskadi Sociedad de la Información</li> <li>• Euskadi Sociedad Emprendedora 2004-2007</li> <li>• Foro Euskadi 2015</li> <li>• Plan de Competitividad e Innovación Social 2006-2009</li> </ul>



# Especialización Inteligente



- Se han definido 3 prioridades (fabricación avanzada, la energía y las biociencias) (Salud Humana principal núcleo de actividad).
- Se han identificado una serie de nichos con distinto nivel de madurez vinculados con el territorio.





## Categorización de las prioridades:

- Prioridades “equilibradas” con capacidades tanto científico-tecnológicas como empresariales y dimensión (en ambas): **Fabricación Avanzada y Energía**
- Prioridad con evidencias de capacidades científicas, pero con limitadas capacidades empresariales **Salud Humana** (sector emergente en Euskadi):
- Nichos de capacidad científico-tecnológica con tamaño relativo limitado y menor potencial en capacidades empresariales: **alimentación, ecosistemas, planificación y regeneración urbana, y ocio y entretenimiento.** (demanda interna)

Clasificación de prioridades RIS3 del Gobierno Vasco 2014

