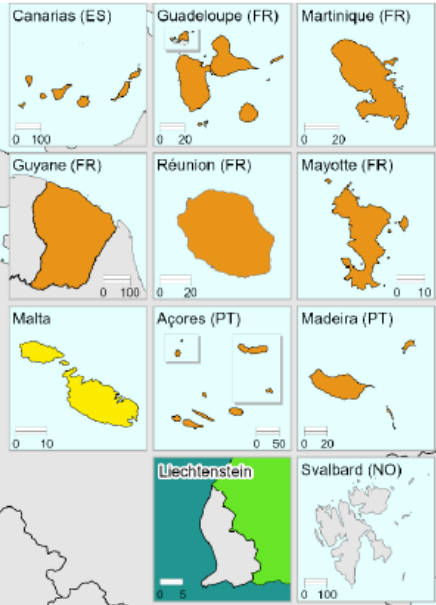
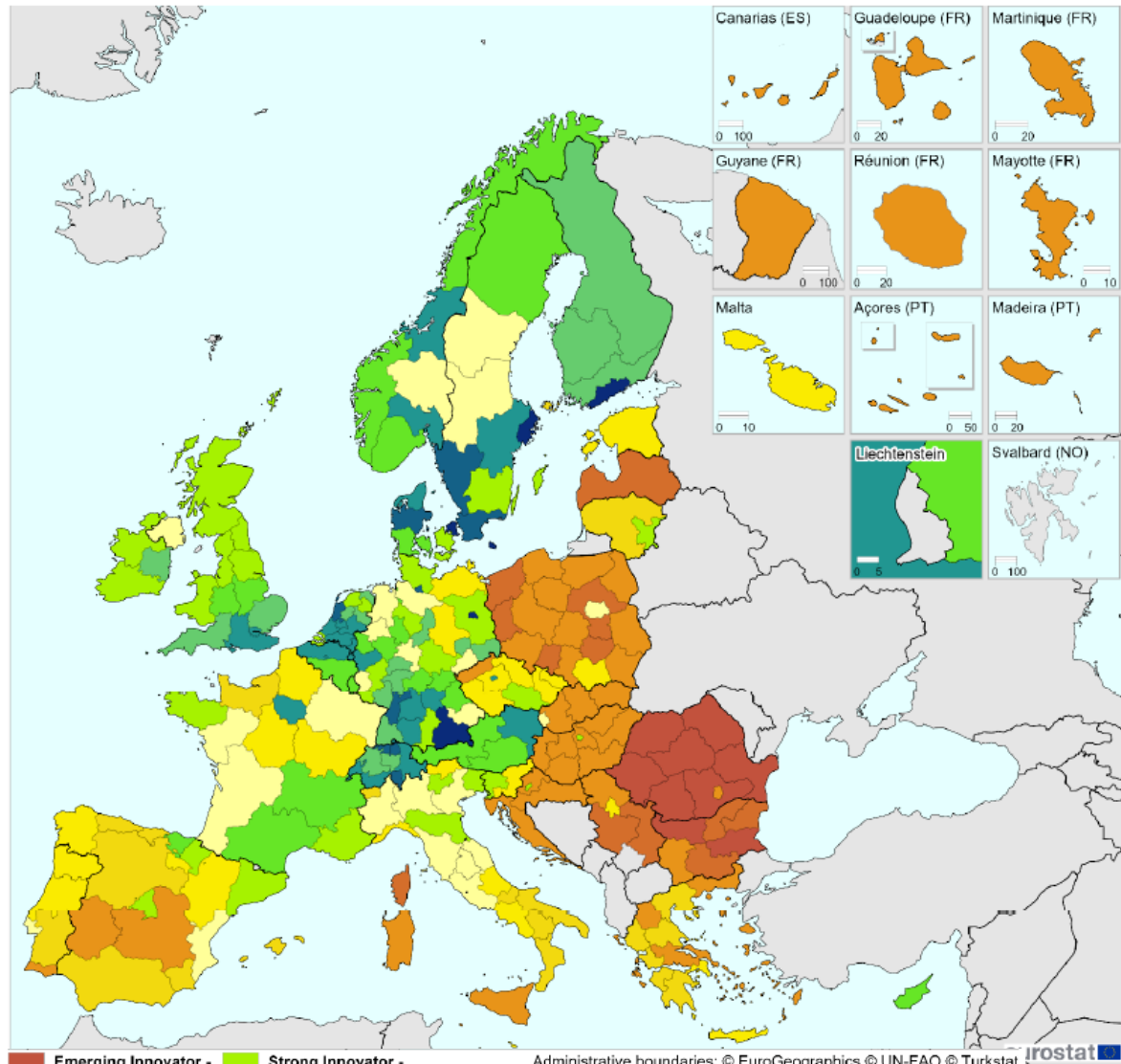




COMPETITIVENESS BASED ON R&D&I



- Emerging Innovator -
- Emerging Innovator
- Emerging Innovator +
- Moderate Innovator -
- Moderate Innovator
- Moderate Innovator +
- Strong Innovator -
- Strong Innovator
- Strong Innovator +
- Innovation Leader -
- Innovation Leader
- Innovation Leader +

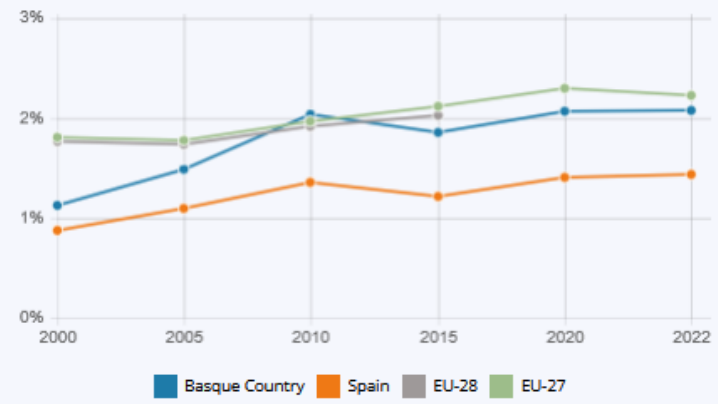
Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
 Cartography: Eurostat — GISCO, 06/2023
 0 200 400 600 800 km

A country where R&D&I is the basis of its competitiveness
 The Regional Innovation Scoreboard (RIS) places the Basque Country in the group of “high innovation” regions.

It is positioned as the best Autonomous Community in Spain and its performance in innovation is above the EU-27 average.

This and other indicators reflect the results of the country’s Industrial Policy.

R&D (RESEARCH AND DEVELOPMENT) EXPENDITURE AS A % OF GDP



BASQUE INDUSTRIAL POLICY PLATFORM

In recent decades, the Basque Country has undergone a process of profound transformation of its productive, economic and social fabric in order to remain competitive in a new context in which international positioning, digitalisation, technological progress, innovation and smart specialisation have all become key factors of competitiveness.



“**Basque Industrial Policy**” platform is the reference tool for understanding the **drivers of transformation**, the philosophy, objectives and initiatives carried out by the Basque Government to lead the process of industrial transformation of the Basque Country, **from 1981 to the present**.

Access link

<https://politicaindustrialvasca.spri.eus/en>

BASQUE INDUSTRIAL POLICY PLATFORM



INDUSTRIAL RESTRUCTURING

What is the origin of industrial restructuring and what strategies have been implemented to promote industrial diversification during the restructuring processes in the Basque Country?



COMPETITIVENESS AND INDUSTRIAL PROMOTION

What strategic actions has the Basque Country taken to promote industrialisation in the region? What specific policies and measures have been adopted to encourage investment in the industrial sector?



FINANCING

How is the allocation and use of regional and European funds managed and monitored in the Basque Country?



ENTREPRENEURSHIP

What are the main characteristics of the entrepreneurial ecosystem in the Basque Country? What initiatives or support programmes exist for entrepreneurs?



DIGITAL TRANSFORMATION

How is digital transformation promoted in Basque organisations? What initiatives promote the adoption of digital competences among the citizens? What key infrastructures for digital transformation have been promoted in the Basque Country?



INFRASTRUCTURES

How have the industrial estates been managed and promoted in the Basque Country? What has been the role of SPRILUR and the Industrialdeak corporations?



TECHNOLOGY AND INNOVATION

What agents have promoted technological and innovative development in the Basque Country? How is collaboration between companies, academic institutions and research centres in the technological field promoted?



INTERNATIONALISATION

What support programmes exist for Basque companies seeking to expand globally?



ENERGY POLICY

What are the main pillars of the Basque Country's energy policy? What public energy strategies have been implemented in the Basque Country since 1982?



ENVIRONMENTAL POLICY

How is the Basque Country progressing in the ecological and climate transition? What measures have been implemented and what have been the fields of action?
















➤ The **Basque Industry Policy** platform is classified in **10 areas of action**, keys in the leadership of the Basque transformation process



Chronogram

To scroll through the schedule, click at any point and drag the mouse sideways.

 DOWNLOAD PDF

- VIEW ALL  MILESTONES  LEGISLATURES  INDUSTRIAL RESTRUCTURING  COMPETITIVENESS AND INDUSTRIAL PROMOTION
-  FINANCING  ENTREPRENEURSHIP  DIGITAL TRANSFORMATION  INFRASTRUCTURES  TECHNOLOGY AND INNOVATION
-  INTERNATIONALISATION  ENERGY POLICY  ENVIRONMENTAL POLICY

1980

1985

1990

1995

2000

2005

2010

2015

2020

2025

- ∨ Milestones
- ∨ Legislatures
- ∨ Industrial Restructuring
- ∨ Competitiveness and Industrial Promotion
- ∨ Financing
- ∨ Entrepreneurship
- ∨ Digital Transformation
- ∨ Infrastructures
- ∨ Technology and Innovation**
- ∨ Internationalisation
- ∨ Energy Policy
- ∨ Environmental Policy



Evolution of the Science, Technology and Innovation Policy

Actions of Science, Technology and Innovation Policy

1 REFERENCE

1982-1996: Supply Creation

4 REFERENCES

Plan for Industrial Technology 1993-1996	1993 - 1996
The Technology Strategy Plan PET 1990-1992	1990 - 1992
The Strategic Technology and Innovation Unit (UETI)	1990 - IN FORCE
First Steps in the Technology Policy 1982-1990	1982 - 1990

1997-2005: Demand Creation

2 REFERENCES

The Science, Technology and Innovation Plan PCTI 2001-2004	2001 - 2004
The Science and Technology Plan 1997-2000	1997 - 2000

2006-2015: Diversification

4 REFERENCES

Science, Technology & Innovation Plan (PCTI) 2010-2015	2011 - 2015
NanoBasque Strategy	2008 - 2015
Science, Technology and Innovation Plan 2007-2010	2007 - 2010
BioBasque Strategy	2002 - 2010

2015-2020: Smart Specialisation

6 REFERENCES

Technological and Innovation Agent Network

Technological and Innovation Institutions

5 REFERENCES

The Basque Science, Technology & Innovation Network

11 REFERENCES

Advanced Manufacturing Centres

2 REFERENCES

Basque Digital Innovation Hub

1 REFERENCE

Technology Parks

4 REFERENCES

BASQUE INDUSTRIAL POLICY PLATFORM



2000

2005

2010

2015

2020

2025

- ∨ Digital Transformation
- ∨ Infrastructures
- ∨ Technology and Innovation

Science and Technology Plan 1997-2000

The Science, Technology and Innovation Plan PCTI 2001-2004

BioBasque Strategy

Science, Technology and Innovation Plan 2007-2010

NanoBasque Strategy

Science, Technology & Innovation Plan (PCTI) 2011-2015

Science, Technology & Innovation Plan 2030

2021-2024 Strategic Plan of the Basque Technology Park

Basque R&D&i Strategy in Europe (2021-2030)

Saiotek

Science, Technology & Innovation Plan 2020

Etortek

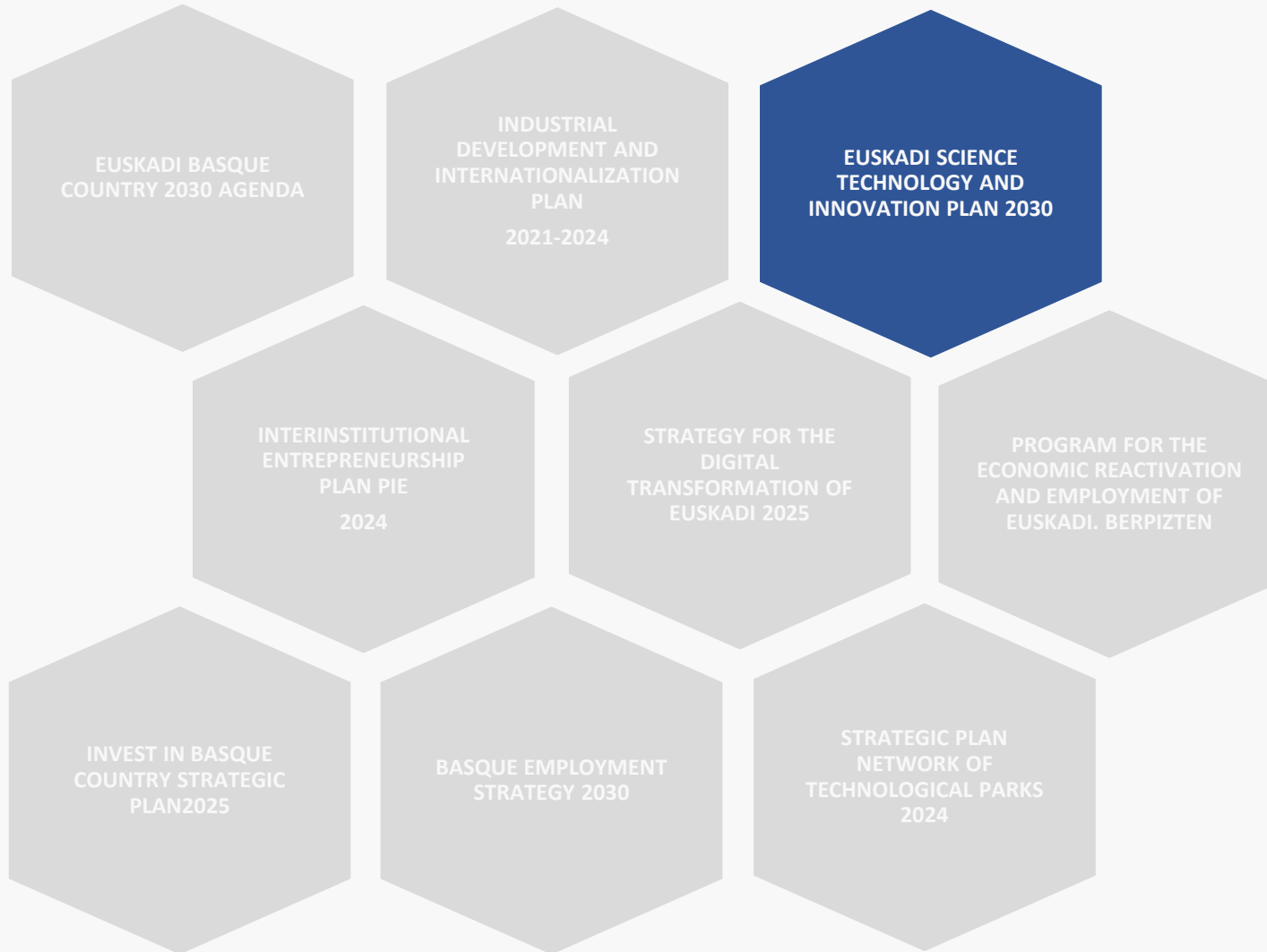
Gaitek

Azpitek

Innotek

Bikaintek (Ikertu and

EUSKADI 2030 SCIENCE TECHNOLOGY AND INNOVATION PLAN



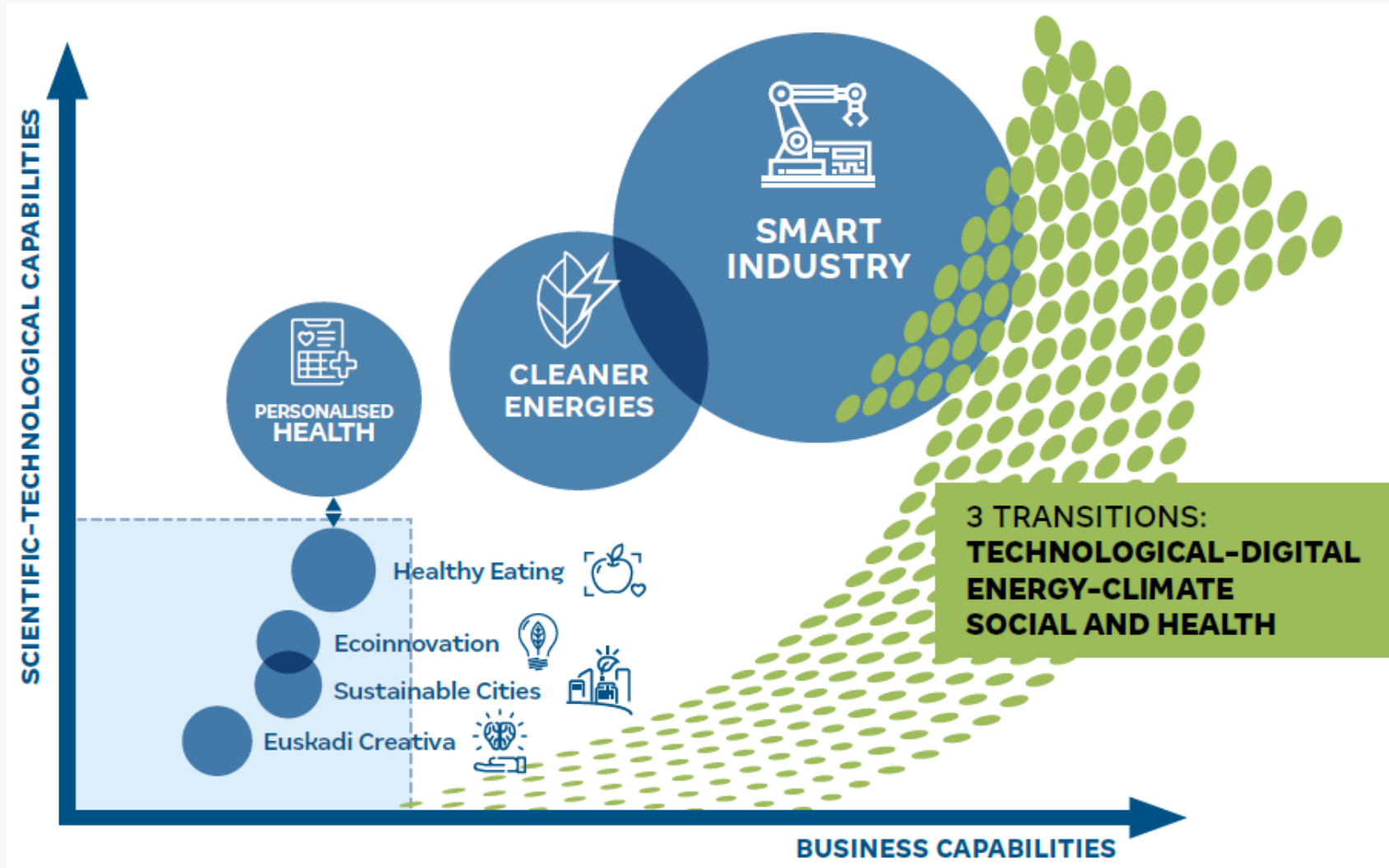


VISION 2030

Euskadi stands among the most advanced regions of Europe in innovation by 2030, with a high standard of living and quality employment



EVOLUTION OF RIS3 AREAS





STRATEGIC PRIORITIES

Smart Industry:



- ❑ Maintain and strengthen competitive advantages based on manufacturing technologies.
- ❑ Value the use of data, providing intelligence and value to customers
- ❑ Increase the value of products and services following patterns of Circular Economy.
- ❑ Face cultural transformation to take advantage of the opportunities related to digital technologies and sustainability.

Cleaner Energies:



- ❑ Turn the European Green Deal objective of zero GHG emissions into a growth strategy.
- ❑ Develop greater collaborative R&D activity in strategic areas and in basic core technologies.
- ❑ Drive digitization and the transition to new data-driven business models.

Personalised Health:

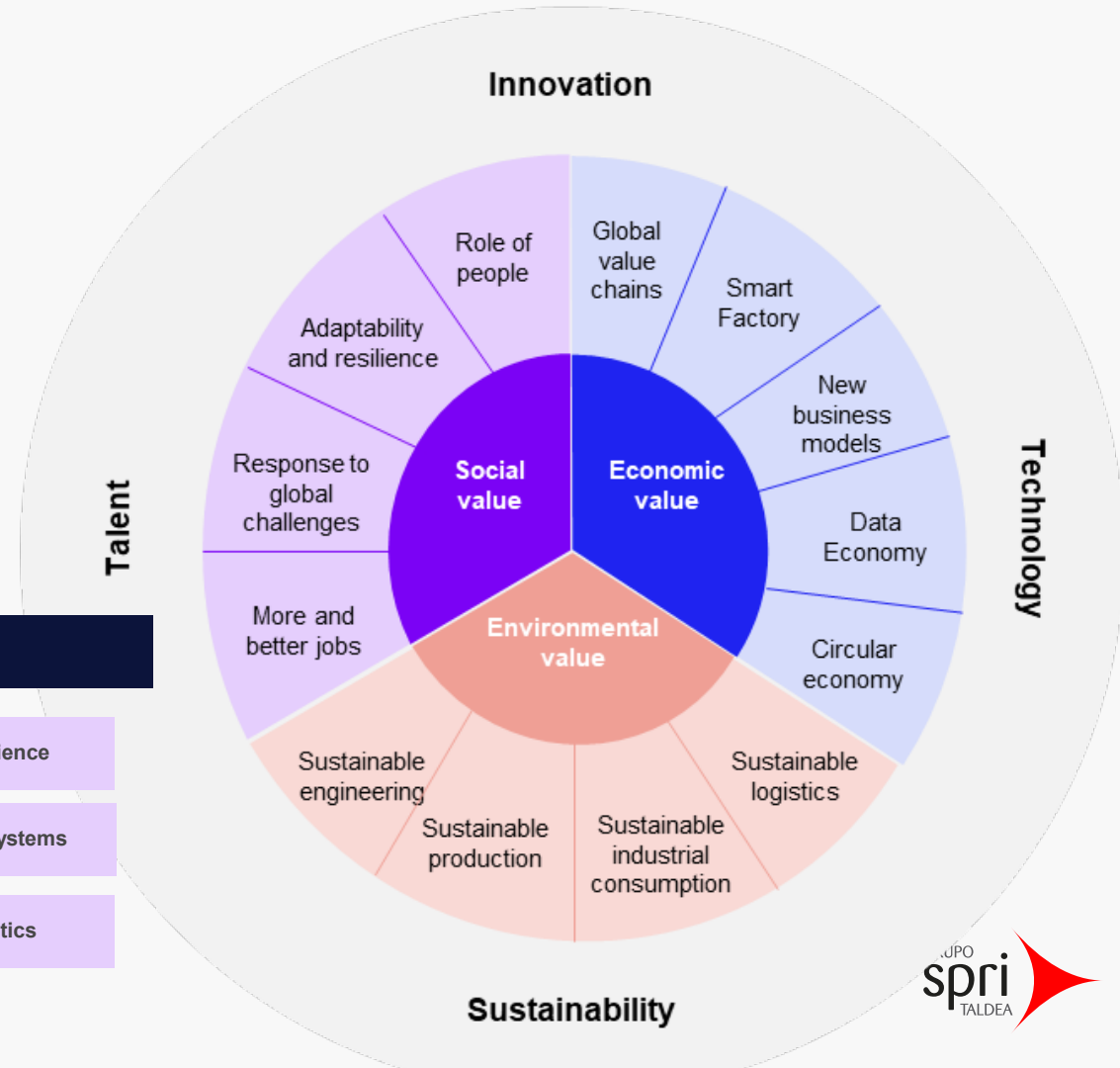


- ❑ Growth of the high-tech business fabric, intensive in R&D&I.
- ❑ Progress in the sustainability of the Health System
- ❑ Digital transformation of the healthcare system
- ❑ Large-scale data access and advanced analytics (Big Data and A.I.)
- ❑ More agile incorporation of high impact innovations



SMART INDUSTRY STRATEGY

Based on the trends identified in other countries and the analysis of the situation of the industrial clusters in the Basque Country, a Strategic Framework has been identified with the key values, challenges and levers to promote the Smart Industry in the Basque Country.



Sustainable production technologies

Advanced materials

Advanced Manufacturing technologies

Machatronic systems

Digital technologies

Artificial Intelligence & Data Science

Connectivity & Cyber-physical Systems

Automation & Intelligent Robotics

BDIH. Example of DIGITAL TRANSFORMATION initiative

- Initiative that responds to the Basque strategy of smart specialization RIS3 to support the industry in experimenting with digital and sustainable innovations.
- Connected network of assets and services for training, research, testing and validation of technologies available for companies (especially SMEs).

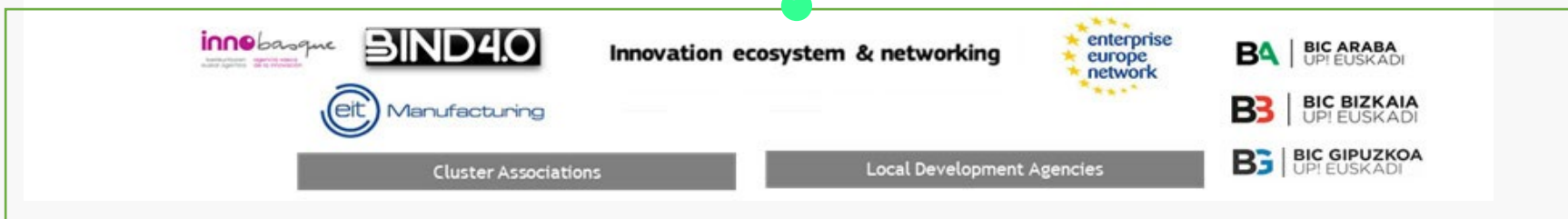
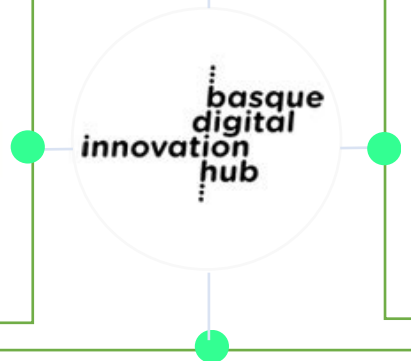
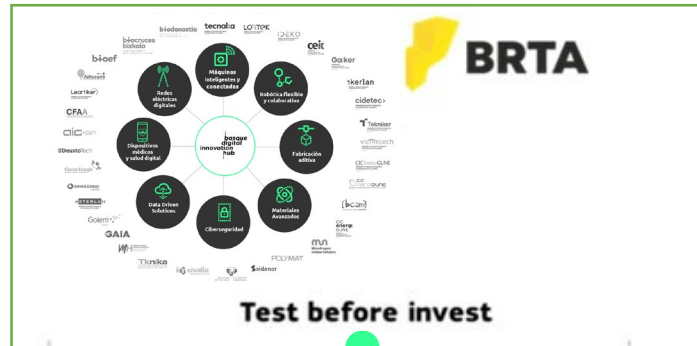
basque
digital
innovation
hub



BDIH. Example of DIGITAL TRANSFORMATION initiative



The BDIH brings together key players in the Basque and international ecosystem as support for digital and sustainable transformation.



BDIH. Example of DIGITAL TRANSFORMATION initiative



- The goal of this initiative is to provide industrial companies, especially SMEs, with the technological capabilities needed to meet the challenges of Smart Industry, Energy and Health.
- The BDIH is co-owned by Technology Centers, Professional Training Centers and Universities and is supported by regional public institutions.

BDIH. Example of DIGITAL TRANSFORMATION initiative



Smart and
Connected Machines



Digital Electricity
Grids



Medical Devices and
Digital Health



Flexible Robotics



Additive Manufacturing



Advanced Materials



Cybersecurity



Data Driven Solutions

BDIH. Example of DIGITAL TRANSFORMATION initiative



Offer



Company

Need to learn about/ test/ develop new technologies



Assets catalogue

Visibility of the BDIH's physical and logical assets (more than 250 assets)



Connected network of assets

Access to aggregated services



Coordinated support

Single window

More than 265 digital and sustainable assets

Technological and economic assistance

- Needs Analysis
- 360° technology consulting
- Collaboration and coworking
- Technology foresight and state of the art
- Technological análisis
- Evaluation of economic viability
- Proof of concept

Desing, prototype and validation

- Conceptual design
- Simulation, solution architecture
- Security analysis
- Prototyping, programming and experimental validation
- Technology transfer for industrialization

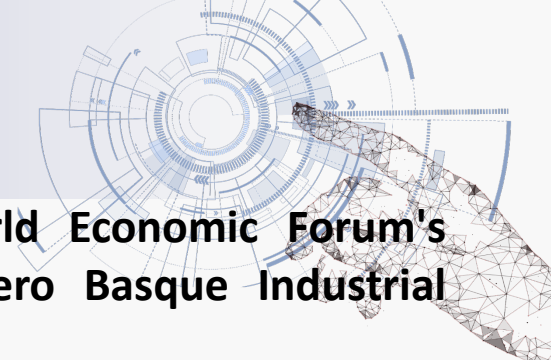
Training and Awareness




- Demonstration/Showroom
- Training Workshops (less than 1 day)
- Training (more tan 1 day)

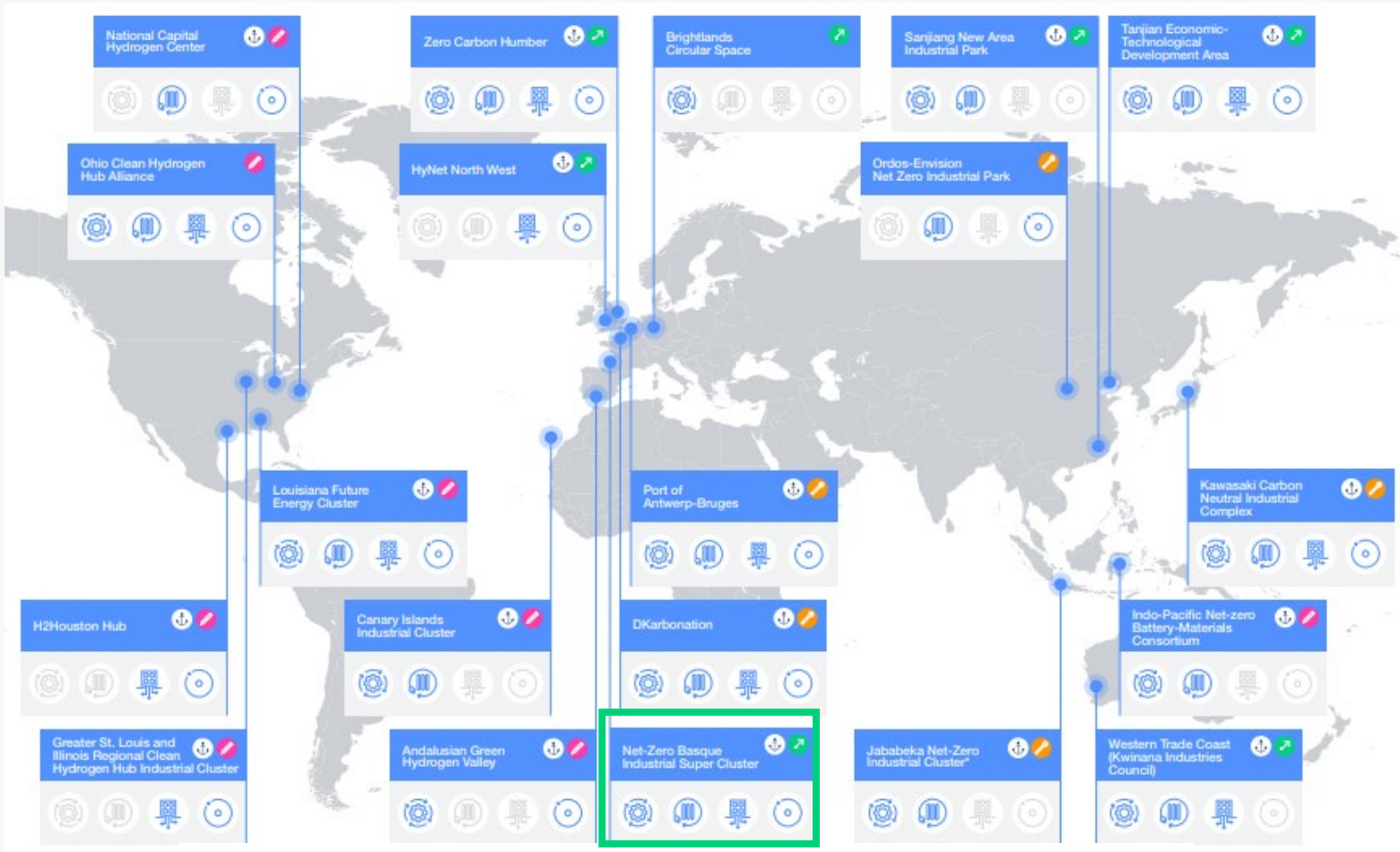
NZBIS. Example of GREEN TRANSFORMATION initiative

The decarbonization strategy for industrial activity in the Basque Country joins the World Economic Forum's Transitioning Industrial Clusters towards Net-zero project with the creation of the Net-Zero Basque Industrial SuperCluster

The initiative currently involves 23 industrial clusters and is expected to reach 100 regional industrial clusters in the coming years.



-  Planning
-  Developing
-  Scaling



WORLD ECONOMIC FORUM

626 Mt CO₂

Abated emissions represented



3.4 million

Direct/indirect job represented



\$362 billion

GDP contribution represented



Transitioning Industrial Clusters towards Net Zero - World Economic Forum (weforum.org)



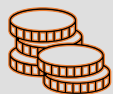
The Net-Zero Basque Industrial SuperCluster aims to accelerate the path to net zero emissions in the Basque Country, fostering energy supply decarbonization and energy efficiency in the industrial sectors and creating market opportunities based on the scale-up of the new technologies and innovative services

Super Cluster because it **integrates the industrial clusters** (through their cluster organisations) already operating in the Basque Country, enabling and facilitating **coordination and synergies within the key Industries**

Collaboration and commitment between the government and the **key energy companies** operating in the region

With an initial focus to **target five Industries up to 68% of total GHG emissions.**

Search for **common objectives** to enable the **development of zero balance technologies** through the development of cluster-specific roadmaps to achieve zero balance targets.



GDP

2B€ to 3B€ (>2030)

(3%-5% of GDP 2021)



Jobs

20k to 30k (>2030)

(2-3% of Jobs 2021)

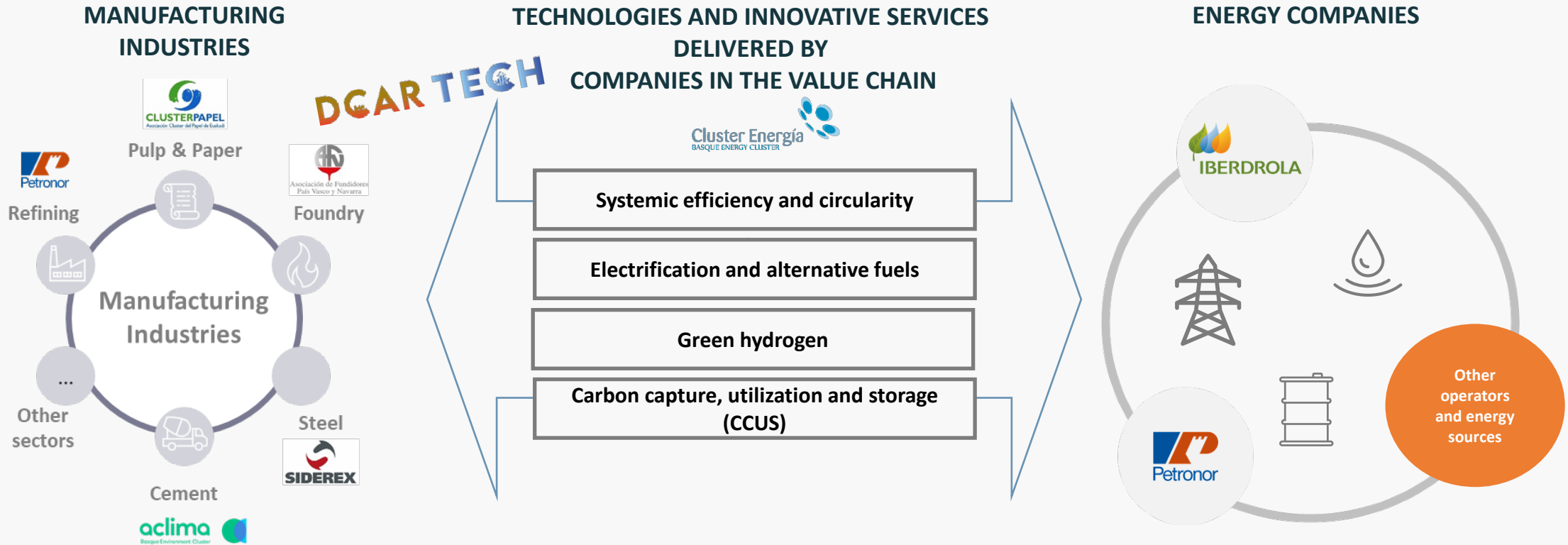


Emissions reduction

100% emissions reduction generated by industrial sector energy consumption by 2050 (7.2 Mt CO₂)



The SuperCluster aims at developing a robust, innovative industrial ecosystem where technology innovations serve as key driver of the energy transition and decarbonization



Basque Government (SPRI)



EUSKO JAURLARITZA
GOBIERNO VASCO



Basque Science, Technology and Innovation Network



BRTA
BASQUE RESEARCH
& TECHNOLOGY
ALLIANCE

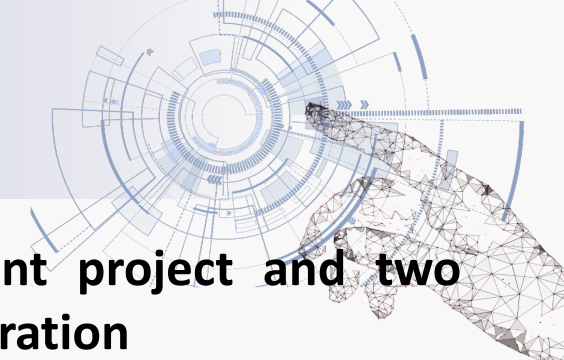
International alliances (WEF, EPRI, MIT...)



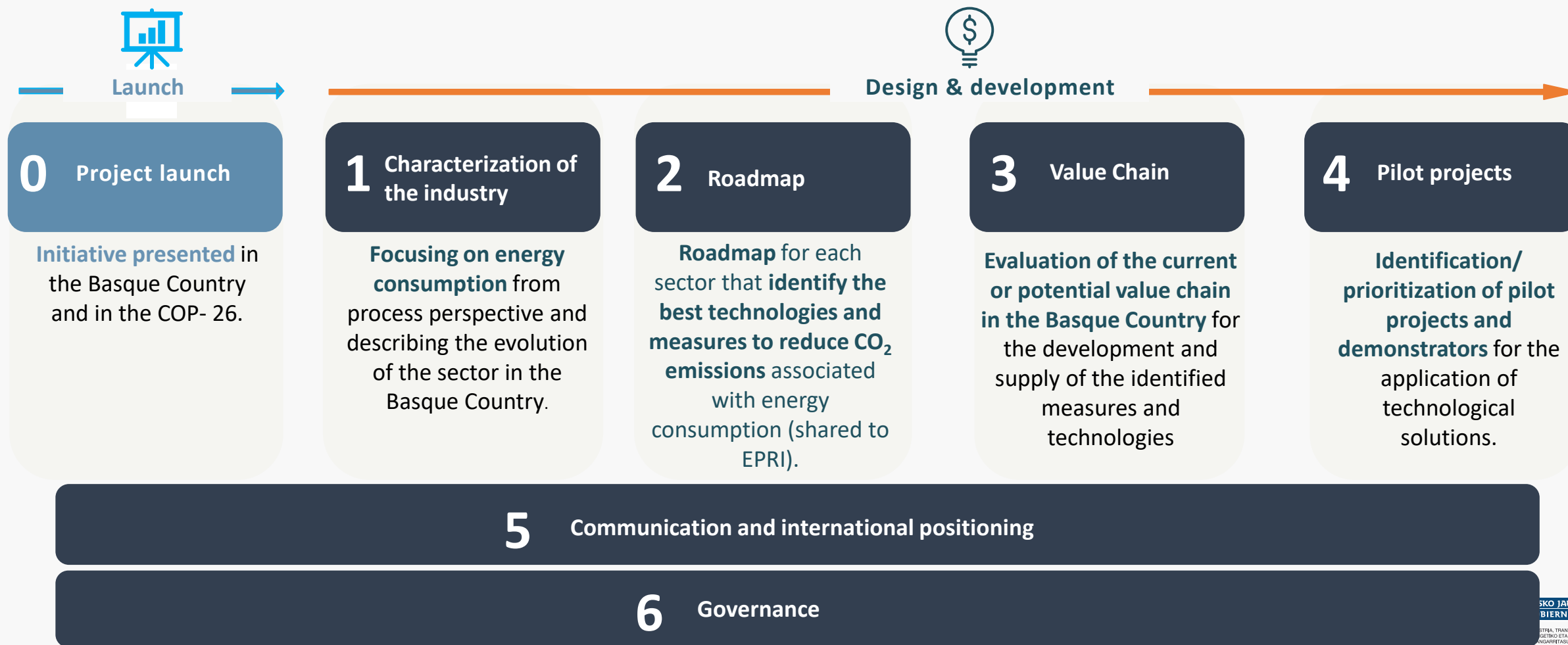
Massachusetts
Institute of
Technology



INDUSTRIA, TRANSIZIO
ENERGETIKO ETA
JASANGARRITASUN SAREA
DEPARTAMENTO DE INDUSTRIA,
TRANSICIÓN ENERGÉTICA Y
SOSTENIBILIDAD



The SuperCluster's activity has been based on a four-phase technical development project and two continuous lines of work that allow for its deployment in local and international collaboration

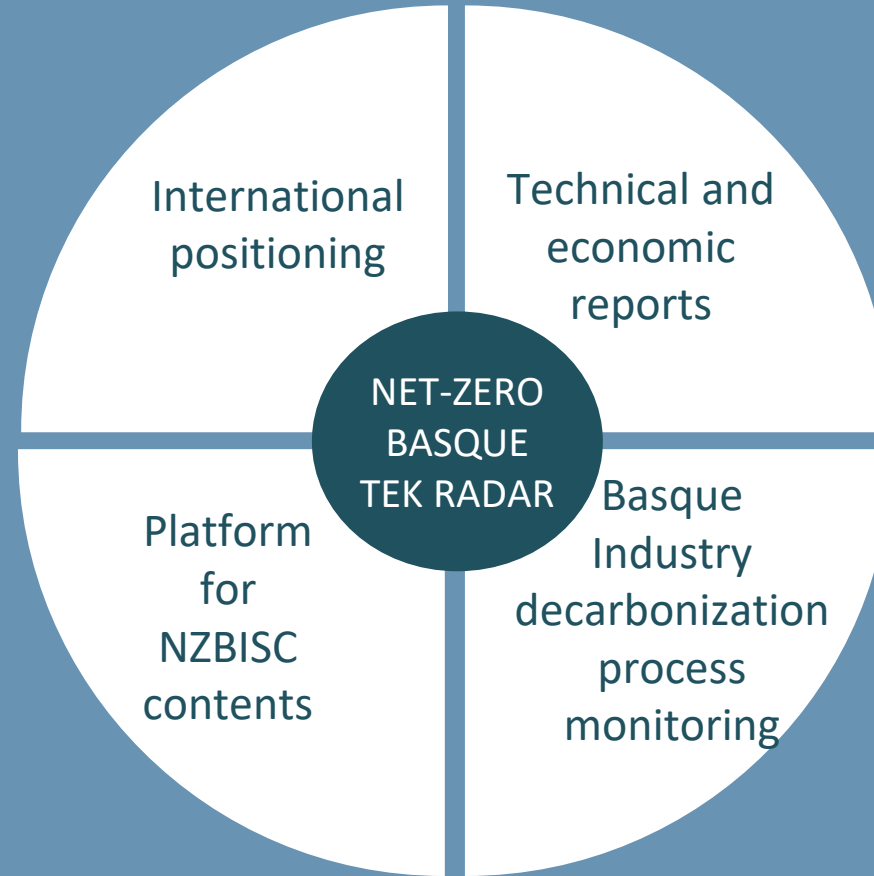


NZBIS NEXT STEPS



Strengthen the national and international positioning of the NZBISC, to maintain its pioneering profile in this field, disseminate the progress that is being made in the work carried out and attract contributions and international good practices that contribute to the initiative.

Implement a platform that serves to disseminate and share information, documents, news and data generated and/or captured within the framework of the NZBISC initiative, which can serve as a co-working network to promote collaborative actions within the initiative.



Delve into the contents of the Sectoral Roadmaps to facilitate their development and application by Basque companies: industrial processes; technological measures and challenges; reference projects; aid programs; policies, regulation and application regulations; necessary infrastructures; variables and reference indicators...

Monitor progress in the decarbonization of the Basque industry: R&D projects underway and completed, technologies developed, investments by companies, evolution of energy consumption indicators and associated CO2 emissions, impacts on activity economic and employment...



↓
Δ DECARBONIZATION PROJECTS



↓
Δ VALUE CHAINS' COMPETITIVENESS



