Euskadi 2030 Science, Technology and Innovation Plan
- 2030 STIP -
A Smart Specialization Strategy
The 2030 STIP represents Euskadi's strategic commitment to Research and Innovation. It also reflects and represents the commitment of Basque society to ensuring a better future... Our commitment is to drive science, technology and innovation to speed up the transition to a digital, green and inclusive Euskadi.

(Iñigo Urkullu, President of the Basque Government. Presentation of 2030 STIP)
INDEX

1. Preparation process
2. Evaluation of previous STIP (2020 STIP)
3. Context and situation assessment
4. Strategic lines of 2030 STIP
5. Fundamentals of RIS3
6. R&D&I support instruments
7. Governance of the Basque STI System
8. Economic fundamentals of 2030 STIP
1. Preparation process
1. Preparation Process

**Phase 1 - Preparation and analysis: ‘Basic strategic and economic lines of 2030 STIP’**

- Meeting 1 O.W.G. 12 April
- Meeting 2 O.W.G. 17 May
- Preparation of document ‘2030 STIP Base’
  - Analysis A.S.C., Intdpal Comm. and Insttit. Commitee June
  - Analysis with SSGG and BSTIS stakeholders July - October
- Progress report BCSTI 25 June

**Approval by BCSTI**

**Phase 2 - Preparation and analysis: ‘2030 STIP’**

- Prepar. ‘2030 STIP’
- Preparation of ‘Euskadi 2030 STIP’ document
- Analysis with SSCC & BSTIS stakeholders, Dec - Jan
- Analysis by Advisory Scientific Committee, Interdepartmental C. and Interinstitutional C. Jan-Feb

**Participation 2030 STIP:**
- +200 entities (+300 people)
- + 45 meetings
2. Evaluation of 2020 STIP
2. Evaluation of 2020 STIP

- RIS3 strategy deployment process
- Budget Execution
- Achievement of operational objectives
- Evolution of RIS3 specialization areas
- Evolution of the policy mix
- Internal evaluation of the results
- External evaluation of the process
RIS3 STRATEGY DEPLOYMENT PROCESS

Deployment of RIS3 strategy and 2020 STIP has been completed

PHASE 0: 2014 «Preparation and approval»

PHASE 1: 2015 «Implementation»

PHASE 2: 2016 «Deployment»

PHASE 3: 2017-2018 «Energisation»
BCSTI – 28/06/2017

PHASE 4: 2019-2020 «Culmination»
BCSTI – 11/12/2018

+ SOCIAL & CORPORATE AWARENESS
+ ENERGISE STEERING GROUPS
+ TALENT & STEAM
+ INV. IN EMERGING APPLIED RESEARCH
+ INV. IN EXCELLENT BASIC RESEARCH
+ MARKET ORIENTED & SMEs
+ TRACTOR-EFFECT PROJECTS
90% budget execution. The investment effort of the Basque Government (106%) and international financing (100%) stand out.

<table>
<thead>
<tr>
<th>R&amp;D investments (figures in million euros)</th>
<th>Initially forecast 2014-2019</th>
<th>Advance on implementation (1) 2014-2019</th>
<th>% Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public finance</td>
<td>3,088</td>
<td>2,980</td>
<td>97%</td>
</tr>
<tr>
<td>Basque Govt.</td>
<td>2,304</td>
<td>2,442</td>
<td>106%</td>
</tr>
<tr>
<td>Territorial Administrations</td>
<td>334</td>
<td>122 (+150)</td>
<td>36% (81%)</td>
</tr>
<tr>
<td>Central Govt.</td>
<td>450</td>
<td>417</td>
<td>93%</td>
</tr>
<tr>
<td>Business finance</td>
<td>5,442</td>
<td>4,477</td>
<td>82%</td>
</tr>
<tr>
<td>International finance</td>
<td>662</td>
<td>664</td>
<td>100%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>9,191</strong></td>
<td><strong>8,122</strong></td>
<td><strong>88%</strong></td>
</tr>
<tr>
<td><strong>TOTAL + Territorial Administration budgets</strong></td>
<td><strong>8,272</strong></td>
<td><strong>90%</strong></td>
<td></td>
</tr>
</tbody>
</table>

(1) Source: Basque Statistics Office (Eustat). R&D survey. It doesn’t include business innovation and entrepreneurship funding programs of the Provincial Councils.
### ACHIEVEMENT OF OPERATIONAL OBJECTIVES (1)

9 out of 12 indicators have evolved positively, while 6 have exceeded the goal established for the last year of the 2020 STIP

<table>
<thead>
<tr>
<th>Operational objectives</th>
<th>Indicators</th>
<th>Source</th>
<th>Initial situation</th>
<th>C. Situation 2019</th>
<th>Goal 2020</th>
<th>Advance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Focus resources and investments in R&amp;D in the areas of specialisation</td>
<td>1.1 % of research of multi-targeted TTCC and CRCs aligned with RIS3 strategic priorities</td>
<td>BNSTI</td>
<td>94.52% 2014</td>
<td>98,0%</td>
<td>90%</td>
<td>✔️</td>
</tr>
<tr>
<td>2. Strengthen fundamental research and experimental development</td>
<td>2.1 R&amp;D activity mix (% Fundamental research / % Industrial research / % Experimental development)</td>
<td>Eustat</td>
<td>14/47/39 2012</td>
<td>15/42/42</td>
<td>15/30/55</td>
<td>✔️</td>
</tr>
<tr>
<td>3. Make the Science, Technology and Innovation System results-oriented</td>
<td>3.1 Indexed scientific publications</td>
<td>Ikerbasque</td>
<td>5,028 2013</td>
<td>6,657</td>
<td>7,500</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>3.2 % of scientific publications indexed in the first quartile</td>
<td>Ikerbasque</td>
<td>53.17% 2013</td>
<td>59.3%</td>
<td>55%</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>3.3 EPO patent applications</td>
<td>European Patents Office</td>
<td>195 2014</td>
<td>194</td>
<td>270</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>3.4 % of Sales of new-to-market and new-to-firm innovations</td>
<td>Eustat</td>
<td>12.73% 2010</td>
<td>18.3%</td>
<td>15%</td>
<td>✔️</td>
</tr>
</tbody>
</table>
# ACHIEVEMENT OF OPERATIONAL OBJECTIVES (2)

9 out of 12 indicators have evolved positively, while 6 have exceeded the goal established for the last year of the 2020 STIP

<table>
<thead>
<tr>
<th>Operational objectives</th>
<th>Indicators</th>
<th>Source</th>
<th>Initial situation</th>
<th>C. Situation 2019</th>
<th>Goal 2020</th>
<th>Advance</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Strengthen the capture of international funds for R&amp;D+i</td>
<td>4.1 % of international financing of Research &amp; Development</td>
<td>Eustat</td>
<td>5.2% 2012</td>
<td>8.7%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Promote Basque participation in H2020</td>
<td>4.2 % of Basque funding on the total funds from Horizon 2020</td>
<td>Innobasque</td>
<td>0.89% 2013</td>
<td>1.3%</td>
<td>1.00%</td>
<td></td>
</tr>
<tr>
<td>Attract international private investment in R&amp;D</td>
<td>4.3 Annual international private R&amp;D financing</td>
<td>Eustat</td>
<td>6 M€ 2012</td>
<td>16,3 M€</td>
<td>18 M€</td>
<td></td>
</tr>
<tr>
<td>5. Increase the number of innovative companies</td>
<td>5.1 Innovative companies with more than 10 employees on the total</td>
<td>Eustat</td>
<td>46.1% 2012</td>
<td>42.2%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>6. Improve the skills of researchers</td>
<td>6.1 % of doctors on the total of research personnel</td>
<td>Eustat</td>
<td>29.0% 2012</td>
<td>30.9%</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.2 % of doctors on the total of researchers in companies</td>
<td>Eustat</td>
<td>8.6% 2013</td>
<td>8.9%</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>
Investments in R&D in the RIS3 areas reached 74% of the total in 2019, compared to 71.4% in 2014. Almost two-thirds went to the strategic priorities of advanced manufacturing, energy and biosciences&health.
INTERNAL EVALUATION OF THE RESULTS

Main successes achieved

1. **Deployment of the RIS3 strategy completed.** Science, technology and innovation system aligned around a single strategy.

2. **Budget implementation** close to 90%. The investment effort of the Basque Government is above 106%.

3. **Improvement of the overall efficiency** of the system, measured in terms of results:
   - **Increased sales** of new business products.
   - **Increased exports** of medium and high technology products.
   - **Growth** of indexed scientific publications and their impact.

4. **Growth of international funding** of R&D.

Some pending challenges:

1. **Increase investment in R&D** above the European average, to close the current gap.

2. **Promote business investment in R&D,** which has not yet recovered from the crisis.

3. **Overcome SMEs’ weak points in innovation**
   - In **non-technological innovation:** organization and marketing
   - In **technological innovation** (non-R&D)

4. **Promote women** in the field of science, technology and innovation.
As of 2018, there is a methodological change in the innovation survey, which makes the values not comparable with those of the previous series.
+ Innovation in SMEs: Basque Country Euskadi in position 132 out of 218 regions in the EU-27 in the RIS 2019, with more pronounced weaknesses in the indicators related to SME’s innovation.
The Basque Country has carried out a flexible, lively and dynamic implementation process of the RIS3 strategy, with the involvement of the whole of the Basque Science, Technology and Innovation System.


Main achievements:

2. Awareness raising in Basque society in favor of innovation.
3. SMEs more integrated in the Basque RIS3 strategy.
4. Development of projects closer to the market.
5. Greater commitment and alignment of the universities.

Improvement areas:

1. Integration of social challenges into the strategy.
2. Better collaboration between strategic priorities and territories of opportunity.
3. Promote innovation in SMEs.
4. New instruments to support strategic projects in the country.
5. Strengthen the presence in Europe and interregional collaboration in RIS3.
3. Context and situation assessment
3. Context and situation assessment

- The 3 transitions in the Basque Country
- Basque strategic context: Sustainable Human Development Strategy, Euskadi Basque Country 2030 Agenda and Berpiztu
- European strategic context: Horizon Europe, Digital Europe, Green Deal and Next Generation EU
- Other related policies of the Basque Government
THE 3 TRANSITIONS IN THE BASQUE COUNTRY

TECHNOLOGICAL-DIGITAL TRANSITION
Digitisation
Artificial Intelligence and Big Data
Technology at the service of the citizen
Automation
Cybersecurity
Fostering a fair and competitive digital economy

ENERGY-CLIMATE TRANSITION
Climate Neutrality
Decarbonisation of the energy system
Efficient use of resources and energy -Circular Economy-
Sustainable and smart mobility
Just Energy Transition
From farm to fork

SOCIAL AND HEALTH TRANSITION
Healthcare System and Pandemic Risks
Demographics and Healthy Aging
Migration
Gender Equality
New care models
Social and territorial cohesion

DIGITAL EUSKADI
GREEN EUSKADI
INCLUSIVE EUSKADI
3. Context and Situation Assessment

Sustainable Human Development Strategy

Euskadi Basque Country 2030 Agenda
BERPIZTU. PROGRAM FOR ECONOMIC REACTIVATION AND EMPLOYMENT 2021-2024

**Axis I – Economic reactivation**

**TRACTOR-EFFECT POLICIES**

1. Investment in public, economic and social infrastructures
2. Research, Innovation and Digital Transformation
3. Energy and Environmental Transition
4. Industry and SMEs, Advanced Services, Creative Industries and Internationalisation
5. Food sector
6. Tourism and Culture companies and industry

**Axis II - Job creation**

**TRACTOR-EFFECT POLICIES**

7. Entrepreneurship New companies
8. Training for work
9. Insertion in the labour market. Local and district employment plans
11. Public Job Offers
12. Action plan for youth employment

**Axis III - Cross-cutting area: Improving quality of employment**

13. Improving Quality of Employment and Gender Equality
Widening participation and strengthening the European Research Area

Widening participation & spreading excellence
Reforming & Enhancing the European R&I system
3. Context and Situation Assessment

Europe investing in digital: the Digital Europe Programme

1. High performance computing
2. Artificial Intelligence
3. Cybersecurity and trust
4. Advance digital competencies
5. Deployment, better use of digital capabilities and interoperability

5 Goals
A EUROPEAN GREEN DEAL

3. Context and Situation Assessment

Transforming the EU’s economy for a sustainable future

- Increasing the EU’s Climate ambition for 2030 and 2050
- Supplying clean, affordable and secure energy
- Mobilising industry for a clean and circular economy
- Building and renovating in an energy and resource efficient way
- Mobilising research and fostering innovation
- A zero pollution ambition for a toxic-free environment
- Preserving and restoring ecosystems and biodiversity
- From ‘Farm to Fork’: a fair, healthy and environmentally friendly food system
- Accelerating the shift to sustainable and smart mobility

Financing the transition
Leave no one behind (Just Transition)

The EU as a global leader
A European Climate Pact
3. Context and Situation Assessment

Investing in a green, digital and resilient Europe

**Supporting Member States to recover**
- Recovery and Resilience Facility
- Recovery Assistance for Cohesion and the Territories of Europe - REACT-EU
- Reinforced rural development programmes
- Reinforced Just Transition Mechanism

Within European Semester framework
- Supporting investments and reforms
- Supporting a just transition

**Kick-starting the economy and helping private investment**
- Solvency Support Instrument
- Strategic Investment Facility
- Strengthened InvestEU programme

- Supporting key sectors and technologies
- Investing in key value chains
- Solvency support for viable companies

**Learning the lessons from the crisis**
- New Health programme
- Reinforced rescEU
- Reinforced programmes for research, innovation and external action

- Supporting key programmes for future crises
- Supporting global partners
OTHER RELATED POLICIES OF THE BASQUE GOVERNMENT

3. Context and Situation Assessment

**Economic Development and Employment**
(Strategic Plans for Industrial Development and Internationalisation, Food&Rural&Employment Development, Digital Agenda of Euskadi and Entrepreneurship Plan)

**Energy and environment**
(Strategic Plan for Energy and Climate Transition, Energy Strategy 2030, Str4ategy for the Circular Economy 2030 and Bultzatu 2050)

**Governance**
(Strategic Plan for Public Innovation and Governance, Strategy for the Digitalization of the Basque Administration)

**Health**
(Strategic Health Plan and Research and Innovation in the Healthcare Strategy)

**Education**
(Strategic Plans for the University and VET System, Company+University Strategy and STEAM Strategy)

**2030 STIP**
4. Strategic Lines of 2030 STIP

- Vision 2030 and Social Challenges
- Strategic Pillars
- Operational Objectives

5. Fundamentals of Basque RIS3

- Evolution of RIS3 areas
- Cross-cutting Tractor-effect Initiatives
- Map of basic technologies

6. R&D&I support instruments
4. Strategic Lines of 2030 STIP
Euskadi stands among the most advanced regions of Europe in innovation by 2030, with a high standard of living and quality employment.
Contribution to solving 5 Social Challenges aligned with the SDGs

- Energy and Climate Change
- Employment
- Health
- Digital Transformation
- Gender Equality
3 Strategic Pillars + 1 Central Core

Pillar I. SCIENTIFIC EXCELLENCE
Improve excellence research as a basis for creating and disseminating new knowledge, capabilities, technologies and solutions

Pillar II INDUSTRIAL LEADERSHIP IN TECHNOLOGY
Achieve socio-economic impact and technological-business results of investments in R&D and contribute to its international positioning

Pillar III OPEN (I)NNOVATION
Promote innovation, especially in SMEs, as well as public innovation, and collaboration with other international ecosystems

Train, develop, promote and attract scientific, technological and business talent aligned with R&D &i priorities
### 4 operational objectives, 8 measurement areas and 18 indicators

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Measurement areas</th>
<th>Indicator</th>
<th>Current status 2019</th>
<th>Goal 2023</th>
<th>Goal 2026</th>
<th>Goal 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Maximize the orientation of Basque R&amp;D+i to results</td>
<td>Socioeconomic results</td>
<td>Knowledge intensive employment</td>
<td>17.7%</td>
<td>18.3%</td>
<td>18.6%</td>
<td>19.0%</td>
</tr>
<tr>
<td></td>
<td>Scientific and technological results</td>
<td>Top 10% world most cited scientific publications</td>
<td>18.8%</td>
<td>20%</td>
<td>21%</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High and medium-high technology product exports</td>
<td>55.3%</td>
<td>56%</td>
<td>57%</td>
<td>58%</td>
</tr>
<tr>
<td></td>
<td>Results of innovation</td>
<td>Sales of new products as % of total sales</td>
<td>18.3%</td>
<td>19%</td>
<td>19.5%</td>
<td>20%</td>
</tr>
<tr>
<td>2. Drive R&amp;D and innovation in companies, particularly in SMEs</td>
<td>Activities and resources for innovation</td>
<td>Investment in R&amp;D</td>
<td>1,481M€</td>
<td>1,630M€</td>
<td>1,892M€</td>
<td>2,300M€</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Investment in R&amp;D financed by companies</td>
<td>799M€</td>
<td>810M€</td>
<td>920M€</td>
<td>1,100M€</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Innovative companies in product and / or business processes</td>
<td>42.2%</td>
<td>50%</td>
<td>55%</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Investments in innovation</td>
<td>0.68%</td>
<td>0.8%</td>
<td>0.9%</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>Protection of Innovation</td>
<td>EPO patent applications</td>
<td>194</td>
<td>220</td>
<td>240</td>
<td>260</td>
</tr>
<tr>
<td></td>
<td></td>
<td>European trademark applications</td>
<td>465</td>
<td>600</td>
<td>700</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td></td>
<td>European design applications</td>
<td>125</td>
<td>155</td>
<td>185</td>
<td>225</td>
</tr>
</tbody>
</table>
## 4. Strategic Lines of the Plan

### 4 operational objectives, 8 measurement areas and 18 indicators

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Measurement areas</th>
<th>Indicator</th>
<th>Current status 2019</th>
<th>Goal 2023</th>
<th>Goal 2026</th>
<th>Goal 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3. Strengthen the internationalisation of Basque R&amp;D+i</strong></td>
<td>International leadership and competitiveness</td>
<td>International financing of R&amp;D</td>
<td>128M€</td>
<td>145M€</td>
<td>170M€</td>
<td>200M€</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leadership in Horizon Europe projects</td>
<td>27%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basque companies participating in Horizon Europe</td>
<td>77</td>
<td>100</td>
<td>110</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td></td>
<td>International scientific co-publications</td>
<td>1,651</td>
<td>1,920</td>
<td>2,220</td>
<td>2,560</td>
</tr>
<tr>
<td><strong>4. Promote scientific-technological talent, particularly women</strong></td>
<td>Promotion of talent and new vocations</td>
<td>PhD researchers</td>
<td>30.9%</td>
<td>33%</td>
<td>34%</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access to STEM bachelor degrees</td>
<td>29.1%</td>
<td>31%</td>
<td>33%</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gender equality and promoting women researchers and technologists</td>
<td>Women researchers</td>
<td>36.3%</td>
<td>37.5%</td>
<td>38.5%</td>
</tr>
</tbody>
</table>
5. Fundamentals of Basque RIS3
EVOLUTION OF RIS3 AREAS

5. Fundamentals of Basque RIS3

3 TRANSITIONS: TECHNOLOGICAL-DIGITAL ENERGY-CLIMATE SOCIAL AND HEALTH

- PERSONALISED HEALTH
  - Healthy Food
  - Ecoinnovation
  - Sustainable Cities
  - Euskadi Creativa

- CLEANER ENERGIES

- SMART INDUSTRY
RIS3 – CHALLENGES FOR THE FUTURE

5. Fundamentals of Basque RIS3

**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.
### Opportunity territories

#### Healthy Food

**Short term:**
- Safe, sustainable and healthy food ecosystems
- Personalized nutrition
- New foods for healthy aging
- New sources of dietary protein

**Medium term:**
- New methods of production of proteins or other food ingredients
- Precision Nutrition focused on disease prevention

#### Ecoinnovation:

- Diagnose the impact of the invested resources.
- Socialize European Challenges and business eco-innovation vectors.
- Contribute to improving the cost-effectiveness of eco-innovation.
- Reinforce the environmental results approach of eco-innovation.
- Activate SMEs towards Eco-innovation.
- Promote participation in EC initiatives and programs.
- Project the good work of the Basque Country on a European scale.

#### Sustainable Cities:

- Mobility, integration of photovoltaic solar collectors, increasing sensorisation and development of internet of things and circular economy.
- Integration of technological solutions in terms of digitisation and sustainability.
- Integrated and sustainable participatory planning and management of the city, incorporating health and equity.
- Promotion and development of disruptive innovative products and solutions within the cities.

#### Creative Euskadi:

- Conceptualise R&D and innovation in the sector.
- Promote its contribution to other sectors, as a non-technological innovation driver.
- Achieve a more competitive sector, in contact with the networks that operate in Europe in this area.
- Face the new forms of consumption of cultural content and its impact on its creation, production and distribution.
- Contribute from culture to social challenges: healthy aging, integration of disadvantaged groups, employment.
They will enhance collaboration between RIS3 areas in strategic domains related to the 3 transitions, with results that can be visualized by society.
# MAP OF BASIC TRANSVERSAL TECHNOLOGIES

## Digital/virtual technologies

<table>
<thead>
<tr>
<th>Artificial Intelligence &amp; Big Data/Data Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algorithms for prediction or decision-making,</td>
</tr>
<tr>
<td>Machine Learning, Data Analytics, Artificial</td>
</tr>
<tr>
<td>Vision, Digital Twin.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Internet of Things and 5G Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>IoT Connectivity, Digital platforms, Cloud</td>
</tr>
<tr>
<td>computing.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cybersecurity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blockchain, Product Cybersecurity, Network</td>
</tr>
<tr>
<td>Cybersecurity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cyber-physical Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Algorithms, Actuators, Embedded electronics, Sensors and Biosensors.</td>
</tr>
</tbody>
</table>

## Materials and processes

<table>
<thead>
<tr>
<th>Materials and processes</th>
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<table>
<thead>
<tr>
<th>Energy Storage</th>
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<tbody>
<tr>
<td>New technologies beyond Lithium-ion, Hydrogen storage and power to gas, Hybrid systems.</td>
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<table>
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<tr>
<th>Power Electronics</th>
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<tr>
<th>Biotechnologies and Genetics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems Biology, Biological Chemistry, Theranostics, Cell Therapies.</td>
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</table>

<table>
<thead>
<tr>
<th>Nanotechnologies</th>
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<tbody>
<tr>
<td>Nanoelectronics, Nanophotonics, Spintronic, Nanobiotechnology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quantum and Neutronic Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantum clocks and synchronisation, Optical-quantum metrology, Simulation and design of materials and molecules in quantum computers, Neutron physics.</td>
</tr>
</tbody>
</table>
6. R&D&I support instruments
R&D&I Initiatives and Support Programmes

6. R&D&I support instruments

1. Technological Training and Promotion of Business R&D

2. Support for the Business Innovation Ecosystem

3. Convergence of Skills and Promotion of Cooperative R&D

4. Generation of Scientific and Technological Skills

5. Management of Scientific, Technological and Business Talent

6. Opening Up and Internationalisation of the R&D&I System

- Current Basque Government support programs (transversal programs, sectoral programs, basic financing programs and others)
- Other support instruments (knowledge and technology infrastructures, support platforms and services, scientific infrastructures and other services)

- Current Support Programs of the Provincial Councils: Araba (APC), Bizkaia (BPC) and Gipuzkoa (GPC)

Strategic orientations for the future
7. Governance of the Basque Science, Technology and Innovation System

- Model of Governance
- Monitoring and evaluation

8. Economic fundamentals of 2030 STIP

- Economic scenarios
7. Governance of the Basque STI System
MODEL OF GOVERNANCE

7. Governance of the Basque STI System

LEHENDAKARI

BASQUE COUNCIL OF SCIENCE, TECHNOLOGY AND INNOVATION (BCSDTI)

Scientific Committee
Advice

Strategic Orientation and Advice

Commissioner
BCSTI Secretariat

International Cooperation and coordination with the Spanish State

Inter-departmental committee
Coordination and Implementation

Inter-institutional committee
Coordination

Living RIS3 process
(Steering Groups and Working Groups of the I.T.T.)

COMPANIES | BSTIS STAKEHOLDERS | PUBLIC STAKEHOLDERS | SOCIAL STAKEHOLDERS
A comprehensive monitoring and evaluation system

1. Evaluation of Strategy
   (annual reports to monitor the progress of the STIP objectives)
   - STIP Dashboard -

2. Evaluation of Basque STI System
   (biennial reports on the comparative situation of the System with Europe)
   - Position in RIS/EIS -
8. Economic fundamentals of 2030 STIP
ECONOMIC SCENARIOS

Scenario 2021 – 2030 (2020 baseline year):

Investment in R&D

<table>
<thead>
<tr>
<th>Year</th>
<th>Basque Government budget</th>
<th>Business investments</th>
<th>International financing</th>
<th>Province Councils budget</th>
<th>Gen. State Administration budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>+6.0%</td>
<td>+2.2%</td>
<td>+2.5%</td>
<td>+1.0%</td>
<td>+5.6%</td>
</tr>
<tr>
<td>2023</td>
<td>+6.0%</td>
<td>+4.4%</td>
<td>+5.5%</td>
<td>+2.3%</td>
<td>+5.6%</td>
</tr>
<tr>
<td>2026</td>
<td>+6.0%</td>
<td>+4.6%</td>
<td>+4.6%</td>
<td>+3.0%</td>
<td>+4.8%</td>
</tr>
<tr>
<td>2030</td>
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Growth rates: 2021-2023 / 2024-2026 / 2027-2030
Euskadi 2030
STIP novelties
1. **Finalist vision** of the Plan.

2. **Deepening inter-institutional collaboration** and coordination based on a shared commitment to innovation.

3. **Higher level of coordination with departmental policies** within the framework of a global Government strategy towards 2030.

4. **Realization of 5 Social Challenges related to the 2030 SDGs** to which the STIP must contribute to their resolution.

5. **New strategic pillars** (Scientific Excellence, Technological-Industrial Leadership and Open (i)nnovation) aligned with Horizon Europe + Talent as the necessary core.

6. **Greater alignment** of operational objectives and indicators with international innovation benchmarks (R.I.S. and E.I.S.).

7. **Evolution of RIS3 Euskadi strategy** incorporating the triple technological-digital, energy-climatic and social and health transition and ICT and advance service companies.

8. **Launch of 3 Cross-cutting Tractor-effect Initiatives between RIS3 areas**, in strategic areas for the Basque Country and with social impact.

9. **Identification and deployment of the key enabling technologies map**.

10. **Reinforcement of the strategic commitment of the Basque Government with R+D+i** (+ 6% of annual budget).
Talentua garatuq, angolana