An Industrial Strategy for Catalonia

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1. Catalonia, an industrial country
Challenges to the Catalan productive economy

- Increasing the weight of the activities with the greatest added value, integrated into international value chains.
- Bringing R&D&I closer to the manufacturing industry.
- Developing and transforming the industrial fabric by introducing advanced services for industry into the value chain.
- Increasing the level of efficiency, innovation and, in general, added value in the most mature sectors.
- Improving the human capital available and the quality of vocational training.
- Promoting the level of entrepreneurship and reducing the business failure rate.
- Increasing the size of businesses (and cooperative projects).
- Giving support to the growth of new knowledge-intensive sectors that generate jobs, transforming the traditional sectors in this direction.
- Concentrating and rationalising the Government’s efforts into sector-oriented initiatives that add value and bring results.
2. An industrial strategy for Catalonia
In line with the priorities of Europe 2020.

1. Intelligent growth based on knowledge and innovation (compatible with manufacturing).

2. Sustainable growth, with efficient use of resources and respect for the environment (green economy).

3. Integrating growth, creating jobs and generating economic, social and territorial cohesion.

*With the Catalonia 2020 strategy (ECAT 2020), Catalonia has made these priorities its own.*
General principles of action

- **Alignment** with the EU’s policies (Catalonia 2020 strategy).
- **Public support - private leadership:** it has to be businesses that take the initiative, while the Government’s job is to support them in adapting to the change in industrial model, making their activities easier.
- **Effectiveness and selection:** the public support has to be concentrated in projects selected for their capacity to drive the economy as a whole.
- **Efficiency and effectiveness:** resources have to be properly aligned and correctly prioritised with the strategic objectives to be achieved.
ARCHITECTURE OF INDUSTRIAL POLICY IN CATALONIA

ECAT 2020

Catalan smart specialisation strategy (RIS3)

General strategy

Programmes depending on the strategic area

Industrial clusters programme

Business innovation programme

Internationalisation programme for the Catalan economy

Industrial reactivation programme

Catalunya Empren (Enterprising Catalonia) programme

SME services programme

Government Plan 2013-2016
## Strategic areas

<table>
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<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Food</strong></td>
<td>Includes the agri-food industry as well as other components of the value chain, such as the primary and large-scale distribution sectors, the packing and packaging industries, machinery for the food industry, additives and raw materials, gastronomy and catering.</td>
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<tr>
<td><strong>Energy and resources</strong></td>
<td>Includes activities involved in managing energy and natural resources and waste. In particular, activities with higher added value and innovative content, such as energy efficiency, cogeneration, home automation, renewable energies, organic chemistry and nuclear fusion.</td>
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<tr>
<td><strong>Industrial systems</strong></td>
<td>These are activities generally able to manage and develop efficient industrial systems (chemistry; machinery and equipment; robotics; IT, electronic and optical products and equipment, and electrical equipment). They particularly include activities related to process engineering and advanced manufacturing technology.</td>
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<tr>
<td><strong>Design-related industries</strong></td>
<td>These are industries that have in common a strong link with design as a key, cross-cutting factor: textile, garment making, leather, footwear, jewellery, crafts and furniture.</td>
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<tr>
<td><strong>Industries related to sustainable mobility</strong></td>
<td>Includes the automotive sector and related activities, but also has implications in electrochemistry, energy, electronics, nanomaterials, the Internet, mobile telephony, etc.</td>
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<tr>
<td><strong>Health industries</strong></td>
<td>Fine chemistry, pharmaceutical preparations, universities, science and technology parks, research centres, the medical technology industry, hospitals and clinics, insurance, related services.</td>
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<tr>
<td><strong>Experience-based industries</strong></td>
<td>Includes creative and cultural industries (publishing, graphic arts, multimedia, audiovisual, audio and video production), and key services in Catalonia like tourism and sport.</td>
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# Key enabling technologies (beyond the statistical identification sector)

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<td>ICTs and electronics</td>
<td>ICTs allow the capture, processing, storage and transmission of information in all possible forms. Microelectronics and nanoelectronics are technologies allowing the design, manufacturing and linking of devices and circuits on a micrometric and nanometric scale to be incorporated into devices and systems.</td>
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<tr>
<td>Nanotechnology</td>
<td>Nanotechnology is the study, design, creation and application for materials, equipment and functional systems through the control of material on a nanometric scale and the exploitation of the phenomena and properties occurring in that state.</td>
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<tr>
<td>Advanced materials</td>
<td>This is the application of knowledge and technologies to the production of new materials and materials to replace existing ones. They should have the characteristics of offering new properties and reducing production costs and environmental impacts.</td>
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<tr>
<td>Photonics</td>
<td>This is a multidisciplinary scientific and technological area based on knowledge and applications related to light, basically the generation, control, processing and detection of photons in the visible and invisible fringes of the spectrum.</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>Biotechnology is the use of living organisms, biological systems and their derivatives to create or modify products or processes. It is based on the application of knowledge in microbiology, biochemistry and genetics, among others. Industrial biotechnology is the application on an industrial scale of the same technologies for chemical or pharmaceutical production or the production of new materials or fuels, or processes related to the environment.</td>
</tr>
<tr>
<td>Advanced manufacturing</td>
<td>This is the application of knowledge and the most innovative technologies to optimise production systems in order to obtain new products and reduce times, costs, energy and materials involved in processes, increasing the parameters of precision, quality and safety, while reducing environmental impacts.</td>
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Developing the 7 programmes, depending on the strategic area, that...

- Will organise and coordinate the DGI/ACC1Ó instruments and be a frame of reference for the rest of the Government of Catalonia.
- Will be long-term.
- Will accelerate the transformation of the production fabric towards higher added value activities and business models.
- Will be geared towards generating industrial projects at the same time as environmental projects.
- Will be developed with the participation of different government agencies.
- Will promote cluster dynamics.
- Eventually, their implementation will require the creation of support and coordination offices with public/private participation.
- Will identify human capital needs (specifically, professional profiles).
Synergy between the 7 strategic areas and the industrial policy instruments
3. Instrumental policies
Programme for clusters in Catalonia

- Active policy of articulating competitive businesses around cooperative projects.
- Catalonia Clusters programme.
  - References at European level.
  - **Catalonia Clústers** brand.
  - System of criteria to select clusters to take part in the programme.
  - Offer of public support services to clusters and their projects.
  - Strategic orientation.
  - Management training.
- Lines of incentives for projects for new business opportunities and cooperative initiatives from the cluster.
- Support for new, emerging clusters.
Business innovation programme

The main challenges are increasing the rates of innovation in Catalonia by:

- Expanding the base of innovative businesses in Catalonia, especially among SMEs.
- Deepening the level of innovation at Catalan businesses, especially the resources being invested in R&D and innovation.
- Increasing technology transfer in Catalonia based on the consolidation of TECNIO as a natural working interface between research and business, and boosting the process of developing technology to bring it closer to the market.
- Designing instruments for supporting innovation, including the international dimension.
- Improving official statistics concerning innovation.
Internationalisation programme:
Strengthening and internationally positioning Catalonia’s businesses and economy.

- Promoting and attracting productive investment in Catalonia (inward investment).
- Providing support to business reinvestment in Catalonia.

- Promoting and diversifying exports by Catalan businesses.
- Promoting direct foreign investment by Catalan businesses (outward investment).
- Increasing Catalan participation in international public contracting.
- Promoting international technology transfer by Catalan businesses and technology centres.
Industrial reactivation programme:

1. Detecting businesses in a risk or opportunity situation.
2. Capturing investment projects in Catalonia.
3. Promoting industrial reentreprenuership.
4. Opportunities and availability of developed industrial land (INCASÒL).
5. Local industrial attraction proposal.
6. Finance strategy oriented towards industrial recovery (ICF).
7. Alignment with the Spanish Government's reindustrialisation instruments.
8. Establishment of legal instruments.
9. Cooperation with the 13 commercial courts in Catalonia.