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The Bioeconomy Consultants

Bioeconomy Factsheet - Spain

This factsheet gives an overview of the Spanish bioeconomy innovation technology system. It includes the key government interventions, research initiatives, networks and finance instruments, in Spain.

Bioeconomy Governance

The key government bodies are:

- The Institute for Energy Diversification and Energy Saving (IDAE)
- The Ministry of Research, Development and Innovation
- The Ministry of Economy and Competitiveness
- Spanish Office for Climate Change
- Ministry of Agriculture, Food and Environment
- Ministry of Industry, Energy and Tourism



Climate Change Policy

Spain adopted the National Climate Change Adaptation Plan (PNACC in Spanish) 2006, and the **Spanish Strategy of Climate Change and Clean Energy** 2007. Major national agencies, have different roles in climate change action, including the National Climate Council, the Policy Coordination Committee on Climate Change, and the Interministerial Commission on Climate Change.

Bioenergy and Biofuels

The development of renewable energies is a priority of the Spanish energy policy, as it benefits the whole of society.

The Government has adopted the **Royal Decree 413/2014** which regulates the activity of electricity production from renewable energy sources, cogeneration and waste, and compensation schemes for facilities.

Renewable electricity generation is supported by **feed-in tariffs**.

To promote thermal biomass in buildings, **IDAE** are in charge of **BIOMCASA II** programs. IDAE also support renewable energy projects in buildings, including large thermal facilities.

La energía de tu casa



For energy efficiency, the Ministry of Industry, Energy and Tourism developed the **National Saving and Energy Action Plan** (2011-2020).

In addition, the vast majority of governments of the Autonomous Regions, who have responsibility for energy, mining and environmental issues within their territory, have established measures to promote renewable energy through their energy plans, which include details of the areas for renewable energy development.





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Bioeconomy Strategies

A bioeconomy strategy was recently published, by a task force at the Ministerio de Economía y Competitividad, '**ESTRATEGIA ESPAÑOLA DE BIOECONOMÍA: HORIZONTE 2030**'. There are also bioeconomy relevant plans in technology and waste prevention.



For innovation, the **State Plan for Scientific Research, Technology and Innovation (2013-2016)** consists of four programs corresponding to objectives set out in the **Spanish Strategy for Science, Technology and Innovation**.

For waste recycling, the **National Municipal Solid Waste Management Plan** (2008-2015) has been instrumental. Also, the **Reduction Strategy of Biodegradable Waste** aims to reduce the impact of landfills.

Technology Commercialisation Centres

Research & Technology Centres include:



- The **Centre for Industrial Technological Development** (CDTI)
- The **Centre for Energy, Environment and Technology Superior Council for Scientific Research** centres, are a network of about 160 units consisting of university groups, hospitals, and technology centres

Research & Technology Funding

The main governing bodies responsible for R&D:

- **General Division of Research Projects**
- **National Evaluation and Foresight Agency** (ANEP) a subsidiary unit of the Directorate General of Technical and Scientific Research



One of the major bioeconomy R&D initiatives in Spain is **CLaMber** – a project to support the bioeconomy sector in the Castilla-La Mancha region, by investing in an advanced biorefinery, research and technology, and synergistic technology hub.

Finance

The **National Energy Efficiency Fund** invests about €370M per year for measures to increase energy efficiency construction, manufacturing, and transportation. Funds are generated from obligated companies (gas, electricity, and petroleum traders).

The **European Fund for Regional and Economic Development** (FEDER) also mobilises an associated investment, of about €2,450 million annually.



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Networks

Networks in Bioeconomy industry mainly operate at national level:

- The **Spanish Association of Bio-Companies** (ASEBIO) promotes biotechnology organisations.
- The **Platform of Biotechnological Markets** is a link between science-technology-company stakeholders, to foster innovation, technology transfer and translation to society.
- The **Association of Renewable Energy Producers** (APPA) brings together renewable energy companies including biofuels and biomass.
- The **Spanish Technological Biomass Platform** (BIOPLAT) is a group of excellence in technical and scientific sectorial coordination. It is a tool of the Ministry of Economy and Competitiveness for the development of RDI in bioenergy.
- The **Superior Council for Scientific Research** (CSIC) is a large public institution, governing a network of centres, to develop and promote research for the benefit of scientific and technological progress.



Biohorizons

The Biohorizons project and survey focused on consulting stakeholders across the bioeconomy, to identify areas for growth, opportunity, and barriers to innovation.



Biohorizons Project:

<http://www.climate-kic.org/projects/biohorizons/>

LinkedIn: <http://linkd.in/1dPjX7R>



This factsheet was produced by Biohorizons partners

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