ShapingBio

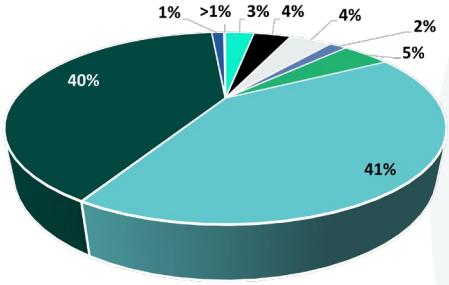
Bioeconomy country file

France

A National Bioeconomy Strategy has been in place since 2017. This strategy aims to foster the sustainable and circular use of renewable resources across various sectors. It provides a framework to promote innovation, investment and collaboration in bioeconomy. Its action plan was implemented from 2018 to 2020.

Employment by sector in France (2020)

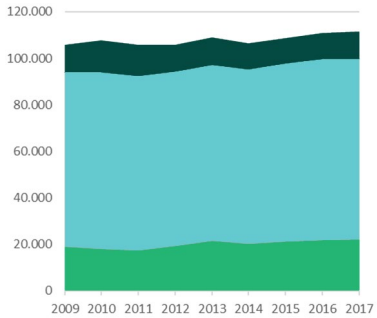
Number of people empoyed



- Agriculture (700k)
- Food, beverage and Tobacco (715.93k)
- Wood products and furniture (80.15k)
- Forestry (29k)
- Bio-based chemicals, pharmaceuticals, plastics and rubber (72.56k)
- Paper (63.71k)
- Bio-based textiles (49.83k)
- Fishing and aquaculture (21k)
- Liquid and biofuels (2.65k)

Biomass consumption by source

Evolution 2009-2017



- Materials
- Energy
- (Food including inputs)

Publication date

2018 - 2020

France

A Bioeconomy Strategy for France

Dominant sectors

- Agriculture and Forestry
- Biobased sectors
- Fisheries and Aquaculture
- Bioenergy and biofuels

Responsible authorities

Ministry of Agriculture and Food Sovereignty

In 2019, FranceAgriMer set up a cross-industry thematic commission (CTI) on the bioeconomy to maintain regular dialogue between the government, research bodies, public operators and representatives of the bioeconomy industries.
Moreover, 18 regions have published strategies related to the bioeconomy and 3 regions (Grand Est, Hauts de France and Ile-de-France) have a fully dedicated bioeconomy strategy.

Other related strategies

- National plant protein strategy (2020)
- National strategy for sustainable and healthy food (2021)
- Agroecological project for France (2016)
- National biomass mobilisation strategy and regional biomass plans (2016)
- Circular economy roadmap (FREC - 2019)
- National biodiversity strategy (2023)
- National forest and wood programme (PNFB-2016-2026)
- National strategy for the sea and coast (2017)
- National strategy to accelerate the transition to a circular economy (2021)

This project has received funding from the European Union's Horizon Europe Programme under Grant Agreement number: 101060252 www.shapingbio.eu

Funded by the European Union

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Policy instruments

PIA (Plan d'investissement d'avenir / Future Investment Programme) - France2030

It is part of "France 2030" , an unprecedented plan for innovation and industry. 10 objectives based on 3 challenges: better production, better living and a better understanding of our world. Open calls for proposals are launched by ADEME or Bpifrance targeting bioeconomy development objectives. An example: 420M€ earmarked for "Biobased products and industrial biotechnologies» call for proposals from January 2022 until January 2024.

CIR (Crédit Impôt Recherche)

A specific tax credit to encourage companies to engage in (R&D) activities. Collaborations with both French and European players are eligible for this deduction, making it easier to finance certain projects or services.

Circular Economy Action Plan (PAEC)

3 axes, including "Developing the circular economy in high-potential sectors", that includes the agri-food sector.
Circular economy applied to the agri-food sector consists of promoting complementarities between farms, companies and local authorities in limited geographical areas, with positive impacts.
Actions of the plan: develop and raise awareness of short food circuits, in a logic of environmental quality; fight against food waste from production to consumption; create value with bio-waste and by-products.

Regional Biomass Schemes (included in the National Strategy for Biomass Mobilisation) - ADEME

A scheme with regional implementation promoting the development of projects on valorizing biomass into energy: heating networks, wood-fired boilers, anaerobic digestion and biogas use to reduce the share of fossil fuels and work collectively on the energy and ecological transition.

Law 2015-991 on the New Territorial Organisation of the Republic (NOTRe)

The Law NOTRe assigns new competences to the French regions. They are required to adopt a waste prevention and management plan, which must include a Circular Economy Action Plan and have a focus on bio-waste.

Law n°2016-138 against food waste

Preventing food waste by targeting "at the source"; Use unsold food through donation or transformationprocessing; Valorization of food wastes into animal feed; Use of food waste as compost for agriculture or for energy purposes, through anaerobic digestion.

Bioeconomy in France

Collaborative structures

Alliance CHEMBOOSTER IMPROVE _ ITERG – SAS PIVERT

This alliance, named ChemBooster, will provide a unique service to customers by pooling the skills and technological platforms of the two organisations on the theme of a more sustainable Green Chemistry.

Axelera

Axelera innovation cluster includes players in industry, chemistry and training in the fields of chemistry and the environment.

Toulouse White Biotechnology (TWB)

TWB is an administrative body supported by French National Institute of Agronomy (INRAE). It facilitates the interface between companies and academics, offering R&D projects from laboratory research to pilot scale (biocatalysis, synthetic biology, process engineering), in the field of biomaterials, chemicals and biofuels. with an association agreement National Institute of Applied Sciences (INSA-Toulouse) and Scientific Research National Center (CNRS)

Bioeconomy4Change

Network dedicated to bioeconomy of more than 500 members, from upstream agriculture to the marketing of finished products.

Valorial

An agri-food innovation cluster bringing together 400 manufacturers, research centres and higher education establishments around the theme of smarter food.

Protéines France

French consortium of companies with the ambition of federating and catalysing the development of plant proteins and new resources.

Protéines France aims to accelerate the development of the plant proteins and new resources sector and to make France a world leader in this field.

Vitagora

Agri-food innovation cluster with a dynamic innovation ecosystem of industry and research professionals: network of 660 members from farm to fork.

Strategic objectives: tasty, healthy and sustainable food product and service offer, driven by the demands of today's consumers, ever more concerned with the impact of food on their wellbeing and the environment.

Showcase

"Ferments of the Future" Grand Challenge

Public and private partners have joined forces to overcome the scientific and technological hurdles that slow down innovation in fields related to fermentation.

The goal of the Grand Challenge is to better understand the mechanisms involved in food fermentation in order to shape them, if necessary, to fit better with health requirements and climate change constraints, or to adapt to consumer expectations. It also aims to encourage the development of new fermented foods, based in particular on cereals, pulses, fruits and vegetables. These new products will help shift diets toward plant-based foods, making them more sustainable.

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