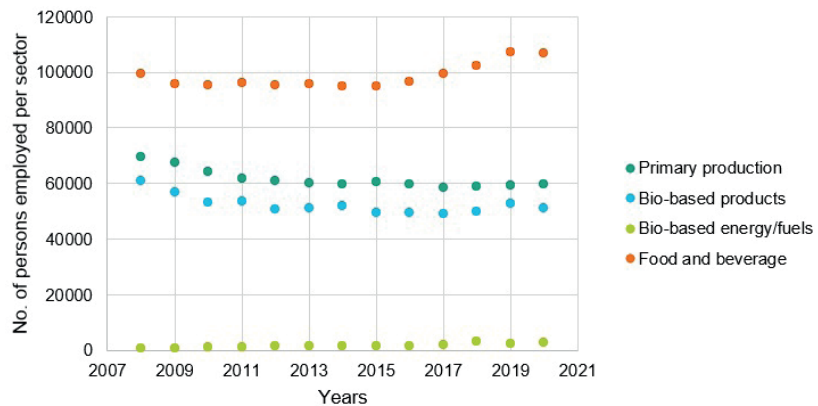


Belgium has made significant progress in developing its bioeconomy. Using its agriculture sector and research capabilities, the country actively expands its focus on sustainable use of biomass, including agriculture, forestry, and waste streams. The Belgian bioeconomy stands out for its emphasis on research, innovation, collaboration between academics and business, and the use of renewable resources for long-term economic growth.

The primary goals of this bioeconomy are to encourage the development of bio-based industries, improve resource efficiency, and facilitate the transition to a low-carbon economy. A regional (subnational) bioeconomy strategy exists in Belgium (Flanders). Flanders, as well as Wallonia and the Brussels regions, benefit from various policy instruments and collaborative structures at a regional level.

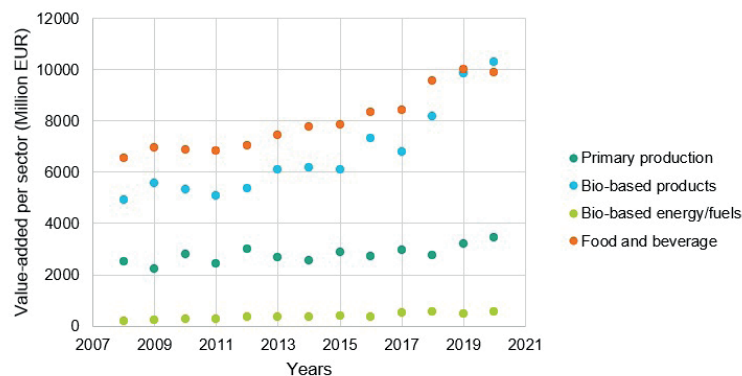
Number of persons employed per sector in Belgium

Evolution 2020–2028




Value-added per sector in Million euros in Belgium

Evolution 2008 – 2020




Policy instruments

Prohibition of the use of certain biomass feedstocks for bioenergy



Some EU countries like Belgium, Finland, and the Netherlands have prohibited the use of certain biomass feedstocks for bioenergy. Belgium and Hungary aim to ensure that the use for energy is the last step in the use hierarchy of biomass feedstocks. This is being referred to as the ‘cascading principle’ and is derived from EU’s Waste Framework Directive (Directive, 2008/98/EC) in which it is referred to as the ‘waste hierarchy’.

Tax regulation mechanism for biofuel producers from rapeseed oil



The Decree provides for the support of biofuels production through an excise duty exemption. The fuel from rapeseed oil produced by a physical or legal person that directly sells its production to the end consumer without intermediary can be exempted from excise duty. The exemption equals the excise rate of the fuel the rapeseed oil replaces. The following conditions apply:

Rapeseed oil shall be used as a biofuel

The natural or legal person producing the rapeseed oil shall sell it to the end consumer without intermediary



Belgium – Flanders

*Duration***2020 – 2023***Responsible authorities*

Flemish Government (Non applicable for Belgium, Wallonia and the Brussels Capital Region)

Belgium

Flanders' Bioeconomy

The plan emphasizes research, innovation and cooperation between industry and agriculture.

The plan contains three strands: research, innovation and stimulating closer cooperation between industry and agriculture. It is precisely in innovative collaborations between these sectors that there is still much potential for new sustainable activities. The strategy aims to strengthen the position of Flanders as a leading region in bio-based innovation, research, and production. It emphasizes the sustainable utilization of biomass resources, the development of biorefineries, the creation of new bio-based value chains, and the promotion of research and innovation in the bioeconomy.

Other related strategies

Bioeconomy in Flanders

Bio-economy: van ambitie tot actie

Showcase

Bio Subsidy Program for Bio-based Applications Pilot Testing

VLAIO, the Flemish Agency for Innovation & Entrepreneurship, provided subsidies to support SME's in the industry, primary agriculture, and aquaculture sectors for piloting bio-based applications. The subsidy covered 35% to 45% of approved project costs, ranging from €20,000 to €100,000.

Eligible businesses needed legal registration and operational activities in the Flemish Region. Both private companies and non-profit organizations were eligible. Size classification followed the European definition of SME, which considered specific criteria related to employment, turnover, and balance sheet values (small: <50 employees or <€10 million turnover/balance sheet total; medium: <250 employees or <€50 million turnover/€43 million balance sheet total).

Supported projects aimed to pilot and demonstrate bio-based applications with sufficient maturity but lacking immediate commercial potential. Projects focused solely on registration or certification costs of already developed products, as well as those too advanced in industrialization or commercialization, were not eligible. The duration of approved projects was capped at one year, with a possibility of extension up to two years, subject to justification. The subsidy was calculated as a percentage of the approved project budget, with 45% for small enterprises and 35% for medium-sized enterprises. The subsidy granted was limited to €8,000,000 cumulatively in the current calendar year.

The subsidies provided by regional governments, including this program, have been exempted from vennootschapsbelasting (corporate tax) since January 1, 2007.



Belgium – Flanders

Policy instruments



Generic R&D instruments

Companies and research institutes can apply for subsidies to conduct R&D. Subsidy percentages vary according to the maturity of the project.



Superhead cluster policy

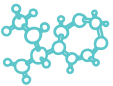
It is a network support structure for different sectors to create R&D consortia and is linked with an earmarked R&D budget.

Flanders Future Tech Fund



Non-bankable projects risk not to find funding at conventional institutes. So, pilot installations do not find funding and are not built. The Flanders Future Tech Fund was created to bridge this gap. The FFTF funds pilots to industrialize these solutions. The business model of the plant has to private, and the income is generated not by sales, but by IP and licensing of the developed solutions.

Moonshot policy



The moonshot programme wants to develop new technological solutions to enable Flemish industry to become carbon neutral by 2050. So long-term risk research is needed.

B2BE facilitator



The B2BE facilitator brings entrepreneurs from agriculture, horticulture, marine and food industry together with industrial partners around GREEN INNOVATIONS in the carbon neutral economy.

Bioeconomy in Flanders

Collaborative structures

CATALISTI (Flanders innovation cluster for the Chemical Sector)

Actively contribute to sustainable and competitive chemical & plastics industries, as well as related sectors in Flanders, by working on new value chains, improved innovation power, clustering knowledge, and a sustainable economy

The Blue Cluster (Flanders' innovation cluster for the marine sector)

The Blue Cluster gathers public and private partners to create transformative innovation projects for the marine sector. This includes the cultivation and transformation of algae for innovative applications, and the upgrading of fisheries waste streams and organic streams from marine sources.

Flanders' Food (Flanders innovation cluster for the agro-industrial Sector)

A central point of contact for businesses, social profit organizations, knowledge institutes and authorities in the strategic domain of the agri-food industry within the Flemish innovation system.

SIM (Strategic Initiative Materials)

SIM is a non-profit organization looking to strengthen the competitive position of the materials industry in Flanders. Service of companies, knowledge and research institutions interested in innovative materials technology for applications in the field of energy & light, durable & sustainable structural materials and nanomaterials. The recyclability and sustainability in general of these material developments are a prerequisite.

FLUX 50 (Flanders innovation cluster for the energy Sector)

Flux50 is the membership organization that helps Flanders gain international recognition as a Smart Energy Region. Flux50 facilitates cross-sector collaboration between energy, IT and building companies to enhance the competitiveness of the Flemish smart energy industry in the transition towards low-carbon systems.



Belgium – Wallonia

Policy instruments

Generic R&D instruments

The Walloon region offers funding to companies as well as universities and research institutions interested in developing R&D projects. Companies incorporated in the Walloon Region are eligible for an advance of up to 70% of their investment expenses for projects involving applied research or technological advancement (Article 17, Décret du 3 juillet 2008). Universities and research institutes can benefit from calls for tenders published by the Department of Energy and Sustainable Building (DG04) and by the Department of Economy, Employment and Research (DG06) of the Public Service of Wallonia

Superhead cluster policy

The investment costs eligible for financial assistance must be at least € 25,000 (Article 7 3 Arrêté du 2 décembre 2004).

The subsidy is computed by comparing the expenses of traditional energy production plants with the same capacity to the additional costs borne by companies.

The amount of the subsidy varies depending on the company:

Maximum 50% of investment costs can be funded for small and medium-sized businesses. Furthermore, the total amount of the subsidy over four years cannot exceed € 1.5 million (Art.9 2 Arrêté du 2 décembre 2004). Maximum support for large companies is 20% of investment costs.

If the enterprise is in a development zone, the total amount can be increased by 5% or 10% depending on the province (Art.9 2 and 4 Arrêté du 2 décembre 2004).

In the case of hydropower, the subsidy is based on a maximum investment amount of € 5,000 per kW for installations with capacities greater than 100 kWp, and a maximum investment value of € 9,000 per kW for installations with capacities less than 100 kWp.



Brussels

Policy instruments

Brustart (financing of young innovative companies)

Companies of less than five years can receive support of up to EUR 250,000 in the form of a loan or participation in capital for the implementation of their business plan. Brustart is an evergreen fund with EUR 10.5 million equity provided by finance.brussels and the region. Overall, EUR 2.460 million have been invested in 17 projects in 2017 under Brustart, and EUR 2.242 million have been invested in 17 projects in 2018 under Brustart and Bruseed.

Bruseed (financing of innovative companies in pre-commercialisation phase)

Innovative SMEs of less than five years can receive support of up to EUR 250,000 in the form of a loan or 37 participations in capital with a view to put their innovative products on the market (launching stage). Bruseed is managed by Brustart and the funding is provided by the region and by the ERDF for a total of EUR 6.1 million (2018-2023).



Bioeconomy in Wallonia

Collaborative structures

Coq Vert

The «Coq vert» initiative is aimed at recycling biomass materials from non-food resources (by-products, residual products, waste etc.) and puts second-generation bio-refineries right at the heart of the long-term development of these sectors in Wallonia. Opportunities with the potential to lead to research and innovation projects as well as investment or even training projects are assessed. A medium-term strategy is also under development to encourage the growth of bio-refineries in Wallonia

TWEED Cluster

The mission of the TWEED Cluster is to promote investment, innovation, development and value in sustainable energy production and exploitation, by mobilizing and acting as a facilitator between industry, knowledge institutes and governments, in this sector, around projects

Wagralim

Wagralim puts you in contact with industrialists, service and equipment companies, institutional and academic partners, and research and training centres in Belgium and abroad.

Plastiwin

Plastiwin brings innovative projects to the fore, supports the market introduction and enhances the value of the plastics industry. They create a dynamic exchange between their members to allow more technology and skills transfer, facilitate access to contractors by increasing the visibility of the value chain and by communicating about Wallonia's technological potential. Public awareness of the innovative, sustainable and circular nature of the plastics industry is raised.

GreenWin (Coq vert partner)

Boosting and fostering investments in the bioeconomy. GreenWin has firmly given itself the mission «engineer encounters that open up the innovative paths of the future»: It is an accelerator of innovative and collaborative industrial projects. It gathers different protagonists from the worlds of economics and academia to bring about and implement the technological innovations able to generate regional economic development.

ValBiom (Coq vert partner)

As part of its public mission, Valbiom acts as a territorial facilitator of the transition towards a biobased economy. For personalised accompaniment, Valbiom also offers support and consultancy services.