

The Framework Memorandum on the Bio-Based Economy was published by the Dutch Ministry for Economic Affairs in 2012. The Memorandum supplements the innovation contract on biobased business published in 2012 as a result of the cooperation efforts of the government, industry, and research institutes. Both policies recognise the bioeconomy as a common theme among the top sectors: agriculture, transport, and chemicals.

Key focal aspects of the Dutch bioeconomy and biobased economy policy are: Biomass valorisation is the production of biobased materials and Use residues for biofuels, electricity, and heat.

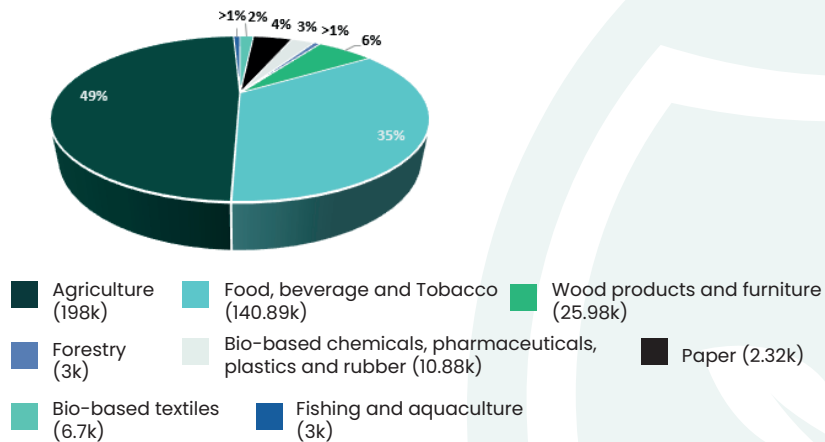
In 2016, more than 1,200 companies were active in the bio-based economy, mostly SMEs that develop and manufacture bio-based materials and chemicals within the agricultural, fishing, and food sectors, with an estimated turnover between €114 billion and €120 billion.

There are several agreements in place between the top sectors, namely, agriculture, transport, and chemicals, to support the development of the bioeconomy. For example, 'Green Deals', within which agreements have been made concerning the production of bio-based chemicals, biopolymers, biofuels, and electricity.

In this regard, there has been a strong link established between bioeconomy and circular economy, given the aim of the Netherlands to become fully circular by 2050. In 2023, the Ministry of Infrastructure and Water Management released the National Programme Circular Economy (NPCE) 2023–2030. Which include comprehensive actions that support the Dutch transition to a circular economy.

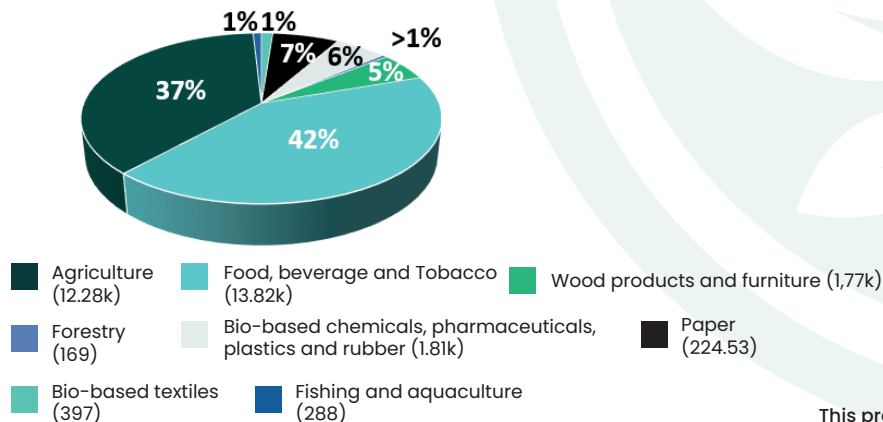
Employment by sector in Netherlands (2020)

Number of people employed



Value added by sector in Netherlands (2020)

Million euros



Publication date

2016

Responsible authorities



Ministry of Infrastructure and Water Management

In its 2016 strategy, the Dutch government has set targets of halving raw material use by 2030 and achieving a fully circular economy by 2050. The aim of the policy is to reduce raw material use and ensure maximum value retention, which requires various circular strategies such as reuse, circular design, sharing, lending, and repair.

The 2021–2023 theme of the policy focuses on a systemic change from a linear to a circular economy by focusing on raw material flow. Focus on:

- Ensuring the efficient use of raw materials in production processes.

- In the event that new raw materials are needed for production, sustainably produced and available raw materials, like biomass, shall be used.

Netherlands
Government-wide programme for a Circular Dutch Economy by 2050

Dominant sectors

**Biomass
Consumer Goods
Manufacturing and
Construction**

Other related strategies


- Raw Materials Agreement 2017
- Green growth 2013
- 2030 Government Vision on Biomass



Netherlands

Policy instruments


SME Innovation Scheme for Top Sectors (MIT) (MKB-innovatiestimulerend Regio en Topsectoren)



Small or medium size business owner working on an innovative project in one of the leading sectors (Agri & food, Creative industry, Energy, Life Sciences & Health (LSH), Logistics, High Tech Systems & Materials (HTSM), Horticulture & Starting Materials and Water)

€ 20,000 for an MIT feasibility project and € 350,000 for an MIT R&D cooperation project.


SDE and incentive scheme



A feed-in tariff scheme where producers receive financial compensation for the renewable energy they generate.

€8 billion is available for the SDE++ call 2023.

EIF and Invest-NL, the Dutch national promotional institution



The DFF's investment focus is on digital innovation, artificial intelligence, life sciences and key enabling technologies, as well as thematic objectives such as energy transition, sustainability and circular economy

Bioeconomy in Netherlands Collaborative structures

Bio Innovation Growth mega Cluster (BIG-Cluster)

Clusters and networks in the trilateral area Flanders-Netherlands-NRW established in 2013. The cluster initiate research and development partnerships for new biobased value chains that fit into a circular economy approach and the use of secondary raw materials and waste, in order to contribute to the realization of a circular economy

Biobased delta (biorizon)

Example for cross-border initiative between NL and BE that works to foster the commercial production of bio-aromatics by 2025 focusing on technology scale-up.

TKI Biobased Economy

Top Consortium for Knowledge and Innovation in Biobased Economy (TKI-BBE). It initiate new activities and projects to promote more efficient use of biomass for energy in the short term and materials and on the longer term.

Dutch Biorefinery Cluster

Help members to bring biomass fully to economic value in a sustainable way

Green Chemistry Campus

A business accelerator for biobased innovations

Showcase Royal Cosun

Produces plant-based food and food ingredients, feed, biobased ingredients and green energy through valorisation of arable crops such as sugar beet, chicory and potatoes. Examples include various potato products, plant-based proteins and dietary fibres. It produces sugar, starch and a range of biobased products like plant based yoghurt.