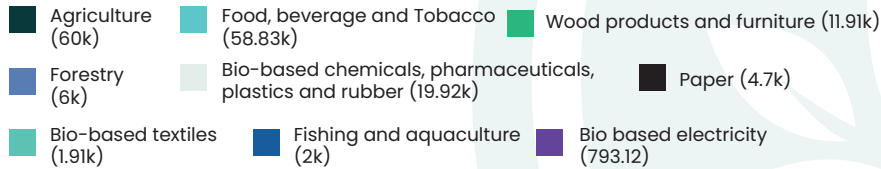
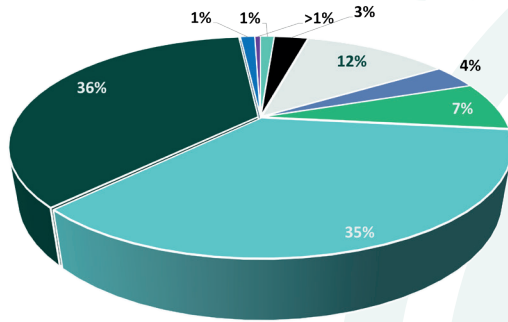
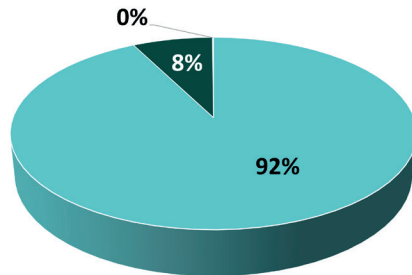


Employment by sector in Denmark (2020)

Number of people employed



Biomass production, million tonnes of dry matter



Denmark has a strong position when it comes to being first mover to market with new technologies and solutions within bioeconomy. Denmark is a pioneer in bio-based life science, fermentation, ingredients, high-value products, use of side streams, and high-efficiency use of biomass and biogas for energy production.

The key objective of the national bioeconomy policy is to unlock the full potential of biomass resources primary from agriculture, forestry and fisheries so that nutrients are recirculated, and new growth and export opportunities are created.

Denmark does not have a dedicated bioeconomy strategy yet, but the National Bioeconomy Panel (NBP) has been the advisory body to provide recommendations for the government regarding the country's bioeconomy development. Governance relevant to the Danish bioeconomy is made up of a mix of public and private regulation, voluntary and mandatory schemes, and national and subnational legislation.



Publication date

September 2022

Responsible authorities



Ministry of Food, Agriculture and Fisheries

New recommendations (Sept. 2022) from the NBP on how Denmark can increase the production of bioresources include:

- A national bioeconomy strategy is being drawn up, which will set the direction for the further development of the bioeconomy in Denmark.
- Financial incentives are introduced that promote the utilization of the full potential of bioresources.
- Large investments are being made in the expansion and upscaling of biorefining and cascade utilization.
- Refining of biofibers into materials and chemicals is developed and scaled up.
- Biorefining, biogas, pyrolysis and CCUS are developed as industrial symbioses.
- Areas with maize and grain crops are converted to biorefining crops with low environmental and climate impact.
- On areas that are not converted to biorefining crops, the Danish straw resource is optimized.
- Consideration of nature and biodiversity is prioritized by taking out production areas which are set aside for purely nature and biodiversity purposes.

Denmark

National Bioeconomy Panel (NBP)

Dominant sectors

Agriculture and Forestry
Fisheries & Aquaculture
Food, Feed, and Beverages

Other related strategies

- The Government's Strategy for Life Science (2021 - 2023).
- The Government's Strategy for Power-to-X (2021)
- The Government's Strategy for Circular Economy (2018)
- The Government's Action Plan for Circular Economy (2018)



Denmark

Policy instruments



GUDP – Green Development and Demonstration Program

Invests in sustainability and growth in collaboration between industry and research



EUDP – Energy Technology Development and Demonstration Program

Funds work by enterprises and universities on the demonstration of new energy technologies



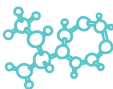
MUDP – the Environmental Technology Development and Demonstration Program

Support the development and application of new environmental and resource-efficient solutions addressing prioritized environmental challenges



Innovation Fund Denmark

Different funding programs, the largest being “Grand Solutions” have thematic calls, e.g., bioresources and energy



Independent Research Fund Denmark

Open calls within the area of basic research within technology and production sciences



Green Tax Reform (2030)

The reform introduces a new CO2 tax from 2030 with a rate of DKK 750 per tonne of CO2 emitted for companies outside the EU ETS and DKK 375 per tonne of CO2 emitted in 2030 for companies within the EU ETS.

Bioeconomy in Denmark

Collaborative structures

A trade association for everybody with an interest in biogas

A trade association for everybody with an interest in biogas

Kalundborg Symbiosis

The city's biggest industrial companies work together across sectors to share excess energy, water, and materials, so less goes to waste

GreenLAB

Is a green and circular energy park, a technology enabler, and a national research facility. Are specialize in accelerating research and technology to scale, and the concept transforms the way green energy is produced, converted, stored, and applied.

Food & Bio Cluster Denmark

Denmark's national cluster organization for the Danish food and bioresource industry. A unifying platform for innovation and growth – for Danish and international companies and knowledge institutions, appointed by the Danish government

Biosolutions Zealand

To create an optimal framework and infrastructure for the development, testing, and upscaling of biotechnological products and solutions in Zealand.

Alliance for biosolutions

An initiative from the Danish Chamber of Commerce to turbocharge the great export and climate potential of biosolutions.

Showcase

Denmarks' first grass protein factory is now in operation

BioRefine is Danish company that has devolved a method for extracting protein from grass. In short, this means that you can harvest grass from fields in Denmark and transform it into a protein that can be digested and absorbed by monogastric animals. Grass protein can to a certain extent replace the imported soy protein that is normally being used for animal nutrition in Danish stables. This could contribute to making livestock production in Denmark far more sustainable. The protein is produced by centrifuging grass juice, extracting the protein from the juice, drying it and finally turning it into a powder.