

The Netherlands



Which bioeconomy-related policy strategies exist?

Bioeconomy development in The Netherlands is politically guided by the "Framework Memorandum on the Bio-based Economy" (2012). The framework paper complements the innovation contract on the bio-based economy, "Groene Groei: Van biomassa naar business" (2012). This biobased business strategy is a result of the government's 2011 innovation strategy ("To the Top") which identified the bioeconomy as a common theme across several top sectors²¹. Six of the nine top sectors consequently agreed to pursue the transition to a Dutch biobased economy.

In 2013, the Dutch government published the green growth strategy, "Groene Groei: voor een sterke, duurzame economie", which explicitly considers the biobased economy as a means of replacing fossil fuels with renewable biomass.



Is the term "bioeconomy" or "biobased economy" used in the strategy documents?

Yes

No

X

The framework memorandum (2012) defines the biobased economy as "green or sustainable economy which uses resources from living nature (including biomass and renewable resources)".

22 The Netherlands. The Cabinet, 2012, p.2

²¹ Top sectors identified by the innovation strategy "To the Top" are agro-food, horticulture and seed stock, high-tech materials and systems, energy, logistics, creative industries, life sciences, chemicals and water.

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Who is the author of the strategies?

The Dutch Ministry of Economic Affairs generally coordinates bioeconomy policy. The "Framework Memorandum on the Biobased Economy" was published by the Dutch cabinet as a shared vision of the biobased economy. In 2012, the government also developed the innovation contract "Groene Groei: Van biomassa naar business" in cooperation with industry and research organizations. The Top Consortium for Knowledge and Innovation (TKI)

"Biobased Economy", which involves about 100 stakeholders from industry, academia, government authorities and NGOs, is responsible for implementing the contract.

The Ministries of Economic Affairs; Foreign Trade and Economic Development; and Housing, and the Central Government Sector developed the green growth strategy in 2013.



What are the key goals of the strategies?

The "Framework Memorandum on the Biobased Economy" (2012) stresses the opportunities offered by a biobased economy for coping with societal challenges, such as climate change, energy security and resource scarcity. It also seeks to increase income and employment in The Netherlands. The term biobased economy thus refers to an economy that is based on renewable raw materials.

The key goals of the innovation contract "Groene Groei: Van biomassa naar business" are to strengthen competitiveness and create new business by establishing inter-sectoral alliances.

The green growth strategy of 2013 aims to strengthen international competitiveness while reducing environmental impacts and dependence on fossil fuels. In order to achieve green growth, the government committed itself to promoting market incentives and appropriate laws that will strengthen innovation in the area of bioeconomy. The government further promotes interdisciplinary collaboration between stakeholders, including business actors, NGOs, and research institutions.



What are the priority areas of the strategies?

In order to promote the transition to a biobased economy, the framework memorandum prioritizes the efficient use of biomass. Emphasizing the concept of "co-production", linked to biorefineries as key technology, should ensure the optimized use of biomass for food, industrial products and energy. The framework encourages research and development in this area (in 2008, the Dutch Ministry of Agriculture, Nature and Food Quality had already initiated the development of a roadmap on biorefineries.) By initiating various public-private partnerships, the government further seeks to build on the country's expertise in biotechnology,

food chemistry, agri-food, chemistry and logistics (especially ports). Sustainability of resource use is also recognized as an essential prerequisite of the biobased economy so that the development of sustainability criteria is supported.

The innovation contract focuses on six work packages in the period from 2012 to 2016, i.e. biobased materials, bioenergy and biochemicals, integrated biorefineries; optimized cultivation and biomass production; recovery and recycling of water, nutrients and soil; and economy, policy and sustainability. The Dutch government's com-

mitment to promoting a biobased economy is also reflected in so-called green deals, which support the biobased business sector by improving the framework conditions.

Within the green growth strategy (2013), the biobased economy is mentioned as one priority

area of future green economy activities. The strategy integrates the goals of the preceding strategy papers. It particularly promotes R&D and demonstration projects aimed at the cascading use of biomass.

REFERENCES

Annevelink, B.; van Ree, R. (2014, November). IEA Task 42 Country Report. The Netherlands (NL). Retrieved from: http://www.iea-bioenergy.task42-biorefineries. com/web/file?uuid=2e1bbf36-f594-479a-b3b9-8c4afd83cd9f&owner=4298a73f-639c-4472-a75e-a7e06a7c6858

European Commission. (2014). National bioeconomy profile Netherlands [country profile]. Retrieved from: https://biobs.jrc.ec.europa.eu/sites/default/files/generated/files/country/National%20Bioeconomy%20Profile%202014%20The%20Netherlands_0.pdf

The National Non-Food Crops Centre (NNFCC). (2015). Bioeconomy Factsheet – Netherlands [Fact sheet]. Retrieved from: http://www.nnfcc.co.uk/publications/bioeconomyfactsheet-netherlands The Netherlands. Ministry of Economic Affairs. (2013). The Biobased Economy in the Netherlands. Retrieved from: http://www.biooekonomie.de/BIOOEKO/Redaktion/PDF/biobased-economy-niederlande,property=pdf,bereich=biooeko,sprache=de,rwb=true.pdf

The Netherlands. The Cabinet. (2012). Hoofdlijnennotitie Biobased Economy. Retrieved from: http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2012/04/02/hoofdlijnennotitie-biobased-economy.html

The Netherlands. The Government. (2013). Groene Groei: voor een sterke, duurzame economie. Retrieved from: http://www.rijksoverheid.nl/onderwerpen/duurzame-economie/documenten-en-publicaties/kamerstukken/2013/03/28/kamerbrief-groene-groei-voor-eensterke-duurzame-economie.html