



This factsheet gives an overview of the Dutch bioeconomy innovation technology system. It includes the key government interventions, research initiatives, networks and finance instruments, in the Netherlands .

Bioeconomy Governance

Bioeconomy is mainly governed by:

- Cabinet of Economic Affairs, Agriculture, and Innovation
- Regional development agencies



Bioenergy and Biofuels

The **Energy Agreement for Sustainable Growth** is an agreement based on a long-term growth path, defined by energy and climate objectives, competitiveness, employment, and exports. It brings together more than forty organisations – including government, employers' associations and unions, environmental organisations, and other civil-society organisations and financial institutions.

The Netherlands implements the RED Directive 2009/28/EC in their **National renewable energy action plan**, which is linked to the Dutch Environmental Management Act.

Incentives

- **GAVE** supports the development of climate-neutral fuels
- **SDE+** supports renewable electricity, gas, heat and CHP

Bioeconomy Strategies

Strategy documents:



Commissie
Duurzaamheidsvraagstukken
Biomassa

- **Hoofdpijnennotitie Biobased Economy** (2012) is a mid- and long term vision and strategy for the biobased economy. The strategy was the result of an on-going interaction between business, society, and science, stimulated by policy makers, including Sociaal-Economische Raad (SER), and the Commissie Duurzaamheidsvraagstukken Biomassa (CDB).

- **Groene Groei: voor een sterke, duurzame economie** (2013) jointly addresses economic growth and environmental improvement, and continued support for the bioeconomy.

The Dutch Government have also coordinated *agreements* between stakeholders, to align strategies towards a bioeconomy:

Manifest Bio-based Economy

- The **Manifest Bio-based Economy** (2011): signed by 43 stakeholders (business and NGOs), to support the development of a sustainable biobased economy.
- **Green Deals:** co-operation between Government and societal initiatives, to develop sustainable projects, by removing obstacles and achieve more rapid results, eg. for community renewable energy projects.
- The **Innovation Contract for the Biobased Economy** is a joined agenda of over 100 companies developed by industry and research organisations in 2012, containing working packages from more basic research to valorisation.



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Research & Technology Funding



The **MKB innovatieregeling** (MIT) program aims to strengthen the knowledge based bio-economy through R&I, funding technical feasibility studies, knowledge vouchers, R&D cooperation projects, innovation and performance contracts, networking and valorization activities.

The **TKI Biobased program** facilitates the cascading use of biomass, funding:



- **Innovation Projects** on biorefinery and conversion
- **Reduction Projects** on electricity, heat and green gas

The Netherlands Enterprise Agency support projects, including 40 pioneering projects in biomass in the **Programme for Sustainable Biomass** (NPSB).

Bioeconomy sectors feature in NL's **TopSector** initiative.

Regional development funds for RDI.

MIT 2014 funding for SMEs in Transport, Agro/Food, Life Sciences, Chemicals and Energy sectors (inc. bio based projects).

R&D Tax breaks

- **WBSO scheme** (Salaries Tax and Social Insurance Contributions (Reduced Remittances) Act (WBSO 2014) widely used innovation grants for entrepreneurs, research institutes and self-employed.
- **RDA subsidy** (Research and Tax Deduction) offers tax deduction from profit before taxes. to subsidise costs and expenses for R&D.

Technology Commercialisation Centres



The **Biobased Delta** cluster has a **Centre of Expertise Biobased Economy** (CoE EBBE) that serves as a knowledge centre, for education and R&D on sustainable biomass (algae and agricultural waste), green building blocks, sustainable process technologies with closed loops.



BE-BASIC's Bioprocess Pilot Facility, located in Delft, is a unique centre of expertise and technology where companies and knowledge institutions, from all over the world, can develop new sustainable production processes.

Climate Change Policy

Climate Agenda: Resilient, Prosperous, and Green outlines a climate approach assembling climate measures, adaptation and mitigation.

Finance

Some financial options available to bioeconomy companies:

- **Starterslift Preseed Loan**
- **Regional Funds**, eg. BOM Venture Capital



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Networks

Public-private partnerships

- The High Level Group Biobased Economy
- The Bio-renewable Resources Platform
- **BE-Basic** (Biobased Ecologically Balanced Sustainable Industrial Chemistry) develops industrial biobased solutions for a sustainable society. BE-Basic is a consortium of large industries, SME's, knowledge institutes and academia, coordinated by Delft University of Technology.



The **Netherlands Offices for Science and Technology (NOST)** Network, activities include producing special reports on the **Bio-based economy in Netherlands**

Clusters

Each region has its specific opportunities and characteristics, e.g. existing infrastructure such as ports, but also existing industry or agriculture. An overview of local initiatives is on the **Dutch Biobased Economy website**. For example:



Biobased Delta further develops South-western collaborations. This region is a frontrunner in biobased economy, due to it's well-developed agricultural and chemical sectors, geographical location, and public and private collaborations. The Biobased Delta 2013–2016 business plan is a follow-up to the **Agro Meets Chemistry development strategy** (2010)



Bio Base NWE

The Bio Base NWE network represents leading biobased economy experts, advising entrepreneurs from across Europe on how to develop new ideas into marketable products, from the first feasibility study or market analysis up to funding and investment scenarios.

BioBase NWE Project:

<http://www.biobasenwe.org/en/home/>





This factsheet was produced by
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