



NNFCC

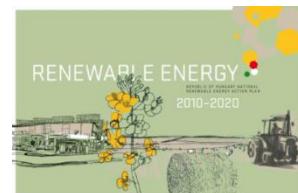
The Bioeconomy Consultants

Bioeconomy Factsheet - Hungary

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

Bioenergy and Biofuels

In the energy sector, The **Hungarian Renewable Energy Utilisation Action Plan 2010-2020** is based on the EU Renewable Energy Directive 2009, and aims to exceed legal requirements of renewable energy production.



In addition, the **National Energy Strategy 2030** (2011) suggests measures for biomass based solutions, including the gradual conversion of uncultivated land to energy crops and the recognition of biomass and waste as potential feedstocks for biotechnology-based economy (pharmaceuticals, fine chemicals and advanced biofuels). The strategy identifies that development requires training, and a stronger industrial and innovation knowledge base.

For renewable energy and waste-to-energy production, feed-in-tariffs are in place, under the framework of **The Electricity Act 2007**. For biofuels the obligations of the EU Renewables Directive are implemented.

Bioeconomy Governance

The multiple aspects of bioeconomy are split between:

- Ministry of Agriculture
- Ministry for National Economy
- Ministry of National Development



Bioeconomy Strategies

Currently, there is no dedicated strategy or policy framework aiming for the formation of the Hungarian bioeconomy, and due to its complexity, the responsibilities are not clear and interfaces are not provided. However, there are policies which cover aspects of the bioeconomy.

The **National Environmental Technology Innovation Strategy** 2011 is a framework for eco-innovation within the Hungarian **National Reform Programme**. The vision of the framework is to facilitate environmental industries and technology, to focus on environmental innovation, reduce primary material use, encourage reuse and recycling, and prevent environmental problems.



The Hungarian Government also approved the following strategies to improve sustainable development, innovation R&D, the economy and employment in various sectors:

- **National Rural Development Strategy**
- **New Széchenyi Development Plan**
- **National Research and Development and Innovation Strategy 2020**



NNFCC

The Bioeconomy Consultants

Bioeconomy Factsheet - Hungary

Climate Change Policy

The Hungarian implementation framework for the UNFCCC and Kyoto Protocol, was **The Climate Change Act 2007**, which contains measures for mitigation and adaptation 2008-2025, and the adoption of the **National Climate Change Programmes** (NCCP).

Finance



Besides the aforementioned Operational Programmes, the **Hungarian Green Investment Scheme (GIS)** funds measures to reduce greenhouse gases, with revenue created from trading surplus greenhouse gas emission allowances, following the Kyoto Protocol. These funds are usually allocated to facilitate energy efficiency investments in the domestic sector.

Technology Commercialisation Centres

While there are many research groups at different universities and research organizations investigating aspects of the bioeconomy, including training programmes for start-up companies (for example Climate-KIC), there is no dedicated bioeconomy centre covering all aspects of the bioeconomy plus providing SME/start-up support.

Research & Technology Funding

Finance for R&D actions is covered from several sources. The largest funds are the:

- **National Research, Development and Innovation Fund (NKFI)**
- **Hungarian Scientific Research Fund (OTKA)**
- **Operational Programmes** for the period of 2014-2020



The most relevant **Operational Programme** to bioeconomy, is the **Environment and Energy Efficiency** Operational Programme. Priority areas for this OP include adapting to climate change, waste water management, waste management and energy efficiency. While other OP's focus on R&D and SME development.

Also, the **European Economic Area Agreement** and **Norway Grants** are accessible for Hungarian partners, with programmes including Green Innovation, Energy efficiency, Renewable energy, and Adaptation to climate change.

Networks

The most important bioeconomy related networks and associations active in Hungary are:

- The **Hungarian Biotechnology Association**, which aims to support development of national life sciences, by winning governmental support, promoting collaboration, international representation, and publishing documents such as the Biotechnology in Hungary Sector report.
- The **Hungarian Bioethanol Association** founded by all 11 Hungarian ethanol industry actors, are active in lobbying, knowledge transfer, supporting research, and organising events, to promote bioethanol use in Hungary.
- The **Hungarian Biogas Association** is an informal intellectual working group which carries out scientific activities, research, education and the distribution of information.
- The **LEADER Association of Bükk-Region** has members from local public and business communities, in North-East Hungary, supporting projects for sustainable development, clean technologies, and decentralised renewable energy.



Biohorizons

The Biohorizons project and survey focused on consulting stakeholders across the bioeconomy, to identify areas for growth, opportunity, and barriers to innovation.



Biohorizons Project:

<http://www.climate-kic.org/projects/biohorizons/>

LinkedIn: <http://linkd.in/1dPjX7R>

This factsheet was produced by
Biohorizons partners



More Bioeconomy
Factsheets can be found here:
www.nnfcc.co.uk/publications/
enquiries@nnfcc.co.uk

