

# Biobased Economy

'Combining agro and chemical'



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### Status

In October 2007, Minister Verburg of Agriculture, Nature and Food Quality presented the government vision on the biobased economy in the energy transition to the Lower Chamber of Parliament, in part on behalf of the Ministers of Economic Affairs (EZ), Housing, Spatial Planning and the Environment (VROM), Development Cooperation (OS) and Transport, Public Works and Water Management (V&W). Trade and Industry at LNV was the secretary and project leader for the vision and worked with the Interdepartmental Programme directorate on Energy transition to implement the vision. The Green Paper on Energy Transition from the Platform for Green Resources was a source of inspiration for the government vision.

### Facts and figures

- Since the end of the 19th century, non-renewable resources have been popular. These resources are now under pressure.
- Approximately 8% of the natural resources in the chemical industry are renewable. McKinsey expects a growth up to 20% in 2010 due to industrial biotechnology.
- As of 2007 the obligatory mixing of 2% bio-fuels will be implemented in the Netherlands.

### Period

Ongoing

### Parties involved

Trade and Industry; EZ, VROM, V&W, Finance, Foreign Affairs; market parties, Wageningen UR, and other knowledge institutes.

### More information

Ministry of Agriculture,  
Nature and Food Quality  
Department of Trade and Industry  
Irene Mouthaan  
telephone +31 (0)70 378 44 75  
e-mail i.m.mouthaan@minlnv.nl  
Cornelis Mijnders  
telephone + 31 (0)70 378 41 76  
e-mail c.mijnders@minlnv.nl



agriculture, nature  
and food quality

*A biobased economy uses renewable green resources to produce chemicals, materials, products and transport fuels as well as to generate energy. This contributes to sustainable economic development. A biobased economy relies on effective collaboration between the agrofood sector, the chemical industry and logistics.*

### Context

The concept of a biobased economy is gaining ground worldwide and offers all kinds of opportunities for the Dutch business sector. Biomass is seen as a 'green' raw material that can be used in the chemical industry and other non-food sectors to produce products and materials such as plastics, adhesives and paints, and to produce fuel and generate energy. This process usually involves some form of biotechnology. As far as the Netherlands is concerned, the prospect of using residual and by-product flows generated by the agrofood industry is of particular interest. This development is driven by the desire to strengthen the economic competitive position of the business sector, to address the problem of climate change, to reduce waste and the distribution of environmentally hazardous substances, and to be less dependent on oil. In the USA, Canada and Japan, as well as in EU countries such as Germany, France and the United Kingdom, the government is committed to developing a biobased economy.

### Areas of challenge

While Biobased Economy has a strong international character and is dependent on continuous changes, the areas of challenge appear and disappear. Business and government face the opportunity to acknowledge these areas of challenge.

### Particular aspects

There are significant economic opportunities for the Netherlands in the production of high-grade applications. Greater sustainability can be realised by making full and intelligent use of the available resources and by-product and residual flows.

### Challenges

The transition to a biobased economy faces two challenges. Firstly, the development of new technology to convert green resources needs to be accelerated. Secondly, a wide range of parties (including the Ministry of Economic Affairs (EZ), the Ministry of Housing, Spatial Planning and the Environment (VROM) and the business sector) need to work together to promote and implement the concept.

### Compatibility with Ministry policy

Since 2005 the Interdepartmental Programme on Energy transition functioned as a framework for the Ministry of Agriculture, Nature and Food Quality (LNV) and other ministries to develop a biobased economy. The Platform for Green Resources is a collaborative effort between representatives of companies, knowledge institutions and NGOs. The platform acts as a mediator in society. The mission statement of Trade and Industry is to reinforce the international competitive position of the agrosector in the Netherlands and make this sector more sustainable.

### Benefits

The business sector stands to gain from these developments, which ensure an improved economic competitive position and contribute to the national economy and a sustainable society. The biobased economy offers an alternative to oil, which is both scarce and expensive. Products can be made more safely and with less risk to health. This also appeals to consumers.