



# PLATFORM BIOBASED RAW MATERIALS

## BIOMASS, HOT ISSUE

### SMART CHOICES IN DIFFICULT TIMES

**The deployment of biomass for energy and materials has been broadly debated during the past year. Bio-energy is often held responsible for the recent food crisis and the devastation of rain forests - and doubts have been raised as to its effect on the climate. The joint Dutch Platforms in the Energy Transition have seized the opportunity to review their position on bio-energy. The result is the book "Biomass, hot issue – Smart choices in difficult times".**

The Platforms agree that concerns on bio-energy are serious. Production of bio-energy should not compromise food supply. Meanwhile the Platforms maintain that the deployment of biomass is essential to the development of a sustainable energy supply. The Platforms wish to sustain ambitious goals in the use of bio-energy, on the condition that this is done *in a sustainable and intelligent way*, allowing agriculture to feed the world. The discussion on the sustainability of bio-energy is essential. The Platforms are looking for a balance in this discussion. Scientific evidence shows that agriculture can produce sufficient food *and* energy and materials to meet world demand, if priority is given to the improvement of agricultural productivity all over the world.

The conservation of biodiversity and the preservation of natural environments are of paramount importance in an intelligent use of biomass potential. Improved productivity of crops is sought: less use of fertilizer and water and higher yields. Agricultural practices that have positive effects on the environment, labour conditions and local economies in producing countries, are actively promoted. The efficiency of the whole chain, from crop to food and use of bio-energy, is improved continuously, resulting in reductions in emissions of greenhouse gases. Byproducts are put to use. New varieties with high yields are developed. And new products and new applications are developed using new technologies.

Smart crops and smart technologies are essential to intelligent use of biomass. Such crops and technologies are developed in great numbers. The first step is to consider the use of the whole crop. Byproducts can be deployed for production of energy and materials. Woody crops and high-yield grasses can cover dormant, marginal and degraded land, and – if food supply permits – also agricultural land. Smart technologies can improve efficiency of both energy and materials chains, as well as the food chain. Clear guidelines and consistent regulation on bio-fuels can lead to a thriving energy source that does not threaten world food supply.

The Platforms therefore conclude:

- Biomass has the potential to play an important role in a sustainable supply of energy and materials;
- There is no reason to wholly embrace or entirely reject bio-energy. In view of the risks, the Platforms call for an intelligent and responsible use of bio-energy;
- According to the latest research (if priority is given to improvements in agricultural productivity all over the world), sufficient supply of bio-based raw materials can be developed to fulfill both the increasing demand for bio-energy and bio-materials, and the increasing demand for food and feed;
- Biomass chains with good greenhouse gas scores are to be promoted;
- Efficiency in all chains (food, feed and energy) will have to rise continuously, by use of the whole crop and chain integration;
- Biobased raw materials offer new opportunities for economic activity, both in The Netherlands and in developing countries, and create a new source of income for farmers across the world;
- Certification of biomass, monitoring of food supply and of macro-effects on land use are of crucial importance for successful deployment of bio-based raw materials;
- A rapid development of new technologies that foster high chain efficiencies (in particular biorefinery, biocascading and second generation technologies) are required to alleviate the tensions between high ambitions of present (European) policies and (present and future) world agricultural production.

If mankind uses biomass intelligently, and respects the boundaries outlined, a large potential of bio-energy can be developed in a responsible way.

#### **The book**

The publication "Biomass, hot issue – Smart choices in difficult times", is an initiative of the Biobased Raw Materials Platform.

The Platforms New Gas, Chain Efficiency, Sustainable Mobility and Sustainable Electricity Supply worked closely together with the Biobased Raw Materials Platform.

Part of the publication is an overview of Facts & Figures. The publication can be downloaded from the internet site, or ordered by e-mail.

#### **More information**

Platform Biobased Raw Materials

Edith Engelen, secretary

t +31 46 420 2351

e [groenegrondstoffen@senternovem.nl](mailto:groenegrondstoffen@senternovem.nl)

[www.creative-energy.org](http://www.creative-energy.org)

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