

Biomass Futures - An Introduction

Why the Interest in Biomass?

Biomass as a source of energy for electricity, heat and transport is expected to be an important constituent of Europe's future renewable energy mix. It offers the potential to provide reliable energy, sourced more securely than fossil fuels, the diversification of supply and could be used to rapidly ramp up Member States renewable energy usage. As such many EU countries are looking to biomass as an expanding source of energy that will be fundamental to the delivery of national 2020 targets under the renewable energy Directive (2009/28/EC).

Within the renewable energy Directive, and the Commission's template setting out guidance for National Renewable Energy Action plans, the importance of biomass to help deliver our energy needs is repeatedly highlighted. In a review by IEEP efforts by the 27 Member States' thus far toward delivering the 2020 targets, biomass was repeatedly highlighted as a source for the future (IEEP, 2009) with a particular emphasis on heat and transport. At present, however, there remains knowledge gaps over the sourcing of this biomass to meet this expanded needs, so too the scale of anticipated demand. While biomass offers a potentially important resource questions remain:

- how can Europe deliver on this biomass potential sustainably?
- what role can biomass play in meeting the renewable energy targets?
- what will be the demand and how does this interact with supply?
- how can diverse and continually increasing demands for energy from biomass be satisfied?

'Biomass Futures' will help to clarify these issues offering improved interpretation of requirements and a basis for more accurately predicting supply, demand and associated impacts. As such the outputs will be of particular use to those preparing National Renewable Energy Action Plans and overseeing the implementation of the renewable energy Directive nationally.

How Can 'Biomass Futures' help?

Biomass Futures is a project funded by Intelligent Energy Europe that brings together the leading experts on biomass for energy research in Europe. These partners are all renowned for their work independently, but this offers the opportunity to bring together their models, understanding and expertise to provide clearer messages to policy makers and stakeholders.

Our Aims

- **Support** - for policy makers and stakeholders helping to interpret, navigate and assess the rapidly evolving field of biomass requirements
- **Harmonisation** - creating a common starting point for research and decision making
- **Integration** – bringing together Europe's key data bases and models to provide better understanding of supply, demand and impacts of biomass as energy
- **Clarification** – over availability, supply, demand and market segmentation - how biomass resources might be used for energy and distribution across the different sub-sectors

The Partners

- **Imperial College, London** – team leaders – demand modelling
- **International Institute for Applied Systems Analysis (IIASA)** – supply modelling
- **Centre for Renewable Energy Sources (CRES)** – energy crops
- **Alterra** – Wageningen University and Research Centre – land use modelling
- **Öko Institut** – Institute For Applied Ecology- sustainability modelling
- **Energy Research Centre (ECN)** – energy modelling
- **Institute for European Environmental Policy (IEEP)** – policy analysis and support

Upcoming outputs

- **Supporting National Action Plan and Engagement in EU Policy Decisions**
 - **Briefings** on policy developments and issues for consideration on biofuels – End Nov onwards and continue throughout the duration of the project. To sign up to receive briefings on biomass policy developments please contact cbowyer@ieep.eu
 - NREAPs and relationship to biomass;
 - Interpreting highly biodiverse grasslands in the renewable energy Directive;
 - The EU Verification procedures and approval of round tables
 - Consultation on biomass sustainability criteria – evaluating the options
 - Sourcing Jatropha, a case study
 - WTO rules and biomass – an analysis
 - Responding to the forecast documents from Member States
 - The state of biomass supply in Europe
 - Responding to proposals on ILUC
 - Responding to proposals on sustainability for biomass
 - **Workshop on Incorporating Biomass into National Action Plans** – 25 March in collaboration with the BAP Driver Project
 - Consideration of implications of Member State forecast documents
 - Conclusions on the approaches adopted to Biomass Action Plans in Europe and their effectiveness
 - Evaluation of impacts of additional, anticipated future EU requirements
 - To register interest please contact cbowyer@ieep.eu
 - **Guide to EU laws that Impact Biomass for Energy** – Requirements, impacts and next steps – July 2010

Finding Out More

- Details of research and publications from Biomass Futures can be found at www.biofutures.org
- To discuss the research being conducted and register interest in results or stakeholder participation please contact c.panoutsou@imperial.ac.uk
- To register to receive updates and briefings from the team contact cbowyer@ieep.eu