

## The BioGrace-II project will

- Produce an Excel-based GHG calculation tool for electricity, heat and cooling from biomass
- Support policy makers in several EU member states to follow a harmonised approach
- Use feedback from companies to improve the tool
- Train the trainers of verification systems on bioenergy GHG calculations

## Partners in the BioGrace-II consortium



## Workshops and feedback sessions

### Public workshops

- Presenting and discussing policies of European Member States on harmonising GHG calculations
- Explaining the BioGrace GHG tool
- All stakeholders are welcome: producers, tradespeople, verifiers, consultants, researchers and other companies

### Feedback-sessions

- Company representatives and other stakeholders are invited to give feedback on the usability of the Excel tool, the user manual, the calculation rules, and the methodological background document
- Starting when the first version of the Excel tool will be ready in spring 2013

### Verifiers – Train-the-trainers sessions

- Featuring GHG calculation of liquid biofuels as well as of solid and gaseous biofuels for electricity and heat
- Practising the BioGrace and other recognised tools
- Aiming at trainers of all European and national certification schemes

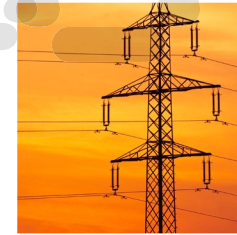
- ▶ Please check dates and locations online!
- ▶ Let us know if you want to participate in the workshops or feedback sessions!
- ▶ Subscribe to our newsletter!

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## Imprint

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# BIOGRACE II

Harmonised greenhouse gas calculations of electricity, heating and cooling from biomass in Europe

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# BIOGRACE II

Harmonised Greenhouse Gas Calculations for Electricity, Heating and Cooling from Biomass

## BioGrace-II seeks harmonisation

In 2009 the European Union set sustainability criteria for liquid biofuels with the legislation of the Renewable Energy Directive and the Fuel Quality Directive.

In the project BioGrace (I) running from 2010 to 2012 a greenhouse gas (GHG) calculation tool was developed for those liquid biofuels. By March 2012 seven Member states had officially referred to the tool, another five intended to do so.

In 2010 the European Commission published recommendations for sustainability criteria for electricity, heat and cooling from solid and gaseous biomass.

The project BioGrace-II now aims to harmonise calculations of GHG emissions for electricity, heat and cooling from biomass. The approach will base on the European Commission report COM(2010)11 on this subject and the follow-up of this report that is expected in 2012. The project period is 2012 to 2015.

## Share your knowledge and experience

All future users are warmly invited to regularly give feedback and help to improve that single GHG calculation tool for Europe that the BioGrace-II consortium is going to create.

There will be three public workshops and nine smaller feedback sessions in 2013 and 2014 to comment on the preliminary versions of the tool. Hosting countries will be Austria, Belgium, and the Netherlands.

## BioGrace-II provides a single GHG calculation tool for companies and verifiers

Report COM(2010)11 gives GHG emission savings of some 30 solid and gaseous biomass production pathways and states a formula for economic operators to perform own calculations: Total GHG emissions are the sum of emissions from cultivation, processing and transportation of the biomass.

Yet the report neither gives any methodological background nor specifies standard values to convert production inputs into emissions – e.g. the emissions typically caused by a cargo ship per tonne and kilometre.

The BioGrace-II project will retrace and publish how the default values were calculated and elaborate a comprehensive GHG calculation tool featuring:

- A list of standard values
- An Excel tool that will:
  1. Show how the standard values in the report were calculated
  2. Allow stakeholders to make calculations themselves
- A user manual
- Detailed calculation rules
- A methodological background document

The screenshot displays the BioGrace-II Excel tool interface. The main window shows a spreadsheet with various data tables and summary sections. The title bar reads "BioGrace-II Excel tool\_Template 1.xls". The spreadsheet content includes:

- General settings:** Includes checkboxes for Electricity, Heat, and Cooling, and a "Track changes" option.
- Overview Results:** A table showing GHG emissions for different energy carriers (Electricity, Heat, Cooling) and their allocation factors.
- Conversion efficiencies:** A table listing efficiencies for electricity, heat, and cooling.
- Calculation per phase:** A detailed breakdown of emissions for various stages:
  - Feedstock is a residue:** Shows yield and moisture content.
  - Forestry residues collection including stump harvesting and chipping:** Shows energy consumption and emissions.
  - Transport of wood chips:** Shows transport per km and emissions.
  - Wood pellet/briquette production:** Shows yield and emissions.
- Allocation factors & references:** A table showing allocation factors for electricity and heat.
- Fossil fuel references:** A table showing GHG emissions for different fossil fuels.

Draft of the Excel GHG calculation tool for electricity, heating and cooling from biomass