

Report of the first Public Company Workshop (D5.2)

30 October 2013

Project IEE/11/733 SI2.616371 BioGrace-II

1. Rationale and goals of the workshop

Once the methodological background document and the first version of the BioGrace-II Excel-based GHG calculation tool were finalized, the BioGrace consortium decided to organize the first round of feedback sessions in order to give an introduction on the tool and specially to receive feedback from companies for improvements. Therefore these feedback sessions target small groups with the purpose of being more interactive and to give to all the participants the opportunity to give their feedback. After this first round of feedback sessions, the tool was improved according to the suggestions done by the participants.

Four months after the first round of feedback sessions was finalised, the BioGrace consortium decided to organize this Public Workshop in Brussels on 30 October to reach all companies throughout Europe. The target group of the workshop was broader than in the feedback sessions and includes companies that would like to comply with sustainability criteria for solid biomass but also verifiers, consultants, researchers and policy makers.

This workshop is aimed to disseminate information from BioGrace-II and the first version of the GHG calculation tool but also to raise awareness on how Member States are harmonising GHG calculations for electricity and heat from biomass and the progress of the European Commission in this regards.

2. Technical information about the workshop

AEBIOM has been the partner responsible to organize this one day public workshop. It was dated on October 30, 2013 and located in Brussels.

Invitations were sent by AEBIOM, BE2020, ANL and VREG to all the participants of the first round of feedback sessions plus other interested stakeholders.

Finally, 56 people confirmed the participation plus 6 project partners. Many other invited companies have regretted explicitly not being able to participate due to other appointments and they requested to be informed of future feedback sessions or workshops and the progress of BioGrace-II project. A complete participant list can be found in the annex of this report.

The draft version of the GHG tool together with the BioGrace-II calculation rule on efficiency and the summary of the output from the 1st round of feedback session (D5.1) was sent beforehand to all the participants. They were asked to already work with the tool concentrating on user-friendliness and send as any comments they have. Besides with all these documents they can better prepare the workshop.

The extended agenda can also be found in the annex. The major items of the workshop have been:

1. Update of the latest policy developments
 - A. Update on the Commission report on biomass sustainability
 - B. Presentation on the UK policy developments
2. The BioGrace II project
 - A. Project presentation: aims, outline and state of results
 - B. Structure of the draft excel tool, general approach
3. Special methodological issues
 - A. BioGrace-II calculation rules
 - B. Specific functions of the tool

3. Overview of the workshop along the agenda

▪ The BioGrace-II GHG calculation tool – General

John Neeft (coordinator of Biograce II) opened the workshop, welcoming participants and giving an overview of the BioGrace II project. He introduced the project aims, outline and state of results, clarifying the role that BioGrace II shall play on the level of policy implementation. John explained that some of the current discussions are not yet applicable at the level of a tool like BioGrace (e.g. forest carbon stock changes, indirect land use change). BioGrace will not include such topics in the tool before policy makers have decided (based on scientific input) to include these issues into legislation and to amend the GHG calculation methodology.

The major work of the project will be to build the tool in line with the (soon) given default values, to involve stakeholders and to foster European harmonisation.

Susanne Köppen (IFEU) presented the BioGrace-II GHG calculation tool: the structure, overview results, allocation factors, references and the general settings. Through an actual calculation she explained the results obtaining per phase and the principle of the calculation. Susanne gave an overview of the structure of the list of standards values and the possibility for the user to define standards values.

▪ Policy - what are the latest policy developments in the field of sustainability criteria for electricity, heat and cooling from biomass

Giulio Volpi from DG ENER informed about the latest developments and proposals by the Commission. He admitted a hesitancy of a legal proposal coming in the short term as parliament could not adopt it in this period before the elections. Therefore he announced that the DG ENER will publish an informative report (an update of COM(2010)11) early 2014 but not any mandatory criteria is foreseen.

Consequently at the beginning of 2014 there will be an update of the guidelines produced in 2010: land criteria, GHG accounting and sustainable forest management.

Giulio Volpi emphasised the necessity of harmonized GHG calculations in EU Members States: “It is clear that biomass will play a key role and we need to be sure that we will have the same standards”

Besides the sustainability criteria for solid biomass, Giulio also made an update of other policy issues as for example iLUC and the update of Annex V (relevance for BioGrace-I).

Caroline Season from the Office for Renewable Energy Deployment (ORED) in UK gave an overview of the UK biomass sustainability criteria and the solid biomass and biogas calculator that was developed by E4Tech and that is used in the UK to show compliance with the UK sustainability criteria for solid biomass and for biogas. She presented UK as a success case study that has achieved large carbon reductions in the last year but that still has a long way ahead to increase the energy supply from renewables. UK developed his own GHG calculator in which they are still working : adding default values, reviewing the establishment inputs for energy crops, including the option of chipping/grinding at plant in pellets production... and as many other improvements they can afford within the budget they have.

Caroline presented the next steps on the UK biomass sustainability criteria as the following:

- Drafting of the legislation (the Renewable Obligation Order 2014) now underway – covering changes to the reporting requirements such as GHG trajectories, sustainable forest management and the audit/assessment.
- ROO 2014 will refer to a separate document setting out how the UK-TPP principles apply to woodfuel used under the RO.
- Ofgem (the regulator) will update their current RO biomass sustainability reporting guidance for generators to reflect the changed criteria.
- Improved supporting materials on the use of evidence to demonstrate that woodfuel is legal and sustainable will be developed for the UK CPET (Central Point of Expertise for Timber procurement) website.
- Changed criteria are to be brought in on a reporting basis from April 2014, with intention for criteria to become mandatory from April 2015.

▪ The BioGrace GHG calculation tool - Some details

Per Wollin from the Swedish Energy Agency gave an overview of the calculation rules behind the BioGrace-II GHG tool. The draft document with the BioGrace-II specific calculation rules and concretely the electrical and thermal efficiency was sent beforehand to all the participants.

Per explained the purpose of these rules, needed to make actual calculation and achieve a harmonisation within EU. He presented the general BioGrace rules and the specific BioGrace-II rules and explained in depth the rule for determining efficiency.

The BioGrace-II consortium is still working in these rules and the methodological background document, therefore any input/question from the participants are welcome as the main objective is to make the rules understandable.

To close the workshop presentations, Fabio Menten from IFEU presented some specific functions of the BioGrace-II tool and other aspects as the land use change and the N₂O field emissions.

He explained the calculation of emissions from carbon stock change due to Land Use Change and the method for measuring LUC according to Annex V of the RED. He described the general principles of the N₂O field emissions and the Global Nitrous Oxide Calculator (GNOC) developed by JRC. Finally Fabio explained the final conversion sheet of the BioGrace-II tool.

3. Participants feedback

Time was foreseen for questions in the agenda of the workshop resulting in a very interactive meeting. The participants asked many questions during the policy block in order to be updated of the latest developments and give feedback for improvements when the BioGrace-II tool was presented.

At the end of workshop many participants came to the organizers expressing his gratitude for the organization of such interesting workshop and requesting to be informed of future BioGrace feedback sessions, workshops or training.

But in order to give everybody the possibility to express their impression on the workshop, a questionnaire was sent online to all the participants after the workshop.

The questionnaire and the answers can be found in Annex III of this report.

ANNEX I – Agenda public workshop

BioGrace-II Public Workshop

Date: October 30, 2013

Location: Martin's Central Park, Boulevard Charlemagne 80, B-1000 Brussels
Room Topaz

Free of charge

Programme

09.30: Welcome coffee

10.00: Block 1 - Policy - what are the latest policy developments in the field of sustainability criteria for electricity, heat and cooling from biomass

- Giulio Volpi (DG ENER EU Commission)
- Caroline Season (DECC) - UK policy developments.

11.30: Coffee Break

11.45: Block 2 - The BioGrace-II GHG calculation tool - General

- John Neeft (Agency NL) - BioGrace-I versus BioGrace-II, and relation to (1) policy developments and (2) work of JRC for the European Commission
- Susanne Köppen (IFEU) - The BioGrace-II GHG calculation tool, electricity, heat and cooling from biomass

12.45: Lunch

13.45: Block 3 - The BioGrace GHG calculation tool - Some details

- Anders Dahlberg (STEM) - BioGrace-II calculation rules
- Perrine Lavelle (BIO IS) - Some specific functions of the BioGrace-II tool

ANNEX II – List of participants

Name	Country	Organisation
Francies Van Gijzeghem	Austria	ODE BioEnergy platform
Agata Jaskot	Belgium	European Biodiesel Board
Anzalone Laurent	Belgium	ValBiom - UCL
Boogaerts Christophe	Belgium	Vlaco
Denise Green	Belgium	Hart Energy
Emilio Font de Mora	Belgium	EACI
Emmanouil Patavos	Belgium	Interel
Francies Van Gijzeghem	Belgium	ODE BioEnergy platform
Gauthier Libeau	Belgium	Conseiller adjoint - Promotion des énergies renouvelables Commission Wallonne Pour l'Énergie - CWaPE
Giulio Volpi	Belgium	ENER
Johan Carels	Belgium	manager
Kenneth Rose	Belgium	CONCAWE
Franz Kirchmeyr	Belgium	European Biogas Association
Luca Colonna	Belgium	IFRI (French Institute for International Relations)
Mark Fleureck	Belgium	EC
Miet Van Dael	Belgium	VITO
Natalia Chmelkova	Belgium	CMI group
Pierre-Yves Cornélis	Belgium	Commission Wallonne Pour l'Énergie - CWaPE
Silvia Vivarelli	Belgium	EACI - European Commission
Susanna Litmanen	Belgium	European Biogas Association
Vanaken	Belgium	OVAM
Willem Vandamme	Belgium	ELECTRABEL GDF SUEZ / MAX GREEN
Mirko Tunjiät	Croatia	Biodizel Vukovar
Anna Harnmeijer	Finland	MHG Systems Oy
Hanne Siikavirta	Finland	Ministry of Employment and the Economy
Joseph Lunet	France	Directorate General for Energy and Climate - Ministry of Ecology, Sustainable Development and Energy
Thomas Siegmund	Germany	Bundesverband BioEnergie e.V. BBE
Alessandra Caramia	Italy	BUREAU VERITAS
Emanuele Bianco	Italy	GSE
Isabella Bruno	Italy	GSE SPA
Marco Ugolini	Italy	Care For Engineering
Līga Hermāne	Latvia	Latgran Ltd
Arjen Brinkmann	Netherlands	Brinkmann Consultancy
Brands	Netherlands	Ecoson
Eric Evers	Netherlands	DEKRA Certification B.V.
Femmy Bakker	Netherlands	E.ON Benelux
H. Croezen	Netherlands	CE Delft

BIOGRACE II

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

Jan Iepsma	Netherlands	NL Agency
Jorn Bronsvooort	Netherlands	Quality Services Certification
Mariel Rouschop	Netherlands	Quality Services Certification
Sipke Castelein	Netherlands	NL Agency
Willem-Jan van Zeist	Netherlands	Blonk Cosultants
Agnieszka Laskowska	Poland	EPA
Michal Cierpialowski	Poland	Quality Assurance Poland
Igor Veres	Slovakia	MoE SR
Lydia Ostradicka	Slovakia	Slovak Hydrometeorological Institute
Ondrej Studenec	Slovakia	Slovnaft
Goizeder Barberena	Spain	CENER - National Renewable Energy Centre
Jonas HÅglund	Sweden	IVL Swedish Environmental Research Institute
Mireille Faist Emmenegger	Switzerland	Quantis
Caroline Season	UK	DECC
Helen Scholey	United Kingdom	Shell
Laszlo Mathe	United Kingdom	4Forests.eu
Laura Craggs	United Kingdom	Drax Power Limited
PROJECT PARTNERS		
Fabio Menten		BIO IS
Per Wollin		STEM
John Neeft		AgNL
Susanne Köppen		IFEU
Veerle Buytaert		VREG
Cristina Calderón		AEBIOM

Supported by



www.biograce.net

BIOGRACE II

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

ANNEX III – Feedback questionnaire

BIOGRACE II

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

PUBLIC WORKSHOP : Participants' feedback

Block 3 - The Biograce II GHG calculation tool-Some details

Anders Dahlberg (STEM) - BioGrace-II calculation rules
Perrine Lavelle (BIO IS) - Some specific functions of the BioGrace-II tool

2. Do you have further remarks on some presentations?

Block 1 - Policy, latest policy developments

Giulio Volpi (DG ENER EU Commission)
Caroline Season (DECC) - UK policy developments

Block 2 - The Biograce II GHG calculation tool-General

John Neefi (Agency NL) - BioGrace-I versus BioGrace-II, and relation to (1) policy developments and (2) work of JRC for the European Commission
Susanne Köppen (IFEU) - The BioGrace-II GHG calculation tool, electricity, heat and cooling from biomass

3. Has the workshop met your expectations?

4. Do you have any remarks/comments about the Biograce II GHG calculation tool?

Submit

Below the answers we received:

Supported by



www.biograce.net

BIOGRACE II

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

Submission Date	2013-11-05 03:51:46
Full name (not obligatory)	[REDACTED]
E-mail	[REDACTED]
Block 1 - Policy, latest policy developments	5
Block 2 - The Biograce II GHG calculation tool-General	5
Block 3 - The Biograce II GHG calculation tool-Some details	4
	It was a very good mixture of the latest policy developments and an explanation of the use of the Biograce tool. Just what I needed.
	Has been useful for us in making some rough calculations on different levels of complexity. I have to use it more often to give a further opinion.
Submission Date	2013-11-04 11:34:12
Block 1 - Policy, latest policy developments	5
Block 2 - The Biograce II GHG calculation tool-General	5
Block 3 - The Biograce II GHG calculation tool-Some details	5
	Very good and clear presentations.
	Yes
	Not for the moment

Supported by

BIOGRACE II

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

Submission Date 2013-11-04 08:36:56

Full name (not obligatory)



E-mail



Block 1 - Policy, latest policy developments

4

Block 2 - The Biograce II GHG calculation tool-General

5

Block 3 - The Biograce II GHG calculation tool-Some details

3

The presentations were useful, but I think it would have been more helpful if there had been a demonstration of the tool: walking through carrying out a real GHG calculation and how you input data into the tool.

I did expect to go into further detail of the calculations sitting behind the spreadsheet, and for a larger discussion on how real-life situations can be applied to the tool.

- A final values sheet would be useful – many pellet plants use a mix of different feedstocks (e.g. 70% sawmill residues, 20% forest residues and 10% thinnings) – it would be helpful if the outcomes of your calculations were summarised on a final sheet, where you can include the % of each feedstock and it calculates a weighted average final value.
- Clarity needs to be provided on how to use the tool. I appreciate that the calculation rules have not been released yet, but I think they need to include the detail of the example below, to ensure that every user is carrying out calculations in a consistent way. Example: in the response to the first round of feedback, you have stated that waste wood would be defined as 'industry residues'... and you need to amend the moisture content to suit waste wood. If you were also using sawdust in this calculation – how would this be handled? Would you need to duplicate the sheet and run 2 separate calculations (one which uses the moisture content for waste wood, and one using the moisture content for sawdust)? Or would you use a weighted average of the moisture content for sawdust and waste wood within the same sheet?
- The calculation for the emissions from pelleting isn't particularly transparent, when you click into cell I88 (emissions per MJ wood pellets), this seems to only take diesel energy consumption into account; however cell I88 does change when you edit the electricity consumption value (C87)
- It was discussed within the workshop that electricity emissions factors will be country-specific, but I can't see this within the BioGrace tool, is this planned for the next update of the tool?
- What are the rules of changing the efficiency of each

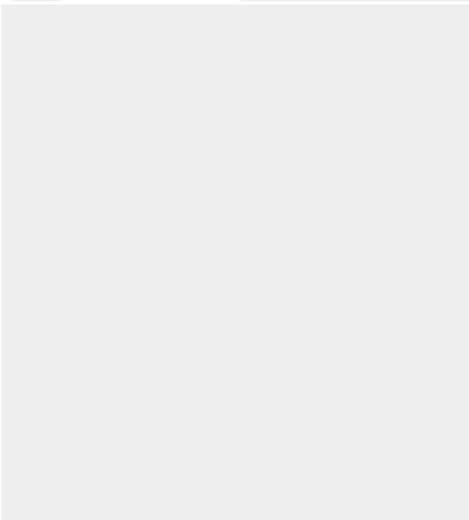
Supported by



www.biograce.net

BIOGRACE II

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



stage? For the yield of the pellet production stage, there are hidden rows below the pelleting module, so you cannot see how the yield has been calculated. It would be useful to see this for transparency

- Every time a user carries out a calculation outside of the tool, it increases the risk of human error. Although I appreciate that users of the tool should all be able to carry out simple conversions, it would be helpful to have these conversions on a sheet within the tool – to ensure every user uses the same conversion factors
- It is not particularly user-friendly to ask users of the tool to add rows and manipulate formulas. Although you would expect users to have this level of Excel knowledge, again, it increases the risk of human error in the tool. This also means that verifiers will need to check the detail of each formula in the tool, to ensure that these have been amended correctly.

Submission Date	2013-11-04 03:41:11
Full name (not obligatory)	
E-mail	
Block 1 - Policy, latest policy developments	5
Block 2 - The Biograce II GHG calculation tool-General	2
Block 3 - The Biograce II GHG calculation tool-Some details	3
	No remarks
	It would have been nice to fill in one example

Supported by



www.biograce.net

BIOGRACE II

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

Submission Date	2013-10-31 15:02:55
Full name (not obligatory)	
E-mail	
Block 1 - Policy, latest policy developments	4
Block 2 - The Biograce II GHG calculation tool-General	4
Block 3 - The Biograce II GHG calculation tool-Some details	4
	only partly
	<p>Remarks on de draft version 1.0.4</p> <p>1. the possible pathways for biogas does not al all correspond to the current situation of entrants for biogasplants in Belgium. Their are allmost no plants with more than 250 kWe-power with a single entrant (maize or manure).</p> <p>The majority of the bigger plants (>250kWe) use a mix of the following 5 entrants: a)solid manure; b) liquid manure; c)energy crops; d) solid organic waste; e) liquid organic waste. S a selection of these inputs should be possible in a specific Belgian biogas plant-pathway. Consequently also each of these entrants have different transport-methods and costs. And also the anaerobic digestion of each of these entrants has different biogas yieflds and DryMatter conversions.....</p> <p>If all these could be considered in one special pathway then You will be able to cover almost all biogasplants in Belgium. (I think this works also for all the other Eu-countries.)</p> <p>K rgds</p> 
Submission Date	2013-10-31 09:16:28
Block 1 - Policy, latest policy developments	5
Block 2 - The Biograce II GHG calculation tool-General	5
Block 3 - The Biograce II GHG calculation tool-Some details	4

Supported by



www.biograce.net