

D6.1

Short report

on GHG Training session for verifier trainers (biofuels)

Date: April 10+11 2013

Location: Office IFEU, Heidelberg (D)

Programme and participants

The programme and the list of participants and trainers are given in the Annex to this report.

Impression

The attendance was quite high – there were 15 participants. Most participants came from German certification bodies and the Agency regulating and surveying the bioenergy certification. 3 participants came from other national systems. The participants were highly motivated.

The training was given by trainers from IFEU in a number of blocks, focussing on (1) GHG calculations under RED and FQD in general (background, different tools), (2) How to verify actual calculations; (3) questions, discussions and (further) examples and exercises; and (4) CHP, Land use change and N₂O field emissions.

Participants actively raised questions and joined discussions. They were highly motivated to do as many exercises as possible. Also during the exercise phases, many questions were raised and discussed. This was possible as the course was designed to be interactive with the trainers walking around and assisting the participants with the exercises.

Evaluation

At the end of the training, the participants were asked to fill out a response form evaluating the training and asking for possible improvements. Also the trainers evaluated the training and reflected about possible improvements.

Evaluation by participants

The evaluation of the participants resulted in the following feedback and suggestions:

- A general outcome of the training (based on the evaluation form) is that:
 - 100% of the participants indicated that the training course did meet their expectations;
 - 44% of the participants indicated that they can now check actual calculations; and
 - 33% of the participants indicated that they feel that they can train verifiers on this subject.
- The participants appreciated most the topics (numbers referring to the programme in the Annex):
 - 5. Calculation rules with some examples
 - 13. Exercise including land use change and N₂O field emissions
 - 14. Questions, discussion, definition of open ends and follow-up action points
 - 4. Basic calculation – Example & Exercise
 - 8. German tool example & exercise of basic calculation
 - 11. CHP (natural gas, lignite, straw), natural gas boiler

- 12. Land use change and N₂O field emissions
The average score for these topics was 4.4 to 4.6 out of 5, so quite high.
- The participants appreciated less (gave the lowest scores in relevancy) to the topics:
 - 10. Questions from participants, discussion or further examples
 - 4. Basic calculation example and exercise
 - 7. Tools for calculations: RSB, ENZOAverage scores for these 4 topics ranged from 3.5 to 3.7 out of 5.
- The participants could add remarks on the evaluation form. The most relevant remarks were:
 - Shorten introduction of background and theory a little bit to get more time for practice regarding the tools; alternatively plan more days than 2 for training
 - send the participants exercises to practice; they should send the results back for correction
 - More practice
 - Send presentations before so that participants can make notes to it
 - All materials should be sent at least two weeks before training
 - The verification examples were very useful, followed by the worked examples / exercises
 - A verification checklist would be extremely helpful (e.g. is track changes on - yes/no etc.)
 - Examples and exercises should be worked on more in detail (e.g. the N₂O field emissions)
 - The introduction of the Spanish and UK tools is too abstract without any results to our praxis
- One of the participants suggested in a separate mail to include risk assessment as part of the course. Verifiers are confronted with a large amount of information and also a large amount of GHG calculations, so they need to make choices on which information to look at in more detail. The participant suggested to pay attention in the training to this risk-based selection process that a verifier is confronted with, and to pay attention to the factors in the GHG calculations where the largest risks on significant deviations can be found. Also this suggestion will be discussed in the BioGrace consortium.

Evaluation by trainers

The overall impression was that the participants learned gained a good level of knowledge during the training. Especially the many exercises and question / answer slides on verification where useful and highly appreciated. Despite the rather large group (15 participants) there was a cordial and concentrated working atmosphere during the whole training. All participants had a good enough knowledge of GHG calculation under the RED so that no detailed question had to be answered in this context. Participants were motivated to do the remaining exercises at home and use the material for training their colleagues. Two participants even asked us to issue a certificate that would allow them to act as trainers themselves. Also the evaluation form revealed the great satisfaction of the participants.

Most of the participants where from Germany and quite interested in the German tool ENZO₂. A whole exercise was dedicated to an exercise on ENZO which was appreciated by most of the participants. Most of the exercises where done in parallel at the screen and by the participants. The trainers walked around to assist the participants with the exercise. We felt that this approach was very helpful to make

sure that all participants could finalise the exercises. The same is true for the handouts distributed before the training that contained all input data for the exercises.

Still there are points of attention:

- As in Utrecht, also in Heidelberg participants still are not confident that they can verify actual GHG calculations, even after a 2-days training. Not even half of them consider themselves as able to check and verify actual calculations. Also during the training participants had difficulties to find the mistakes in the verification exercises even at the second day. The problem is that most of them did not have a profound knowledge of the BioGrace calculation rules. However, this is necessary for verification. Apparently, the training period is too short to gain this knowledge when starting from zero.
- Although participants seemed to have good knowledge on GHG balancing under the RED, the knowledge regarding Excel and the most common formulas differed widely. As the BioGrace tool is rather complex, participants with less good knowledge of Excel got lost when more complicated structures (e.g. CHP) were implemented in the tool. Walking around and providing assistance made sure that everybody was able to finalise their exercises.
- More time is needed to do also exercises on more complex issues such as building a completely new pathway or make major changes in an existing pathway. This is especially true if participants are not completely familiar with Excel (see above).
- A problem when using the 'for compliance version' of the tool was that changes could not be undone. Thus, when someone made a major mistake (including / copying a wrong row) he had to start all over again. A suggestion is to work with a version without track change mode.
- To allow for a better preparation of the training a short questionnaire was sent to the participants before the training. Unfortunately, it was answered only by one person so it did not provide a lot of useful input to the training.
- Also a short calculation exercise was sent around to familiarise the participants with the BioGrace tool. However, most participants were not able to fill in the exercise. Partly this was due to the problems with the track change mode that caused Excel to crash. Maybe the exercise was still too complex.

Annex – Programme and List of participants and trainers

Programme

GHG calculation course for verifier trainers (Biofuels)

April 10 + 11, Heidelberg

Day 1 – April 10, 2013

9.00 - Start of programme

9.00 – Welcome and introduction (15 min)

9.15 - BLOCK 1: GHG calculations under RED and FQD

9.15 – 1. Background of GHG calculations – (15 min)

9.30 – 2. Introduction on GHG calculation tools (15 min)

9.45 – 3. Tools for biofuel GHG calculations under RED and FQD (45 min)

Spanish GHG calculator

UK GHG calculator

BioGrace

10.30 Coffeebreak (15 min)

10.45 - Continuation of BLOCK 1

10.45 – 4. Basic calculation – Example by teacher, exercise by participants (45 min)

11.30 – 5. Calculation rules with some examples (45 min)

12:15 Lunch (45 min)

13.00 - BLOCK 2 – How to verify actual calculations

13.00 – 6. Discussion: what do verifiers need to look at, what kind of information they use? (20 min)

13.20 – 7. Tools for biofuel GHG calculations under RED and FQD (30 min)

German GHG tool

Round table Sustainable Biofuels GHG calculator

13.50 – 8. German tool example of basic calculation by teacher, exercise by participants (45 min)

14.35 – 9. Exercise on an actual verification (45 min)

15.20-15.40 Tea break

15.40 BLOCK 3 – Questions, discussions, further examples

15.40 – 10. Questions from participants, discussion or further examples (80 min)

17.00 End of Day 1

Day 2 – April 11, 2013

9.00 - BLOCK 4 – CHP, Land use change, N₂O field emissions

9.00 – 11. CHP (natural gas, lignite, straw), natural gas boiler (30 min)

9.30 – 12. Land use change and N₂O field emissions (45 min)

10.15 Coffee break (15 min)

10.30 - Continuation of BLOCK 4

10.30 – 13. Exercise including CHP (30 min)

11.30 – 14. Exercise including land use change and N₂O field emissions (60 min)

12.00 Lunch (45 min)

12.45 - BLOCK 5 – Final issues and closure

12.45 15. Questions from participants, discussion or further examples, open ends or follow-up action points (75 min)

14.30 16. Evaluation of training course (30 min)

15:00 End of programme

List of participants and trainers

Scheme	Company	Name	Surname	Country
Slovak national Scheme	Ministry of Environment of the Slovak Republic	Igor	Vereš	Slovak Republic
UK national scheme	UK Department for Transport	Keeley	Signal	UK
Austria national scheme	Environment Agency Austria	Ralf	Winter	Austria
German national scheme	Bundesanstalt für Landwirtschaft und Ernährung (BLE)	Steffen	Albrecht	Germany
	Bundesanstalt für Landwirtschaft und Ernährung (BLE)	Andre	Tech	Germany
	Bundesanstalt für Landwirtschaft und Ernährung (BLE)	Sven	Jeutter	Germany
	Bundesanstalt für Landwirtschaft und Ernährung (BLE)	Doreen	Schmidt	Germany
	Bundesanstalt für Landwirtschaft und Ernährung (BLE)	Josef	Kuntscher	Germany
Various (Certification body)	Dekra Certification	Jos	Bertholet	The Netherlands
Various (Certification body)	GUT Zertifizierungsgesellschaft mbH	Peter	Behm	Germany
Various (Certification body)	GUT Zertifizierungsgesellschaft mbH	Sabine	Schumacher	Germany
Various (Certification body)	agro Vet Lebens- und Umweltqualität Sicherungs GmbH	Matthias	Grill	Austria
Various (Certification body)	Intertek Certification GmbH	Martin	Grass	Germany

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BIOGRACE II

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

Various
(Certification body)

Intertek Certification GmbH

Heiko

Zeller

Germany

Various (auditor)

Deutsches
Biomasseforschungszentrum
(DBFZ)

Karolina

Kapsa

Germany

Trainer

Company

IFEU

Name

Surname

Country

Trainer

IFEU

Susanne

Köppen

Germany

Trainer

IFEU

Horst

Fehrenbach

Germany

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