Short report  
on GHG Training session for verifier trainers (biofuels)  

Date: September 10+11 2012,  
Location: Office NL Agency, Croeselaan 15, Utrecht (NL)  

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

Impression  
The attendance of the training was higher than expected; the organisers aimed for 8 participants and got 11 participants (with more verifiers interested). The participants were highly motivated, although the start level of the participants was different which had some effect on the training (see further below). The training was given by trainers from Agency NL (also organising the training), BIO IS and IFEU. The training was given 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, (4) CHP, Land use change and N2O field emissions, and (5) discussion. Participants actively raised questions and joined discussions, sometimes also outside the scope of the training. A number of participants put forward a request to make a change to the BioGrace Excel tool, in order to make it possible to use in the tool the results of previous and partial calculations expressed in g CO2eq per kg of product (instead of per MJ of biofuel). On day 2 it was discussed in further detail what should be put on delivery notes to the economic operator that uses such results as input, in order to allow a verifier to verify the complete calculation. The BioGrace coordinator promised to take this point to both the consortium and to the European Commission who assesses the tool to be a recognised scheme.  

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:  
  o 92% of the participants indicated that the training course did meet their expectations;  
  o 75% of the participants indicated that they can now check actual calculations; and  
  o 73% 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):  
  o 5. Calculation rules with some examples  
  o 6. Discussion: what do verifiers need to look at, what kind of information they use?  
  o 9. Exercise on an actual verification  
  o 10. Questions from participants, discussion or further examples
The average score for these topics was 4.2 or 4.3 out of 5, so quite high.

- The participants appreciated less (gave the lowest scores in relevancy) to the topics:
  - 1. Background of GHG calculations: (for some this was clear and not useful, but others just needed more info, so a bit of a contradiction)
  - 4. Basic calculation example and exercise: (examples/exercises were hard to see, participants do not want to copy only some values)
  - 8. German tool example & exercise (make it more a verifying exercise) (in general spent less attention to other tools)
  - 14. CO2 storage and replacement (leave out new things like CCS and CCR)

Average 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:
  - Don’t make the exercises too difficult;
  - Make more clear instructions and let the other instructors help the participants;
  - Give handouts in the training;
  - Give information how (procedure) to verify calculations and include risk assessment (on which elements to check);
  - Verifiers should participate in giving such a training;
  - Such a course should be available in the long run for verifiers and trainers. It could be updated and maybe put-online, including explanations;
  - Include more exercises (less examples);
  - Maybe give an exercise of adding a full new module as homework;
  - Discussion from/with group is valuable.

- One of the participants suggested verbally to make a video of the training and to put this on the internet, so that the training will be available for a much larger amount of verifier trainers and verifiers. This suggestion will be discussed in the BioGrace consortium.

- 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 evaluation by the trainers resulted in the general feeling that the training was valuable for the participants as they have learned about GHG calculations and verification of such calculations. Participants seemed to be happy with the various exercises to experiment the new knowledge and to reuse this material in the future, either by themselves or to prepare courses that they will give themselves. The approach to have long and short exercises and examples, in order to keep the
participants’ attention, seems to have worked well. The evaluation forms by the participants learn that overall they are satisfied. Still there are points of attention:

- Participants still seemed to feel afraid of verifying actual GHG calculations, even after a 2-days training. This learns us (the trainers) that the subject is difficult and that verifying actual calculations is amongst one of the more complicated tasks that a verifier will encounter. Of course, two days of training will never replace ten years of practice. It could also be that the trainers are more pessimistic on this point than the participants are themselves, as 75% of them indicated on the evaluation form at the end of the training to be able now to verify actual calculations.

- The different level of knowledge that the participants had at the start of the training hindered fast progress at some points of the training. Some of the participants did not have a good knowledge of the regulatory context and it seemed also not to be their main interest. The trainers conclude that a good knowledge of the relevant parts of the RED and some experience with at least one GHG calculation tool should be mandatory for participants. Otherwise, detailed discussions and exercises may overburden participants with less knowledge. Before the next training, ANL, BIO IS and IFEU will together define the minimum required start level of knowledge to be allowed in the training.

- For quite some of the participants the presentations on other tools (national tools, RSB tool) have not been of much use as they were much more interested in BioGrace and as the relatively short presentations on the other tools did not allow to really get acquainted with these tools. Therefore the trainers discussed on leaving out these presentations on other tools than BioGrace. However, it was on request of EACI and the Commission that the training is a general GHG calculation training rather than a BioGrace training. The BioGrace coordinator will contact EACI (and through EACI the Commission) on this point. The trainers conclude that in the next courses we will try to focus more on verification: where are possibilities for changes and which mistakes can occur.

- Block 4 on complex issues like N₂O calculations, LUC and improved agricultural management and CHP’s and excess electricity was highly appreciated by the participants, including the exercises on this topic. Also the detailed part on BioGrace calculation rules was highly appreciated. The trainers conclude from this feedback by participants that in the next trainings the time for the theoretical background has to be reduced so that more time can be spend on the practice (examples and exercises) including the difficult topics.

- For the exercises, we will consider to work with handouts for a better readability. And, especially for longer exercises, the trainers can walk around and assist people.

- A large number of exercises is very welcome, participants should be encouraged to do exercises at home that were not completed during the training.

- The trainers suggested preparing the following training course by
  1. providing a simple exercise and ask participants to make that before the start of the course;
  2. ask participants to fill out a small questionnaire on experiences with verification.

These feedback, suggestions and points of attention will be taken into account in the next trainings to be organised by IFEU, BIO IS and Agency NL.
Programme

GHG calculation course for verifier trainers (Biofuels)
September 10+11 2012, NL Agency, Croeselaan 15, Utrecht

Day 1 – September 10, 2012

9.00 - Start of programme
9.00 – Welcome and introduction (15 min)

9.15 - BLOCK 1: GHG calculations under RED and FQD – NL Agency
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 – NL Agency
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 –IFEU
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 – NL Agency
15.40 – 10. Questions from participants, discussion or further examples (80 min)

17.00 End of Day 1
Day 2 – September 11, 2012

9.00 - BLOCK 4 – CHP, Land use change, \(N_2O\) field emissions – BIO-IS
9.00 – 11. CHP (natural gas, lignite, straw), natural gas boiler (30 min)
9.30 – 12. Land use change and \(N_2O\) field emissions (45 min)

10.15 Coffee break (15 min)

10.30 - Continuation of BLOCK 4 – BIO-IS
10.30 – 13. Exercise including land use change and \(N_2O\) field emissions (60 min)
11.30 – 14. \(CO_2\) storage or replacement + example (30 min)

12.00 Lunch (45 min)

12.45 - BLOCK 5 – Final issues and closure – NL Agency
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

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Company</th>
<th>Name</th>
<th>Surname</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>2BSvs</td>
<td>Bureau Veritas</td>
<td>Christian</td>
<td>Piat</td>
<td>France</td>
</tr>
<tr>
<td>ISCC</td>
<td>ISCC</td>
<td>Lydia</td>
<td>Pforte</td>
<td>Germany</td>
</tr>
<tr>
<td>NTA8080</td>
<td>Responsible Bizz</td>
<td>Giovanni</td>
<td>Wawoe</td>
<td>Netherlands</td>
</tr>
<tr>
<td>REDCert</td>
<td>RED Cert</td>
<td>Donka</td>
<td>Dimitrova</td>
<td>Germany</td>
</tr>
<tr>
<td>RSB</td>
<td>AB training</td>
<td>Liviu</td>
<td>Amarie</td>
<td>Italy</td>
</tr>
<tr>
<td>RSBA</td>
<td>Abengoa</td>
<td>Reyes</td>
<td>Barrado</td>
<td>Spain</td>
</tr>
<tr>
<td>RSPO</td>
<td>RSPO</td>
<td>Melissa</td>
<td>Chin</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Slovak national scheme</td>
<td>Brinkmann Consultancy</td>
<td>Arjan</td>
<td>Brinkmann</td>
<td>Netherlands</td>
</tr>
<tr>
<td></td>
<td>Slovak Hydrometeorological Institute</td>
<td>Miroslav</td>
<td>Mikovec</td>
<td>Slovakia</td>
</tr>
<tr>
<td></td>
<td>WWF</td>
<td>Kate</td>
<td>Anderson</td>
<td>USA</td>
</tr>
<tr>
<td></td>
<td>SGS</td>
<td>Henk Jan</td>
<td>Olthuis</td>
<td>Netherlands</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Name</th>
<th>Surname</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL Agency</td>
<td>John</td>
<td>Neef</td>
<td>Netherlands</td>
</tr>
<tr>
<td>NL Agency</td>
<td>Simone</td>
<td>Te Buck</td>
<td>Netherlands</td>
</tr>
<tr>
<td>IFEU</td>
<td>Susanne</td>
<td>Köppen</td>
<td>Germany</td>
</tr>
<tr>
<td>BIO-IS</td>
<td>Perrine</td>
<td>Lavelle</td>
<td>France</td>
</tr>
<tr>
<td>BIO-IS</td>
<td>Gregoire</td>
<td>Thonier</td>
<td>France</td>
</tr>
</tbody>
</table>