



Meeting Minutes

WP8 – 4th WP Leaders Meeting

Date: 27-10-2016
Time: 13:30 – 15:00
Location: Skype

Participants

Anne-Belinda Bjerre	DTI (Coordinator & WP8 leader)
Bert Groenendaal	SIOEN (WP1 leader)
Xiaoru Hou	DTI (WP2 leader)
Ana López Contreras	DLO (WP3 leader)
Wouter Huijgen	ECN (WP4 leader)
Jaap van Hal	ECN (WP5 leader)
Jonna Fry	ERM (WP6 leader)
Rita Clancy	EURIDA (WP7 leader)
Dimitar Borisov Karakashev	DTI (member of DTI management group)

Agenda

1. Approval of the last DRAFT meeting minutes
2. Update news for the next project meeting (Ana)
3. Advisory Board membership update & discuss (Jaap)
4. Update WP1 (Bert)
5. Update WP2 (Xiaoru)
6. Update WP3 (Ana)
7. Update WP4 (Wouter)
8. Update WP5 (Jaap)
9. Update WP6 (Jonna)

9. Update WP7 (Rita, Anne-Belinda)
 - Blog update (Rita)
 - 1st newsletter (Rita)



- General presentation slides (Rita)
 - Brussels contractor 15 Sep (Anne-Belinda)
10. Update WP8: Management (Anne-Belinda)
- Presenting the new member of MacroFuels' DTI management team: Dimitar Borisov Karakashev

Minutes of meeting

1. Appointment of Scribe (Secretary)

Xiaoru Hou will make minutes.

2. Approval of DRAFT meeting minutes

Approved

3. Action Items

Will be noted with ACT x and highlighted by green letters in the following minutes.

4. Update news for the next project meeting (Ana)

The 2nd project meeting (GA meeting) will be held on Wageningen Food & Biobased Research and the draft of meeting Agenda has been sent to the whole consortium, waiting for comments.

Anne-Belinda suggested to add more scientific input in the project meeting, e.g. overview of red, brown and green seaweed composition.

Bert suggested to add an extra part of workshop, in which people in the related area e.g. the members from the (potential) advisory board list can be invited for discussion and clarification especially for the legislation related questions.

Rita suggested to focus more intensively on the cross topics in this GA meeting e.g. policy/legislation, common data share (storage, maintenance, & access). People from the EU commission e.g. the Cabinet could be invited for the meeting. **ACT1: Rita will send to Jaap the potential list of the policy/legislation guiders in the “biofuels/bioengine” area.** Ana mentioned a colleague (name?) who is experienced in biofuel legislation issues. **ACT2: Jaap will take a further discussion with Rita about the possible invitations, and he will take the responsibilities for these invitations.**



Bert supplemented that the legislation/policy problem is very important and he would rather prefer to adjust the dates of the GA meeting if needed, in order to make sure the availability of the peoples with legislation/policy knowledge.

Anne-Belinda suggested to put this “workshop” or extensive discussion of legislation/policy issues in the GA meeting agenda (e.g. under WP7 frame).

ACT3: Ana will take responsibility for adjusting the meeting Agenda and send the adjusted one to the consortium for common approval.

5. Advisory Board membership update & discuss (Jaap)

Jaap has sent out the description of the MacroFuel perspectives to the potential Advisory Board (AB) members, from whom Shell BioDomain (UK) showed the possible interest. They questioned if MacroFuels would like to invite them for only advising on the fuels or advising the whole value chains of seaweed-biofuels. **ACT4: Jaap will keep contacting them for further discussion.**

Jonna has contacted Statoil for their interest to be in AB however did not get any feedback yet. **ACT5: Jonna will try to contact Statoil again and feed back to us.**

Bert also tried to contact some but without success up to now.

ACT6: Anne-Belinda will try to contact Novozymes’ representative who is in the consortium of DTI’s another coming project.

ACT7: Rita suggested to contact the European Technology Platform and she will figure out if there is any still active Biofuel platform.

ACT8: Jaap will update the list of AB potential members, after off-line discussion with Rita, Bert and Anne-Belinda. AB needs in total 3 members.

6. Update WP 1 (Bert)

SIOEN is working on finalizing the last substrate production. The produced substrates e.g. ribbons, nets, sheet has been sent to the cultivation partners e.g. SAMS and AU. SAMS has started the deployment of brown seaweed for next year. By the end of November, everything should be in water.

Anne-Belinda initiated a discussion of the fouling problems from the September harvested seaweed biomass especially on *Saccharina* from SAMS. It was agreed that:



- **ACT9: Bert will add a discussion/presentation of the biomass quality in the 2nd project meeting in (FBR) under WP1 topics. The appearance and biomass composition difference will be presented and strategies for ensuring biomass quality will be discussed.**
- **ACT10: Xiaoru will call in a new tele meeting between WP1 and WP2 for more detailed discussion including the quick biomass composition determination (for harvesting strategy). Besides WP1 and WP2 partners, Jaap and a representative person from AU will also be invited.**

7. Update WP 2 (Xiaoru)

Next WP2 meeting will be held on 1st November. The WP2 partners have received biomass from SAMS- DTI has done the test of oven-drying at three different temperatures for the separated less-fouling *Saccharina* frozen samples from SAMS. The Biomass Technology section in DTI is developing HPLC in their own lab, and hopefully the first run could start within one month. For the moment, **ACT11: DTI will send 20 HPLC samples to ECN, asking for sugar composition analysis.** These samples are for the first overview of 1) the composition difference between heavily-fouling, less-fouling, and air-dried-as-a-whole *Saccharina* samples from SAMS; 2) any possible sugar degradation during the drying process under 3 different temperatures. Xiaoru will have a more detailed discussion with Wouter after the meeting.

All the other tasks e.g. Screw Press (DTI), Enzymatic hydrolysis (MATIS, DTI) and ensiling treatment (DTI, FEXP) are ongoing as planned.

8. Update WP 3 (Ana)

FBR has received the enzymatic hydrolysate (pilot scale hydrolysate from *Laminaria*) from DTI, and extracted laminarin (from SAMS' *Saccharina*) from ECN. FBR are at the moment working on analyzing the substrates and testing the different hydrolysis methods (enzymatic hydrolysis & chemical hydrolysis) for producing the fermentable sugar monomers. Hopefully by the end of the year, the fermentation of ABE will start.

For enzymatic hydrolysis, Anne-Belinda suggested to make a protocol and use the “uniformed” enzymes for making the fermentation substrates, so that the results of fermentation can be comparable. **ACT12: WP2 and WP3 will have a further meeting for such discussion.**

9. Update WP 4 (Wouter)

Things are on track. Exploratory tests are ongoing. Conversions of sugars such as xylose to furans have been tested on both seaweeds and hydrolysate produced from WP2 (using *Palmaria* and *Ulva* from SAMS). Next phase will be to work on the process optimization e.g. yield and selectivity. The possible beneficial effect of salts will be investigated.

10. Update WP 5 (Jaap)



Besides the AB issues as discussed before (see point 5.). Jaap will work on getting AB members involved in advising the engine test. The initial scenarios of minimum required amount of seaweed hydrolysate for producing enough liquid biofuels for engine test have been established. **ACT 13: The other quality requirement of fuels e.g. maximum allowed percentage of water content in the liquid biofuels etc. will be informed hopefully by the end of this year, after consulting the partner of DTI Engine test.**

11. Update WP6 (Jonna)

ACT 14: The scoping document will catch up and send the draft around to all the WPs next week (the beginning of November) for comments. The Deliverable D6.1 “Definition of the scope of the sustainability assessment for the MacroFuels project” will be finished by the end of December.

12. Update WP 7 (Rita)

1st news letters have been sent with good opening rate and clicking rate. General presentation slides have been sent out to the consortium. **ACT15: 1st Blog about cultivation was a little delayed, but Adrian from SAMS promised that it will be ready by the end of October.**

ACT 16: Rita is also working on the script for the MacroFuels film, and the script draft is on the way to be sent around within the WP leaders circle for comments.

In September, Anne-Belinda and Jaap have been in the EERA-Bioenergy in Denmark. Anne-Belinda and Bert have been to Brussels a meeting with EU contractors and the new project officer for MacroFuels. MacroFuels was presented with good feedbacks.

Ana mentioned that FBR is working on the CO₂ fixation by *Clostridium* now, and they are looking forward to any possible interests/collaborations.

13. Update WP8: Management (Anne-Belinda)

Anne-Belinda thanked to all the WP leaders for the smooth operation in MacroFuels and introduced the new colleague Dimitar Borisov Karakashev who is going to join the management group of MacroFuels helping with project daily management issues. Dimitar will also take responsibility of DTI’s ensiling task in WP2 and fermentation task in WP3. Dimitar gave a brief background introduction. He worked previously as senior scientist in DTU and has extensive experience in the field of thermoanaerobic bacteria fermentation, biogas production, liquid biofuels production *etc.*

14. Other business



Ana mentioned that their institution has changed name to “Wageningen Food & Biobased Research”. The logo was also changed. There is no need of amendment in ECAS system, since the name of their institute in all involved projects will be changed automatically. **ACT17: But Ana will send the new initiative & logo to Dimitar and Rita, for being revised on all the future dissemination relating with “FBR” e.g. logos and initials on the template of MacroFuels presentation slides.**

Noted by Xiaoru Hou, revised by Wouter Huijgen & Jaap van Hal 03. Nov. 2016