



Meeting Minutes

WP2 – 4th WP Meeting

| Date: | 10-Jan-2017 |
|-----------|--|
| Time: | 10:00 - 12:45 |
| Location: | Hotel "De Wageningsche Berg", Meeting room 1 |

Participants

| Name | Company/Institute |
|----------------------------|-------------------|
| Xiaoru Hou | DTI |
| Anne-Belinda Bjerre | DTI |
| Jelle van Leeuwen | WFBR |
| Nicole Engelen | WFBR |
| Paulien Harmsen | WFBR |
| Miriam Budde | WFBR |
| Wouter Huijgen | ECN |
| Jaap Van Hal | ECN |
| Bryndís Björnsdóttir | MATIS |
| Guðmundur Óli Hreggviðsson | MATIS |
| Antoine Moenaert | MATIS |
| Ed de Jong | AVT |
| Ben McKay | AVT |
| Rene Schepens | FEXP |
| Jens Legarth | FEXP |
| Michele Stanley | SAMS |
| Arlene Ditchfield | SAMS |
| Adrian Macleod | SAMS |
| Ana Lopez Contreras | WFBR |
| Truus de Vrije | WFBR |

Agenda

• Welcome and introduction of the meeting (Xiaoru)

- Biomass request (Xiaoru Hou)
- Feedback of year 2016 received biomass (e.g. quality, quantity)?
- Confirm the biomass request for year 2017





- Task 2.1 Conditioning & Storage of macro-algae by de-watering, silaging and drying (Xiaoru)
- Screw-pressing
- Oven drying
- Plan for next 6 months b
- Task 2.2 Storage and pretreatment by biological and chemical ensiling (Xiaoru)
- Lab-scale ensiling test
- Plan for next 6 months
- Task 2.3 Enzymatic hydrolysis of macroalgal polysaccharides (Bryndis, Jelle)
- Progress of recombinant enzymes construction and crude results of seaweed hydrolysis
- Plan for next 6 months
- Task 2.4 Fractionation and mild chemical treatment (Wouter, Jelle, Ed de Jong)
- Summarized results from ECN, DLO & AVT about liquefaction and fractionation of seaweed
- Plan for the next 6 months
- Task 2.5 Purification and concentration of algal sugar syrups (Wouter, Jelle)
- Pre-tested results
- Free discussion
- Next meeting

Minutes of meeting

1. Seaweed Biomass Supply

- Update from WP1 was introduced.
- Biomass request for year 2017 from all WP2 partners have been collected and sent to WP1 on 5th Jan 2017.
- Sugar-rich kelp could be expected for year 2017.
- The biomass request for year 2018 should be ready to WP1 before August 2017, to ensure the sufficient deployment.

2. Task 2.1 Conditioning and Storage:

- Results & plan for the next 6 months refer to the presentation slides of "MacroFuels-4th WP2 meeting_T2-1 and T2-2.pdf".
- 3. Task 2.2 Storage and pretreatment by biological and chemical ensiling:





- Results & plan for the next 6 months refer to the presentation slides of "MacroFuels-4th WP2 meeting_T2-1 and T2-2.pdf".
- DTI will provide 1~2 kg ensiled *S. latissima* biomass to ECN, as substrate to be tested for chemical hydrolysis. The delivery is expected to be in Oct-Nov 2017, after getting sugar-rich *S. latissima* from SAMS.

4. Task 2.3 Enzyme pretreatment:

• Results & plan for the next 6 months refer to the presentation slides of "MacroFuels-4th WP2 meeting_T2-3_MATIS.pdf" & "MacroFuels-4th WP2 meeting_T2-3_WFBR.pdf".

5. Task 2.4 fractionation and mild chemical treatment:

- Results & plan for the next 6 months refer to the presentation slides of "MacroFuels-4th WP2 meeting_T2-4_ECN.pdf" & "MacroFuels-4th WP2 meeting_T2-4_WFBR.pdf" & "MacroFuels-4th WP2 meeting_T2-4_AVT_ Zambezi Process.pdf
- ECN is under design, construction and testing of new seaweed processing line (incl upscaling from 20L (current volume) to 100L.
- In year 2017 T2.4 will focus on lab-scale optimization and provision of hydrolysate to WP3 & WP4 kg-scale hydrolysate.

6. Task 2.5 Purification and concentration

- Tests for purification and concentration of sugar syrup by ECN and WFBR have started ahead of the project plan (which is officially started from M12). Results & plan for the next 6 months refer to the presentation slides of "MacroFuels-4th WP2 meeting_T2-5_ECN.pdf" & "MacroFuels-4th WP2 meeting_T2-5_WFBR.pdf".
- Requirement to the concentrated sugar syrups except for salt conc. (e.g. peptide conc., sugar alginates etc.), for the purpose of biofuel conversion, is requested to be sent to T2.5 (Task leader: ECN: Wouter Huijgen) as soon as being realized.

7. Others

- Next project meeting will be held in April by mobilemeeting. Doodle request will be sent by Xiaoru.
- The 8 presentations (as mentioned under 2 6) with detailed research results and plans are available in Members Area.

Noted by Xiaoru Hou