

**Two joint workshops
IEA Bioenergy – BiofuelNet
Campus of University of British Columbia, Vancouver,
Canada**

Workshop 1: September 21, 2016.

Landscape Management and Design for Bioenergy and the Bioeconomy

Workshop 2: September 22, 2016

Mobilisation of Forest Biomass to Produce Bioenergy, Biofuels and Bioproducts: Challenges and Opportunities

UBC Chemical and Biological Engineering Department, 2360 East
Mall, Vancouver, BC V6T 1Z3
2nd floor, room #202



Participation on the both workshops will be available via teleconference, too.

Workshop 1

Landscape Management and Design for Bioenergy and the Bioeconomy

September 21, 2016

Background

With increasing demand for land, often with competing interests, there is a need for improved understanding – and promotion – of biomass production in landscapes that generate multiple ecosystem services and support biodiversity. Governance of land use and other activities shaping our landscapes requires methods to assess impacts on biodiversity and ecosystem services. A multitude of approaches exist that address biodiversity and ecosystem services on different spatial and temporal scales. This diversity is important for advancing science and knowledge, but can create difficulties in situations where governance agreements are to be made.

The advancement of science and knowledge needs to be managed in parallel with processes informing governance based on the current state of knowledge. This is a challenging task, which can be supported through structured information exchange and collaboration engaging researchers and other actors involved with landscape governance.

Description

IEA Bioenergy Task 43 organizes a workshop to highlight research and other activities relating to ***Landscape management and design for bioenergy and the bioeconomy***, in collaboration with BioFuelNet, an integrated community of academic researchers, industry partners and government representatives in Canada who engage in collaborative initiatives to accelerate the development of sustainable advanced biofuels.

Workshop participants will have the opportunity to share views and experiences and, in this way, provide a basis for identifying challenges and opportunities related to landscape management and design. A workshop outcome report is planned, which will summarize important concerns, knowledge gaps and research questions that should be followed up in subsequent activities.

The workshop will provide an important basis for the planning of Task 43 activities in 2017-2018. The workshop will in this way be a good opportunity to network and develop collaborations, and to identify options for engagement in coming activities within Task 43 and BioFuelNet.

Workshop organizing Committee: Biljana Kulišić, Energy Institute Hrvoje Požar (Croatia); Göran Berndes, Chalmers University of Technology (Sweden); Ioannis Dimitriou, Swedish University of Agricultural Sciences (Sweden); Évelyne Thiffault, Université Laval (Canada)

GoToMeeting Invitation

Please join the meeting on 21 September 2016 at 9:00 AM PDT (Pacific Daylight Time) - 6:00 PM W. Europe Daylight Time <https://global.gotomeeting.com/join/953377437>

Use your microphone and speakers (VoIP) - a headset is recommended. Or, call in using your telephone. Ireland: +353 (0) 19 030 053; Australia: +61 2 8355 1034; Austria: +43 7 2088 0716; Belgium: +32 (0) 28 93 7002; **Canada: +1 (647) 497-9372**; Denmark: +45 69 91 84 58; Finland: +358 (0) 923 17 0556; France: +33 (0) 170 950 590; Germany: +49 (0) 692 5736 7206; Italy: +39 0 699 26 68 65; Netherlands: +31 (0) 208 080 759; New Zealand: +64 9 974 9579; Norway: +47 21 04 30 59; Spain: +34 931 76 1534; Sweden: +46 (0) 852 500 691; Switzerland: +41 (0) 435 0026 89; United Kingdom: +44 (0) 20 3713 5011; United States: +1 (669) 224-3319

Access Code: 953-377-437

Audio PIN: Shown after joining the meeting

Landscape Management and Design for Bioenergy and the Bioeconomy

September 21, 2016

UBC Chemical and Biological Engineering Department, 2360 East Mall, Vancouver, BC V6T 1Z3
2nd floor, room 202

Workshop 1 Agenda

09:00-09:30 registration/mingle

09:30- 10:00

Welcome and background on Task 43 WP1

Göran Berndes, Chalmers University of Technology, Sweden

10:00-12:00

Outcome of Task 43 survey in support of planning of work in WP1 in the 2017-2018 period / Biljana Kulišić, Energy Institute Hrvoje Požar, Croatia

Environmental effects of integrating SRC into landscapes / Ioannis Dimitriou, Swedish University of Agricultural Sciences, Sweden

Sustainable intensification of agricultural systems in combination with biorefinery processing can produce more biomass for bioenergy without imposing iLUC, Uffe Jörgensen, Aarhus University; Denmark

Q&A / moderator Göran Berndes

12:00-13:00 Lunch break

13:00-15:00

The BEFS rapid appraisal tool to guide bioenergy strategy development / Luis Rincon, Bioenergy and Food Security Projects (BEFS) Energy Team NRC Division Food and Agriculture Organization of the United Nations (FAO)

Tool for sustainability impact assessment (ToSIA) - a decision support tool for the forestry sector / Évelyne Thiffault, Université Laval, Canada & Jörg Schweinle, Institute of International Forestry and Forest Economics at Thünen Institute, Germany

Landscape management by choosing the optimal land slots for SRC plantations: a fuzzy analytical hierarchical process approach / Biljana Kulišić, Energy Institute Hrvoje Požar, Croatia

Q&A / moderator Ioannis Dimitriou

15:00 – 15:15 Coffee break

15:15 - 17:00

Discussion on WP1 plans for 2017-2018 with concluding remarks / moderators Göran Berndes & Ioannis Dimitriou

Workshop 2
Mobilisation of Forest Biomass to Produce Bioenergy, Biofuels and
Bioproducts: Challenges and Opportunities

September 22, 2016

Background

The Intergovernmental Panel on Climate Change reviewed global energy scenarios in the context of CO₂ stabilization, and reported that by 2050, bioenergy (in replacement of fossil fuels) should provide 80-150 Exajoules (EJ) per year to keep CO₂^{eq} concentration at about 440–600 ppm, and from 118 to 190 EJ for less than 440 ppm CO₂^{eq} concentration. The technical global potential of forest biomass alone could reach 100 EJ. Thus, forest bioenergy feedstocks are set to play a significant role in modern bioenergy production for climate change mitigation. To indicate magnitudes, 100 EJ roughly corresponds to 7.3 X 10⁹ m³ of wood (more than double the current amount of wood harvesting in the world). To reach these levels of forest biomass mobilization, innovative solutions and technological transfer will be needed.

Description

This event aims to bring together stakeholders from different countries to identify and discuss opportunities, challenges, best practices and knowledge gaps in the area of forest biomass mobilization for the sustainable production of bioenergy (including liquid fuels) and bioproducts. The workshop will be built around presenting real case studies concerning the deployment and the development of forest biomass supply chains. These case studies will be selected to cover a range of geographic regions, feedstocks, end-products and the maturity of project development, and a plenary discussion defining/highlighting the critical challenges, opportunities, and best practices.

The workshop will provide the material for drafting a report on best practices and recommendations for mobilization of forest biomass, to be published jointly by BioFuelNet and IEA Bioenergy.

Workshop organizing Committee:

Évelyne Thiffault, Université Laval, Canada

Mark Brown, University of the Sunshine Coast, Australia

Biljana Kulišić, Energy Institute Hrvoje Požar, Croatia

GoToMeeting Invitation

Please join the meeting on 22 September 2016 at 8:30 AM PDT (Pacific Daylight Time) - 5:30 PM W. Europe Daylight Time

<https://global.gotomeeting.com/join/764437725>

Access Code: 764-437-725

Audio PIN: Shown after joining the meeting

Mobilisation of Forest Biomass to Produce Bioenergy, Biofuels and Bioproducts: Challenges and Opportunities

September 22, 2016

UBC Chemical and Biological Engineering Department, 2360 East Mall, Vancouver, BC V6T 1Z3
2nd floor, room 202

Workshop 2 Agenda

08:00-08:30 registration/breakfast

08:30- 08:45 **Welcome and introduction**

08:45-9:45 Presentation of case studies

- **Valorization of low quality and stranded biomass resources in Mission, BC /** Mahmood Ebadian - University of British Columbia, CA
- **Integrating Economic and Environmental Values into Forest Supply Chain Management for Timber and Bioenergy Production from Beetle-killed Biomass in Colorado /** She Ji and Hee Han, Oregon State University, US
- **Logistics of supplying wood pellets to the coal-fired coal plants in Alberta /** Ryan Jacobson, University of British Columbia, CA

09:45 – 10:15 Coffee break

10:15-11:35 Presentation of case studies

- **Sustainability Impact Assessments of Bioenergy Generation from Logging Residues in Canada /** Marian Marinescu, FPInnovations, CA
- **Forest biorefinery - Ecole internationale d'été sur les énergies renouvelables /** Benoît Delcroix - Université du Québec à Trois-Rivières, CA
- **A new approach to biomass supply chain optimization under uncertainty /** David Zamar- University of British Columbia, CA
- **Forest biomass supply chains in Ireland /** Ger Devlin - University College Dublin, IR

11:35-12:00 Plenary session

12:00-13:00 Lunch break

13:00-14:40 Presentation of case studies

- **Forest biorefinery in Latuque, QC /** Benoît Delcroix - Université du Québec à Trois-Rivières, CA
- **Large Scale Transport of Biomass Feedstock through Pipeline for Production of Fuels and Chemicals /** Mahdi Vaezi- University of Alberta, CA
- **Forest biomass supply chains in Italy /** Rafaele Spinelli - CNR-IVALSA, IT
- **Learnings from Low-cost biomass feedstocks Task Force /** Kevin Vessey - St. Mary's University, Nova Scotia, CA
- **Current status and prospects of wood pellet production and trade in Canada /** Shahabaddine Sokhansanj – University of British Columbia, CA

14:40 – 15:10 Coffee break

15:10-16:30 Plenary session

16:30 - 17:00 Wrap up