



IEA Bioenergy

Workshop announcement

## **Sustainability of Bioenergy Supply Chains**

Presentation and discussion of interim results of the IEA  
Bioenergy inter-task project on

**Measuring, governing and gaining support for sustainable  
bioenergy supply chains**

*18-19 May 2017*

*Radisson Blu Scandinavia Hotel*

*Södra Hamngatan 59, Gothenburg, Sweden*

hosted by Chalmers University

# Background and aim

Sustainability of liquid and solid biofuels production is under continued scrutiny, including topics such as iLUC, food vs. fuel, forest carbon accounting and sustainable forest management principles. Sustainability criteria and metrics differ between feedstock and final end use (road transport vs. heat & power, size of end-use, no criteria for aviation, shipping & materials yet). At the same time, the public debate on bioenergy is heated, often based on emotions and political agendas. Part of the controversy is different approaches to governance and the partial or perceived failure of these systems to ensure the sustainability of bioenergy supply chains. Obviously, definitions of 'sustainable bioenergy' also depend on different views and perceptions of stakeholders both within and outside the value chains, and this may confuse the discussion.

To address the challenges embedded in this situation, the IEA Bioenergy inter-task project on "Measuring, governing and gaining support for sustainable bioenergy supply chains" is pursuing three main objectives:

1. To provide an overview and examples of calculation methods & tools to assess the sustainability of various biomass and bioenergy supply chains and discuss needs, possibilities and limitations of global, uniform/harmonized framework.
2. To compare and assess the legitimacy, including effectiveness and efficiency of a variety of approaches on how to govern and verify sustainability of biomass and bioenergy supply chains in different conditions.
3. To understand the positions and underlying motivations of stakeholder groups relative to their perceptions of bioenergy and inform dialogues/discussions to avoid misconceptions and gain trust in bioenergy

This project was started in mid-2016, and under the three objectives, a multitude of studies have been initiated, focusing largely on the agriculture, forestry and biogas sectors (see also the program below).

The aims of this workshop are two-fold:

- 1) To share preliminary project results of the work carried out under the three objectives to an audience of both members of IEA Bioenergy and informed stakeholders from industry, policy, the NGO community and other, and
- 2) To obtain feedback from these stakeholders on the results, identification of possible knowledge gaps to properly address the overall project aim, and issues which should additionally be addressed in the remainder of the project.

Especially with regard to the second aim, there will be ample opportunity to discuss with the project participants and other stakeholders during the workshop.

# General program overview

During the first plenary morning session, the project leaders will introduce the general aims of the project, give an overview of the applied methodologies and how the different parts of the project are interlinked.

Next, in a first parallel session on *measuring sustainability* (objective 1 of the project) presentations will focus on methodological aspects of assessing sustainability of biobased systems, addressing various challenges for LCA and other assessment tools supporting governance. Topics include assessments of the climate effect of forest bioenergy systems and analyses of ecosystem services in landscapes. A second parallel session will cover the topics of sustainability governance and stakeholder involvement with a focus on *agricultural supply chains*. Presentations will cover amongst others the conceptual approach used for the work under objective 2 on trust, credibility and effectiveness of sustainability governance; the sustainability governance of the bioeconomy and policy analysis of governance for sustainable agricultural biofuel in Europe, with a focus on Denmark and Canada. Additionally, the measurement of sustainability parameters in US agricultural systems will be addressed. At the end of day one, a plenary session will be held to report back and discuss the findings of the first day. The first day will be finalized with a joint dinner at the expense of the participants.

On Friday morning, we will have three parallel sessions. The first session will concern the *assessment of the climate effects of bioenergy systems*, where the outcome from O1 sessions on Thursday as well as from previous workshops on the topic will be discussed. The second session will feature *sustainability governance and stakeholder involvement of biogas plants* through three phases of development in Germany and the impact of the legislative framework on the implementation of biogas in Denmark. The third session will focus on *governance and stakeholder involvement on forestry supply chains*, amongst other as set in Quebec and Ontario (both Canada) and the South-East of the US, including international standards for both forestry and agriculture and involve governance approaches and stakeholder involvement for the use of woody biomass for biorefineries and the production of wood pellets.

After lunch, we will continue in plenary, but focus on the *position of supranational stakeholders* on the future role of bioenergy. Preliminary results of a series of consultations of various stakeholders groups on their positions towards bioenergy will be shown, and possibilities will be discussed if – and how – “common ground” on widely acceptable bioenergy supply chains and levels could be reached. The workshop will be finalized with a roundtable discussion. During the final plenary session, we will attempt to draw general conclusions and lessons from the various case studies and identify of possible gaps and issues to address in the remainder of the inter-task project.

# Detailed program overview

Thursday 18 May 2017		
09.00-09.15	General workshop & project introduction. Presenter: Martin Junginger	
09.15-09.30	Introduction to Objective 1. Presenter: Annette Cowie	
09.30-09.45	Introduction to Objective 2. Presenter: Inge Stupak	
09.45-10.00	Introduction to Objective 3. Presenter: Uwe Fritsche	
10.00-10.30	General discussion on approaches	
10.30-11.00	Coffee	
	<b>Objective 1: Measuring sustainability</b>	<b>Obj. 2&amp;3: Governance and stakeholder involvement</b>
11.00-11.30	Comparison of tools for assessing greenhouse gas emissions savings of biofuels. Presenter: Helena Chum (confirmed)	Trust and legitimacy in sustainability governance of bioenergy supply chains. Presenter: Maha Mansoor
11.30-11.55	How to analyse ecosystem services in landscapes. Presenter: Oskar Englund	Drivers and effectiveness of sustainability governance of agricultural crop production at EU level. Presenter: Niclas Scott Bentsen
11.55-12.20	Relating ecosystem Services to indicators of progress toward a sustainable bioeconomy. Presenters: Virginia Dale and Keith Kline	Sustainability governance of agriculture-based bioeconomy in Canada. Presenter: Tat Smith for Charles Lalonde/Maria Wellisch
12.20-12.45	Delphi survey approach for the identification of sustainability indicators and environmental impacts of forest biomass harvesting for a biorefinery: Case study in Québec. Presenter: Ichrak Lakhdhar	Incorporating policy, market and technology in sustainability governance of agriculture-based biofuel and bioeconomic development in the US. Presenter: Jian Gan
12.45-13.45	Lunch	
13.45-14.45	Discussion: Possibilities and limitations of a global harmonized framework to assess sustainability of biobased production.	Discussion: governance of sustainability of agri-based bioenergy and the bioeconomy
14.45-15:15	Assessing the climate effects of forest bioenergy systems: Swedish case study. Presenter: Olivia Cintas	Bridging ecosystem services and sustainable bioenergy indicators in agricultural landscape with stakeholders Presenters: Keith Kline and Virginia Dale
15:15-15.45	Assessing climate effects of forest bioenergy systems: A Canadian case study of unloved wood. Presenter: Evelyne Thiffault	Modeling improvements in sustainability of corn stove removal and through energy crop integration into agricultural landscapes. Presenter: Shyam Nair
15.45-16.15	Coffee	
16.15-17.00	Discussion on methodologies used to assess climate impacts of forest bioenergy systems in the Swedish and Canadian case studies	Discussion on documentation and perceptions of sustainability of agri-based bioenergy in the US
17.00-18.00	Report back from sessions and discussion of findings	
19:00	Dinner (at own expense)	

Friday 19 May 2017			
Objective 1: Measuring sustainability		Obj. 2&3: Governance and stakeholder involvement	
08.15-09.00	General discussion on methodologies to assess the climate effects of bioenergy systems	Sustainability governance and role of stakeholders in the different market phases of biogas development in Germany with a view to other countries. Presenters: Kay Schaubach and Daniela Thrän	Role of stakeholders' perceptions for bioenergy sustainability: Case of forest biorefinery in La Tuque, Quebec. Presenters: Evelyne Thiffault, Léonard Nkuzimana, Biljana Kulišić and Patrice Mangin.
09.00-09.30		Discussion of governance and perceptions of sustainability of biogas	
09.30-10.00	Coffee		
10.00-10.30	Linking measurement and governance: wood pellets from the southeastern United States. Presenters: Virginia Dale, Keith Kline, Don Hodges, & Neelam Poudyal		
10.30-11.00	Measuring, Documenting, and Communicating the Sustainability of Supply Chains within the Wood Pellet Industry of the Southeast U.S. Presenter: Brian Kittler		
11.00-11.30	Governance of sustainable forest management and bioenergy in Ontario. Presenter: Tat Smith		
11.30-11.45	Coffee		
11.45-12.30	Discussion of governance and perceptions of sustainability of forest-based bioenergy		
12.30-13.30	Lunch		
13.30-14.30	Position, perceptions and vision of stakeholders on bioenergy sustainability: Methodology and preliminary results. Presenters: Thuy Mai-Moulin, Uwe Fritsche and Martin Junginger		
14.30-16.00	Roundtable & common conclusions, format to be announced.		

## Registration

Participation is free of charge, but registration is mandatory. We encourage rapid registration as both the **number of workshop participants is limited to 100**, and the general available hotel capacity in Gothenburg is limited in this particular week due to a large sports event in the weekend. Registration can take place through the following website:

<http://www.trippus.net/IEAintertask>

Accommodation can be booked as follows:

<http://booking.meetx.se/en/accommodation>