



DTIE

IEA Bioenergy

Task 43: Biomass Feedstocks
for Energy Markets



Joint Workshop on

Bioenergy and Water: Developing strategic priorities for sustainable outcomes

20th-21st February, 2014 at UNEP Paris Office, France

Background

Purpose

The aim of the workshop is to develop a co-ordinated and common approach to addressing and communicating water-related issues for bioenergy. Good management of resources - benefiting from complementarity of different land use systems - can deliver food, materials and bioenergy AND improve the state of water. This vision motivates exploration of how integration of bioenergy systems into forest and agriculture landscapes can bring positive outcomes for environment and socio-economy.

Since the last Bioenergy and Water Nexus workshop and Report, several organisations have taken on the issue. Some gaps, identified at the time, have been closed, but others remain. The objective of the workshop is to identify strategic priorities to enable the benefits of bioenergy to be captured and delivered. The workshop will drill deeper into assessment, policy and implementation issues, as well as address data gaps. The group will develop a work plan and a group communication strategy.

The workshop will be able to react to the SDG discussions on Water and Energy by the Open Working Group, taking place in early February in New York, and contribute to the subsequent development of integrated and interlinked targets and indicators, from a scientific perspective.

Outcomes

- a) Facilitate the exchange of knowledge
- b) Extend scope for international collaboration
- c) Identify strategic priorities for addressing water-related issues
- d) Identify a work-plan for more formalized collaboration
- e) Develop a communications strategy

Key questions

In order to do this the workshop will focus on the following questions:

(Q1) What are the water-related challenges for bioenergy?

(Q2) How can these challenges be addressed and by whom?

(Q3) What are the opportunities and how can these be promoted?

(Q4) How can water-related issues for bioenergy best be communicated?

Question (Q1) concerns both water quality effects and the possibility that bioenergy schemes bring new competition for water resources.

Answering question (Q2) requires knowledge about how existing governance systems address water related issues, to what extent these help addressing water related challenges associated with bioenergy, and what additional governance as well as strategies for bioenergy implementation are needed to support bioenergy expansion that avoids - or at least mitigates - water related impacts.

Question 3 builds further on Q1 and Q2: a landscape perspective is proposed for addressing the critical question *how can bioenergy systems be located, designed and managed so as to optimise the contribution to sustainability objectives on local, regional and global scale*. This work includes assessments focusing on technical and natural resources aspects and also wider considerations of the social–ecological resilience of emerging land use systems; i.e., how general and local knowledge of possible feedbacks and integration between technical, social, and ecological systems can be used to develop bioenergy systems that also generate additional benefits when integrated into agricultural and forested landscapes (e.g., reduced soil erosion and eutrophication of lakes and rivers, reduced wild fire risk in forests).

It is critical to include the producer perspective and the motivations, opportunities, and capabilities for producers in agriculture and forestry to change from conventional production systems and deploy and/or integrate sustainable biomass production systems in response to new energy drivers. Both support schemes (e.g., establishment support) and instruments aimed at reducing risks of negative impacts (e.g., certification systems) influence the operating conditions for the producers. This workshop will identify the issues that should be addressed in follow-up work with producers.

One key issue here concerns the quantification and economic valuation of environmental services provided by bioenergy feedstock production systems and the development of mechanisms to credit the land users so as to enhance the socio-economic attractiveness and market competitiveness of the biomass produced. To illustrate with an example, farmers can get economic support for establishing wetlands intended to capture nutrients in run-off water and thereby reduce the eutrophication pressure on aquatic systems. If economic support was also offered to farmers that locate and manage bioenergy plantations as buffer strips for capturing such nutrients, these farmers would be able to produce bioenergy feedstock at more competitive costs. Payment for carbon sequestration in soils and standing biomass is another example that can also have consequences for water.

Question 4 will be discussed in a specific session during the workshop and concerns both proper use of criteria and indicators, identification of specific information needs of different stakeholders, and suitable processes for information dissemination.

Bioenergy and Water Workshop: Developing strategic priorities for sustainable outcomes

Thursday February 20 and Friday February 21 at UNEP, 15 Rue de Milan, F-75009 Paris, France

FINAL AGENDA

	Topic	Speaker
	DAY 2 (February 21)	
0900	Welcome and introduction <ul style="list-style-type: none"> - Goal and objectives of the workshop - Workshop procedures 	Martina Otto - UNEP and Göran Berndes - Task 43
	Participants introduction	All
0930	Session A: Background	
	Background and how-to-move-ahead. <i>Deliver brief overview of the 'first report' and identify what has happened since</i>	
	<ul style="list-style-type: none"> • Important reference frameworks <ul style="list-style-type: none"> ○ GBEP, SDGs, UNCCD and others ○ International and national sustainability standards and certification 	Uwe Fritsche – IINAS Michela Morese - GBEP
	<ul style="list-style-type: none"> • Available assessment tools and toolkits: <ul style="list-style-type: none"> ○ LCA approaches and data availability ○ Water footprinting tools ○ Other assessment tools 	Kevin Fingerman - Humboldt State Univ. USA/IINAS Winnie Gerbens-Leenes – Twente University
1030-1050	Refreshment break	
	Session B: Water-related challenges and ways to address these – Roundtable Session	
	Q1. What are the water-related challenges for bioenergy? Q2. How can these challenges be addressed and by whom?	
10:50		
	<ul style="list-style-type: none"> • Water policy and bioenergy in Brazil 	Marcia Moraes - Federal Univ. of Pernambuco, Brazil
	<ul style="list-style-type: none"> • The role of water in EU Policy (WFD, CAP, RED) 	Jean-Francois Dallemand - EC JRC
	<ul style="list-style-type: none"> • The role of water in US biofuel policies 	Sonia Yeh – UC Davis
	<ul style="list-style-type: none"> • Roundtable on Sustainable Biomaterials– approach and experience in managing water-related challenges 	Sebastien Haye – Roundtable on Sustainable Biomaterials
11.50	Roundtable discussions Parallel small roundtable discussion groups, each including session speakers, to discuss and have further inputs from participants	
12.30	Plenary discussion session [Moderator: Michela Morese - GBEP] <ul style="list-style-type: none"> - Are the governance systems adequate? What needs to change? - What is needed to support effective governance? Where are we in terms of delivering data to support effective governance? 	
13-14	Lunch break – lunch is provided	

	Topic	Speaker
Session C: Water-related opportunities and ways to promote – Roundtable Session		
Q3. How can bioenergy systems be located, designed and managed so as to optimise the contribution to sustainability objectives on local, regional and global scale?		
14:00	<ul style="list-style-type: none"> Integration of bioenergy feedstocks into agriculture landscapes can reduce water impacts from agriculture 	Virginia Dale – University of Tennessee
	<ul style="list-style-type: none"> Best practice guidelines for managing water in bioenergy feedstock production. 	Dan Neary - US Forest Service
	<ul style="list-style-type: none"> GIS-based approach to manage stakeholder meetings on introduction of willow/poplar in Germany 	Gerald Busch - Balsa - Buro for Applied Landscape Ecology and Scenario Analysis
	<ul style="list-style-type: none"> Using the BEFS tool - Experience in Peru and Thailand 	Erika Felix – FAO BEFS programme
15.30	Coffee break	
16.00	Roundtable discussion Parallel small roundtable discussion groups, each including session speakers, to discuss further and have more inputs from participants	
17.30	Plenary discussion session <ul style="list-style-type: none"> How do these approaches affect project implementors (farmers, project developers, investors etc)? What conclusions can we draw on how bioenergy-water synergies could be implemented? 	

Dinner: Dinner is at participant's own expense

	Topic	Speaker
	DAY 2 (February 21)	
	Session D: How can the benefits of bioenergy be delivered?	
9:15	Summary of Session C on Day 1	Martina Otto - UNEP and Göran Berndes - Task 43
9.40	Issues to consider e.g., lessons from carbon finance	Jessica Chalmers – Winrock International
10:00	Perspectives from the financial sector	Nancy Jerusun-Clements (InterAmerican Development Bank)
10:30	Refreshment Break	
10.45	Breakout session 2 Breakout groups identify recommendations to deliver benefits from bioenergy at: a) UN level b) Regional / national level including private sector	
11.45	Plenary discussion session	
12.30- 13:15	Lunch break	
13.20	Session E: Towards a workplan and communications strategy	
	Breakout session In break-out groups use outcomes from Session D to identify a workplan and communications strategy to include: <ul style="list-style-type: none"> - Governments (including local /decentralised governance) - Intergovernmental organisations - Research institutions - Financial institutions - Civil society - International initiatives – e.g. GBEP, UN Global Compact Sustainable Agriculture Principles - Certification schemes – Bonsucro, ISCC, FSC, RSB, RTRS, RSPO etc. 	
15.00	Plenary discussion session [Moderator: Uwe Fritsche, IINAS]	
15.30	Final remarks and way ahead	