IEA Bioenergy

Attractive Systems for Bioenergy Feedstock Production in Sustainably Managed Landscapes

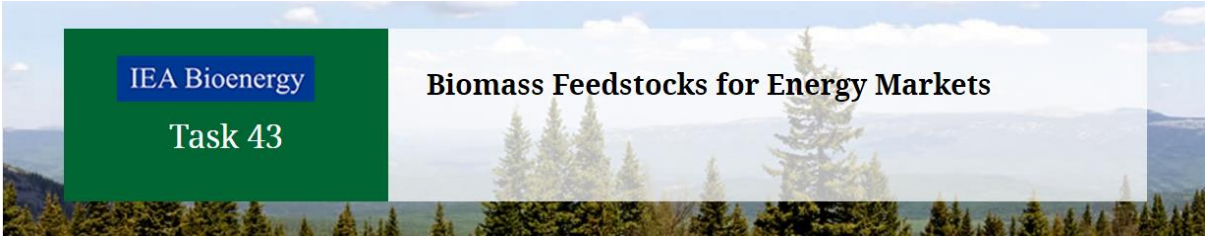
IEA Bioenergy Task 43 Workshop, 20th November 2017, the Gold Room at L'Aqua - Dockside, Cockle Bay Wharf Sydney, Australia

IEA Bioenergy Task 43 has launched an initiative to identify attractive examples of landscape management and design for bioenergy and the bio-economy. The goal of this initiative is to compile world-wide innovative examples as a means of showcasing how the production of biomass for bioenergy can generate positive impacts in agriculture and forestry landscapes. These examples are also meant to serve as sources of inspiration that other biomass producers can use to enhance the sustainability of their own activities.

The workshop is a warm up event for **Bioenergy Australia Conference 2017** where contributions were handpicked to demonstrate good examples and stimulate a discussion on how these can be relevant for developing attractive systems in the Australian context. An additional event is planned for September 2018, to be hosted by the Food and Agriculture Organisation of the United Nations, Rome (Italy). This event will include variety of examples both in terms of bioenergy systems and geographical distribution with details coming soon.

Agenda

11:30 – 12:30	Registration with welcome lunch and introduction
	• Dimitriou: Welcome to IEA Bioenergy Task 43 workshop • Brown: welcome from the host and house rules
12:30 – 12:40	• Berndes: WP1 Landscape management and design for bioenergy and the bio-economy
12:40 – 13:50	Australian Section (20' each)
	• Feltrin, Gasification Australia: "The Emerald Plan" - Concepts of fitting production landscapes with modern energy production possibilities via merging better biodiversity outcomes in agricultural landscapes at large scale • Henson, PNG Biomass Markham Valley Power Project: "A 30 MW power plant from 16.000 ha eucalyptus Markham Valley, Lae, Morobe Province, Papua New Guinea" • Williamson: "The Benefits of Biomass Harvest with Crop Rotation in the Australian Agricultural Landscape" • Highlights by a rapporteur
13:50 – 14:10	Coffee/tea break
14:10 – 15:20	International Section (20' each)
	• Mola-Yudego & Dimitriou: "Combining different management regimes of fast growing plantations on a landscape can result in the production of different and compatible ecosystem services, in addition to widen the economic options for the owners" • Heavey & Volk: "Living snow fences (LSF) from willow stop blowing and drifting snow from reaching roadways, New York State" • Kulisic et al.: "Contribution of SRC to long term ragweed eradication in the City of Osijek, Pannonian Basin" • Highlights by a rapporteur
15:20 – 15:40	Coffee/tea break
15:40 – 17:00	Interactive Conclusions with Göran Berndes & Biljana Kulišić: Australian perspectives on Attractive Systems for Bioenergy Feedstock Production in Sustainably Managed Landscapes



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Background of the Workshop

IEA Bioenergy Task 43 addresses issues critical to mobilizing sustainable bioenergy supply chains, including all aspects of feedstock production, its markets and environmental, social and economic impacts. The objective is to promote sound bioenergy development that is driven by well-informed decisions by landowners, businesses, governments and others. The Task has a global scope and includes commercial, near-commercial and promising feedstock production systems in agriculture and forestry. The primary focus is on land use and land management of biomass production systems.

The Work Programme is organized in three work packages:

- WP1 - Landscape management and design for bioenergy and the bio-economy;
- WP2 - Developing effective supply chains for sustainable bioenergy deployment; and
- WP3 - Governance of bioenergy supply chains.

The Task collects, analyses, and shares technical and non-technical information related to biomass feedstock supply and provides relevant actors with timely and topical analyses, syntheses and information. Workshops, seminars and other events are regularly arranged and specific Task studies are conducted to analyse topics identified as important by the Task.

Landscape management and design for bioenergy and the bio-economy

Bioenergy implementation requires strategies for efficient use of biomass from sustainably managed landscapes. Formulating such strategies requires knowledge in how landscape management and land use decisions affect biodiversity and the capacity of ecosystems to provide biomass and other ecosystem services.

Task 43 aims at supporting landscape management and design for bioenergy and the bioeconomy, by expanding the knowledge base required for sustainable expansion of biomass production systems that also contribute positively to biodiversity and the generation of other ecosystem services.

The Task takes a landscape level approach to deployment of biomass production for bioenergy and integration of this objective with ownership and societal objectives for existing land use and associated systems. The below overarching questions are addressed, which are relevant for both agricultural and forestry systems and reflect that agriculture and forestry activities often co-exist and shape the landscape together:

- Which are the most suitable areas for production and/or extraction of various biomass feedstocks?
- How can biomass feedstock production systems be located, designed and managed to increase resource use efficiency, avoid/mitigate negative and promote positive environmental, economic, and social effects?
- How can outcomes be optimized to meet the goals of individual stakeholders and society as a whole, including environmental, economic, and social goals?
- How can analysis and assessment inform participatory processes engaging landowners, policy makers, and other stakeholders in further developing and re-defining goals and plans for landscape management and designs?