

Lessons learnt from the IEA Bioenergy Intertask Project

”Measuring, governing and gaining support for sustainable bioenergy supply chain”

Governing Sustainability in biomass supply chains for the Bioeconomy. Utrecht, 23 May 2019



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Three Objectives

- **O1:** Provide overview of calculation methods & tools to **assess sustainability** of various biomass and bioenergy supply chains and discuss needs, possibilities and limitations of a global, uniform/harmonized framework
- **O2:** Compare and assess effectiveness and efficiency of a variety of approaches on **how to govern and verify sustainability** of biomass supply chains
- **O3:** Understand **positions** and underlying **motivations** of stakeholder groups relative to their perceptions of bioenergy and **inform dialogues/discussions** to avoid misconceptions about bioenergy

The following concerns main lessons from O2 & O3 results.

Recommendations from Objective 2

- include **sustainability governance** as an integrated part of bioenergy deployment, in adaptive frameworks, which continuously monitor and assess the situation, and revise policies against agreed sustainability criteria;
- include **transparent** and **comprehensive** assessment methodologies, which distinguish between fossil and biogenic carbon and consider both changes in net GHG emissions due to product substitution and changes in carbon stocks in ecosystems and wood product pools in an integrated framework; show transparently how large fossil carbon emissions associated with bioenergy and reference systems are, and how GHG savings from product substitution are possibly linked to temporary changes in carbon stocks;

Recommendations from Objective 2

- include calculation frameworks and standards which ***include the impacts of the larger sectors to which bioenergy development is linked***, e.g., agriculture, forestry, waste handling, nature conservation, etc., in order to more transparently address the economic, environmental and social impacts of bioenergy in the context of the impacts from these other sectors;
- develop methodologies and indicators which can clarify ***if and when bioenergy is the most desirable option for use of biomass resources***, which alternative bioenergy technologies and products is preferable, and how bioenergy can be integrated with other renewables to support decarbonization

Recommendations from Objective 3

- Investigate the *role and modes of communication* for creation of *trust and confidence* among different groups of actors, and the role of researchers for communication; which role and modes are most effective for which groups, depending for example if communication takes place at local, regional, national or international levels
- Include *social stakeholders*
- Need for supranational stakeholders' recognition *of local governance systems already in place*

Recommendations from Objective 3

There is *no one single approach* to assessing progress toward sustainability in any particular setting, but there are common patterns. These general attributes include

- active stakeholder engagement throughout the bioenergy production process;
- transparent sharing of information about the social, economic, and environmental costs and benefits;
- ongoing monitoring; and
- working together towards identifying and implementing better practices

Vision ahead

1. Short term

- **Sustainability criteria** (to be improved; mandatory preferred) & **measuring** (transparent; contextualized indicators)
- **Technological advancement** (processing) & **de-risk investment**
- **Communication** with external stakeholders for mutual solutions
- Include stakeholders **underrepresented** in discussion (e.g. labor unions...) and highlight **positive** effects (e.g. rural income)
- **Policies** taking broad picture of risks and opportunities

2. Medium & long term

- **Advanced biofuels:** technologies & deployment
- **Monitoring & measuring sustainability:** flexible on local level, particularly for developing regions
- **Collaboration:** more efficient between sectors using biomass

Source: Based in interviews with 11 **supranational stakeholders**

Thank you for your attention!

More information:

<http://itp-sustainable.ieabioenergy.com/>

Including the overall project summaries, links to three webinars, several conference/workshop proceedings and a wealth of individual case studies, papers etc.

And IEA Bioenergy Tasks 40, 43 and 45