

GBEP Working Group on Capacity Building for Sustainable Bioenergy

ACTIVITY GROUP 4

Towards sustainable modern wood energy development

Introduction

During the 2nd meeting of the GBEP Working Group on Capacity Building for Sustainable Bioenergy (WGCB), Rio de Janeiro, HSBC Arena, 19 June 2012, UN Foundation informed the Working Group about an exchange of views with FAO and UNEP regarding the possible creation of a further Activity Group to be focused on woody bioenergy. The Working Group invited UN Foundation, FAO and UNEP to continue discussing this matter with a view to developing a proposal/scope of work to be submitted to the next WGCB.

UNF, UNEP and FAO have taken the first steps regarding this possible AG by preparing the proposal/scope of work. This does not mean that they will automatically co-chair this AG, but their continued leadership is very welcome. It would be good to balance the participation of these international organizations with involvement by countries. Possible candidates could be Sweden or Germany from Europe and the United States or Brazil from the Western Hemisphere, given their vast experience in this topic.

Justification and Overall Goal

Biomass energy as a renewable source currently makes up more than 75 percent of the global share of renewable energy. Trees and woody plants provide more than 80 percent of this biomass. Traditional use of such woody biomass is the dominant source of energy for cooking and heating in developing countries, often in unsustainable ways. Yet, this practice often is energy-inefficient, takes up considerable amount of time of women and children collecting firewood, comes with considerable health hazards through indoor air pollution, contributes to climate change through emission of short-lived climate pollutants, and contributes to deforestation and related adverse climate and biodiversity impacts. Recent important initiatives have been put in place to address the challenge related to traditional use of woody biomass, including the Global Alliance for Clean Cookstoves¹ and the Climate and Clean Air Coalition.

Woody biomass is also important in other countries², mainly through co-firing in coal powerplants, but also for dedicated (co-)generation and (industrial) heating plants³.

¹ www.cleancookstoves.org/

² In Europe wood energy is expected to double, and volumes are expected to triple in case of North America by 2030. The Korean Forest Service forecasts that pellet demand could rise significantly by 2020 to fulfill their electricity needs, and countries such as China, India, and South Africa, among others, also consider implementing large-scale biomass co-firing.

³ There is also rising interest in solid biomass for advanced liquid biofuels, and cascading or multiple uses (e.g. biorefineries), but this is in an early stage of development.

The increase in the demand for woody biomass for modern energy services, in particular in OECD countries, is driven by the need of reducing CO₂ emission, diversifying energy supplies, improving energy security, and enhancing local livelihoods. Parallel to this, there is great interest from the private sector in modern wood energy development.

This surge brings up some important challenges related to, inter alia,

- sustainable and secure biomass sourcing, including environmental, social, and economic considerations;
- carbon neutrality of woody bioenergy, new research and discussions on this topic;
- competition for raw material, land quality and land ownership;
- role and impacts of planted forests, and
- energy efficiency and transfer of technical information.

To address these challenges, supportive policy and institutional environments are required. Finally, both the public and private sectors have a great interest in developing modern wood biomass resources. This interest can benefit from fostering enabling policy and institutional environments that build upon effective public-private partnerships to promote environmental, social, and economic sustainability. In addition, we encourage a dialogue among experts and interested stakeholders to learn from one another and develop a framework for best practices. This can benefit from fostering enabling policy and institutional environments that build upon effective public-private partnerships to promote environmental, social, and economic sustainability. In addition, we encourage a dialogue among experts and interested stakeholders to learn from one another and develop a framework for best practices.

Given this background, a GBEP Activity Group is seen as an appropriate mechanism to promote such development and collaboration. A co-benefit of such work would be the participation of the private sector companies in this Activity Group and further expansion of GBEP membership to new P&Os.

Proposed approach and activities

A “*twin-track approach*” is proposed as a possible working framework for this activity group:

* *Track 1:* To disseminate and use GBEP designed tools, specifically the common methodology for life cycle analysis of GHG emissions and the indicators of sustainability, to promote greater understanding of important topics such as more comprehensive national assessments of the current use of woody biomass energy (combining modeling and ground truthing), national, regional, and local assessments of potential sources of feedstocks for power generation and/or cooking fuels, alternative uses of forest products, and GHG mitigation potential of different bioenergy sources in comparison with continued use of fossil fuels.

* *Track 2:* Through an inclusive multi-stakeholder process that includes civil society and the private sector and that utilizes existing tools developed by GBEP and others, build a framework of best practices that can inform and enhance the sustainable use of woody biomass resources.

To develop pilot initiatives how the sustainable use of woody biomass resources can be promoted.

Modus of Operation

- The AG4 will be open to GBEP Partners and Observers and to relevant experts and private sector actors involved in sustainable woody bioenergy issues or affected by its unsustainable uses.
- The AG4 will closely collaborate with other international agencies and initiatives, including several IEA Bioenergy Taskforces in information exchange and joint workshops.
- The work could start with a technical meeting under the GBEP auspices, involving some major private sector players, relevant governments and international organizations, as well as research community. The meeting would define in more details the elements to include in the two above-mentioned tracks
- In addition, specific subgroups could be created if appropriate.
- In order to optimize lessons learned from the activities in both tracks, members of Activity Group 4 will share their experience as work progresses.
- Activity group 4 will regularly report to the Working Group on Capacity Building on the experience and understanding gained from the implementation of their work;
- We anticipate meetings of the activity group to be held in conjunction with the plenary GBEP meetings.

Given the extensive knowledge available through FAO, IEA and UNEP as well as many GBEP Partners (e.g. EU, Germany, Netherlands, Sweden, USA), a broad inclusion of actors is envisaged.

The options for (co-)chairing of the AG will be discussed after the overall acceptance of the new AG, and its scope.

Guiding questions for the 3rd WGCB:

1. What should be the focus for cooperation in this AG4. Woody biomass linked to traditional wood fires, woody biomass for large scale modern bioenergy operations or both?
2. How and with whom should GBEP look for cooperation with other organizations, the private sector, science and non-governmental groups?
3. Are the most important challenges listed?
4. What is your opinion on the twin track approach?