

GBEP Task Force on Financing, Capacity Building and Technology Cooperation for Sustainable Bioenergy

Draft scope and programme of work

29 April 2010

The 7th Technical Working Group is invited to consider the proposed revised scope and programme of work for the GBEP Task Force on Technology Cooperation, Capacity Building and Financing for Sustainable Bioenergy as set out in this paper, for submission to the 9th GBEP Steering Committee meeting for consideration. The previous draft of this document (3 March 2010) was submitted to the Technical Working Group for discussion at its 6th meeting in The Hague, 19 March 2010. Written comments from Partners and Observers were requested and comments received have been incorporated into this draft.

Rationale

In light of the original G8 GBEP mandate to “support wider, cost effective, biomass and biofuels deployment, particularly in developing countries” and the fact that GBEP has made good progress on developing sustainability criteria and indicators and a framework for measuring GHG savings, GBEP should now take practical steps to facilitate the widespread deployment of sustainable bioenergy, focusing on financing, capacity building, enabling environments and technology cooperation as key building blocks for the development, transfer, deployment and diffusion of technologies.

These technologies should include those of relevance to developing country contexts and priorities, with particular attention given to technologies in the context of delivering energy services in rural areas. However, the need for technology cooperation is not limited by any means to developing countries, nor to North-South technology transfer.

GBEP provides a very suitable forum for guiding and stimulating these discussions. Through convening a wide range of national governments, international organizations and other stakeholders, GBEP can also add value in the collection and sharing of information on work in the areas of bioenergy RD&D, production, use, policy development, capacity building, financing and impacts of technologies on sustainability. Using this information to identify consensus, gaps in the development, deployment and adaptation (particularly to the needs of developing countries) of technology, examples of good practice and areas for collaboration will help to make the most of resources in seeking to find innovative solutions to global challenges.

Scope of work

An important activity for GBEP to go on to undertake is the **implementation of its Common Methodological Framework for GHG Lifecycle Analysis of Bioenergy and its sustainability criteria and indicators**, as soon as these are ready.

Furthermore, scanning the current international scene in the area of bioenergy three major observations arise:

1. there is a need to concert international effort to **facilitate the financing of sustainable bioenergy**, including overcoming barriers to accreditation of CDM projects and programmes and assisting developing countries in the preparation of Nationally Appropriate Mitigation Actions (NAMAs) and other supported activities under the UNFCCC, including REDD-plus;
2. there is a need for strengthened coordination and awareness-raising of the **capacity-building** efforts of the UN family and other development agencies in the area of sustainable bioenergy, and a platform for the formation of partnerships (e.g. bilateral relationships) aimed at filling identified gaps in bioenergy technology and policy-making capacity; and
3. there is a need for a vehicle for galvanising **cooperation** amongst governments, with the support of expert international organizations, on the **coordinated development and implementation of national bioenergy technology action plans**, including the identification of means to establish an enabling environment for bioenergy technology development and deployment.

The work of this new Task Force should therefore focus on financing, capacity building, enabling environments and technology cooperation as key building blocks for the development, transfer, deployment and diffusion of technologies. The work should consider all technologies related to the bioenergy value chain, including those related to feedstock production. It should also have a strong systems focus, including the consideration of models for the integration of bioenergy production into existing agricultural, forestry and industrial systems. It should particularly focus on the implementation, continual improvement and dissemination of its own tools and on coordinating and sharing information about relevant activities and services of its Partners.

Given GBEP's role primarily as an intergovernmental policy discussion forum, it will be very important to build on existing and ongoing work, including that of the UN agencies and programmes (especially FAO, UNCTAD, UNDP, UNEP and UNIDO), IEA and IRENA, rather than carrying out a large amount of technical work. Indeed much of the work of the new Task Force should be discussion, promotion and dissemination of existing tools, good practice and results from previous work of other initiatives, with the intention of reaching a wide variety of decision-makers and other stakeholders and adding to the work the significant backing of broad international consensus.

Programme of work

The programme of work of the Task Force is split into three tasks, over an initial period of around two years from the finalisation of the major outputs of the current two Task Forces.

Task 1: Information sharing and coordinated action to facilitate financing of sustainable bioenergy

Objective: To facilitate access to financing for bioenergy for climate change mitigation and sustainable development, at the project, programme and sectoral levels.

- a) Work has started on the **compilation and dissemination of information regarding available financing options for bioenergy projects and programmes**, with the preparation of a report identifying multilateral organizations and financial mechanisms

that currently offer financial incentives to green field investments and upgrading of existing systems. The report will offer guidance, including a description of the kinds of projects and programmes that would be eligible and ineligible for each financing option.

- b) The report would be accompanied by **practical action towards overcoming barriers to accessing such financing**, through, for example:
- providing (in collaboration with the UNFCCC Secretariat, GEF, MDBs etc.) clear guidance, methodologies and tools for decision-making regarding development and financing of bioenergy projects, programmes, NAMAs and other activities under the UNFCCC, including REDD-plus;¹
 - establishing version 1 of the GBEP Common Methodological Framework for GHG Lifecycle Analysis of Bioenergy as the preferred tool for reporting projected and actual emissions from mitigation actions² in the bioenergy sector; and
 - developing recommendations to improve access to financing from international financial institutions for sustainable bioenergy, e.g. through harmonisation of their financing criteria and increasing their portfolios of sustainable bioenergy projects, including policy assistance, infrastructure development, and programs on bioenergy technologies and their adaptation to the needs and realities of developing countries.

Indicative duration/timeline:

- June 2010: Finalization of the report on financing options (activity a) by the GBEP Sec., including incorporation of comments from Partners and Observers, to be disseminated and kept updated (an ongoing activity);
- Spring 2011– Spring 2013: Practical actions (activity b) agreed and implemented.

Task 2: Building capacity for bioenergy policy-making, including implementation of GBEP sustainability indicators

Objective: To provide a platform for information exchange about, and coordination of, capacity-building services relevant to bioenergy policy-making and to develop policy-support tools where GBEP can add value. To enable all Partners to measure and interpret the GBEP sustainability indicators by matching offers of support with assessments of needs.

- a) The Task Force would undertake the ongoing role of **coordinating and sharing information about capacity-building services**, in part through producing a database to be maintained on the GBEP website and through “matchmaking” donor and recipient Partners in bioenergy policy-making support services. Such services would include analytical tools which build country capacity to assess sustainable bioenergy potential and to devise and implement a strategy for realization of this potential, in light of their policy objectives and resource availability. This activity would promote the use and guide the further development of tools developed and under development by the UN agencies and programmes, other GBEP members and non-members alike, as well as the work of the GBEP Task Forces on GHG Methodologies and Sustainability. GBEP would play the role of facilitator, and the primary mechanism of this work would be a specialized workshop on each class of tool, to be followed by the publication of a summary of the workshop including references to available resources, examples of their implementation and recommendations for practical means to increase the utility and use of the tools. These workshops would bring together governments who may wish to use such tools to guide

¹ Care would be taken to build on, and avoid duplication of, other efforts to this end, such as the development of templates for NAMAs and sectoral approaches.

² This could apply to both supported and unsupported mitigation actions.

their policy-making, governments and international organizations who may wish to include them in capacity-building programmes and the experts involved in the design of the tools. In the reports produced, links to implementation of the GBEP criteria and indicators and methodological framework for GHG LCA should be made. (These reports would act as inputs to activity c, below, and therefore attempt to place the use of the various classes of analytical tools in a strategy- and policy-making context.) The following classes of tools would be amongst those considered:

- i) agro-ecological zoning,³ ecological-economic zoning⁴ and related decision support tools for land-use analysis, such as multi-criteria analysis and simulation, including tools on conservation of carbon stocks and biodiversity;
- ii) GIS-based tools for mapping and matching biomass supply and demand (particularly regarding the availability of wood and forestry and agricultural residues, as opposed to the suitability of land and its potential for energy crop production, as assessed by the tools described in a) above);
- iii) techno-economic analysis tools for evaluating the costs and energy demand of all stages of bioenergy chains, so that the most economic options of those that meet all other requirements can be chosen; and
- iv) tools (such as decision support systems) allowing an integrated, holistic assessment and comparison of a variety of bioenergy policy options in a country or other specific administrative unit.

Work has started on this activity through the compilation of information about analytical tools of the kind described above.⁵ It will be important to add value by connecting service providers with potential users.

- b) The new Task Force would **facilitate the provision of support amongst Partners, Observers and any other interested country for the measurement of the GBEP sustainability indicators and associated policy analysis**, including through posting offers of and requests for support organized in accordance with the GBEP sustainability criteria and indicators. This could be a specific and high priority example of matchmaking in capacity-building services (activity a). In this regard, after agreement of the GBEP criteria and indicators, as amended after piloting, the Task Force on Sustainability would meet only on an infrequent and *ad hoc* basis to discuss any further revision of the criteria and indicators or associated documents deemed useful by Partners and Observers. The same approach would be taken regarding the Task Force on GHG Methodologies after the production of version 1 of the methodological framework.
- c) The Task Force would produce a capacity-building tool in the form of a concise “**Step-by-Step National Sustainable Bioenergy Policy Guide**”. This would contain “how to” directions for countries that wish to develop a national bioenergy plan or strategy. The product would be a manual, using simple language and offering a rational, basic approach framework. It would be very practical in nature, driven by specific needs and include the fruits of previous GBEP work and work of Partners and Observers, including South-South know-how transfer. The tool would seek to build on relevant existing work, including the UN-Energy decision support tool for bioenergy currently under development⁶ in order to

³ Agro-ecological zoning is the division of an area of land into smaller units, which have similar characteristics related to land suitability, potential production and environmental impact. For more information, see <http://www.fao.org/docrep/W2962E/w2962e00.htm#P-2>.

⁴ Ecological-economic zoning is a kind of zoning that integrates physical land resources elements with socio-economic factors and a wider range of land uses in zone definitions. For more information, see <http://www.fao.org/docrep/W2962E/w2962e-06.htm>.

⁵ This work builds upon that undertaken for the UN-Energy bioenergy decision support tool, currently under development.

⁶ This same tool could also be used as the starting point for the online database of capacity-building services mentioned above in a).

avoid duplication. GBEP would add value by exploiting the policy-making expertise of its Partners and Observers and by ensuring that the guide was built to meet the demands of national governments.

This work would draw on the collation of examples of good practice in bioenergy production, use and policy-making identified for each GBEP criterion and indicator envisaged under the Task Force on Sustainability.⁷

Indicative duration/timeline:

- June 2010: finalization of the report on analytical tools (in activity a) by the GBEP Sec., including incorporation of comments from Partners and Observers, to be disseminated and kept updated (an ongoing activity);
- July 2010–Spring 2011: planning for workshops (mentioned in activity a);
- Spring 2011–Spring 2012: completion of activity a, commencement of activity b (an ongoing activity), collation of examples of good practice (under activity c) if not undertaken by Task Force on Sustainability;
- Spring 2012–Summer 2013: Development of a concise “Step-by-Step National Sustainable Bioenergy Policy Guide” (activity c – this activity could start in autumn 2011 if necessary inputs were considered ready) and ongoing activity b.

Task 3: Cooperative development and implementation of bioenergy technology action plans

Objective: To promote and facilitate the coordinated development and implementation of national bioenergy technology action plans and mechanisms for international technology cooperation, including identification of: conditions to facilitate the transfer, deployment and diffusion of proven sustainable bioenergy technologies and the development of new sustainable bioenergy technologies; opportunities for joint research and demonstration projects; and options for bilateral and multilateral agreements regarding technology transfer and improving the sustainability of bioenergy technologies in use.

- a) The new Task Force would act as a forum for **sharing of national plans for RD&D** in bioenergy, ensuring the **coordination of international RD&D efforts** (in conjunction with IEA Bioenergy, REEEP etc.) and **seeking opportunities for joint RD&D (especially demonstration projects)** among subsets of Task Force members. This work would include a focus on the potential for a collaborative approach to overcoming barriers to the development of and widespread access to those novel biofuel conversion technologies that show promise of diversifying the range of feedstocks or increasing resource efficiency in a sustainable manner. This activity would draw on existing analysis of these barriers (e.g. by IEA and its Bioenergy Implementing Agreement). It would seek the involvement of the private sector and public research institutes, possibly in the form of technology-specific workshops, in order better to determine the value that could be added by international collaboration or strengthened international or national policy-making. This focus area would also address the question of how to ensure that the development of novel biofuel technologies makes use of lessons learnt from the development of already mature biofuel technologies and is sustainable.
- b) The Task Force would also discuss options for policies to create an **enabling environment for the development and deployment of technologies for sustainable**

⁷ Should the Task Force on Sustainability not undertake this activity, the new Task Force would do so immediately upon commencement of activities.

bioenergy. This discussion would result in options for action at the domestic level to ensure widespread implementation of available solutions for the provision of sustainable bioenergy for heating, electricity and transport and also the creation of a regulatory environment conducive to private investment and the foundation of a stable and economically productive sector in bioenergy research, development, demonstration and deployment. Such options would also describe necessary market conditions and innovative forms of project financing and incentivisation of the development and deployment of sustainable and resource-efficient bioenergy technologies. (This guidance might form part of the GBEP Step-by-Step National Sustainable Bioenergy Policy Guide mentioned under Task 2, activity c.) Attention would also be paid to realising the potential contribution of bioenergy in view of a transition to a green economy; in other words for promoting sustainable development.

- c) The Task Force would also discuss options for mechanisms for **international technology cooperation** in sustainable bioenergy. These could include building on existing international development and deployment cooperation, taking into account unique national and regional circumstances, encouraging the harmonization of standards, expanding technology transfer (e.g. through government-to-government agreements). It would also facilitate technology transfer by assisting the undertaking of technology needs assessments covering bioenergy and drawing on these to match supply and demand for technologies (in the same way as described above regarding capacity-building). This task, in particular, could draw on the work already done by UNIDO in preparing the draft document for GBEP “Deployment of Technologies for Sustainable Bioenergy: Towards an Agenda for International Cooperation”.
- d) This task would include a focus (regarding both national policy-making and international cooperation) on means to **assist a widespread shift from traditional to modern bioenergy**,⁸ particularly for the provision of clean, safe and sustainable energy services in rural areas of developing countries. To this end, engagement with groups such as farmers’ cooperatives, workers’ organisations and NGOs working in the field will be essential.

Some outputs of this Task 3 would feed into activity c under Task 2, i.e. the development of a GBEP Step-by-Step National Sustainable Bioenergy Policy Guide.

Indicative duration: Spring 2011–Spring 2013.

Timeline

- 19 March 2010 (The Hague): Discuss and agree the broad content of the Scope and Programme of Work and give steer to the Secretariat regarding revision of this document
- late April 2010: Secretariat circulate revised Scope and Programme of Work for discussion in the 8th meeting of the GBEP Steering Committee
- early May 2010: 8th Steering Committee endorses Scope and Programme of Work and establish new Task Force
- Summer 2010–Spring 2011: Publication and dissemination of the initial reports from Task 1 (report on available funding options for bioenergy projects) and Task 2 (report on analytical tools for assessing and realising the sustainable bioenergy potential of a country), with discussion as required in meetings back-to-back with meetings of the

⁸ Traditional bioenergy refers to the direct combustion (often in open hearths or simple stoves) of solid biomass in forms such as firewood, charcoal, manure and crop residues. Modern bioenergy refers to the use of biomass converted to higher value and more efficient and convenient energy carriers, such as pellets, biogas, electricity, ethanol and biodiesel.

current Task Forces; planning for activities to take place from Spring 2011, including preparation of detailed work plans for each Task

- Spring 2011: Task Force begins main activities with a meeting to discuss and approve work plans for the Tasks and co-operation envisaged with other international initiatives and stakeholders
- Spring 2011—Summer 2013: Work on Tasks 1-3 (see above for more detailed indicative timelines for each Task)

Task Force Membership

Membership of the new Task Force would be open to all GBEP Partners and Observers. Its work would be undertaken in conjunction with key stakeholders, including parties engaged in or responsible for RD&D in technologies for sustainable bioenergy, funding mechanisms for bioenergy projects and capacity building activities, as well as industry and civil society, and key international decision-making bodies and institutions. Particular efforts will be made to secure the involvement of biomass-producing developing countries and emerging economies.

The Task Force will determine its working practices, including the frequency, location of meetings and work plan envisaged for achievement of each output. The Task Force will raise awareness of its work and outputs through appropriate means and communicate progress regularly.

Resources

The programme of work of the new Task Force has the following budgetary implications:

*1. Organization of 4 workshops mentioned in Task 2 a.*⁹

Partners and Observers are kindly invited to host these workshops.

*2. Travel costs to facilitate participation of developing countries representatives in these workshops and in Task Force meetings.*¹⁰

Partners and Observers are kindly invited to cover these costs that have been included in the running costs of the GBEP Secretariat below or could be considered on a case-by-case basis.

3. Running costs of the GBEP Secretariat.

Partners and Observers are kindly invited to provide financial support to allow GBEP activities for the next biennium (2011-2012). Most of these activities will be related to the new Task Force.

Participating Partners could provide “in kind” support.

Costs related to the implementation of activities in the field mentioned in Task 2 (capacity building) are not included in the above-mentioned estimates. These activities and related cost allocation will be decided on a case-by-case basis and/or through bilateral cooperation.

⁹ For a 1 day workshop of up to 50 participants, in case of room facilities free of charge (using official buildings/headquarters of Partners and Observers), organizational costs would only imply coffee breaks and lunch break with a rough estimate of around USD 3,000.

¹⁰ For a 1 day meeting travel costs (including economy flight and daily substance allowance) would be around USD 2,200 per person, while around USD 2,600 per person for a 3 day meeting.