Global Bioenergy Partnership

Working together to promote bioenergy for sustainable development

5th meeting of the GBEP Technical Working Group

10 July 2009
United Nations Environment Programme, Paris

GBEP Secretariat
BACKGROUND

- The 4th TWG meeting (18 March 2009), considered a discussion paper presenting proposals received and concluded that a new Task Force should be established to work chiefly on the subject of technology cooperation. Collection and dissemination of good practices could also be added, as part of the preliminary phase of this work, and elements of the work proposed on advanced biofuel technologies should also be included. (The US were unable to join this consensus due to their change in administration.)

- A working title of “Task Force on Deployment of Technologies for Sustainable Bioenergy” was established.

- The proposal of a new GBEP Task Force reflects discussion at the last TWG meeting and comments received from Partners and Observers between that meeting and the last Steering Committee meeting (14 May 2009). Comments from the Steering Committee generally suggested a need for streamlining the proposed scope and programme of work.
SCOPE OF WORK

- Conceptual work related to enabling conditions to promote the deployment of technologies for sustainable bioenergy and appropriate frameworks for technology cooperation in bioenergy (first and second phases)

- Pilot collaborative field projects (as a third phase, depending on sufficient funding). These pilots could then inform a review of the conceptual work, providing an ongoing feedback loop.

- There would be breaks between phases to take stock, reassess priorities, resources, progress made in GBEP and outside etc. No need to agree Phases 2 & 3 in order to start on Phase 1.
SCOPE OF WORK

- The work should consider **all technologies related to the bioenergy value chain**, including those related to feedstock production.

- Strong systems focus, including the consideration of models for the **integration of bioenergy production** into existing agricultural, forestry and industrial systems.

- 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 and IEA. Much of the work of the 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.
THREE PHASES

1. Compilation of a report highlighting available funding options for bioenergy projects
2. Collation of examples of good practice in bioenergy production, use and policy-making
3. Provision of a platform for information exchange about analytical tools
4. Identification of principles, conditions and institutional frameworks to facilitate the development and deployment of technologies for sustainable bioenergy
7. Pilot activities among GBEP Partners that promote the deployment of technologies for sustainable bioenergy
SCHEMATIC WORK OF THE TASK FORCE ON DTSB

Task 1: Compilation of available funding options for bioenergy projects, with guidance on how to access them

Task 2: Compilation of examples of good practice in bioenergy production, use and policy-making

Task 3: Information sharing on agro-ecological zoning and other tools for the development of national bioenergy strategies

Task 4 (process): Identification of lessons learnt, including on establishing an enabling environment and working collaboratively for DTSB

Task 4 (output): Publication of guidance on DTSB


Task 7: Pilot technology cooperation activities

Task 7 (feedback): Review of conceptual work for DTSB

Consultation with stakeholders and other international initiatives, including workshops with industry on novel biofuel technologies

Phase 1 (approx. 18 months)
Phase 2
Phase 3

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1. Compilation of a report highlighting available funding options for bioenergy projects

Identification of multilateral organizations/financial mechanisms that currently offer financial incentives to green field investments.

Guidance, including a description of the kinds of projects that would be eligible and ineligible for each funding option, and action towards overcoming barriers to accessing funds.

[To this end, use of the GBEP Methodological Framework for GHG LCA as a template for reporting expected GHG savings in applications for project funding and harmonization of funding criteria should be discussed with relevant financing institutions.]
PHASE 1 (approx. 18 months)

2. **Collation of examples of good practice in bioenergy production, use and policy-making**, with a focus on transferable systems, technologies, techniques and regulatory tools that demonstrate or promote good performance against the emerging GBEP sustainability criteria.

- Publication of a report containing examples of integrated systems;
- Possible inclusion in the main output of the TF on Sustainability of examples of good practice in bioenergy production, use and policy-making of how to promote the positive and mitigate the negative potential impacts of bioenergy as identified by the criteria and indicators;
- Online database of wide-ranging cases of good practice, reported in a common format and identified by technology, feedstock and setting labels, to be made available on the GBEP website and updated on an ongoing basis, and to be shared and developed in coordination with the GEF targeted research project on “Assessments and Guidelines for Sustainable Liquid Biofuels Production in Developing Countries”, and other relevant activities and prospective users.
PHASE 1 (approx. 18 months)

3. Provision of a platform for information exchange about analytical tools which build country capacity to assess sustainable bioenergy potential and to devise and implement a strategy for realization of this potential

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. The following classes of tools would be amongst those considered:

a) agro-ecological zoning, ecological-economic zoning and related decision support tools for land-use analysis, such as multi-criteria analysis and simulation;

b) GIS-based tools for mapping and matching biomass supply and demand (particularly regarding the availability of wood and forestry and agricultural residues);

c) techno-economic analysis tools for evaluating the costs and energy demand of all stages of bioenergy chains;

d) tools (such as decision support systems) allowing an integrated, holistic assessment and comparison of a variety of bioenergy policy options.
PHASE 1 (approx. 18 months)

4. Identification of principles, conditions and institutional frameworks to facilitate the development and deployment of technologies for sustainable bioenergy

- Guidance for technology cooperation (including South-South);
- Guidance for policy-making at the domestic level to ensure widespread implementation of available solutions and an enabling environment for innovation;
- Include a focus on the potential for a collaborative approach to overcoming barriers to the development of and widespread access to novel biofuel conversion technologies and how to ensure their sustainability: this work would draw on existing analysis (e.g. by IEA and its Bioenergy Implementing Agreement) and seek the involvement of the private sector and public research institutes, possibly in the form of technology-specific workshops.
- Include a focus on means to assist a widespread shift from traditional to modern bioenergy, particularly for the provision of clean, safe and sustainable energy services in rural areas of developing countries – engaging with groups such as farmers’ cooperatives, workers’ organisations and NGOs working in the field.
SCHEMATIC WORK OF TASK 4 OF THE TF ON DTSB

**Policy level**

- TF members compile recent and ongoing R,D&D programmes (national and international) on novel biofuel technologies
- TF members compile information about and achievements of policies aimed to stimulate deployment of novel biofuel technologies
- Discussion of achievements, support systems that work effectively, and priorities and principles for further policy development
- 1. Preparation of a report highlighting achievements in member countries in terms of sound support to technology development and deployment and guidelines for this area of policy-making

**Technical level**

- TF members appoint representatives from the private sector and/or their in-house technical experts to participate in workshops/conferences on specific technology issues (e.g. feedstock pretreatment, enzymatic/catalytic conversion, BTL, algal oil separation, system integration of biofuel production plants...). These events will be organized every 2-3 months.
- Technical discussion on the prioritization of international research/investments and the identification of common areas for R,D&D cooperation among sub-groups of participants
- 2. Preparation of a report including: outcomes of technical workshops (respecting IPR); investment priorities to effectively and efficiently foster technology development; and the nature and expected outcomes of cooperation established amongst TF members
PHASE 2


- Drawing on work completed or underway by GBEP Partners, including UN agencies and programmes and the IEA, and the tools and methodologies discussed under Task 3 of Phase 1.
- This work would start in interested GBEP Partner countries, with priority given to developing countries.

- Based on Tasks 1-4 and contain “how to” directions for countries that wish to develop a national bioenergy plan or strategy.
- The product would be a graphically compelling 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 South-South know-how transfer based on experience.
PHASE 3
(to be preceded and informed by consideration of other ongoing initiatives)

7. Pilot activities among GBEP Partners that promote the deployment of technologies for sustainable bioenergy, particularly in developing countries.

- These pilot projects would put into practice the technical guidance developed in the first phase of the work of the Task Force, as well as that of the other GBEP Task Forces.

- Lessons learned from these projects would input into an ongoing feedback loop with Phases 1 and 2, such that the technical guidance and conceptual frameworks developed could be amended and updated in light of their practical implementation. Likewise, the GBEP methodological framework for GHG LCA and the GBEP criteria and indicators for the sustainable development of bioenergy should also undergo a process of implementation, assessment and revision.
July 2009: Technical Working Group (TWG) meeting to discuss and agree scope and programme of work for the new Task Force. Once agreed amongst the TWG, the proposal could be submitted to the Steering Committee for approval via email.

Establishment of the new Task Force would then be followed by preparation of work plans for the tasks to be initiated immediately and co-operation envisaged with other international initiatives and stakeholders, including scoping of any consultancy work to be commissioned.

End 2009: Publication of the output from Task 1

End 2010: Publication of remaining outputs from Phase 1 and agreement of plans regarding Phase 2 (potentially another year’s work) and possibly Phase 3.
RESOURCES

- Participating Partners could provide “in kind” support in the form of staff time and appropriate resources for possible travel to Task Force meetings.

- The work will mainly build on existing and ongoing work, including that of the UN agencies/programmes and other Partners/Observers and will seek to facilitate the fulfillment of countries’ UNFCCC obligations.

- Much of the work of the 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, with the added value of international consensus.

- Partners are invited to provide financial support for a more efficient delivery of solid outputs for Phases 1 (and, if agreed, 2) of the work of the Task Force. Significant funding for the pilot projects of Phase 3 would need to be agreed to make this work feasible, but this can be discussed later.

- The Chair of the Task Force will provide guidelines and continuous backstopping of the work, with the support of the Secretariat. Other Partners may volunteer to lead (or support the Chair) on specific tasks.
SUMMARY AND SUGGESTION FOR TAKING THE WORK FORWARD

1. Compilation of a report highlighting available funding options for bioenergy projects
   - Sec do 1st draft, then ask for input from Ps and Os
   - TF then discusses means to facilitate access to such funds, possibly with Ps and Os volunteering to lead on particular funds/issues

2. Collation of examples of good practice in bioenergy production, use and policy-making
   - Sec produce template for submission of examples of good practice, for agreement by TF
   - Ps and Os submit examples, Sec add from literature review; TF agrees on selection of examples
   - Sec produces outputs for publication (web database, focussed report on integrated systems, possible inclusion or follow-up to Sust TF report
SUMMARY AND SUGGESTION FOR TAKING THE WORK FORWARD II

3. Provision of a platform for information exchange about analytical tools which build country capacity to assess sustainable bioenergy potential and to devise and implement a strategy for realization of this potential

- Ps and Os volunteer to host and/or contribute to funding of (possibly four) workshops; Sec assists these Ps and Os in organisation of workshops and production of supporting documents
  - a. Agro-ecological or ecological-economic zoning
  - b. GIS-based tools for mapping and matching biomass supply and demand
  - c. Techno-economic analysis tools
  - d. Decision support tools for assessing policy options

4. Identification of principles, conditions and institutional frameworks to facilitate the development and deployment of technologies for sustainable bioenergy

- Split into sub-tasks with leading Ps for each to support TF Chair
  - a. Technology framework (policy, institutions; international and national)
  - b. Immature technologies
  - c. Rural energy services in developing countries