

Global Bioenergy Partnership

*Working together to promote bioenergy
for sustainable development*

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Global Bioenergy Partnership (GBEP)

LCA GHG methodologies for bioenergy

10 June 2008, Copenhagen

G8 Commitments and Mandates

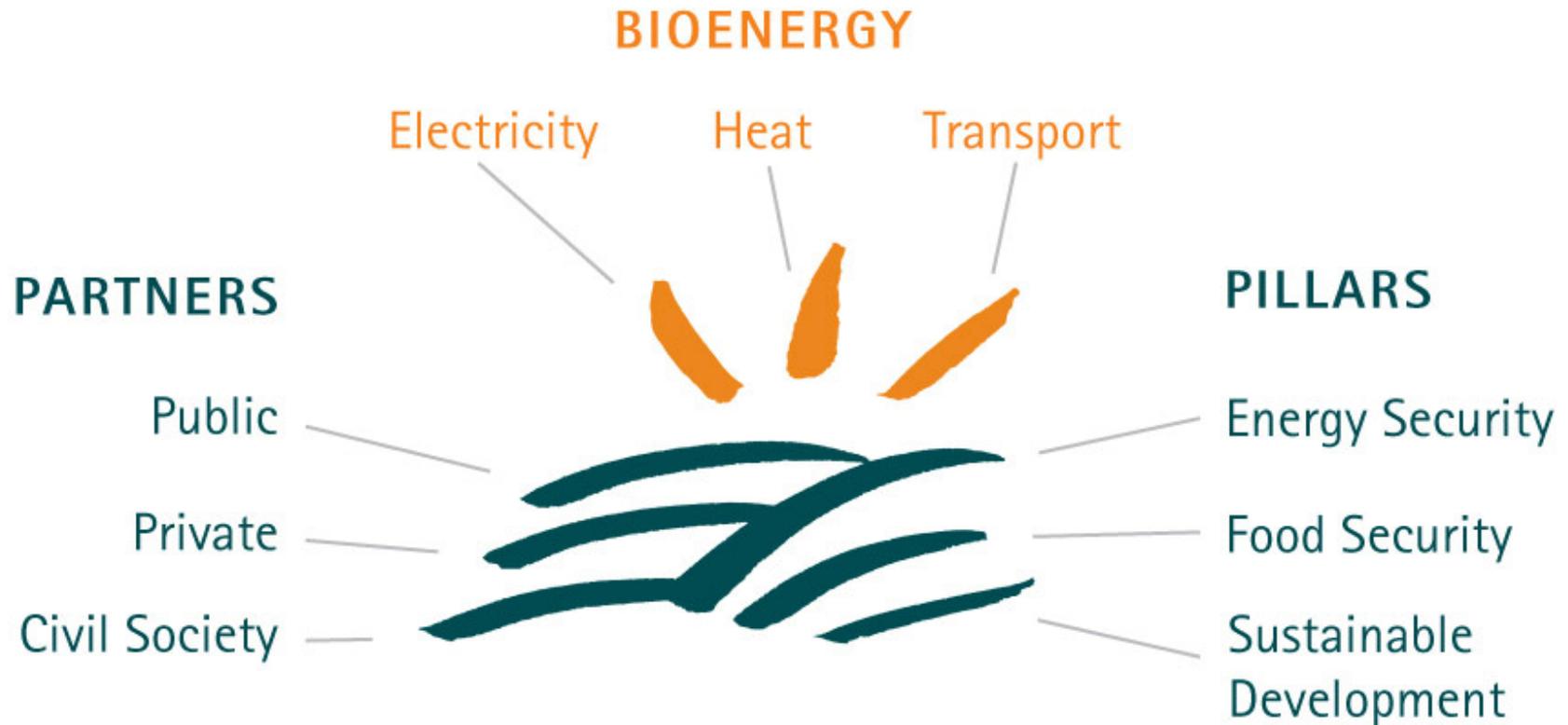
2005 Gleneagles Plan of Action:

*“We (the G8) will promote the continued development and commercialisation of renewable energy by: [...] d) **launching a Global Bioenergy Partnership** to support wider, cost effective, biomass and biofuels deployment, particularly in developing countries where biomass use is prevalent, following the Rome International Workshop on Bioenergy”.*

2007 Heiligendamm Summit Declaration:

*“We invite the **Global Bioenergy Partnership (GBEP)** to continue its work on biofuel best practices and **take forward the successful and sustainable development of bioenergy**”*

GBEP – Scope, Partners, Pillars



GBEP Objectives

- Favour **efficient and sustainable** uses of biomass
- Facilitate bioenergy **integration into energy markets**
- Create a **global high-level policy dialogue** and **facilitate international collaboration**
- Foster the **exchange of information**
- Act as a **cross-cutting initiative**, working in synergy with other relevant activities and avoiding duplications

GBEP Added Value

- Focus on **bioenergy** as a key renewable energy source
- Strong **political commitment** - promote bioenergy in line with climate change, energy security & food security considerations
- A **voluntary forum** to facilitate international dialogue
- Priority given to **developing countries**
- **Exchange of experience and technologies** – North-South, South-South, South-North
- Engagement of the **private sector**
- **Visibility** of bioenergy opportunities and challenges at international level & **Integration** into development initiatives.
- Improved **coordination** across sectors and stakeholders

GBEP Programme of Work

- **First GBEP Report**
“A Review of the Current State of Bioenergy Development in G8 +5 Countries”
- Facilitate the **sustainable development of bioenergy** and collaboration on bioenergy **field projects**.
- **Raising awareness** and **information management**
- **Harmonization of methodologies** for measuring GHG emission reductions for transport biofuels and solid biomass

GBEP Programme of Work

FIRST GBEP REPORT

“A Review of the Current State of Bioenergy Development in G8 +5 Countries”

- It provides an overview of the current state of bioenergy development in G8 +5 Countries. It helps identify where there is common ground in policy priorities and concerns, and opportunities for international cooperation, as well as providing guidance on what still needs to be done for a sustainable development of bioenergy.
- GBEP presented this Report on 13 November 2007 in Rome at the 20th World Energy Congress.
- The Report is available at www.globalbioenergy.org.

GBEP Programme of Work

SUSTAINABLE BIOENERGY AND FIELD PROJECTS

“GBEP Task Force on Sustainability”

(UK leading Partner)

Actions and Objectives:

- Develop an inventory of what is being done on bioenergy sustainability internationally;
- Identify and discuss commonalities, differences and issues requiring further consideration;
- Facilitate the sharing of information, data, experiences and best practices relating to sustainable bioenergy production and use;
- Promote shared understanding with a view to developing a voluntary and flexible framework on sustainable bioenergy and ways to achieve it.

This work will provide a reference for all interested stakeholders and in the formulation of **national policies** and **international cooperation programmes**.

GBEP Programme of Work

RAISING AWARENESS AND INFORMATION MANAGEMENT

This GBEP activity seeks to increase the understanding of pertinent issues related to bioenergy development among Partners and between the Partnership, other technical and political actors, and the general public.

GBEP's awareness-raising and information management activities are focusing on two main areas:

- development of GBEP information material and a GBEP website (www.globalbioenergy.org);
- participation in relevant international conferences and meetings focused on bioenergy, and organization of specific GBEP events.

GBEP Programme of Work

HARMONIZATION OF GHG METHODOLOGIES

GBEP Task Force on the harmonization of methodologies for measuring GHG emission reductions from the use of biofuels for transportation and solid biomass

- Established by GBEP Steering Committee in May 2007.
- Desired end result is flexible methodology for policy makers in all countries.
- First taskforce meeting held October 2007
- Second meeting held 6-7 March 2008

Task Force on GHG Methodologies Work Plan

GBEP Steering Committee set forth **5 key elements**:

1. Review existing methodologies;
2. Develop a harmonised approach so GHG lifecycle assessments can be compared on an equivalent basis;
3. Encompass the full well-to-wheel lifecycle of transport biofuels;
4. Not indicate a preference for any particular existing methodology or feedstock, or to limit parameters; and
5. Define parameters and inputs to be considered when conducting a LCA and develop a good practice document.

GHG Methodologies Task Force

Results of 1st Meeting

- Accomplished review of existing efforts in defining methodologies
- Reached broad agreement that it is possible to develop common methodology
- Developed preliminary list of parameters needed for a common methodology in a “checklist”
- Recognized issues needing further discussion

GHG Methodologies Task Force

Development of a Common “Checklist”

- The GHGs to be covered;
- The effects of direct land use change, both in terms of above and below ground carbon inventories (**US** lead);
- The effects of the production cycle, including fertilizer production, agricultural inputs and processing energy (**EC** lead);
- Combustion of the finished biofuel and tailpipe emissions (**Germany** lead);
- Corresponding factors to facilitate comparison with the fuel replaced (**Brazil** lead).

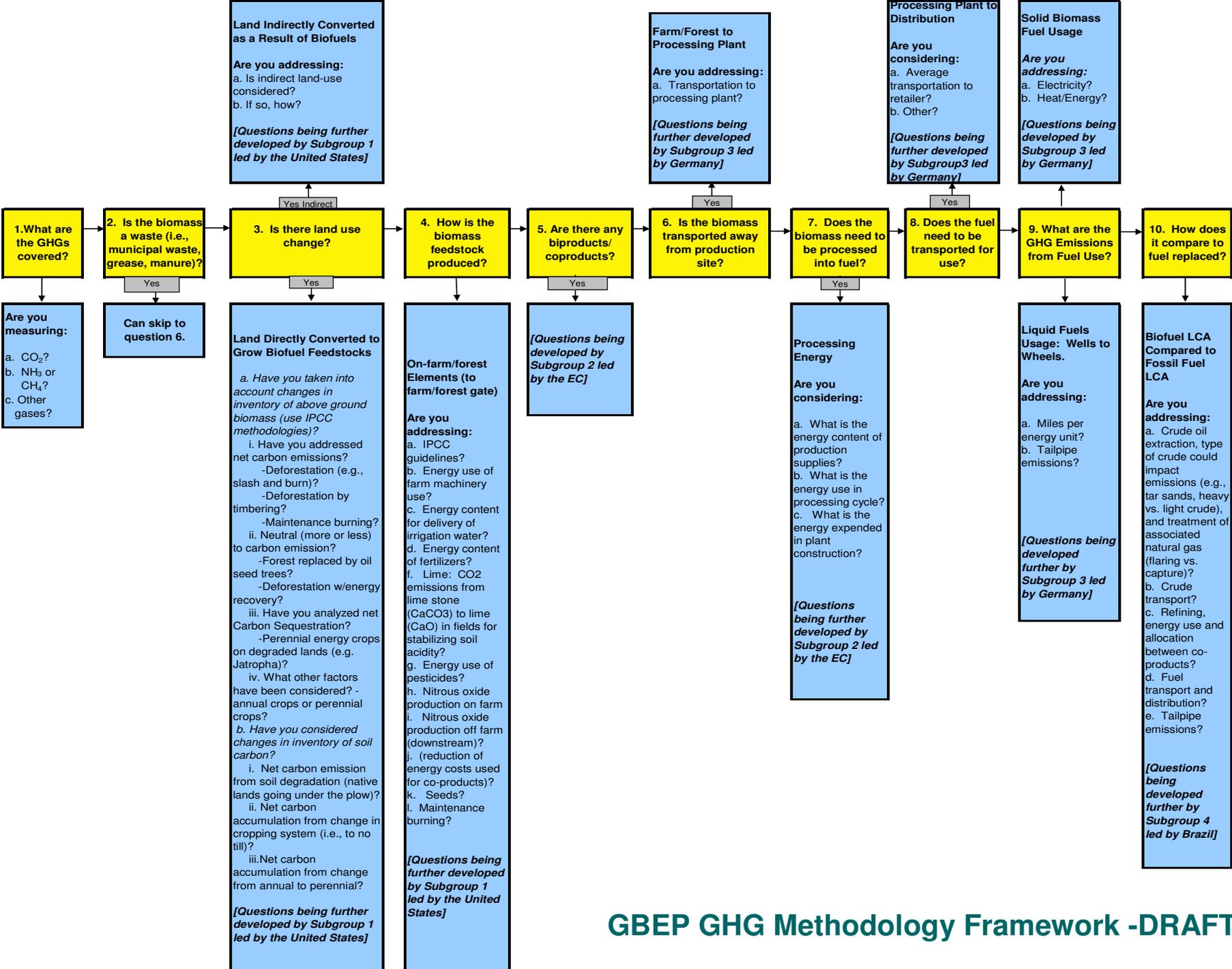
GHG Methodologies Task Force

Main Issues Needing Further Discussion

- Accounting for co-product emissions;
- Ensuring transparency in default values and parameters used, and assumptions made, in conducting a GHG lifecycle assessment;
- Whether and how to take account of the effects of indirect land use change;
- How to take account of future technologies (e.g. cellulosic) in the design of the methodology.

GHG Methodologies Task Force Results of 2nd Taskforce Meeting

- Task Force decided more appropriate and feasible to develop a methodological framework (next slide).
- Includes solid biomass per GBEP Steering Committee.
- The methodological framework provides a reference of pertinent questions for countries/institutions to ask when seeking to develop a GHG methodology.
- Although answers may differ, having a commonly agreed set of questions increases transparency and facilitates comparability.



GHG Methodologies Task Force

Next Steps

Continue meeting and define timeline for finishing final methodology by March 2009.

- Goal to finalize questions by June and have first draft by late 2008
- Draft of checklist will be made available for comment
- Comments incorporated and submitted to GBEP Steering Committee for approval
- After comments GBEP will develop a template and good practice guidance on what the methodology should be as well as guidance for policy makers

For further information

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