

# Global Bioenergy Partnership (GBEP)

WORKING TOGETHER FOR SUSTAINABLE DEVELOPMENT

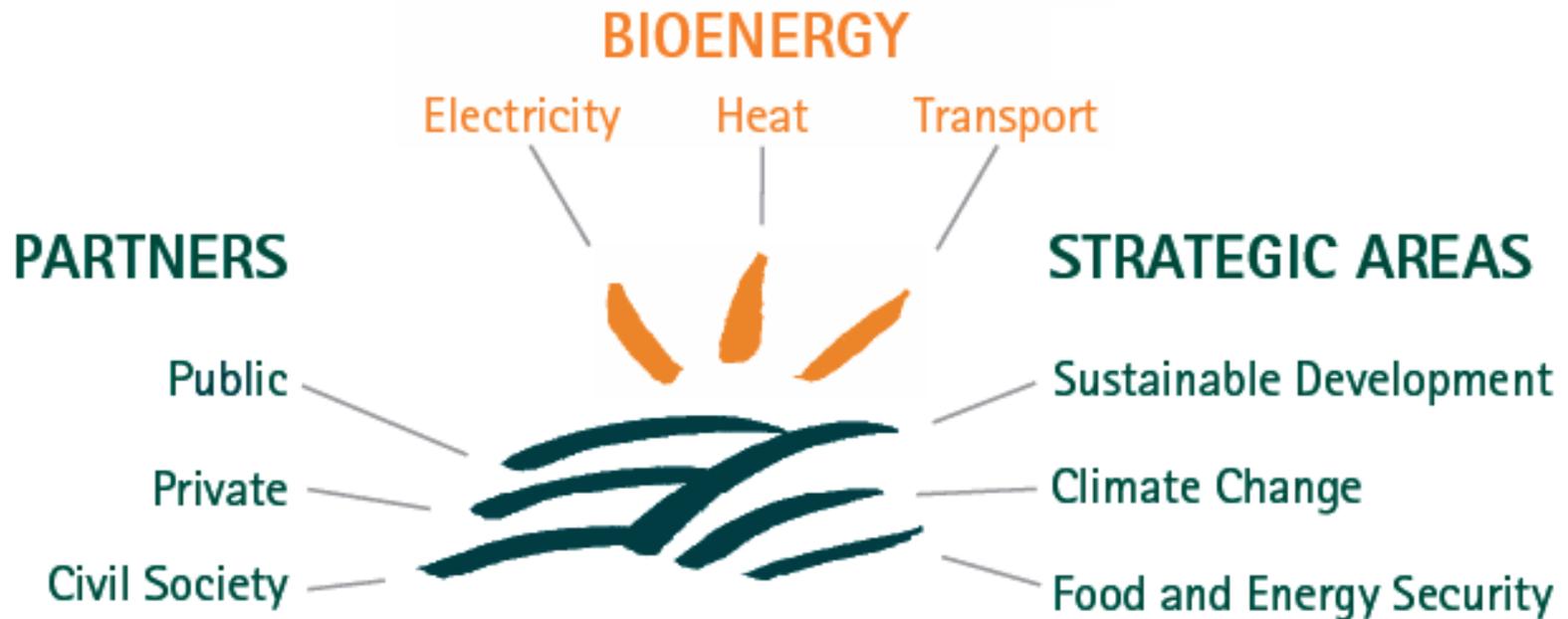
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*Global Bioenergy Partnership Secretariat*

# THE GLOBAL BIOENERGY PARTNERSHIP



# 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”.

## 2008 Hokkaido Toyako Summit

- “We support the work of the Global Bioenergy Partnership (GBEP) and invite it to work with other relevant stakeholders to develop science-based benchmarks and indicators for biofuels production and use”

## 2009 L’Aquila Summit

- “We[...]invite GBEP to accelerate its work in developing science-based benchmarks and indicators for sustainable biofuel production and to boost technological cooperation and innovation in bioenergy”

## 2010 Muskoka Summit

- “We welcome the work of the Global Bioenergy Partnership (GBEP) and commit to facilitating swift adoption of voluntary sustainability criteria and indicators, as well as [agreement] on capacity building activities“

## 2011 Deauville Summit

- “We believe that it is also crucial to employ a range of measures to encourage efficient and sustainable resource use, including renewable energy, by national and other actors. We will keep on supporting international initiatives launched by the G8, notably [...] the Global Bioenergy Partnership (GBEP)”

**2011 G20 Ministers of Agriculture:** “We continue to support the work of the Global Bioenergy Partnership”.

**18 January 2007 - GBEP was registered as a CSD Partnership for Sustainable Development**

# GBEP PARTNERS AND OBSERVERS

## 36 Partners (23 governments – 13 organizations):

G8 Governments (Canada, France, Germany, Italy, Japan, Russian Federation, United Kingdom, United States of America) plus Argentina, Brazil, China, Colombia, Fiji Islands, Ghana, Mauritania, Mexico, Netherlands, Paraguay, Spain, Sudan, Sweden, Switzerland and Tanzania, as well as the ECOWAS, European Commission, FAO, IDB, IEA, UNCTAD, UNDESA, UNDP, UNEP, UNIDO, UN Foundation, World Council for Renewable Energy and EUBIA.

## 34 Observers (23 governments – 11 organizations):

Angola, Australia, Austria, Cambodia, Chile, Egypt, El Salvador, Gambia, India, Indonesia, Kenya, Laos, Madagascar, Malaysia, Morocco, Mozambique, Norway, Peru, Rwanda, South Africa, Thailand, Tunisia and Vietnam, along with the African Development Bank, Asian Development Bank, ECLAC, European Environment Agency, GEF, IFAD, IRENA, Organization of American States, UEMOA, World Bank, and the WBCSD.

Italy and Brazil are currently Chair and co-Chair of the Partnership.

The Secretariat is hosted at the FAO in Rome.

# GBEP'S OBJECTIVES

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The main objectives of the Global Bioenergy Partnership are to:

- promote global high-level dialogue on bioenergy policy-related issues and facilitate international cooperation;
- support national and regional bioenergy policy discussions and market development;
- favour the transformation of biomass use towards more efficient and sustainable practices; and
- foster exchange of information, skills and technologies through bilateral and multilateral collaboration.

GBEP is a forum where voluntary cooperation works towards consensus amongst its partners in the areas of the sustainable development of bioenergy and its contribution to climate change mitigation.

It also provides a platform for sharing information.

# GBEP PROGRAMME OF WORK

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GBEP's priorities are:

- 1. Piloting the GBEP Common methodological framework on GHG emission reduction measurement from the use of bioenergy** (Task Force on GHG Methodologies);
- 2. Facilitating the sustainable development of bioenergy** (Task Force on Sustainability);
- 3. Facilitating Capacity Building for Sustainable Bioenergy** (newly established Working Group on Capacity Building for Sustainable Bioenergy);
- 4. Raising awareness and facilitating information exchange on bioenergy.**

# 1. GBEP TASK FORCE ON GHG METHODOLOGIES

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# GBEP TASK FORCE ON GHG METHODOLOGIES: BACKGROUND

- **October 2007** – TF established under the co-leadership of the United States and the UN Foundation
- **June 2009** – TF developed and published the “GBEP common methodological framework for GHG lifecycle analysis of bioenergy – Version Zero” intended to guide policy makers and stakeholders when assessing GHG emissions associated with bioenergy, and to be used as a tool for comparing the results of various methodologies when assessing GHG emissions from bioenergy systems, for communicating the results in a transparent way and also building capacity in GHG lifecycle analysis (LCA) for bioenergy.
- **October 2010** – TF finalized the “**GBEP common methodological framework for GHG lifecycle analysis of bioenergy – Version One**”, after dissemination, testing and improvement of the previous version.
- **January 2011** – **Clearing house on GHG methodologies** up and running on the GBEP website.
  - ❖ It sets a platform to exchange information on the implementation and testing of the “GBEP common methodological framework for GHG lifecycle analysis of bioenergy” and to allow users to share documents and studies as well as to learn from other users’ experience. It also allows you to test the methodological framework on line.

# GBEP COMMON METHODOLOGICAL FRAMEWORK FOR GHG LCA OF BIOENERGY

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The methodological framework is a checklist that comprises ten steps in the full lifecycle analysis of GHG emissions from bioenergy production and use:

1. GHGs covered
2. Source of biomass
3. Land-use changes due to bioenergy production
4. Biomass feedstock production
5. Transport of biomass
6. Processing into fuel
7. By-products and co-products
8. Transport of fuel
9. Fuel Use
10. Comparison with replaced fuel

For each step, a set of questions was developed to ascertain which sources of emissions (or sinks) were considered and through which methods, and which assumptions were made.



## Test the GHG methodological framework

- **Download the GBEP GHG Methodological Framework (.pdf)**
- **Relevant regional, national and international rules and regulations**
- **Relevant documents and studies**
- **Related institutes and research centres**
- **Compiled questionnaires and statistics**
- **Provide your feedback/suggestion**

The GBEP methodological framework consists of 10 "Steps" of analysis. Steps 1 and 2 are simple checkboxes in which the user identifies the GHGs included in the LCA and the source of the biomass feedstock. In cases that the feedstock is waste material, further explanation is requested. Steps 3-9 walk through a full LCA appropriate for bioenergy production and use, including emissions due to land use change, biomass feedstock production, co-products and by-products, transport of biomass, processing into fuel, transport of fuel, and fuel use. For each Step the framework presents a series of yes/no questions and checkboxes, with requests for further explanation where appropriate. Step 10 is the comparison with replaced fuel. In this Step the framework includes options for reporting LCA of fossil transport fuels and LCA of stationary heat and electricity production systems.

This on-line version can be completed in multiple sessions. You can re-access your questionnaire at a later time without losing previously entered data.



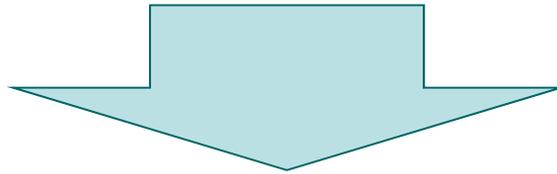
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# PROPOSED NEXT STEPS FOR GHG TF

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**Facilitate the implementation of the  
GBEP Common Methodological Framework**



**WG on Capacity Building for Sustainable Bioenergy**

## 2. GBEP TASK FORCE ON SUSTAINABILITY

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# GBEP TF ON SUSTAINABILITY: BACKGROUND

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Task Force established in June 2008 - Led by the UK until October 2010.  
Currently led by Sweden.  
3 sub-groups established.

## SCOPE

- **To provide relevant, practical, science-based, voluntary sustainability indicators to guide any analysis undertaken of bioenergy at the domestic level.**
- **To be used with a view to informing decision making and facilitating the sustainable development of bioenergy and not to be applied so as to limit trade in bioenergy in a manner inconsistent with multilateral trade obligations.**

# WHAT MAKES THIS WORK UNIQUE

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The uniqueness of the GBEP Task Force on Sustainability lies in the fact that :

- It is currently the only initiative seeking to **build consensus among a broad range of national governments and international institutions on the sustainability of bioenergy**;
- The emphasis is on providing **science-based measurements useful for informing national-level policy analysis and development** (in contrast to sustainability schemes recently developed by others, primarily designed for application at the project or economic operator level);
- **It doesn't have directions, thresholds or limits and do not constitute a standard; nor are they legally binding on GBEP Partners in any way.** Measured over time, the indicators will show progress towards or away from a sustainable development path as determined nationally;
- It addresses **all forms of bioenergy**, rather than just liquid biofuels.

# 24 SUSTAINABILITY INDICATORS

agreed by 23 countries & 13 international organizations  
involving a total of 45 countries and 23 int. organizations (Ps & Os)

## PILLARS

### Environmental

### Social

### Economic

## INDICATORS

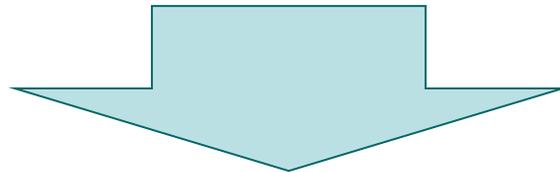
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| 1. Life-cycle GHG emissions   | 9. Allocation and tenure of land for new bioenergy production              | 17. Productivity   |
| 2. Soil quality   | 10. Price and supply of a national food basket                             | 18. Net energy balance   |
| 3. Harvest levels of wood resources                                       | 11. Change in income   | 19. Gross value added  |
| 4. Emissions of non-GHG air pollutants, including air toxics              | 12. Jobs in the bioenergy sector   | 20. Change in consumption of fossil fuels and traditional use of biomass |
| 5. Water use and efficiency   | 13. Change in unpaid time spent by women and children collecting biomass   | 21. Training and re-qualification of the workforce                       |
| 6. Water quality  | 14. Bioenergy used to expand access to modern energy services              | 22. Energy diversity   |
| 7. Biological diversity in the landscape                                  | 15. Change in mortality and burden of disease attributable to indoor smoke | 23. Infrastructure and logistics for distribution of bioenergy           |
| 8. Land use and land-use change related to bioenergy feedstock production | 16. Incidence of occupational injury, illness and fatalities               | 24. Capacity and flexibility of use of bioenergy                         |

# TF ON SUSTAINABILITY - NEXT STEPS

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- **Report that will include the set of indicators, descriptions of methodological approaches for their measurement and supporting text**
- give further consideration to **consulting** a wide range of interested parties and stakeholders, and to how the work can be **disseminated**, including through further outreach activities.

GBEP is already **exploring possibilities for piloting** the agreed indicators, including through **capacity building activities**.



**WG on Capacity Building for Sustainable Bioenergy**

# 3. GBEP WORKING GROUP ON CAPACITY BUILDING FOR SUSTAINABLE BIOENERGY

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# WGCB

The Working Group on Capacity Building for Sustainable Bioenergy has been just established by the Steering Committee (20 May 2011).

It is currently co-chaired *by* The Netherlands and USA, and hold its first meeting yesterday, 16 November 2011 in Tokyo.

## SCOPE

- **To develop capacity building activities and projects for sustainable bioenergy, through collaborative work among GBEP Partners and Observers. It aims to develop a repository of information and insights gained from experiences and outcomes from these activities and projects.**
- **Activities and projects will build upon, but not limited to, the work of the GBEP TFs on GHG Methodologies and on Sustainability.**
- **Activities and projects will be country driven.**

# For further information

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**Do not hesitate to contact the GBEP Secretariat:**

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**Further information are available at:**

[www.globalbioenergy.org](http://www.globalbioenergy.org)