

The Global Bioenergy Partnership (GBEP)

In response to the 2005 G8 mandate (renewed in subsequent G8 Declarations), GBEP initiated an international discussion on the issues related to bioenergy. Several years after its establishment and at a time of intense debate on bioenergy, GBEP is actively working to advance bioenergy for sustainable development, climate change mitigation, and food and energy security. To this end, GBEP has defined a set of voluntary, science-based sustainability indicators for bioenergy. GBEP has also developed a common methodological framework for use in measuring and reporting greenhouse gas (GHG) emissions reductions from bioenergy. GBEP is currently working on capacity building activities and projects for sustainable bioenergy, including through the implementation of its sustainability indicators and methodological framework on GHG emissions.

GBEP membership

Over the last years, GBEP has continued to expand its membership, such that its Partners now comprise the following 23 countries and 14 international organizations: all G8 nations plus Argentina, Brazil, China, Colombia, Fiji Islands, Ghana, Mauritania, Mexico, Netherlands, Paraguay, Spain, Sudan, Sweden, Switzerland and Tanzania, as well as the Economic Community of West African States (ECOWAS), European Commission, FAO, Inter-American Development Bank (IDB), IEA, IRENA, UNCTAD, UN DESA, UNDP, UNEP, UNIDO, United Nations Foundation, World Council for Renewable Energy and European Biomass Industry Association.

A further 26 countries are participating as observers (Angola, Australia, Austria, Cambodia, Chile, Denmark, Egypt, El Salvador, Ethiopia, Gambia, India, Indonesia, Kenya, Lao P.D.R., Madagascar, Malaysia, Morocco, Mozambique, Norway, Peru, Rwanda, South Africa, Thailand, Tunisia, Viet Nam and Zimbabwe), along with the African Development Bank, Asian Development Bank, Economic Commission for Latin America and the Caribbean, European Environment Agency, Global Environment Facility, ICRAF, IFAD, Organization of American States (OAS), West African Economic and Monetary Union (UEMOA), World Bank, and the World Business Council on Sustainable Development. GBEP welcomes new Partners who wish to actively contribute to its programme of work and is working to facilitate the engagement of more developing countries.

Italy is currently Chair of the Partnership while Brazil is the Co-Chair. They are supported by the GBEP Secretariat, hosted at FAO Headquarters in Rome.

GBEP's activities

GBEP is a forum where voluntary cooperation works towards consensus amongst governments, intergovernmental organizations and other partners in the areas of the sustainability of bioenergy and its contribution to climate change mitigation. It also provides a platform for sharing information and examples of good practice.

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;
- foster exchange of information and skills through bilateral and multilateral collaboration; and
- facilitate bioenergy integration into energy markets by tackling barriers in the supply chain.

GBEP's achievements in its current priority areas

1. Facilitating the sustainable development of bioenergy

In December 2011 GBEP published its report on sustainability indicators for bioenergy, providing an invaluable resource in helping countries assess and develop sustainable production and use of bioenergy. The 24 relevant, practical, science-based, voluntary sustainability indicators and their respective methodology sheets are intended to guide any analysis of bioenergy undertaken at the domestic level with a view to informing decision making and facilitating the sustainable development of bioenergy and,

accordingly, shall not be applied so as to limit trade in bioenergy in a manner inconsistent with multilateral trade obligations. This report is the result of the work of the Task Force on Sustainability that GBEP established in June 2008 under the leadership initially of the United Kingdom and then (since November 2010) of Sweden.

The GBEP indicators are currently in the implementation phase. The uniqueness of the GBEP Task Force on Sustainability lies in the fact that it is the only initiative seeking to build consensus among a broad range of national governments and international institutions on the sustainability of bioenergy and in the fact that the emphasis is on providing measurements useful for informing national-level policy analysis and development. The GBEP work addresses all forms of bioenergy. The GBEP sustainability indicators do not feature directions, thresholds or limits and do not constitute a standard; nor are they legally binding on GBEP Partners. Measured over time, the indicators will show progress towards or away from a sustainable development path as determined nationally. The work of the Task Force responds directly to the mandates GBEP received from G8 Leaders in the last few years and facilitates the implementation of Agenda 21 and the Johannesburg Plan of Implementation. The Annex to this information note contains the agreed GBEP sustainability indicators for bioenergy. The full report is available at www.globalbioenergy.org.

2. Testing a common methodological framework on GHG emission reduction measurement from the use of bioenergy

In January 2011 GBEP released "The GBEP Common Methodological Framework for GHG Lifecycle Analysis of Bioenergy – Version One" for the use of policymakers and stakeholders when assessing GHG emissions associated with bioenergy and to make GHG lifecycle analyses (LCAs) more transparent. This report is the result of the work of the Task Force on GHG Methodologies that GBEP established in October 2007 under the joint leadership of the United States and the UN Foundation. The common methodological framework is in the implementation phase also through the GBEP's online GHG LCA clearinghouse. GBEP believes the framework may become a useful tool for domestic measurement, reporting and verification, as set out in the Copenhagen Accord.

3. Facilitating capacity building for sustainable bioenergy

In May 2011 GBEP established a Working Group on Capacity Building for Sustainable Bioenergy to raise awareness of the potential benefits of sustainable modern bioenergy building on the work previously developed by GBEP and to facilitate collaboration among its Partners and Observers. The Working Group has been focusing on the followings:

- ✓ *Sustainable Modern Bioenergy in the ECOWAS region (led by USA and ECOWAS)*. Three forums were organized to initiate a regional dialogue to support the development of regional and national bioenergy strategies; to discuss biomass resource assessment and mapping; and to discuss agricultural productivity and feedstock conversion, in order to further facilitate effective policy planning for a sustainable bioenergy sector in the region.
- ✓ *Raise awareness and share data and experience on the implementation of GBEP indicators (led by Germany and Indonesia)*. The aim of this activity is to share experiences and lessons learned from the pilot testing of the GBEP sustainability indicators in various countries.
- ✓ *Study Tour for Capacity Building (led by Brazil)*. Bioenergy Weeks have been held consisting in short training courses analyzing technical and public policy aspects of bioenergy development, in line with GBEP 24 indicators of sustainability, in several regions. Experts from developed and developing countries have the opportunity to learn from positive experiences in the sustainable production and use of bioenergy that could guide the design and implementation of bioenergy policies in their countries.
- ✓ *The Global Renewable Energy Atlas – Bioenergy component (led by IRENA)*. This activity is aimed at the development of a repository of high quality resource maps from leading technical institutes worldwide, and a simplified model for evaluating the technical information on the basis of the GBEP sustainability indicators.
- ✓ *Initial discussions on capacity building activities on woody biomass and food security*.

4. Raising awareness and facilitating information exchange on bioenergy

GBEP's awareness-raising and information exchange activities have focused on the following areas:

- a. Development of GBEP's information material, including management of the GBEP website (www.globalbioenergy.org), which includes a database of bioenergy information;
- b. Participation in relevant international conferences, as well as organization of GBEP events relating to its programme of work;
- c. Organization of an international media campaign to promote GBEP activities, which has led to extensive media coverage of GBEP's activities, and publication of a quarterly GBEP newsletter.

Annex: The GBEP sustainability indicators for bioenergy

In the below table, the set of twenty-four GBEP sustainability indicators for bioenergy, are set out under the three pillars, with the relevant themes listed at the top of each pillar.

| PILLARS | | |
|--|---|--|
| <p>GBEP's work on sustainability indicators was developed under the following three pillars, noting interlinkages between them:</p> | | |
| Environmental | Social | Economic |
| THEMES | | |
| <p>GBEP considers the following themes relevant, and these guided the development of indicators under this pillar:</p> | | |
| <p>Greenhouse gas emissions, Productive capacity of the land and ecosystems, Air quality, Water availability, use efficiency and quality, Biological diversity, Land-use change, including indirect effects.</p> | <p>Price and supply of a national food basket, Access to land, water and other natural resources, Labour conditions, Rural and social development, Access to energy, Human health and safety.</p> | <p>Resource availability and use efficiencies in bioenergy production, conversion, distribution and end-use, Economic development, Economic viability and competitiveness of bioenergy, Access to technology and technological capabilities, Energy security/Diversification of sources and supply, Energy security/Infrastructure and logistics for distribution and use.</p> |
| INDICATORS | | |
| 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 |