

The Global Bioenergy Partnership (GBEP)

The Global Bioenergy Partnership (GBEP) was established to implement the commitments taken by the G8 in the 2005 Gleneagles Plan of Action to support “biomass and biofuels deployment, particularly in developing countries where biomass use is prevalent”. GBEP aims mainly to:

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

As of January 2017, GBEP brought together, as Partners and Observers, fifty-one national governments and twenty-six international organizations, under the co-chairmanship of Italy and Brazil.

Bioenergy facts and figures

Biomass is the fourth main source of energy worldwide and the first among renewables, with a share of around 10 percent of global primary energy supply in 2013 (IEA, 2014).

The global demand for modern bioenergy¹, and especially liquid biofuels, has grown significantly in recent years, driven mainly by climate change mitigation policies and volatile fossil fuel prices. In 2013, heating accounted for the majority of biomass use, with a capacity of 296 GWth. In addition, 116.5 billion litres of liquid biofuels for transport (i.e. around 3.4 percent of global consumption of road transport fuels) and 405 TWh of biomass-based electricity (i.e. around 2 percent of global electricity generation) were generated in 2013 (REN21, 2014).

GBEP Common Methodological Framework for GHG Lifecycle Analysis of Bioenergy

GBEP has developed, under the leadership of the United States and of the United Nations Foundation (UNF), a common methodological framework intended to guide policy makers and institutions when calculating GHG emissions from bioenergy and to enable life cycle assessments (LCA) of the GHG emissions of bioenergy. Version Zero of the framework was released in 2009. Following initial dissemination and testing, Version One was released in 2010.

GBEP Sustainability Indicators for Bioenergy

In order to facilitate the assessment and monitoring of bioenergy sustainability at national level, GBEP has produced, under the leadership of the United Kingdom and Sweden, a set of twenty-four indicators and related methodologies (see table). These indicators, which were developed under a series of relevant themes, address the production and use of liquid, solid and gaseous biofuels for heat and power and for transport.

¹ Modern bioenergy does not include the use of biomass for cooking or heating in open stoves or fires with no chimney or hood.

The indicators are intended to inform policy-makers about the environmental, social and economic sustainability aspects of the bioenergy sector in their country and guide them towards policies that foster sustainable development. Measured over time, the indicators will show progress towards or away from a nationally defined sustainable development path.

As of December 2016, the GBEP Sustainability Indicators for Bioenergy had been implemented in ten countries and were in the process of being implemented in another dozen countries.

List of GBEP Sustainability Indicators for Bioenergy

ENVIRONMENTAL	SOCIAL	ECONOMIC
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

GBEP Work on Capacity Building

GBEP has carried out a number of capacity building activities, first under the leadership of the Netherlands and the United States and then, since December 2013, of the Economic Community of West African States (ECOWAS) and Argentina.

Most notably, in West Africa GBEP supported the development of a Regional Strategy on Bioenergy, which was adopted by ECOWAS Ministers of Energy at the end of 2013.

Furthermore, since 2013, each year GBEP has organized a Bioenergy Week in a different continent. The goal of this initiative is to bring together relevant stakeholders in order to share experiences and lessons learnt related to sustainable bioenergy development, with a focus on the specific priorities and issues of the hosting country and region. The Bioenergy Week was held in 2013 in Brazil, in 2014 in Mozambique, in 2015 in Indonesia and in 2016 in Hungary.

As part of its capacity building efforts, GBEP is also addressing issues related to sustainable modern wood energy development and to the nexus between bioenergy and water resources. Discussions on biogas and advanced biofuels are also in progress.