

Global Bioenergy Partnership (GBEP)

WORKING TOGETHER FOR SUSTAINABLE DEVELOPMENT

G20 Expert Outreach Conference on Commodity and energy Markets

“Sustainable energy: designing policy for G20”

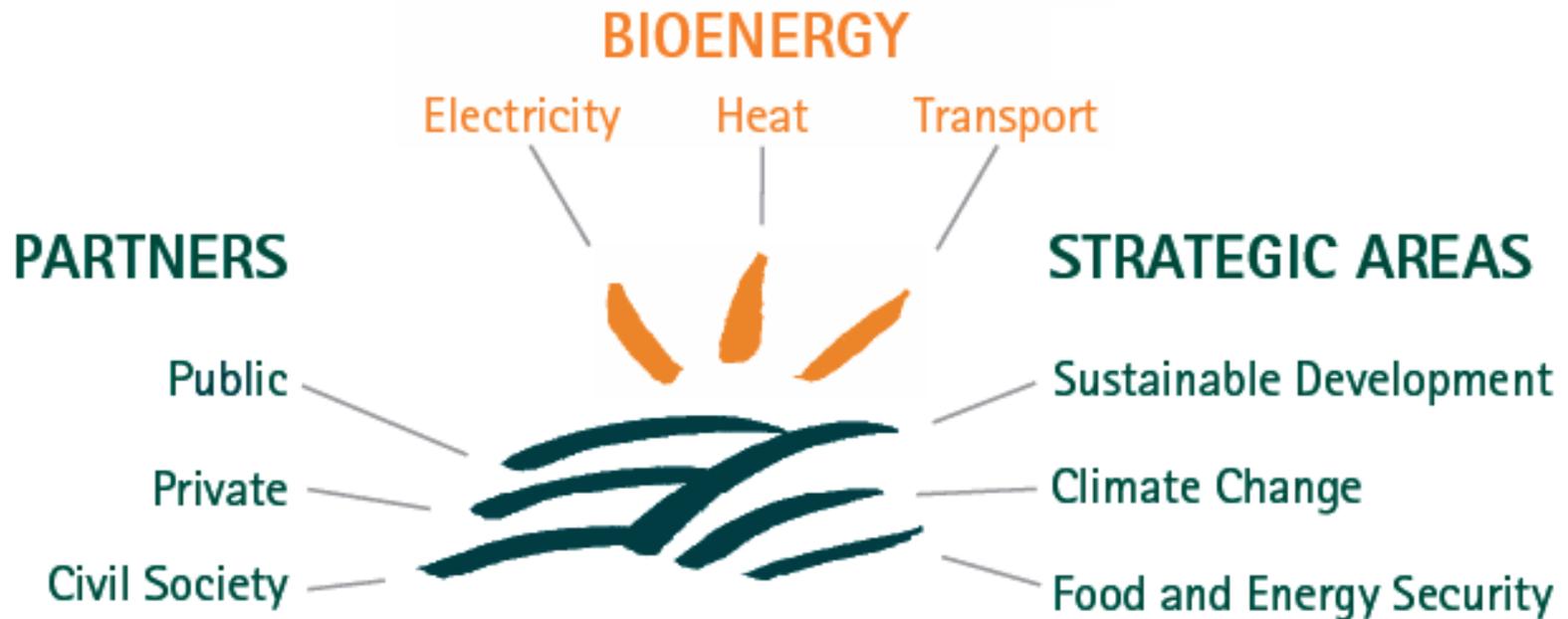
Maria Michela Morese

Executive Secretary

Global Bioenergy Partnership (GBEP)



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”.

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)”

2012 Camp David Summit

- “Applaud the Global Bioenergy Partnership (GBEP) for finalizing a set of sustainability indicators for the production and use of modern bioenergy and for initiating capacity building activities through a Regional Forum in West Africa. Invite GBEP to continue implementing capacity building activities that promote modern bioenergy for sustainable development.”

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

37 Partners (23 governments – 14 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, IRENA, UNCTAD, UNDESA, UNDP, UNEP, UNIDO, UN Foundation, World Council for Renewable Energy and EUBIA.

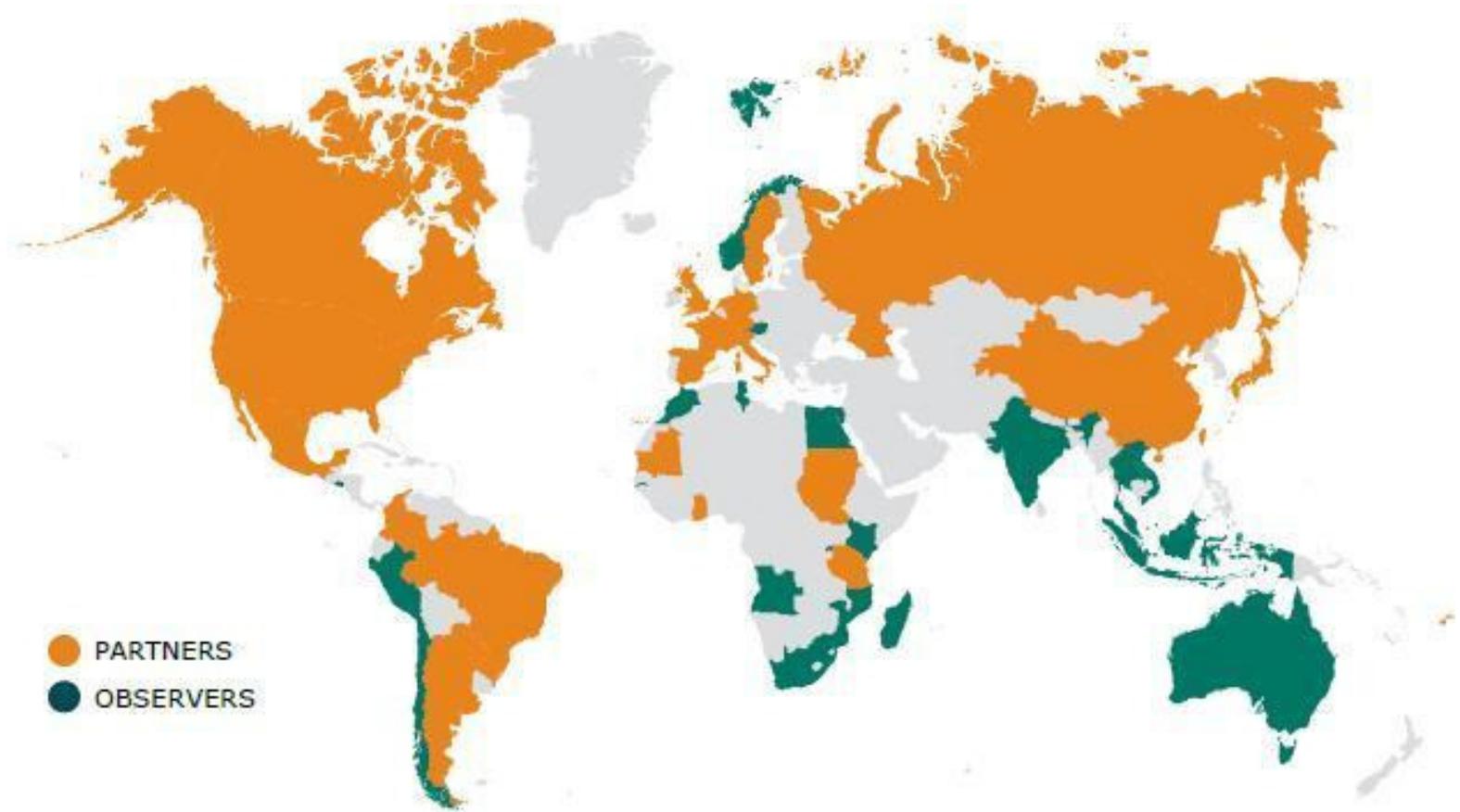
37 Observers (26 governments – 11 organizations):

Angola, Australia, Austria, Cambodia, Chile, Denmark, Egypt, Ethiopia, 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, ICRAF, IFAD, 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.

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GBEP PROGRAMME OF WORK

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.

GBEP's priorities are:

- 1. Piloting the GBEP Common methodological framework on GHG emission reduction measurement from the use of bioenergy** – developed in 2010 it is intended to guide policy makers and stakeholders when assessing GHG emissions associated with bioenergy;
- 2. Facilitating the sustainable development of bioenergy;**
- 3. Facilitating Capacity Building for Sustainable Bioenergy;**
- 4. Raising awareness and facilitating information exchange on bioenergy.**

GBEP WORK ON GHG METHODOLOGIES

MAIN ACHIEVEMENT

- Through a 3 year process started in October 2007, in **October 2010 GBEP** finalized the “**GBEP common methodological framework for GHG lifecycle analysis of bioenergy**”, after dissemination, testing and improvement of a previous version.

It is 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 and also building capacity in GHG lifecycle analysis (LCA) for bioenergy.

- **Since 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

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.

GBEP WORK ON SUSTAINABILITY

MAIN ACHIEVEMENT

- ❖ Through a 4 year process of intense discussions, **in December 2011 GBEP agreed on a set of 24 sustainability indicators and finalized the report “The GBEP Sustainability Indicators for Bioenergy”** that include supporting information and methodologies for their measurement. The indicators are aimed to inform decision making and facilitating the sustainable development of bioenergy. Measured over time, the indicators will show progress towards or away from a sustainable development path as determined nationally.

The **uniqueness of the GBEP work 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;
- The emphasis is on providing science-based measurements useful for informing national-level policy analysis and development;
- It doesn't have directions, thresholds or limits and does not constitute a standard; nor is it legally binding on GBEP Partners in any way;
- It addresses all forms of bioenergy.

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

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

PILOTING OF INDICATORS

GBEP is **piloting** the agreed indicators:

- FAO is piloting GBEP indicators in Colombia and Indonesia;
- Piloting at the national level – Brazil, Germany, Italy, Japan, NL, US; and
- Piloting through cooperation projects – Ghana, Argentina, Jamaica.

GBEP WORK ON CAPACITY BUILDING

WGCB

The Working Group on Capacity Building for Sustainable Bioenergy has been established in May 2011 and co-chaired by The Netherlands and USA.

SCOPE

- **To develop capacity building activities and projects for sustainable bioenergy, through collaborative work among GBEP Partners and Observers.**
- **Activities and projects will build upon, but not limited to, the previous work of GBEP on GHG Methodologies and on Sustainability.**
- **Activities and projects will be country driven.**

WGCB activities

1. *Regional Forum on Sustainable Modern Bioenergy*

Focused on West Africa (leading Partners: U.S. and ECOWAS)

- Forum held in Bamako (Mali), March 2012 - towards reg. and nat. bioenergy strategies
- Workshop held in Rome, 13-14 November 2012 - focused on resource assessments and mapping to promote effective policy planning for a sustainable bioenergy sector
- Bioenergy Week held in Brasilia (Brazil), 18-23 March 2013 - exchanging experiences
- Workshop held in Berlin, 29 May 2013 - drawing conclusions

2. *Raising awareness, and sharing of data and experience on the implementation of GBEP indicators* (leading Partners: Germany and Indonesia)

- Seminar in Rio de Janeiro (Brazil), 18-22 June 2012
- Seminar in Rome, 15 November 2012
- Workshop held in Berlin, 29 -30 May 2013

3. *Study tour for capacity building and training* (leading Partner: Brazil)

- Preparatory seminar held in Rome, 15 November 2012
- Bioenergy Week held in Brasilia (Brazil), 18-23 March 2013

4. *Global Bioenergy Atlas* (leading partner IRENA)

Web based repository of resource maps including sustainability considerations.

For further info

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<http://www.globalbioenergy.org>