

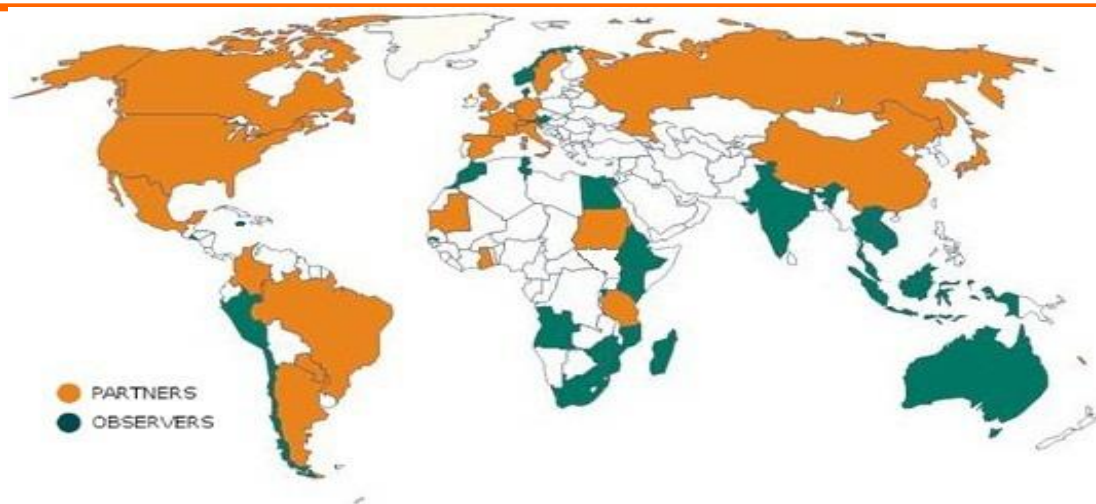
# **GBEP sustainability indicators for bioenergy. Implementation and lessons learned**

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***IEA Workshop on Sustainability Governance***  
*Paris, 25 April 2017*

***Dr. Maria Michela Morese***  
*Executive Secretary*  
*Global Bioenergy Partnership*  
*Food and Agriculture Organization of the United Nations (FAO)*

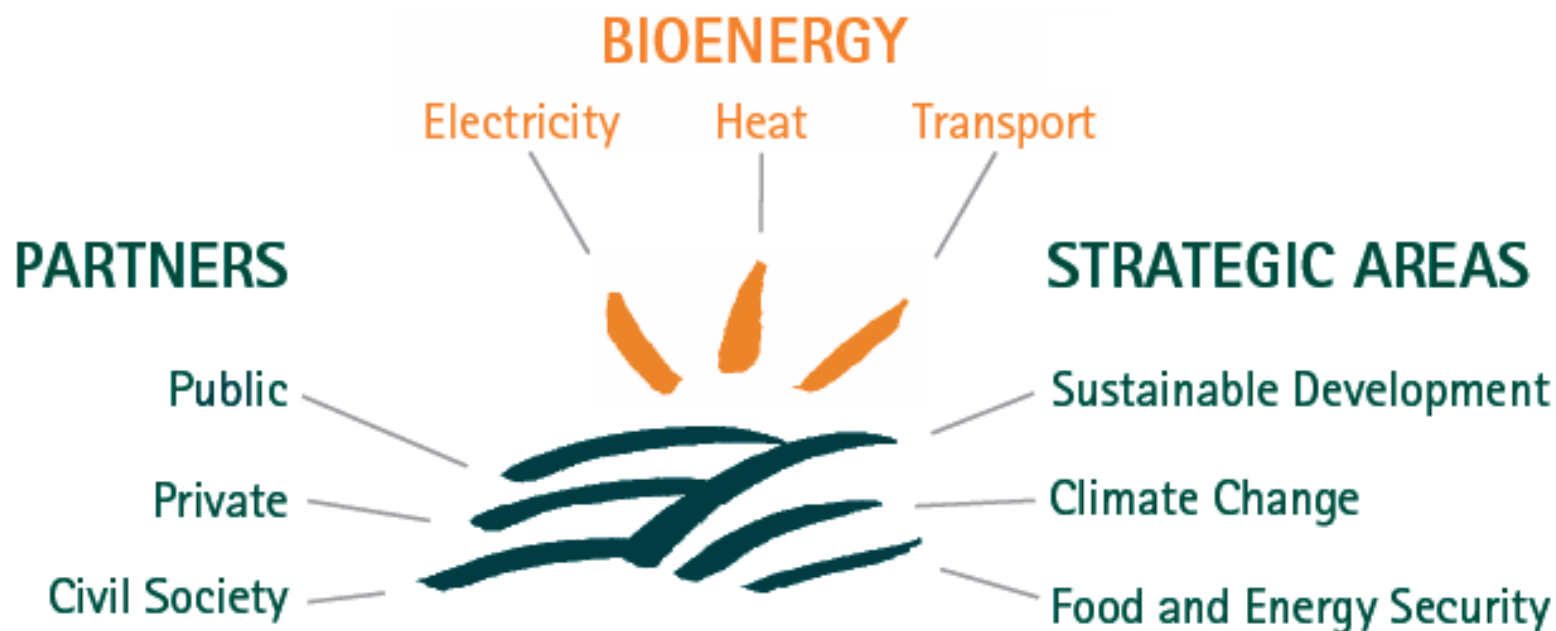
# GBEP MEMBERSHIP



37 Partners and 40 Observers  
(Governments and International Organizations)



# THE GLOBAL BIOENERGY PARTNERSHIP



**Italy** and **Brazil** are currently Chair and co-Chair of the Partnership.  
The Secretariat is hosted at FAO in Rome.

# GBEP PROGRAMME OF WORK



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**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 main priorities:

- 1. Facilitating the sustainable development of bioenergy** (Task Force on Sustainability)
- 2. Facilitating Capacity Building for Sustainable Bioenergy** (Working Group on Capacity Building for Sustainable Bioenergy)

# GBEP SUSTAINABILITY INDICATORS FOR ALL TYPES OF BIOENERGY

ENVIRONMENTAL		ECONOMIC
1. Lifecycle GHG emissions	<p data-bbox="608 796 1207 935"><b>THE GLOBAL BIOENERGY PARTNERSHIP SUSTAINABILITY INDICATORS FOR BIOENERGY</b> FIRST EDITION</p> 	Productivity
2. Soil quality		Net energy balance
3. Harvest levels of wood resources		Gross value added
4. Emissions of non-GHG pollutants, including air toxics		Change in consumption of fossil fuels and traditional use of biomass
5. Water use and efficiency		Training and re-qualification of the workforce
6. Water quality		Energy diversity
7. Biological diversity in the landscape		Infrastructure and logistics for distribution of bioenergy
8. Land use and land-use change related to bioenergy feedstock production		Capacity and flexibility of use of bioenergy



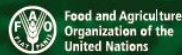
# IMPLEMENTATION OF THE SUSTAINABILITY INDICATORS

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Pilot Testing of  
GBEP Sustainability Indicators  
for Bioenergy in Colombia

59

ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT WORKING PAPER  
[ ENERGY ] MONITORING AND ASSESSMENT



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Pilot Testing of  
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for Bioenergy in Indonesia

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# TESTING OF THE GBEP INDICATORS IN COLOMBIA, INDONESIA, VIETNAM AND PARAGUAY

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Between 2011 and 2014, FAO tested the GBEP indicators in **Colombia and Indonesia**, while **since May 2016** are being tested in **Vietnam and Paraguay** with support from the International Climate Initiative (ICI) of the **Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety of Germany**.

The testing are aimed to:

- **assess and enhance the practicality** of the indicators as a tool for sustainable development; and
- **strengthen the capacity of the countries to measure bioenergy sustainability and enhance its achievement**. Measured over time, the indicators show progress towards or away from a sustainable development path as determined nationally.

# LESSONS LEARNT: NEED FOR FURTHER GUIDANCE

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- In light of the numerous lessons learned collected so far on the Colombia and Indonesia case, as well as on the many other projects developed so far on the measurement of the GBEP indicators, an **Implementation Guide** has been recognized as needed in order to provide guidance on **methodological** and **practical issues** related to the implementation of certain indicator methodologies. → new scope of the GBEP TF Sustainability
- Further guidance would be needed especially on the **attribution** of impacts to bioenergy production and use, identifying a range of suitable approaches for each indicator.



# CONCLUSIONS

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- Bioenergy has the potential to reduce GHG emissions **and offer opportunities to agriculture and forestry sectors;**
- **Sustainability** is key;
- **Monitoring sustainability** is a **necessary step** in order to understand, evaluate and improve the performances of the sector;
- **GBEP is actively working** on the diffusion of **sustainability** in the processes of production and use of bioenergy resources (e.g. **the GBEP Sustainability Indicators for Bioenergy**); and
- Particularly for **policymakers** GBEP represents an important forum for discussion and harmonization **policies.**

# THANK YOU!



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