

Global Bioenergy Partnership

*Working together to promote bioenergy
for sustainable development*

20th World Energy Congress – Rome 2007

Maria Michela Morese

Global Bioenergy Partnership Secretariat
Food and Agriculture Organization of the United Nations



A CONFLICT OF INTERESTS

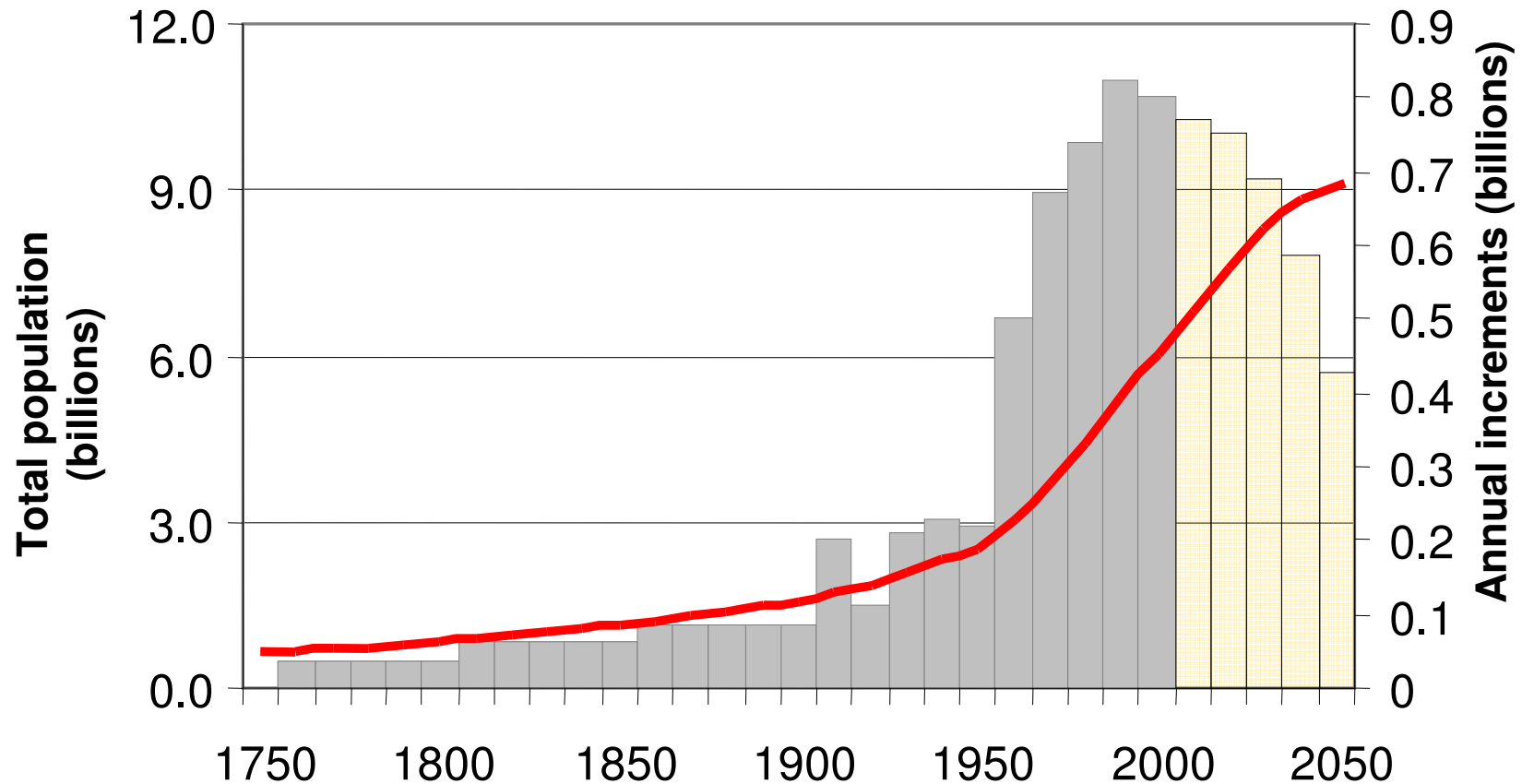
Energy security and Climate security

According to the **Intergovernmental Panel on Climate Change (IPCC)** a global emissions reduction by 30%-50% should be reached in the timeframe 2030-2050, to drive the stabilization of CO₂ concentration at a safe level (450-550 ppm) by the end of the century, to avoid irreversible changes in the climate system.

According to the Reference Scenario in the **IEA World Energy Outlook 2006**:

- world energy consumption will increase about 55% in the next 25 years, 85% from fossil fuels;
- the global CO₂ energy related emissions will increase of about 50%-60%.

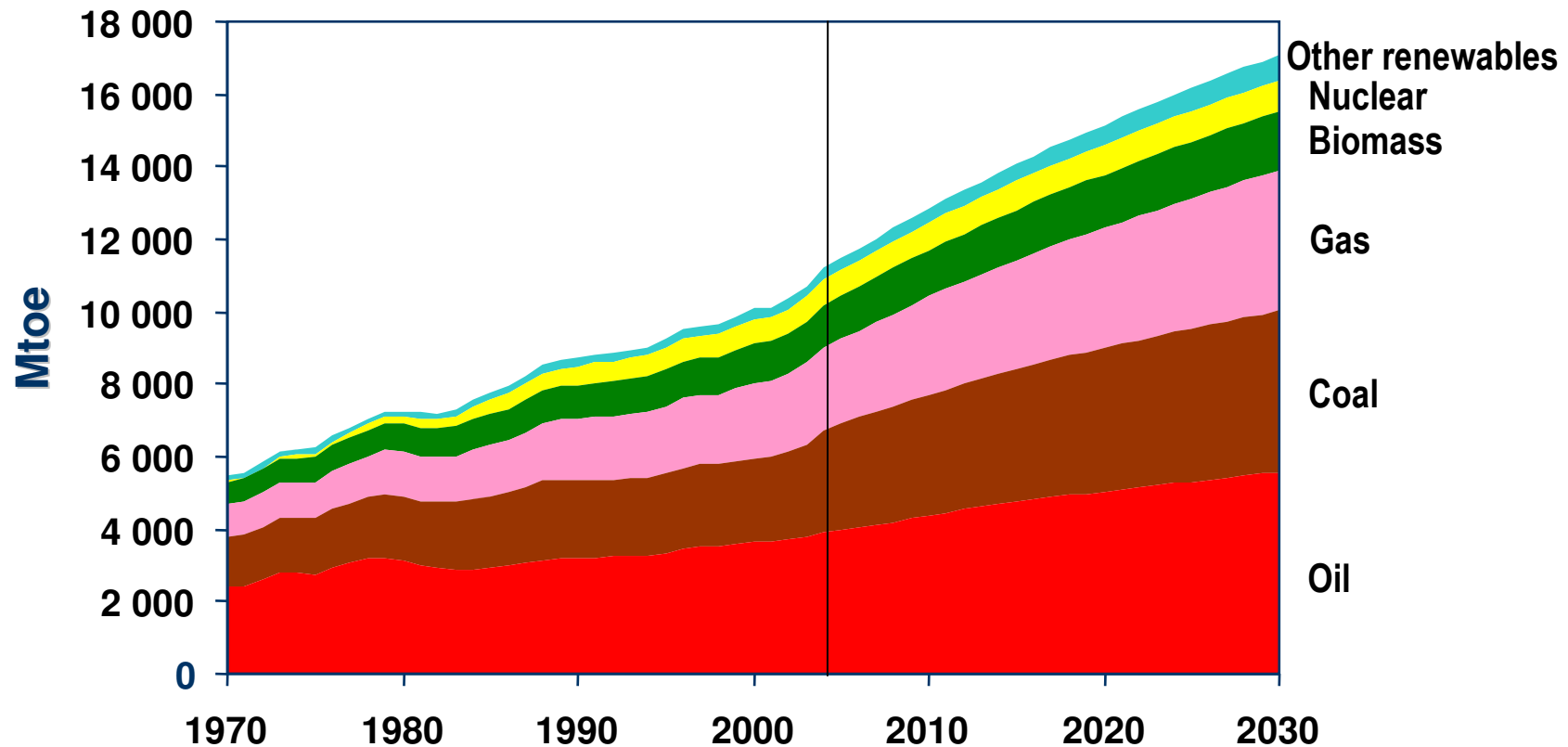
WORLD POPULATION: 1750 – 2050



Source: UN, 2003

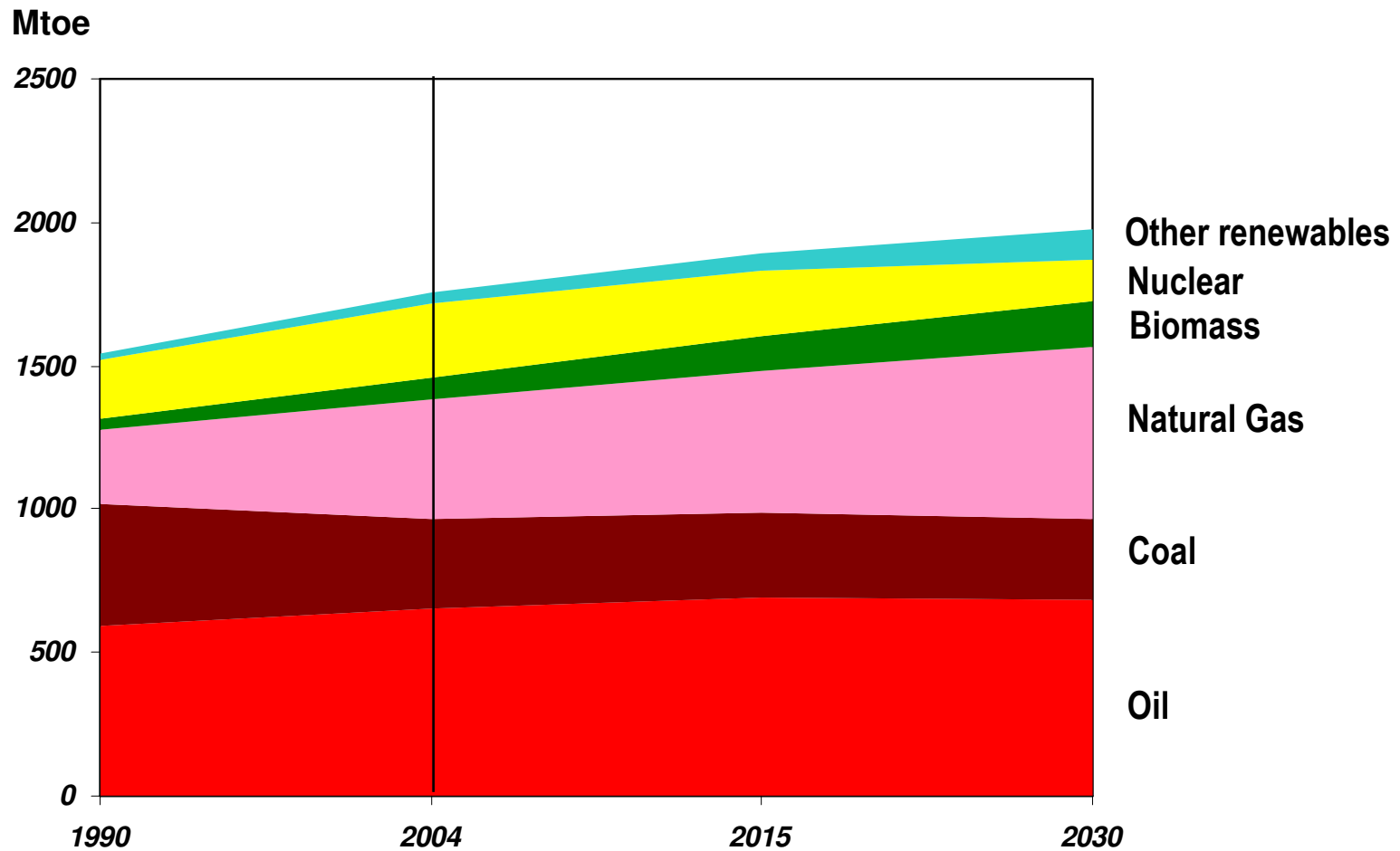
WORLD PRIMARY ENERGY DEMAND

(Reference Scenario WEO 2006)



Source: Reference Scenario WEO, IEA 2006

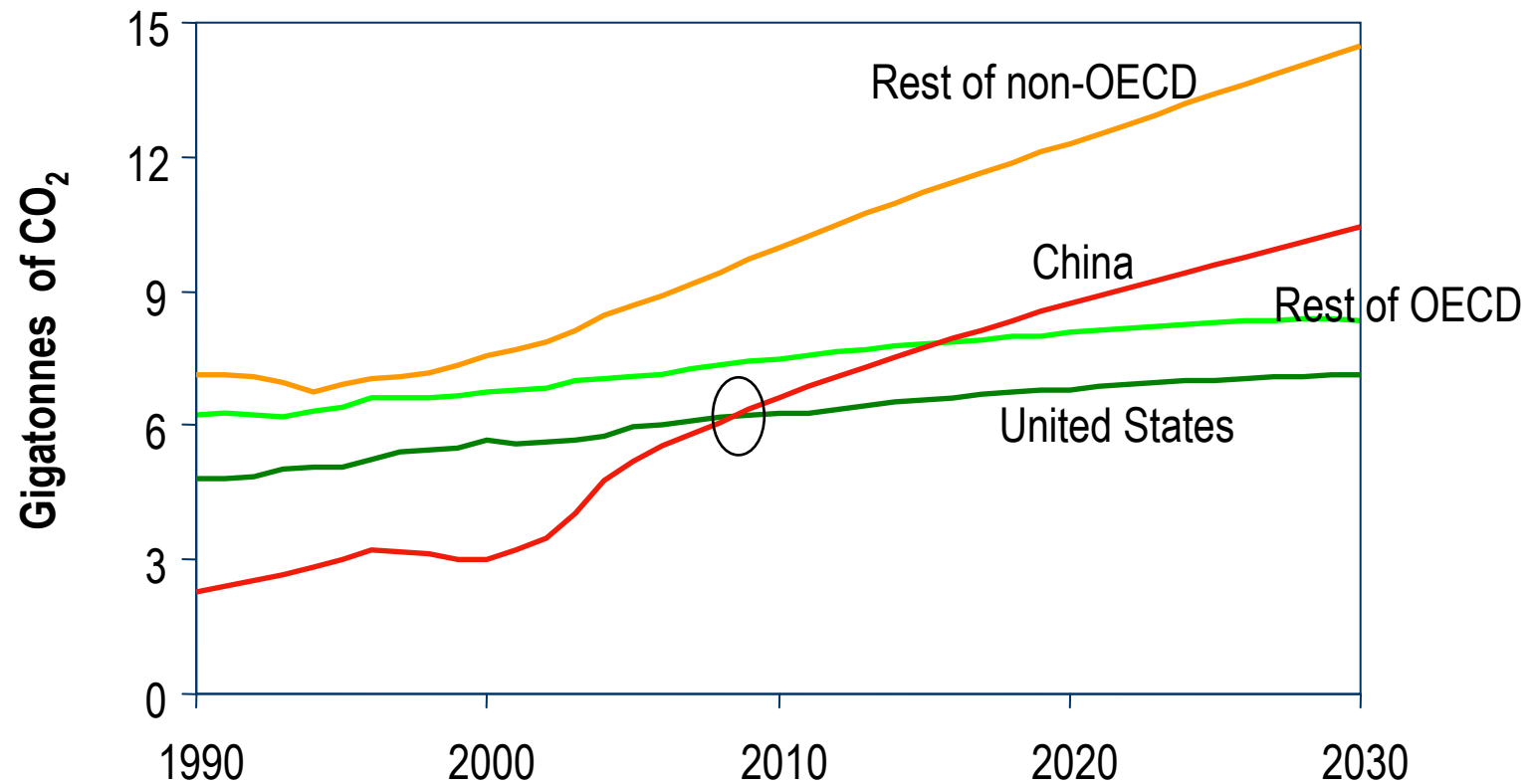
PRIMARY ENERGY DEMAND IN THE EU (1990 – 2030)



Source: Reference Scenario WEO, IEA 2006

ENERGY-RELATED CO₂ EMISSIONS

(Reference Scenario WEO 2006)



Source: Reference Scenario WEO, IEA 2006

G8 COMMITMENTS AND MANDATES

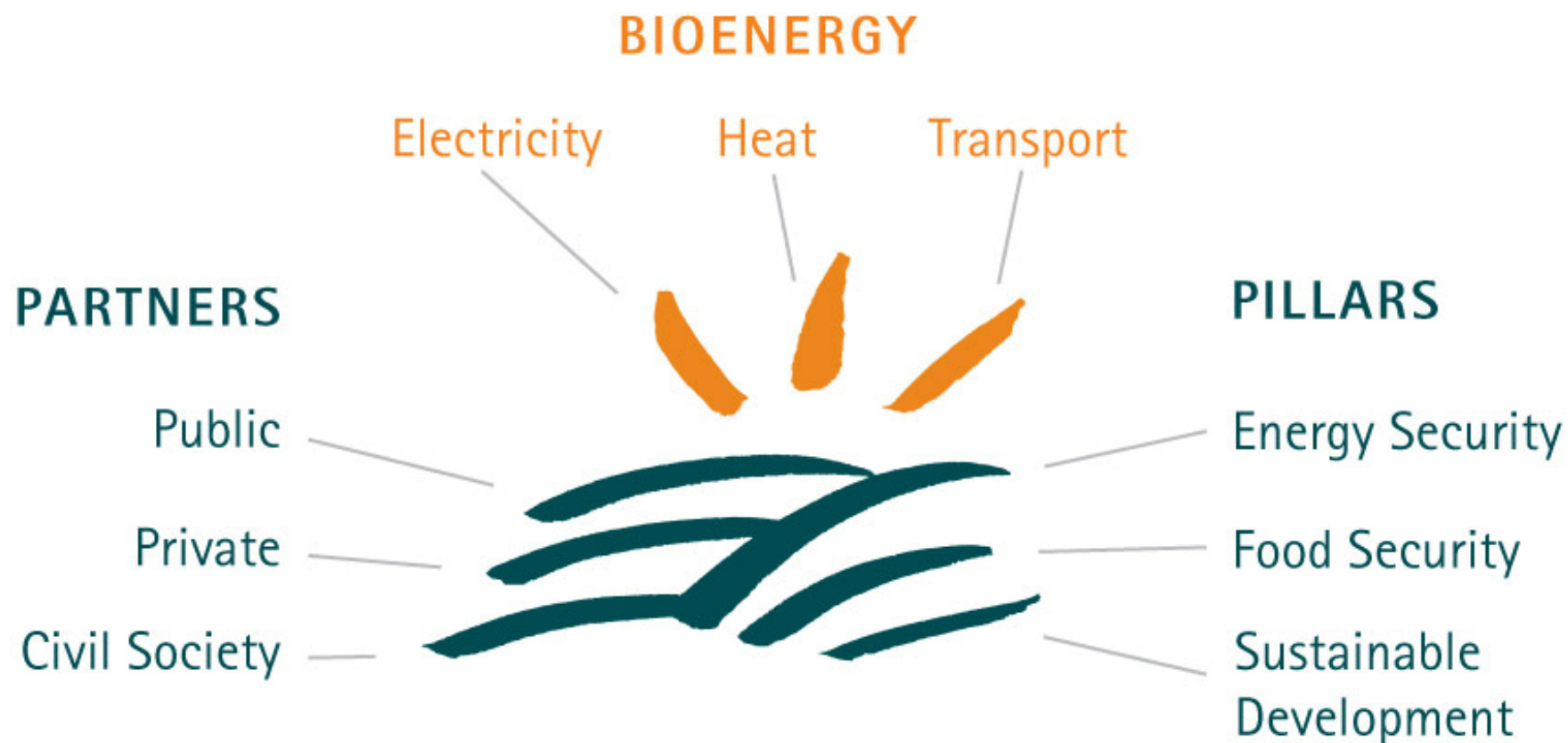
2005 Gleneagles Plan of Action

*“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, following the Rome International Workshop on Bioenergy”.*

2007 Heiligendamm Summit Declaration

*“We invite the **Global Bioenergy Partnership (GBEP)** to continue its work on biofuel best practices and **take forward the successful and sustainable development of bioenergy**”*

GBEP – SCOPE, PARTNERS, PILLARS



GBEP OBJECTIVES

- Favour **efficient and sustainable** uses of biomass
- Facilitate bioenergy **integration into energy markets**
- Create a **global high-level policy dialogue** and **facilitate international collaboration**
- Foster the **exchange of information**
- Act as a **cross-cutting initiative**, working in synergy with other relevant activities and avoiding duplications

GBEP ADDED VALUE

- Focus on **bioenergy** as a key renewable energy source
- Strong **political commitment** - promote bioenergy in line with climate change, energy security & food security considerations
- A **voluntary forum** to facilitate international dialogue
- Priority given to **developing countries**
- **Exchange of experience and technologies** – North-South, South-South, South-North
- Engagement of the **private sector**
- **Visibility** of bioenergy opportunities and challenges at international level & **Integration** into development initiatives.
- Improved **coordination** across sectors and stakeholders

BIOENERGY: MAIN BENEFITS

- **Sustainability:** clean and renewable energy source
- **Availability:** increased energy access - rural areas
- **Flexibility:** power, heat and transport
- **Energy security:** diversified energy mix, domestic sources
- **Mitigation of climate change**
- **Diversification of rural livelihoods**
- **Reduction in land degradation**

BIOENERGY: KEY CHALLENGES

- Ensuring **sustainability**
- Safeguarding **food security**
- Protecting **biodiversity**
- Managing competition for **land and water**
- Controlling pollution of **air, water and soils**
- Removing barriers to bioenergy **trade**

ARE BIOFUELS A SUSTAINABLE OPTION?

THE PALM OIL CASE IN INDONESIA

According to a 2006 research of “Wetlands International” and “Delft Hydraulics”, the expanding production of palm oil in Indonesia to meet the increasing demand of biofuels in Europe was created by draining and burning the peat land, as well by razing huge tracts of the Southeast Asian rain forest in combination with overuse of chemical fertilizers.

Peat is an organic carbon storage sponge. Peat land is 90 per cent water. Draining and burning the peat land releases about 2 billion tons of carbon/year, equivalent to 8% of annual global emissions from the use of fossil fuels.

This driven Indonesia the third-leading emitter of green house gases after USA and China.

In the case of palm oil from Indonesia the production of biofuels can produce more harmful emissions than the fossil fuels they replace.

BIOFUELS: TOWARDS A SUSTAINABLE OPTION

- > Labeling and certification should be used to ensure sustainable development, environmental gains and promote social equity.
- > However, sustainability criteria should not represent a way for the introduction of un-necessary trade barriers and protectionism against developing countries export opportunities.
- > Biofuels can help in reducing emissions and addressing energy security if produced in appropriate way.

GBEP PROGRAMME OF WORK

Key priorities:

1. **FIRST GBEP REPORT**

“A Review of the Current State of Bioenergy Development in G8 +5 Countries”

2. **HARMONIZATION of METHODOLOGIES** for measuring GHG emission reductions from the use of biofuels for transportation

3. **Raising awareness** and facilitating information exchange on bioenergy

GBEP Programme of Work

1. FIRST GBEP REPORT

“A Review of the Current State of Bioenergy Development in G8 +5 Countries”

- It provides an overview of the current state of bioenergy development in G8 +5 Countries. It helps identify where there is common ground in policy priorities and concerns, and opportunities for international cooperation, as well as providing guidance on what still needs to be done for a sustainable development of bioenergy.
- GBEP has just this Report in a press conference here at the 20th World Energy Congress
- The Report is available at www.globalbioenergy.org

GBEP Programme of Work

2. HARMONIZATION of GHG METHODOLOGIES

GBEP Task Force on the HARMONIZATION of METHODOLOGIES for measuring GHG emission reductions from the use of biofuels for transportation

- US is the GBEP leading Partner
- US hosted the first GBEP Task Force meeting in Washington DC on 9-10 October 2007.
- Main objectives of this GBEP Task Force:
 - Identify commonalities in how different countries and institutions are measuring the GHG impacts of biofuels
 - Develop a checklist of elements for life cycle analysis, in view of a harmonized methodology

GBEP Programme of Work

3. RAISING AWARENESS AND FACILITATING INFORMATION

This GBEP activity seeks to increase the understanding of pertinent issues related to bioenergy development among Partners and between the Partnership, other technical and political actors, and the general public. It also provides the basis for a deeper and more effective coordination of ongoing activities on bioenergy.

GBEP's awareness-raising and information management activities are focusing on two main areas:

- development of GBEP information material and the GBEP website (www.globalbioenergy.org);
- participation in relevant international conferences and meetings focused on bioenergy, and organization of specific GBEP events.

For further information

GBEP Secretariat

Food and Agriculture Organization

Rome - ITALY

E-mail: GBEP-Secretariat@fao.org

www.globalbioenergy.org