

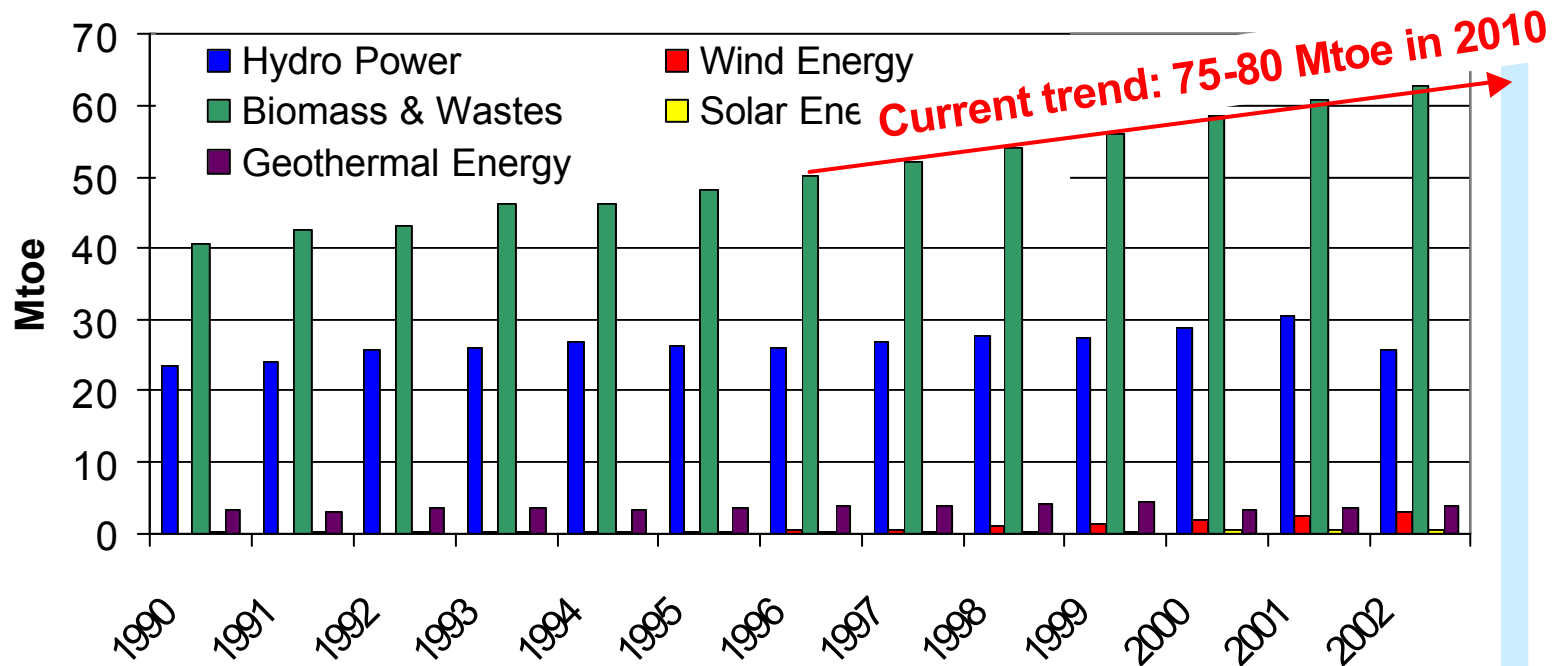
# EU Biomass Action Plan

- Biomass action plan adopted December 7, 2005  
... in the form of a communication to the  
Council and Parliament
- Objectives:
  - 1) security of energy supply
  - 2) reduce greenhouse gas emissions
  - 3) stimulate economic activity in rural areas

# Insufficient Growth of Bioenergy in Europe

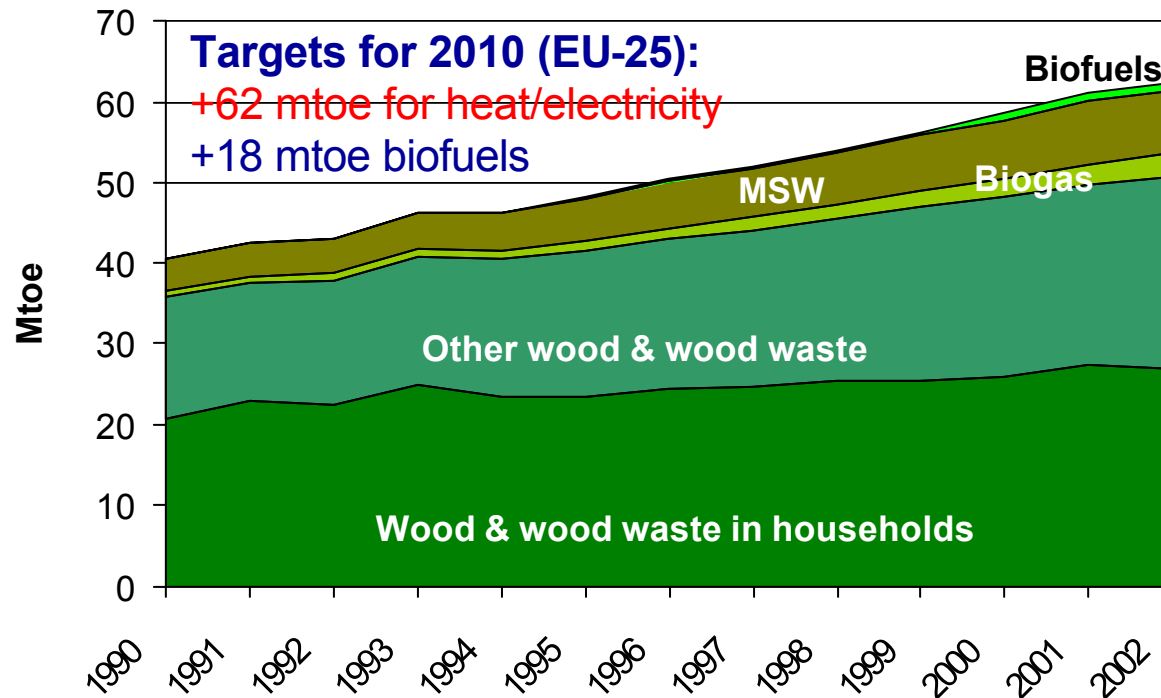
White Paper target for EU-15: 135 Mtoe biomass use in 2010

Adjusted targets for EU-25: 150 Mtoe biomass use in 2010



# Europe's Ambitious Targets for Bioenergy

**EU25, 1990-2002, biomass & waste only**



# ENERGY USES OF BIOMASS

## ❖ **transport biofuels**

- tackle the most important security of supply problem (oil)
- employment-intensive
- most expensive

## ❖ **biomass in electricity generation**

- highest greenhouse gas benefits

## ❖ **biomass heating**

- cheapest (often competitive with fossil fuel)

**Conclusion:**  
**biomass should be promoted in**  
**all three sectors**



# MEASURES

- The plan lists 31 measures
- These measures, if implemented, are expected to increase biomass use to **150 mtoe** by 2010 or soon after
- This can be done with **good agricultural practice** and **sustainable production** of biomass and without significantly affecting **domestic food production**

# BIOMASS FOR HEATING AND ELECTRICITY

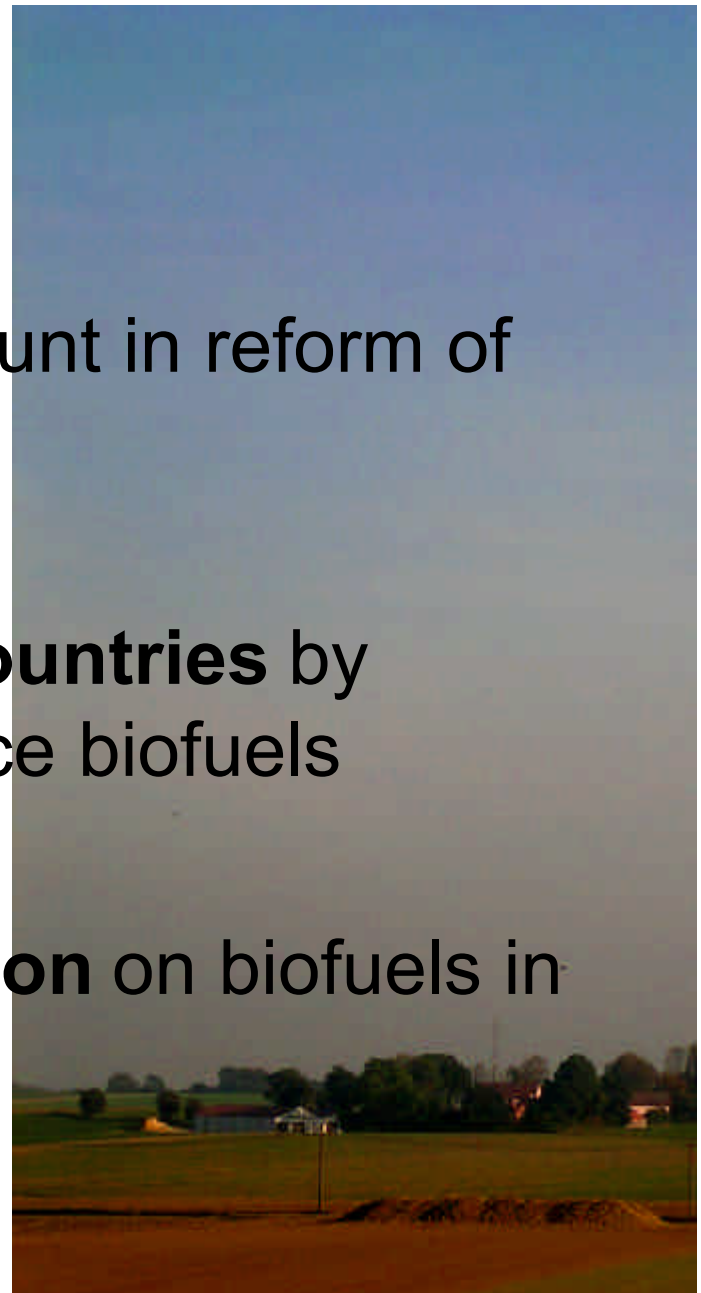
- Work towards legislation on **renewable energy in heating and cooling**. The examination will cover:
  - amendment of the **buildings directive**
  - standards for **household biomass boilers**
  - new **specific legislation** (NB: there are good reasons to think that targets may not be the right solution)
- Encourage **district heating** to modernise and convert to biomass
- Ensure proper implementation of the directive on **renewable energy in electricity**

# TRANSPORT BIOFUELS

- Report on implementation of the **biofuels directive**. Look at amending the directive with respect to:
  - national targets
  - “biofuels obligations” for fuel suppliers
  - certification of minimum standards of sustainable cultivation
- “Balanced approach” to **biofuels trade**, respecting interests of domestic producers and trading partners

## TRANSPORT BIOFUELS (2)

- Take biofuels into account in reform of **fuel quality directive**
- Support **developing countries** by helping them to produce biofuels
- **Specific communication** on biofuels in early 2006





# CROSS-CUTTING ISSUES

- Examine how to improve **biomass supply** through:
  - Common Agricultura Policy (energy crop scheme)
  - forestry action plan
  - waste framework legislation
  - animal by-products legislation
  - standardising biomass fuels
- Encourage Member States to take biomass into account in operational plans under the **structural funds**
- Biomass energy **research** priorities including:
  - bio-refining
  - 2<sup>nd</sup>-generation transport biofuels from wood and wastes

## ESTIMATED COSTS AND BENEFITS (2010)

- **Reliance on imported energy** reduced from 48% to 42%
- **Greenhouse gas emissions** reduced by 209 MT CO<sub>2</sub> per year
- Direct **employment** for up to 250-300 000 people, mostly in rural areas
- Potential **downward pressure on the oil price** as a result of reduced demand for oil
- **COST** about €9 billion per year – equivalent to increases of 1.5 cents/litre for petrol and diesel and 0.1 cents/kWh for electricity

*More details (including ranges) are in the impact assessment*

# EU Strategy for Biofuels

- Adopted by the Commission 8 February
- Three main aims
  - promote use of biofuels in EU and developing countries
  - prepare for large scale use by improving cost-effectiveness and research into 2<sup>nd</sup> generation
  - support developing countries