



The EU energy and climate package

Improving energy efficiency

get to grips with
**climate
change**



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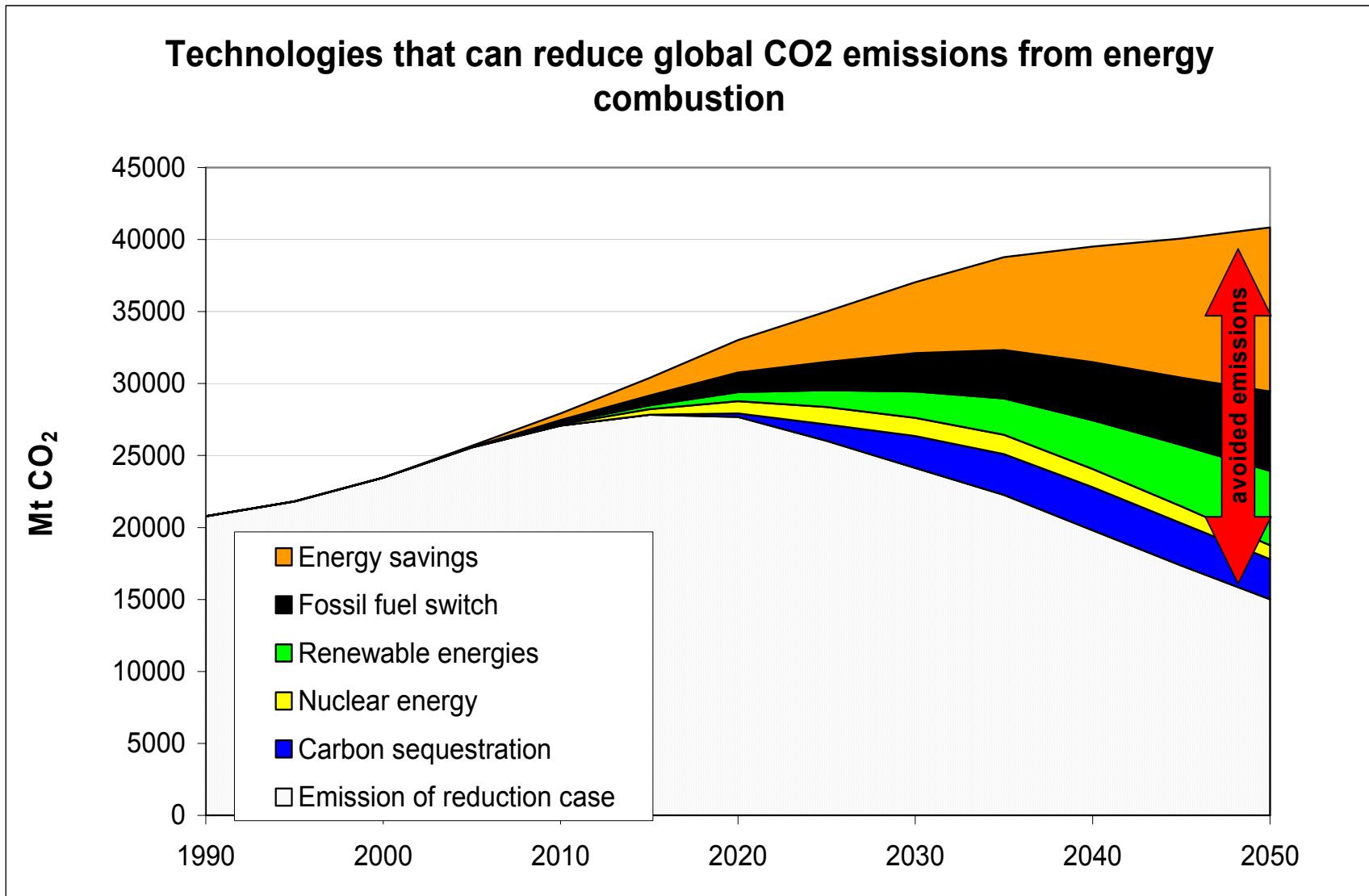


Climate Change and Energy package: Limiting climate change to 2°C

- Global GHG emissions need to peak around 2020
- Comprehensive package of measures: integrated climate change and energy policy to combat climate change (2°C) and boost energy security and competitiveness
- Key features of this new EU policy are:
 - Reducing greenhouse gas emissions from developed countries by 30% by 2020 in the framework of an international agreement
 - Committing the EU independently to reduce greenhouse gas emissions by at least 20% by 2020 even in the absence of an international agreement
 - Improving energy efficiency by 20% by 2020
 - Raising the share of renewable energy to 20% by 2020
 - Increasing the level of biofuels in transport fuel to 10% by 2020



Energy Efficiency is key to achieve the 2 degree Celsius objective



Source: JRC-IPTS, POLES model



Energy Efficiency is key to achieve the 2 degree Celsius objective

IPCC, 4th AR, WG III, Summary for Policy Makers:

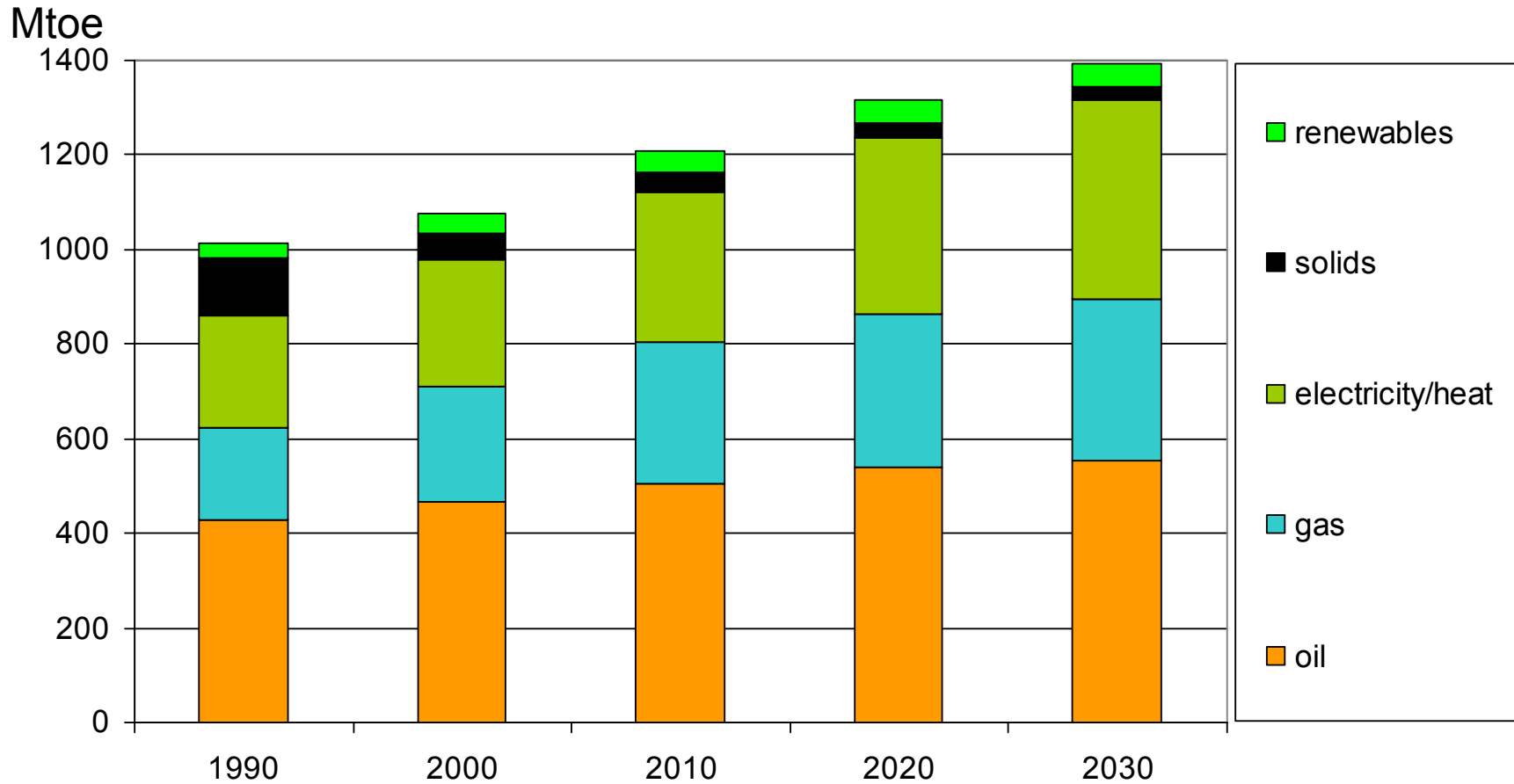
- Energy efficiency plays a key role across many stabilisation scenarios for most regions and timescales.
- Climate change policies related to energy efficiency and renewable energy are often economically beneficial, improve energy security and reduce local pollutant emissions.

IEA, Energy Technology Perspectives 2006:

- Improving energy efficiency is often the cheapest, fastest and most environmentally friendly way to meet the world's energy needs.
- Improved energy efficiency also reduces the need for investing in energy supply. Many energy efficiency measures are already economic and they will pay for themselves over their lifetime through reduced energy costs.



Also in the EU final energy demand rises without additional measures



EU energy demand trends to 2030



EU

**Energy Efficiency
Action Plan**



Energy Efficiency Action Plan

- Dynamic energy performance requirements for energy-using products, buildings and energy services
- Improving energy transformation and distribution (30% of primary energy use)
- Moving on transport (fuel-efficient cars; better use of public transport; biofuels....)
- Financing energy efficiency, economic incentives and energy pricing
- Changing energy behaviour
- International partnerships and EE agreement

6 areas, 10 priorities, 75 actions



Implementing measures

- Intelligent Energy Agency & RTD Framework Prog.
- Commission work programme & Lisbon strategy
- Legislation: Buildings (*highest efficiency houses to become the norm for new housing*) – Cogeneration – Eco-Design Dir. – Energy end-use efficiency Dir. ('ESD') – Labelling Directives...
- Industrial agreements/commitments
- 'Behaviour change' campaigns: SustEnergy ('SEE') and ManagEnergy (local actors)
www.sustenergy.org www.managenergy.net



New initiatives

- *Sector agreements* to include regulators and (voluntary) with producers
- *Framework for distributed generation* to promote smaller-scale, localised supply
- EE/greater decentralisation into *EU Reg. on cross-border distribution*
- *White (EE) certificates* – market-based instrument..... (subject to study results)
- Revised '*environmental*' guidelines for state aid acceptance: Commission seeking greater consideration for E.E.



EU resources for energy efficiency

- Structural Funds/ERDF (priority)
- EIB/EBRD and other IFIs to focus support and products (ongoing); more commercial banks
- International Energy Efficiency agreement with G8 + 5 and G20 countries, incl bi-lateral agreements
- Possibility of Public-private-partnerships



Expected impact of Energy Efficiency Action Plan

- **MONETARY SAVINGS:** around 50 billion euros gross annually already by 2012 – *double by 2020*
- **CARBON EMISSION SAVINGS:** around 780 million tonnes of CO₂ annually by 2020 (Kyoto +)
- **ENERGY SAVINGS:** around 390 Mtoe by 2020 or +/- 14% less than 2007 (*cf Renewables: only about half – 250 Mtoe*)
- **GREATER COMPETITIVENESS** for the EU economy
- **POTENTIAL GLOBAL IMPACT** through international agreement(s)



Proposed Green Paper on Urban Transport

AIMS

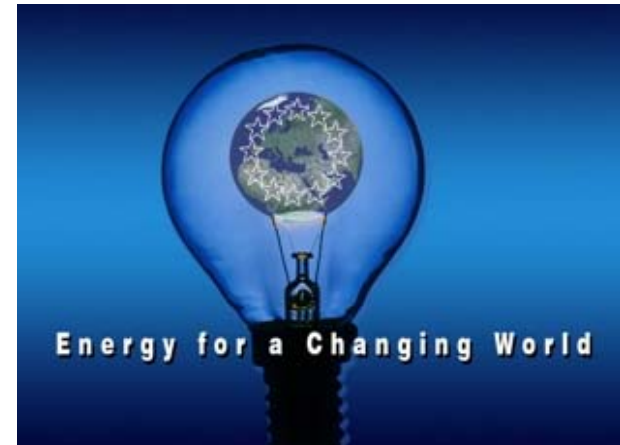
- to identify potential European added value to action that is taken at the local level in all aspects of urban transport
- to assess whether obstacles exist at the EU level and how to remove them
- to confirm the areas where integrated European solutions can help

Green Paper is based on wide public consultations



More information on how to...

get to grips with
climate change



http://ec.europa.eu/energy/energy_policy/index_en.htm

http://ec.europa.eu/environment/climat/future_action.htm