ENERGY EFFICIENCY IN BUILDINGS

THE WAY FOR THE EU TO MEET ITS KYOTO COMMITMENTS

The European Alliance of Companies for Energy Efficiency in Buildings

June 15 2005, Brussels
EUFORSE-INFORSE-EREF Seminar
In 1998, twenty-two of Europe’s leading companies involved with the manufacture, distribution and installation of a variety of energy saving goods and services came together to form The European Alliance of Companies for Energy Efficiency in Buildings - otherwise known as the EuroACE project. Members employ half a million people and turnover is 150 billion euros across the EU.
EuroACE MEMBERS

- Aereco
- Armacell International
- Bing
- BPB
- CRH
- Danfoss
- Eurima
- Giacomini
- Grundfos
- Honeywell
- Hunter Douglas
- Huntsman Polyurethanes
- Knauf Insulation
- Paroc
- Philips Lighting
- Pilkington
- Rockwool International
- Saint-Gobain Isover
- Siemens
- Skanska
- URSA
- VELUX
Conclusion: Buildings account for 40-45% of CO₂ emissions
BUILDING EMISSIONS - SOME BASIC FACTS

- Buildings are the single largest end users of energy in the EU
- 40% - 45% (average) in each member state
- 2/3 domestic – 1/3 commercial
- Space heating and cooling represents:
  - 70% in homes
  - 50% in commercial buildings
BUILDINGS - PRESENT TRENDS

- Between 1985 and 1997 average home size increased from \(83^2\) to \(87m^2\)

- During the last decade, in the services sector, energy consumption per \(m^2\) increased faster than total area occupied, at an annual rate of 1.3%

- Since 1997, 50% of the increase in total energy demand has arisen in the service and domestic sectors (balance from transport)

- Transport sector +39% (1990 - 2010); service and domestic sectors expected to be similar
WHERE WILL THE REDUCTIONS IN EMISSIONS COME FROM?

- Thermal insulation: Up to 200 million tonnes
- Glazing: Up to 120 million tonnes
- Controls systems: Up to 80 million tonnes
- Lighting: Up to 50 million tonnes

Total: Up to 450 million tonnes

www.euroace.org
EuroACE’S KEY MESSAGES

- Annual saving of up to 450 million tonnes of CO₂ by 2010 through building energy efficiency measures - more than 10% of 1990 emissions
- Implementation would create many jobs (estimated at 3.4 million job years)
- Almost all building energy efficiency measures are highly cost effective
- Measures undertaken during refurbishment are more cost effective
- In many instances the measures provide savings
MORE OF EuroACE’S KEY MESSAGES

- Technologies are available now
- Technologies are appropriate for new and existing buildings - refurbishment of existing buildings is a critically important step
- Energy savings could enhance the viability of renewable energy generation technologies
- Measures are highly appropriate to an enlarged EU - extreme climates and under-insulated buildings
GETTING THE EuroACE MESSAGE ACROSS

Appointments to:
• EC Policy Advisory Committee on Energy
• European Climate Change Programme (Working Group on Energy Consumption)
• EC Task Group on Sustainable Construction and Energy Efficiency (Chairman)
• Security of Supply Panel
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