

## A new Directive on Energy Efficiency

- Challenges addressed & solutions proposed -

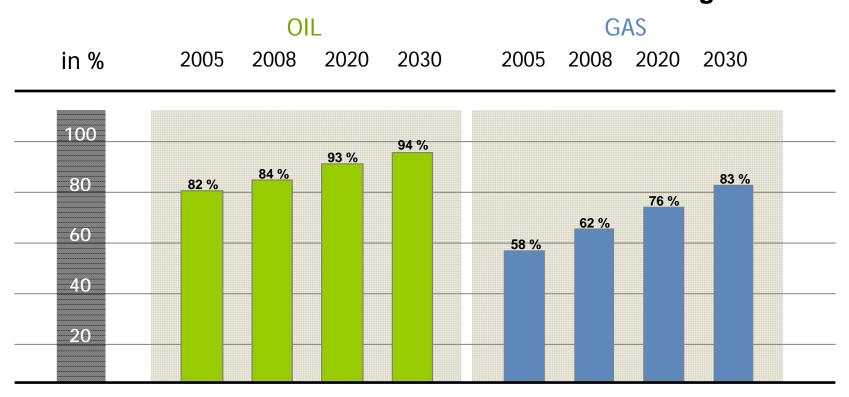
DG Energy 22 June 2011





### AS DEPENDENCE ON ENERGY IMPORTS IS LIKELY TO GROW

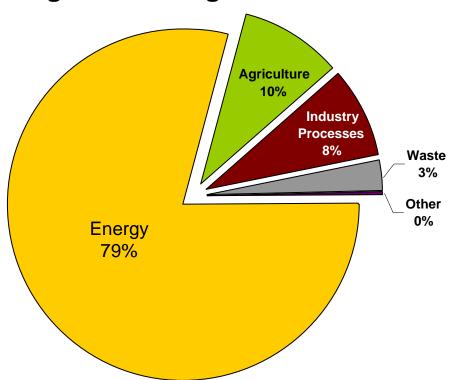
#### « Business as usual » scenario based on 2009 figures



Today, Europe imports more than half of the energy it uses. If nothing changes, our dependence on fossil fuel imports will rise by 2030.

### AND ENERGY USE IS A MAJOR SOURCE OF EMISSIONS

### Share of greenhouse gas emissions in 2008

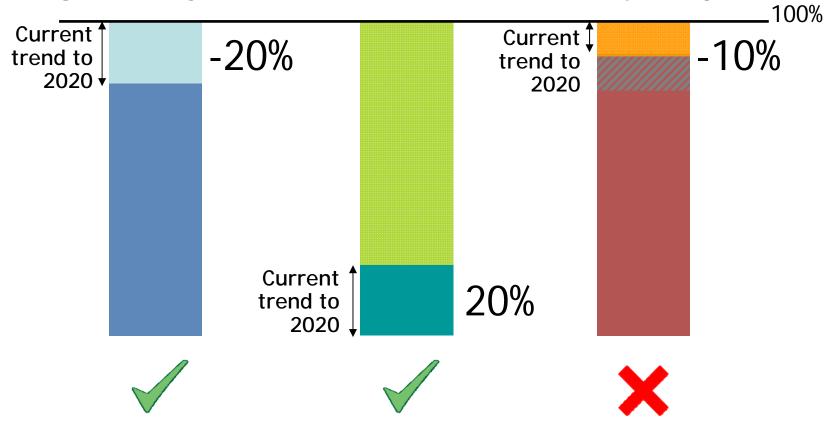


# MEETING ALL THREE "20-20-20 BY 2020" GOALS BECOMES A MATTER OF URGENCY

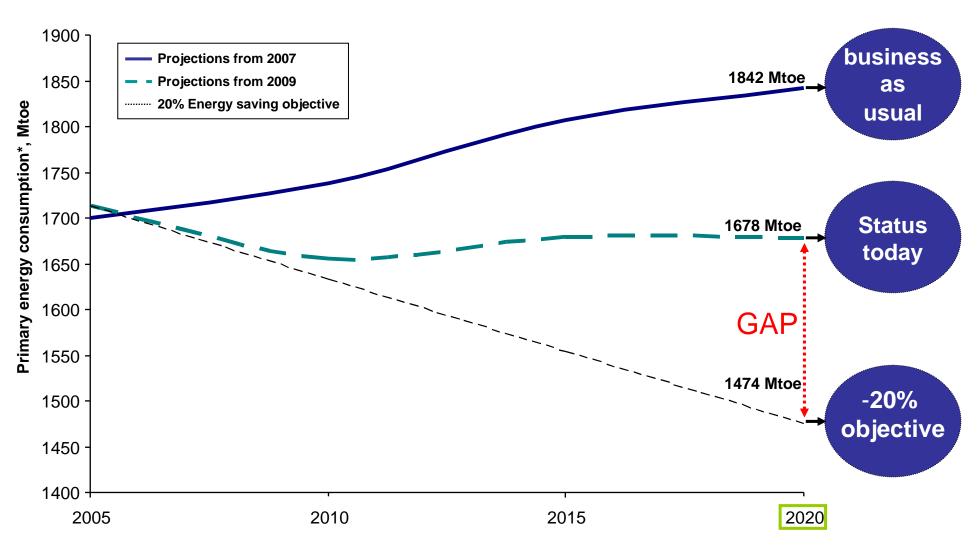
Reduce greenhouse gas levels by 20%

Increase share of renewables to 20%

Reduce energy consumption by 20%



# SO FAR THE EU IS NOT ON TRACK TO MEET ITS 20% ENERGY SAVING TARGET BY 2020



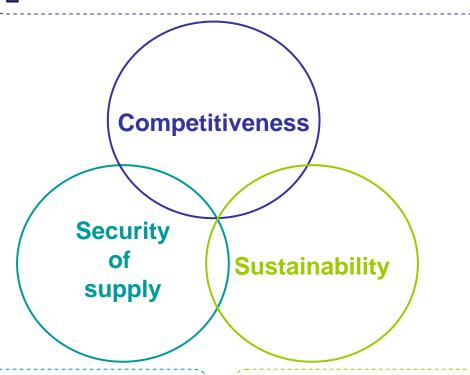
<sup>\*</sup> Gross inland consumption minus non-energy uses

### **DESPITE ITS CRUCIAL BENEFITS FOR EUROPE ...**

Reduce EU's energy bill by about €200 bn annualy in 2020

Create up to 2 million new jobs by 2020

Boost R&D & markets for EU global leadership



Reduce EU's energy dependence

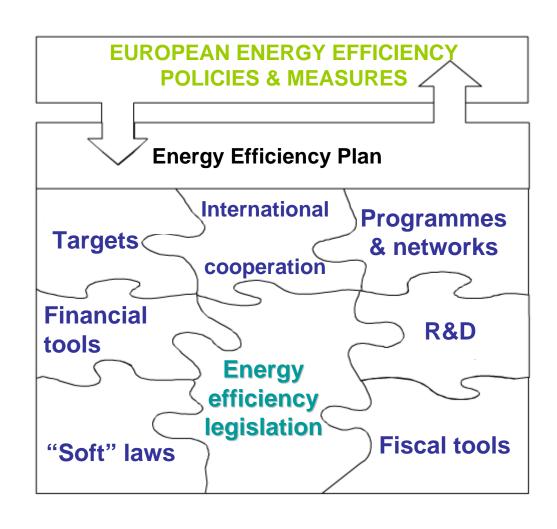
Reduce investments in energy infrastructures

Improve the energy trade balance

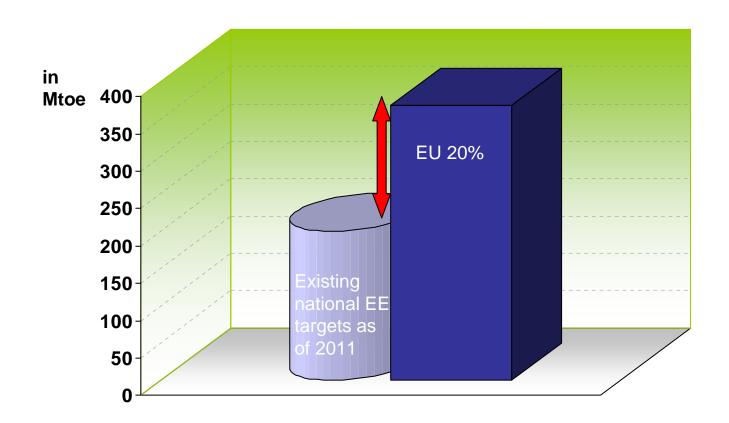
Reduce CO<sub>2</sub> emissions

Limit environmental degradation

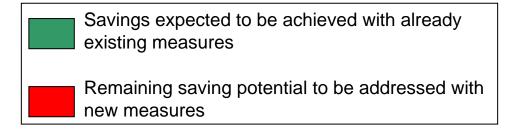
# AND THE COMPREHENSIVE SET OF EUROPEAN POLICIES & MEASURES IN PLACE TO ADDRESS ENERGY EFFICIENCY IN ALL ITS ASPECTS

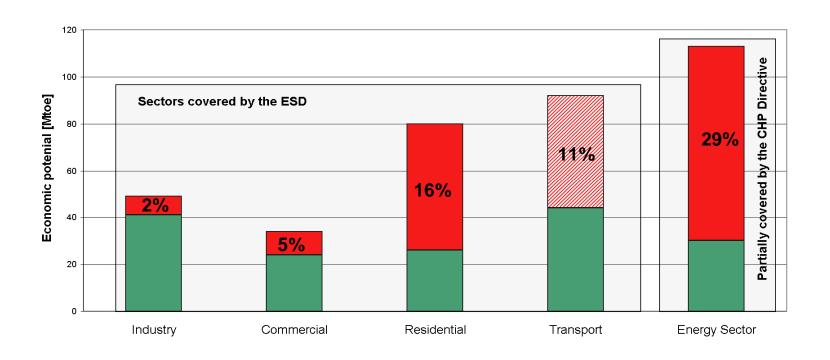


### **COMBINED WITH NATIONAL INTENTIONS WILL NOT SUFFICE**

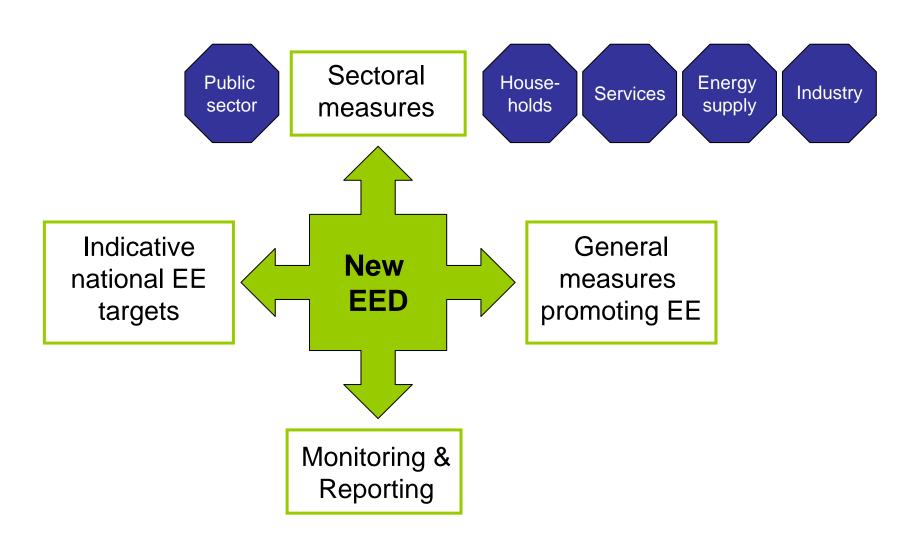


# TO TAP THE REMAINING ECONOMIC ENERGY SAVING POTENTIALS FOR 2020 THROUGHOUT THE SECTORS



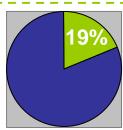


# A NEW IMPETUS IS NEEDED: COMMISSION PUTS FORWARD A NEW ENERGY EFFICIENCY DIRECTIVE

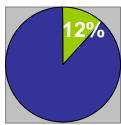


### **PUBLIC SECTOR TO LEAD BY EXAMPLE**

#### **Status**



 Public sector consumption makes important share of EU's GDP



 Share of public buildings in building stock



 Low average energy performance of existing buildings stock, incl. public buildings



 Cost optimal renovation can bring up to 60% energy savings

#### **EED** proposals

Purchase of products, services
 & buildings with high energy
 efficiency performance

Annual renovation target of 3% for public buildings above 250 m<sup>2</sup>

 Local energy efficiency plans and introduction of energy management systems

 More systematic use of Energy Performance Contracting

# CREATING BENEFITS FOR CONSUMERS THROUGH THE PROVISION OF TAILORED ENERGY SERVICES AND INFORMATION

#### **Status**



- Considerable saving potential unused in the residential and services sectors
- Slow uptake of market for energy efficiency services
- Lack of awareness & access to appropriate information on EE benefits



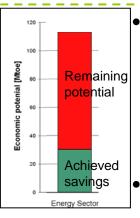
 Technological developments (e.g. smart meters/ grids) not sufficiently reflecting households interests

#### **EED** proposals

- National energy efficiency obligation scheme for utilities
- Obligation for individual energy meters, reflecting actual energy consumption & information on actual time of use
- Ensure accuracy & frequency of billing based on actual consumption
- Appropriate information with the bill providing comprehensive account of current energy costs

# IMPROVING ENERGY EFFICIENCY IN TRANSFORMATION AND DISTRIBUTION OF ENERGY

#### **Status**



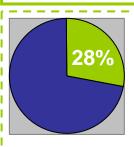
- Fragmented regulations & incentives to address waste across supply chain
- CHP uses 30% less fuel for the same amount of heat & power but level of use in EU low: 11% vs.
  21%.
- New generation installations not systematically reflecting level of Best Available Technologies

#### **EED** proposals

- 10-year national heat & cooling plans: transparency, predictability & alignment of policies for investments
- Waste heat recovery (CHP)
   obligation for new and existing
   power & industrial plants
- Network tariffs design to encourage offering services for consumers allowing them to save energy & control consumption
- National annual inventories of generation installations to monitor efficiency levels

# INCREASE AWARENESS FOR BENEFITS STEMMING FROM ENERGY EFFICIENCY IMPROVEMENTS IN INDUSTRY

#### **Status**



 Important share in overall final energy consumption



 Considerable progress made but potential remaining



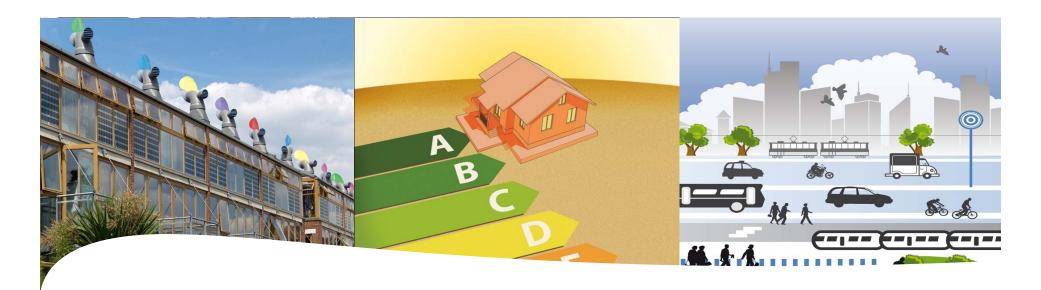
 Energy efficient technologies and EE best practices readily available

#### **EED** proposals

 Member States to create incentives for SMEs to undergo energy audits

 Dissemination of best practices on benefits of energy management systems for SME businesses

 Mandatory audits for large companies & incentives for the implementation of recommended measures and the introduction of Energy Management Systems



### Thank you!

For further information on energy efficiency please consult our website:

http://ec.europa.eu/energy/efficiency/

### POSSIBLE TIME PLANNING AFTER ADOPTION

July 2011

September - December 2011

January – June 2012

June – December 2012

December 2013

June 2014

- European Parliament to nominate a rapporteur
- First presentation & discussions in the Council Energy Working Group under Polish Presidency
- Continuation of discussions in the Council Energy Working Group
- Discussion in the EP
- Energy Council (November)
- Achieving of political agreement
- Finalization of the legislative text under the Cyprus Presidency
- Entering into for force of Energy Efficiency Directive by the end of 2012
- Implementation of the new Directive in the MS

Assessment of progress towards 20% saving objective