

# A new Directive on Energy Efficiency

- Challenges addressed  
& solutions proposed -

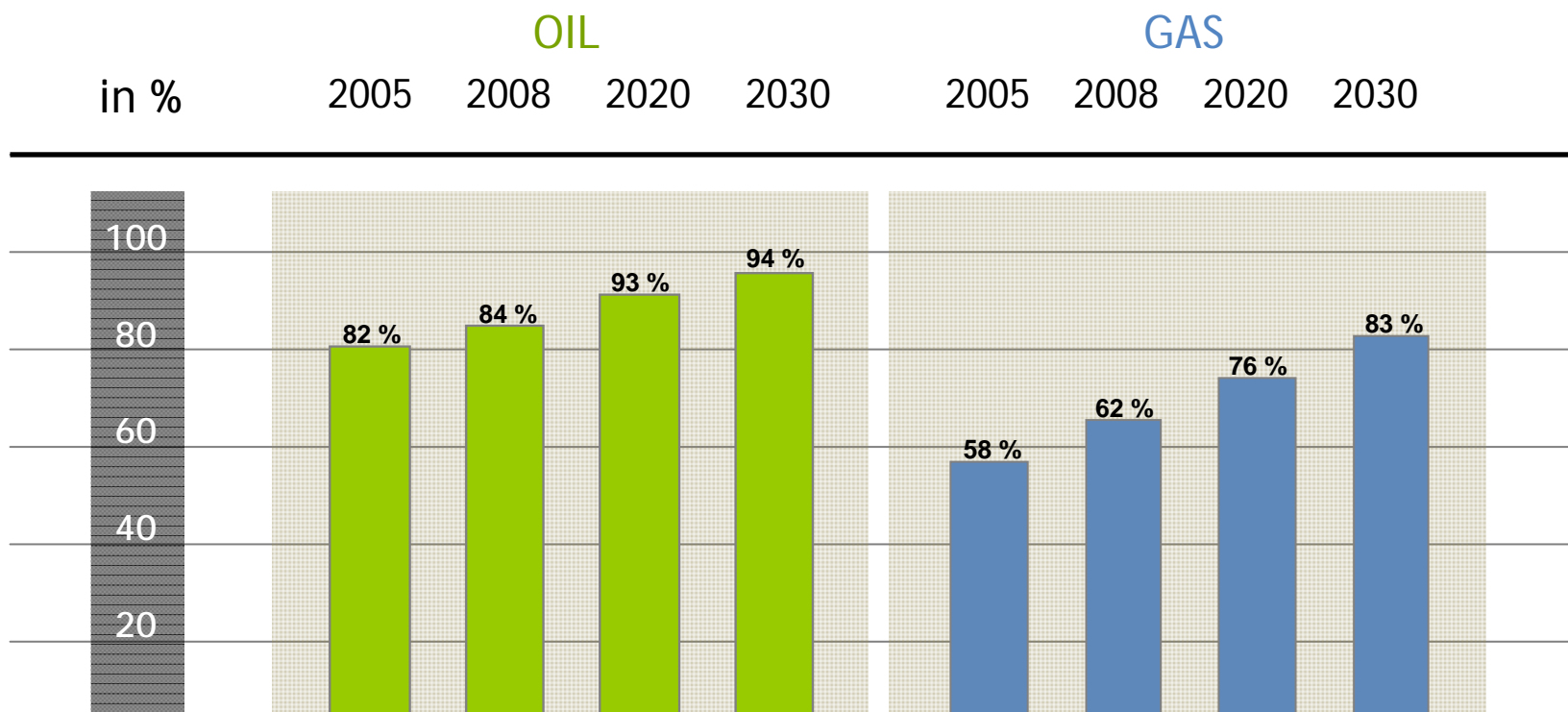
Directorate-General  
for Energy



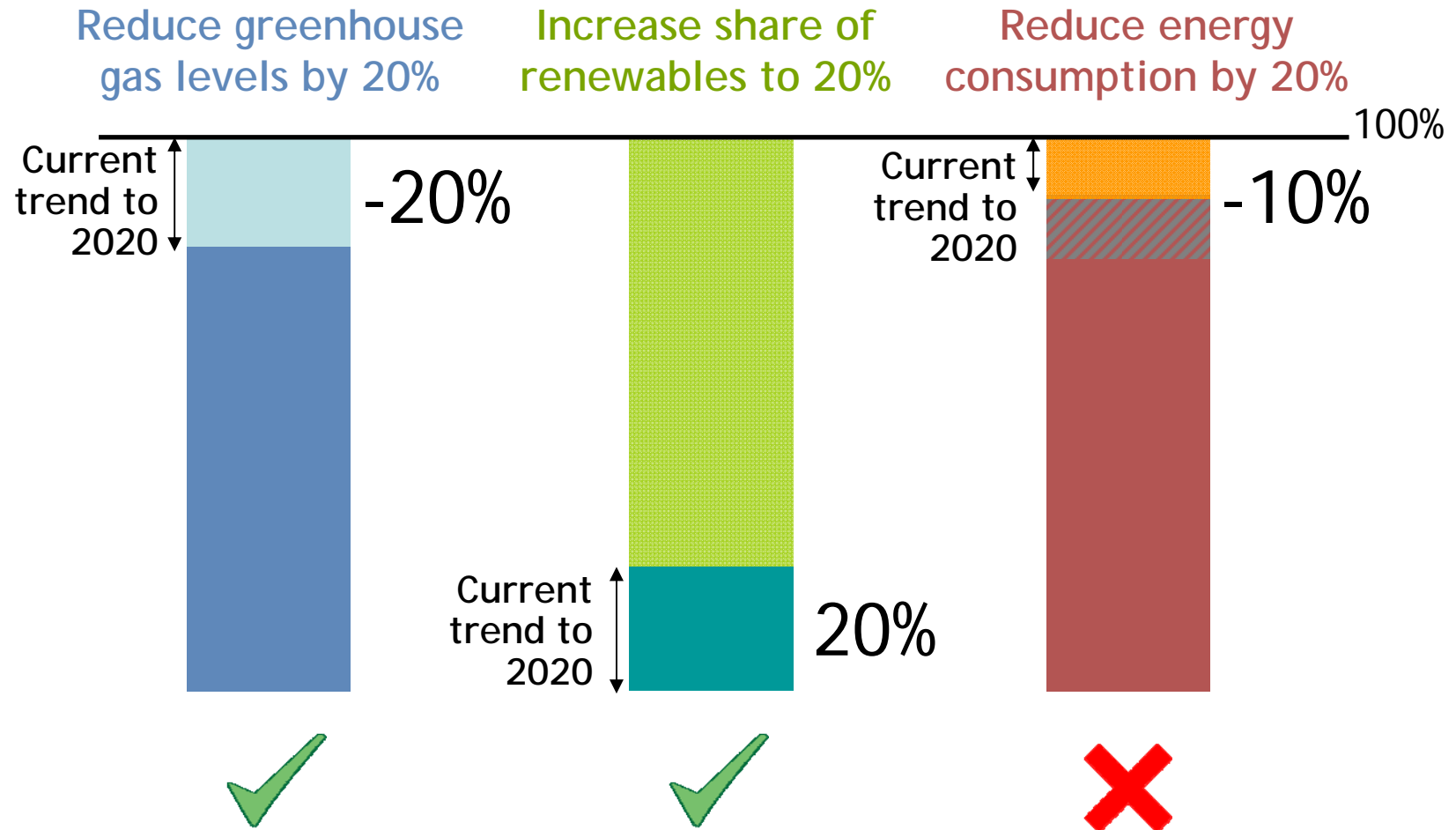
**Philip Lowe**  
DG Energy  
22 June 2011, London

## AS DEPENDENCE ON ENERGY IMPORTS IS LIKELY TO GROW

« Business as usual » scenario based on 2009 figures

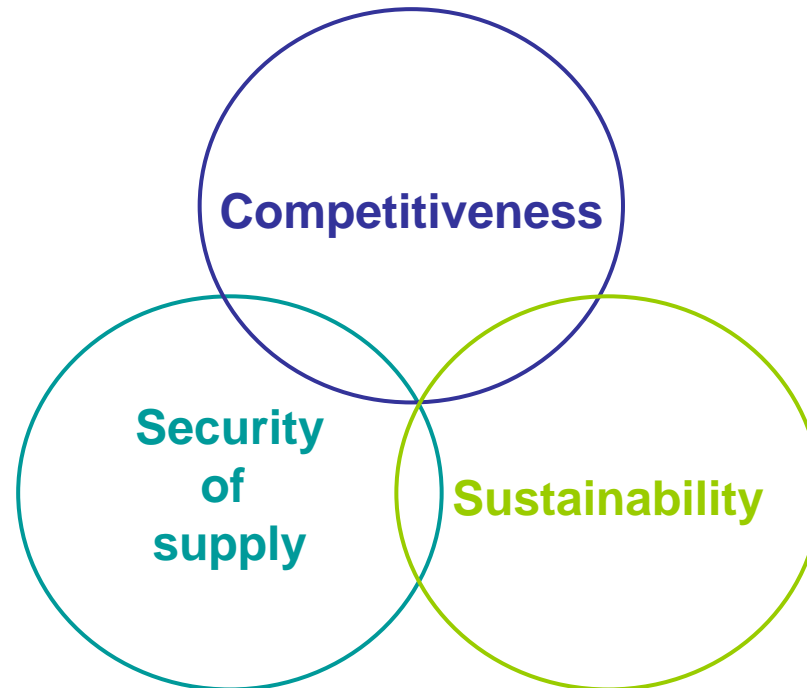


# MEETING ALL THREE “20-20-20 BY 2020” GOALS BECOMES A MATTER OF URGENCY



## DESPITE ITS CRUCIAL BENEFITS FOR EUROPE ...

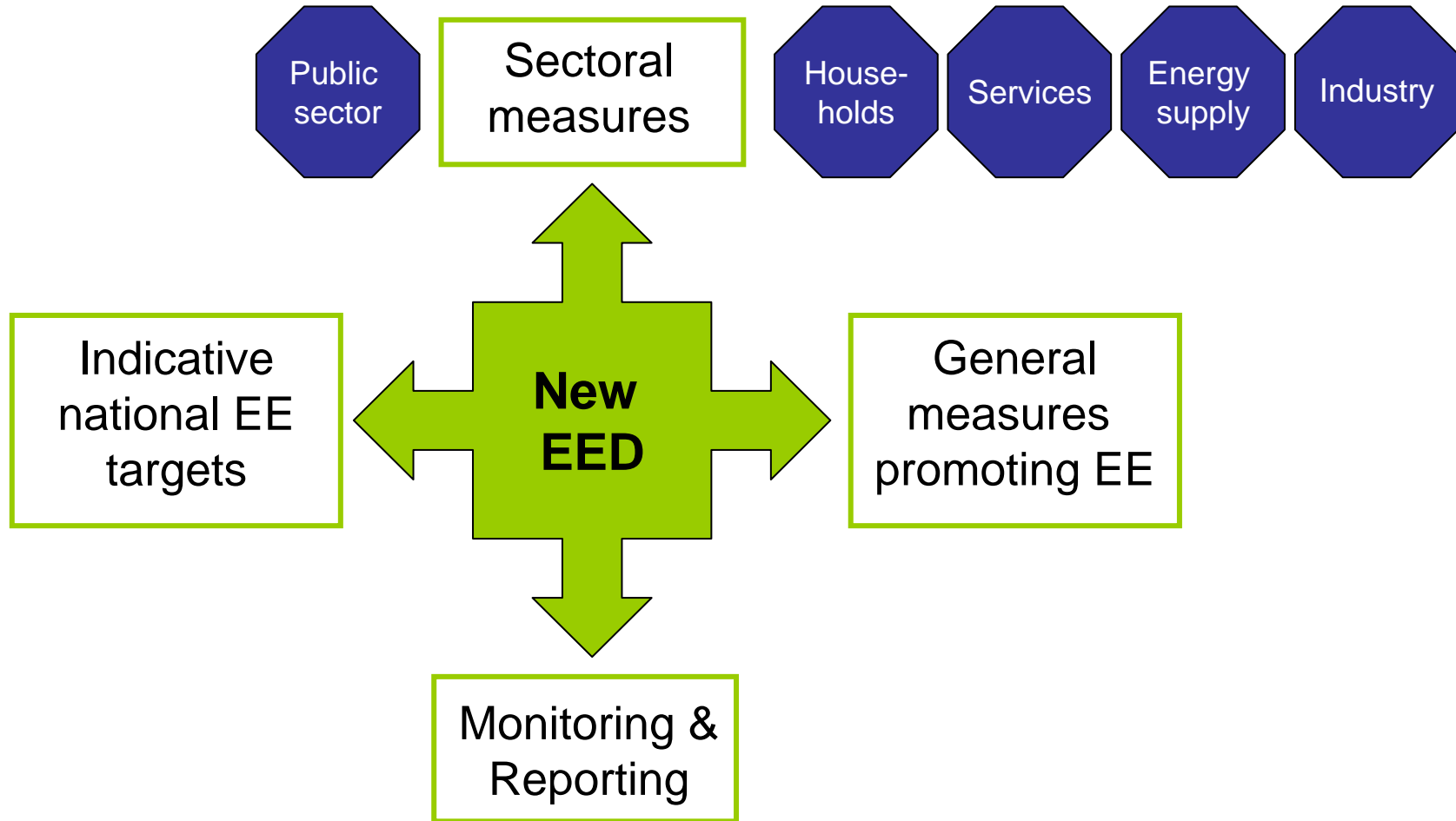
- ↓ Reduce EU's energy bill by about €200 bn annually in 2020
- ↑ Create up to 2 million new jobs by 2020
- ↑ Boost R&D & markets for EU global leadership



- ↓ Reduce EU's energy dependence
- ↓ Reduce investments in energy infrastructures
- ↑ Improve the energy trade balance

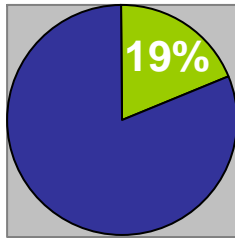
- ↓ Reduce CO<sub>2</sub> emissions
- ↓ Limit environmental degradation

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

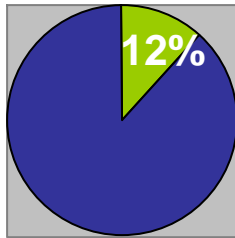


## PUBLIC SECTOR TO LEAD BY EXAMPLE

### 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 standards**
- 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



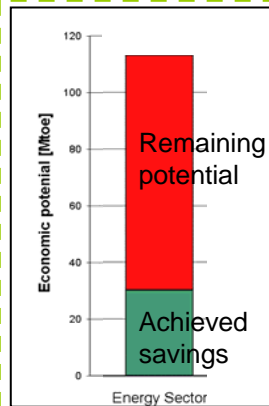
- Considerable saving potential unused in the residential and services sectors
- Slow uptake of market for energy efficiency services
- Lack of awareness & access to appropriate information on EE benefits
- Technological developments (e.g. smart meters/ grids) not sufficiently reflecting households interests

## 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



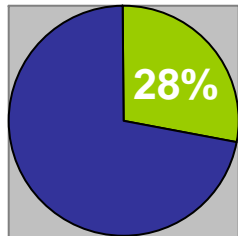
- Fragmented regulations & incentives to address waste across supply chain
- CHP uses 30% less fuel for the same amount of heat & power but level of use in EU low: **11% vs. 21%**.
- New generation installations not systematically reflecting level of Best Available Technologies

## 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

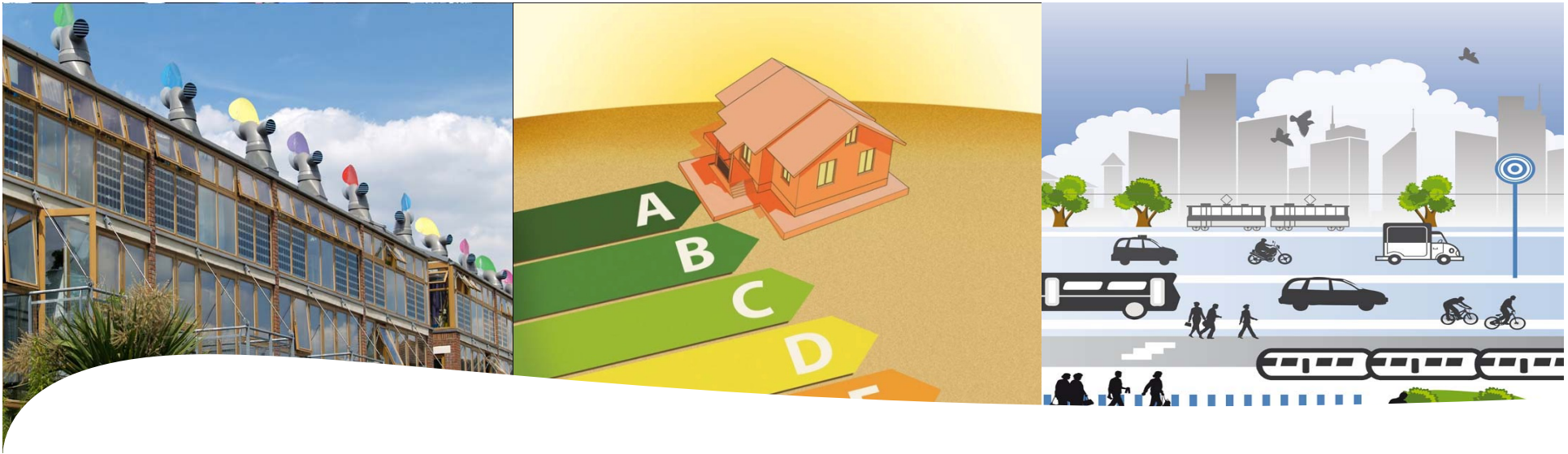
## EED proposals

- 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



## Interplay for the UK

- CERT and Green Deal inspired Commission proposals
- UK is on the right track
- More is needed in other countries as well



**Thank you!**

**For further information on energy efficiency please consult our website:**

**<http://ec.europa.eu/energy/efficiency/>**