



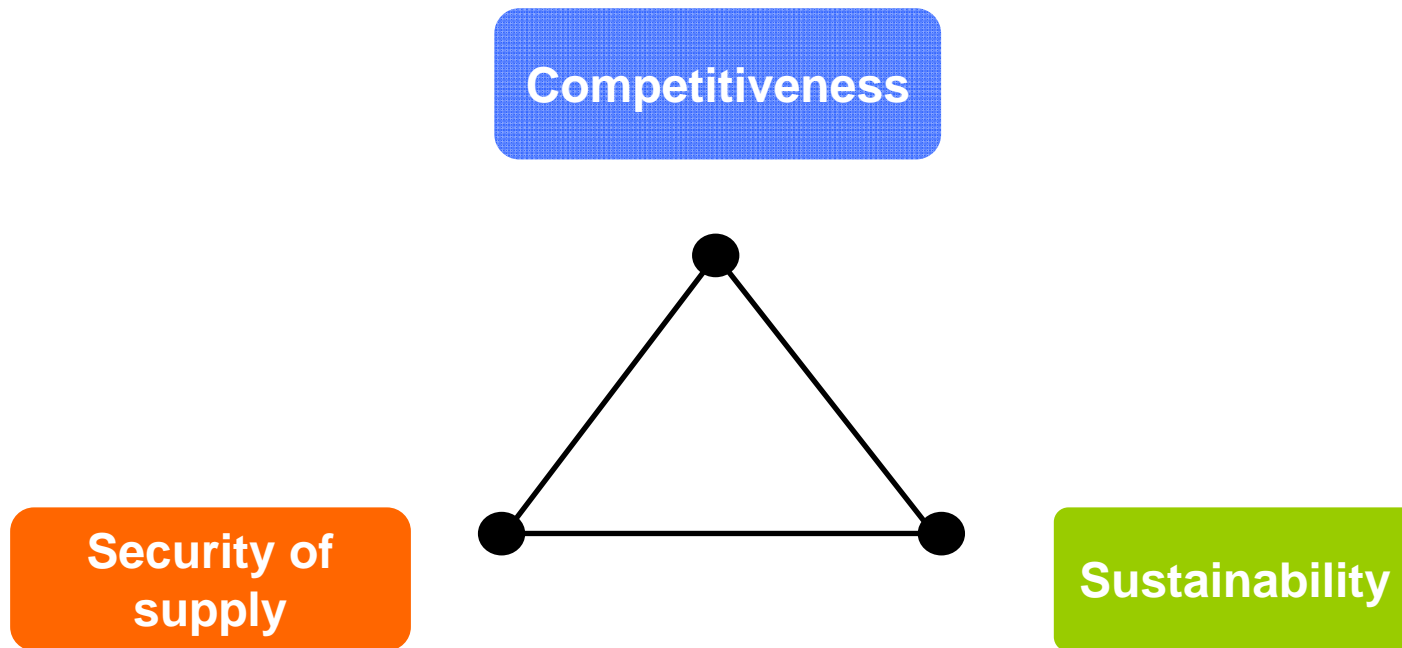
Directorate-General  
for Energy



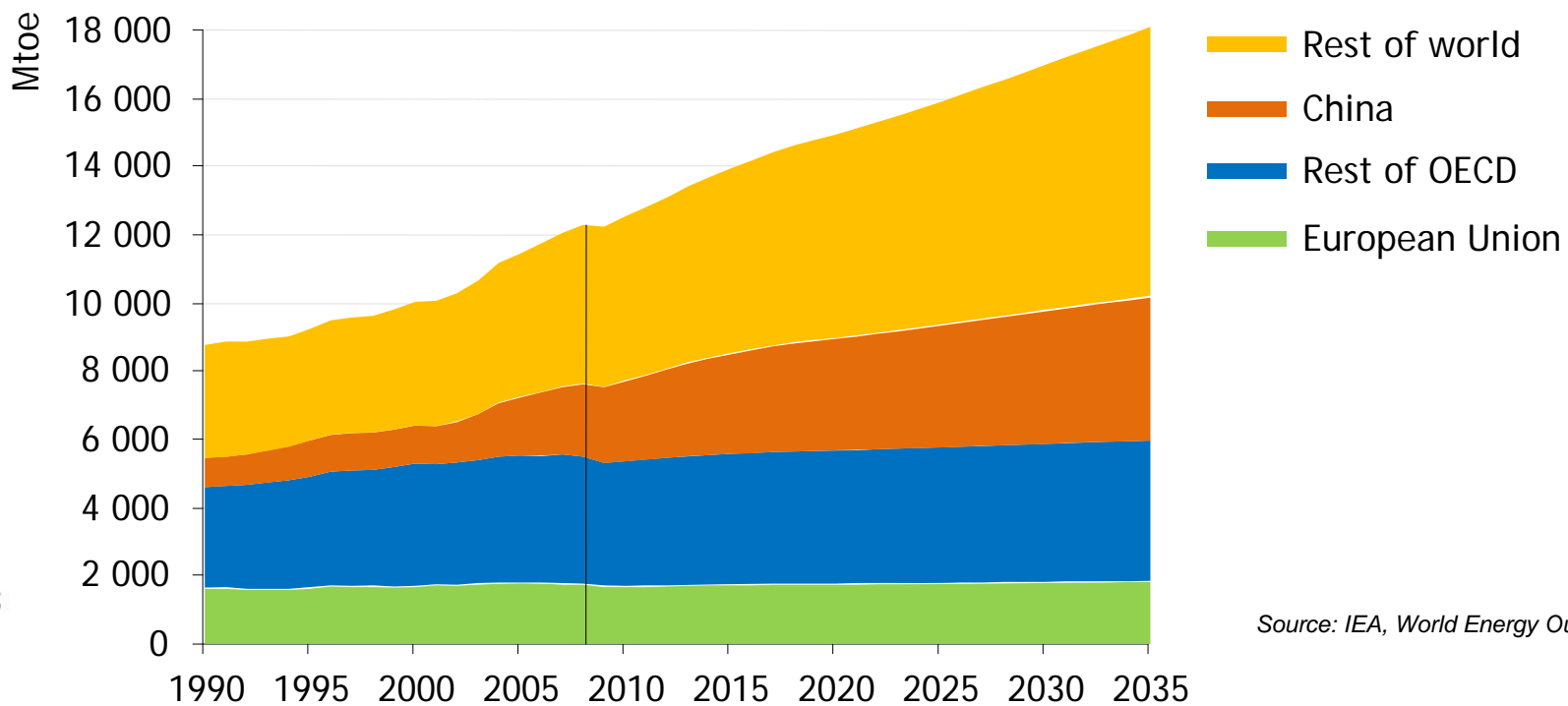
- Energy networks, diversifying energy sources and increasing energy efficiency

**Fabrizio BARBASO**  
Deputy Director General

# ● EU energy goals



# World energy demand is on the rise

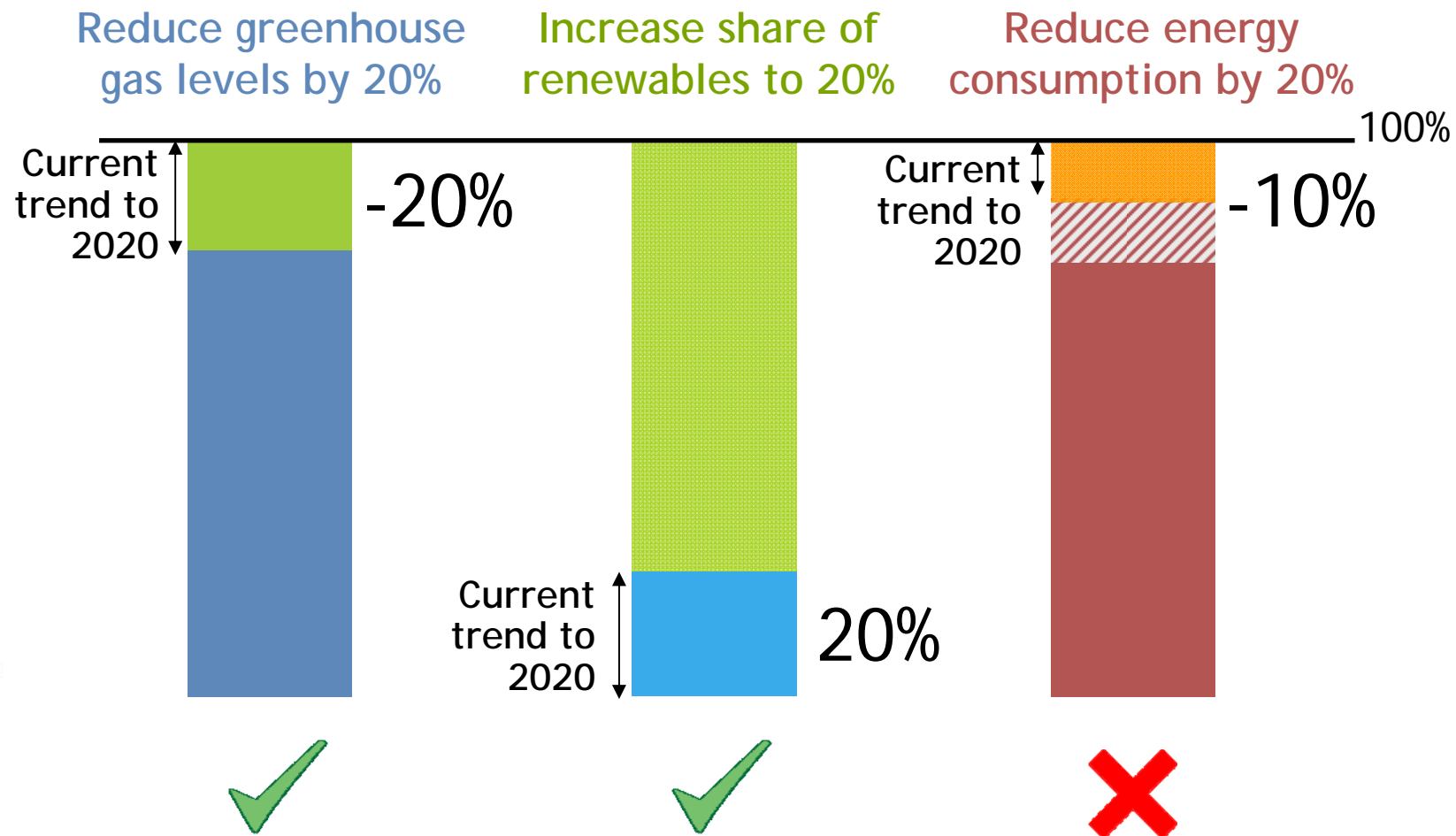


Source: IEA, World Energy Outlook 2010

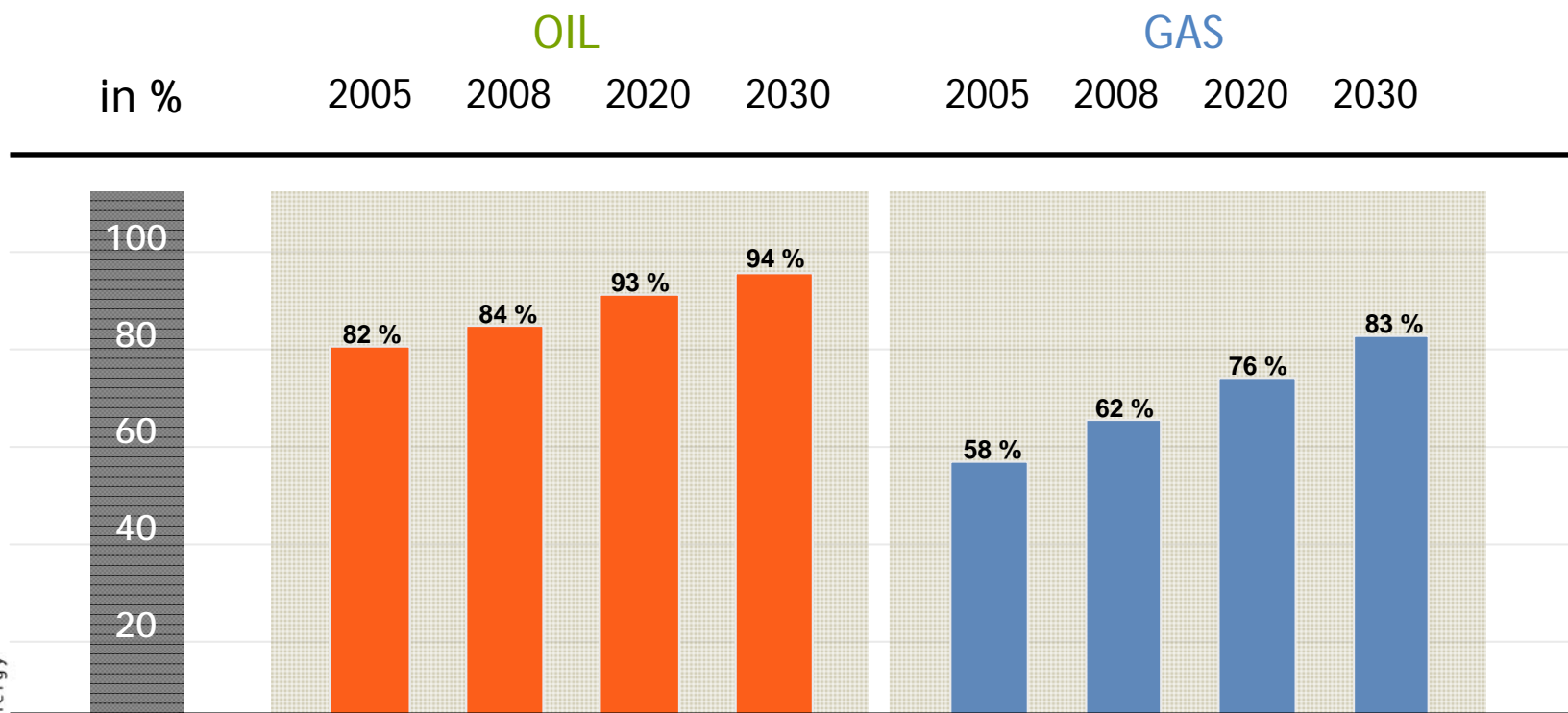
## ● Energy strategy 2020 – 5 priorities

- **Efficient use of energy**
- **Integrated energy market**
- **Secure, safe and affordable energy for consumers**
- **Technological leadership**
- **Strong international partnership**

# ● Meeting our “20-20-20 by 2020” goals



# Dependence on energy imports



«Business as usual» scenario based on 2009 figures

# ● Energy Infrastructure challenges and drivers

## Electricity:

- Increasing demand
- Growing share of RES
- Smart grid applications
- Large-scale storage
- Higher voltage - long-distance transmission

## Gas:

- Stable share, growing import dependency
- Role as back-up fuel – need for more flexibility
- Single-source dependency in Eastern Europe – need for diversification

## CO2 transmission:

Co-ordinated planning for future optimised deployment

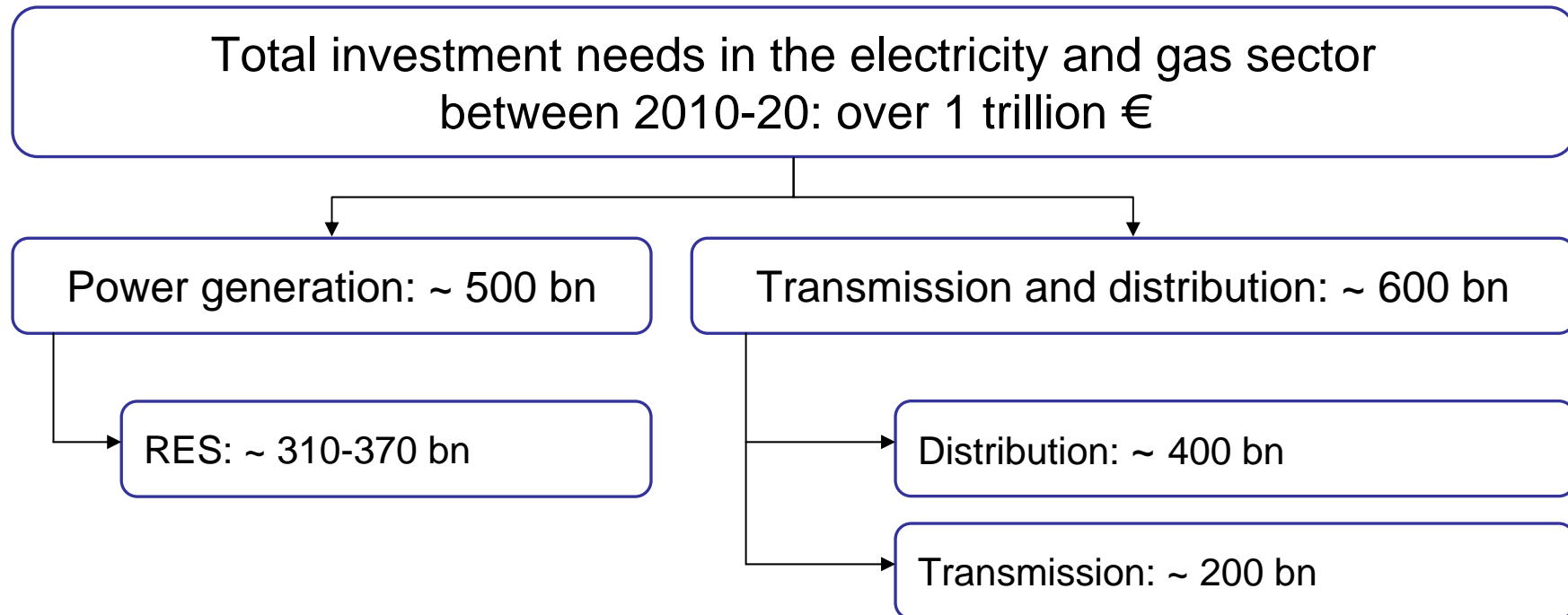
## Oil:

Security of supply of land-locked countries in Central-Eastern Europe

In addition, the modernisation of **district heating and cooling** networks can enhance energy efficiency.

[Energy networks, diversifying energy sources and increasing energy efficiency]

## ● Energy system investment needs



Sources: approximative figures, mainly from DG ENER calculations based on data from PRIMES, ENTSO-E, KEMA, ECOFYS etc.



# Priorities for 2020 and beyond

Priorities for 2020

Priorities beyond 2020



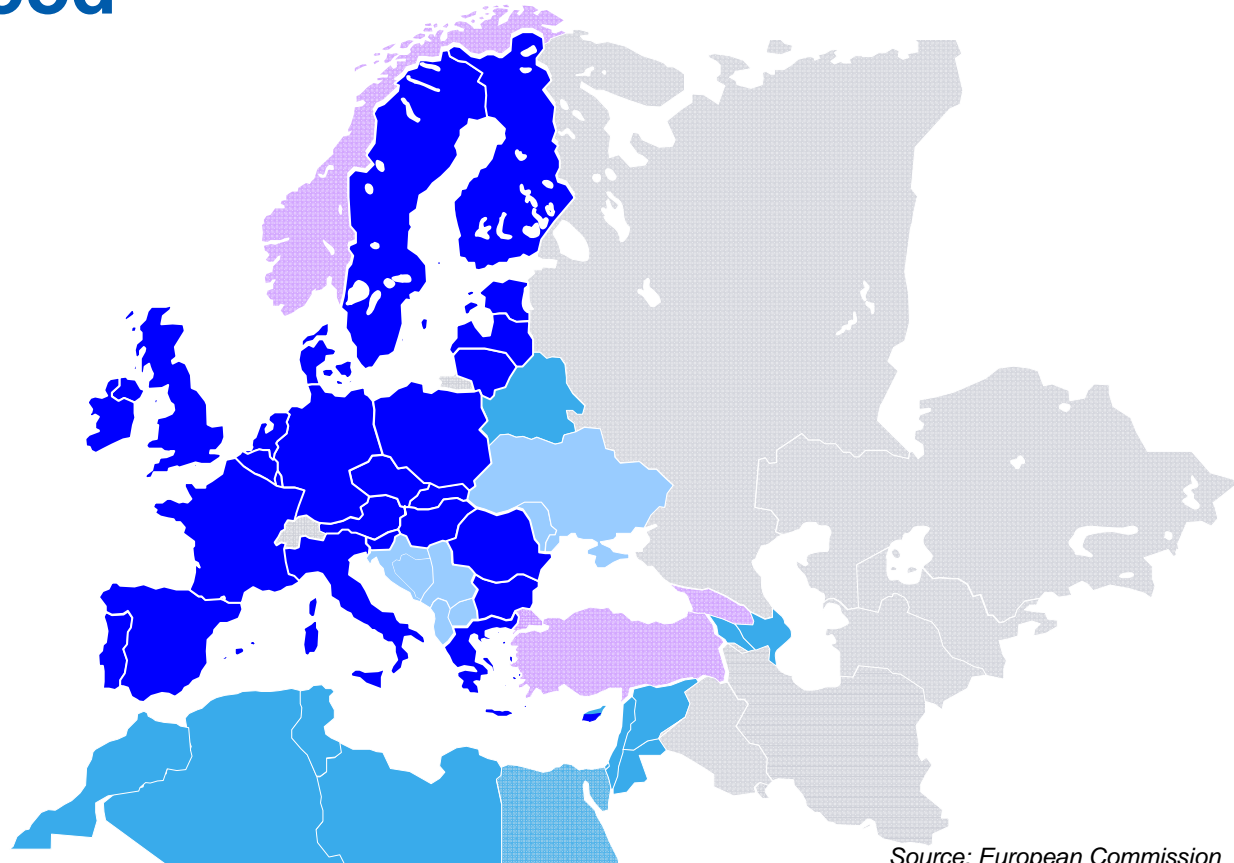
Electricity  
Highways

CO2 transport  
network

- Gas
- Electricity
- Electricity and gas
- Oil and gas
- Smart Grids for Electricity in the EU

# ● Extension of the EU energy market to the neighbourhood

- EU
- Energy Community Parties
- Energy Community Observers
- Other Neighbourhood Policy Countries

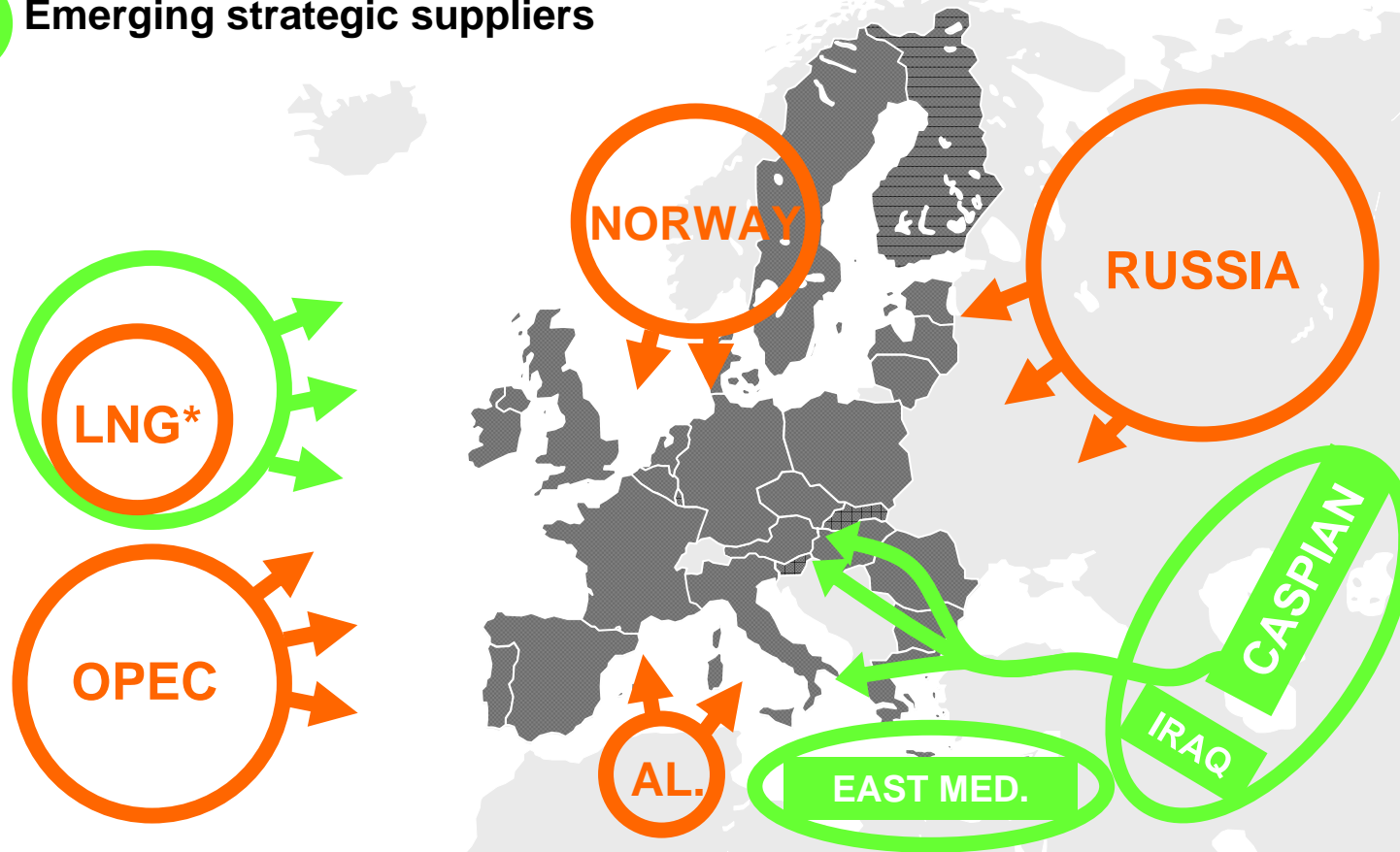


Source: European Commission

**The EU is projecting its energy market model as well as political and economic stability in neighbouring countries including through the Energy Community Treaty.**

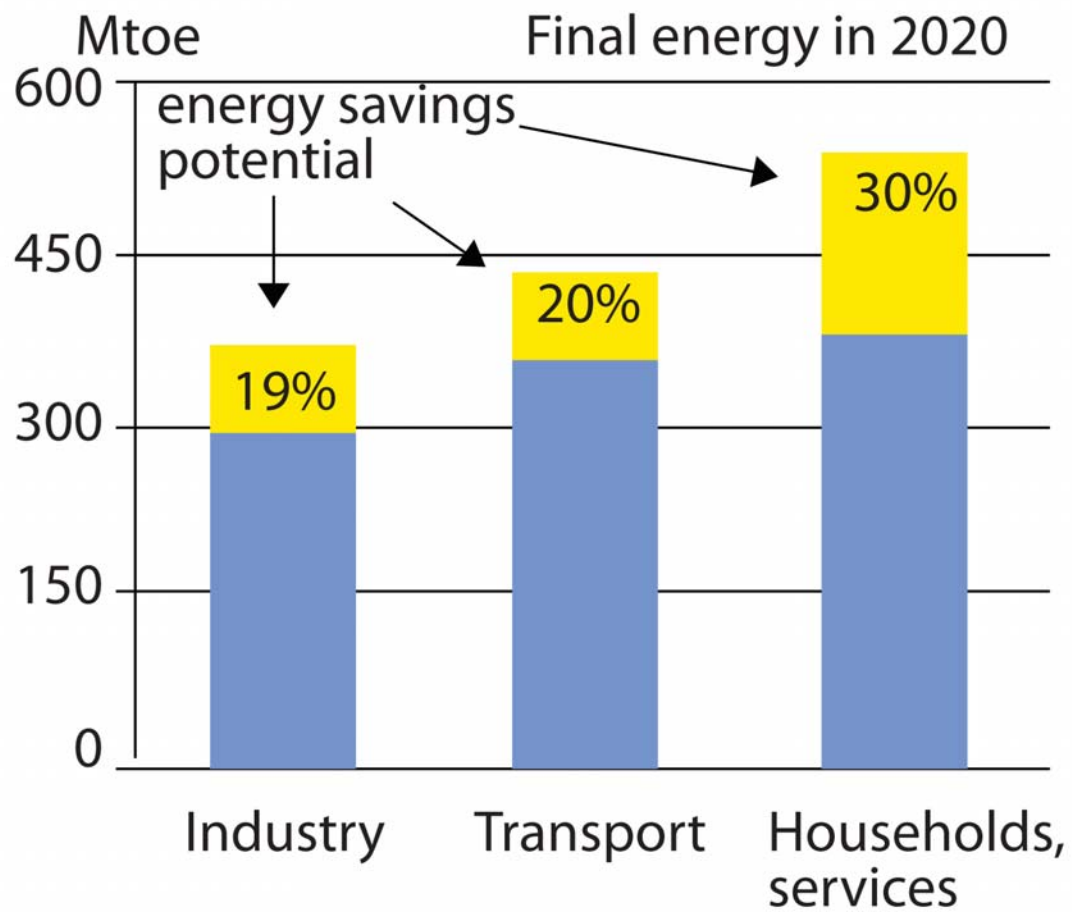
# Traditional and emerging hydrocarbon suppliers

- Traditional strategic suppliers
- Emerging strategic suppliers



\* LNG: Liquefied natural gas (Qatar, Algeria, Nigeria, etc.)

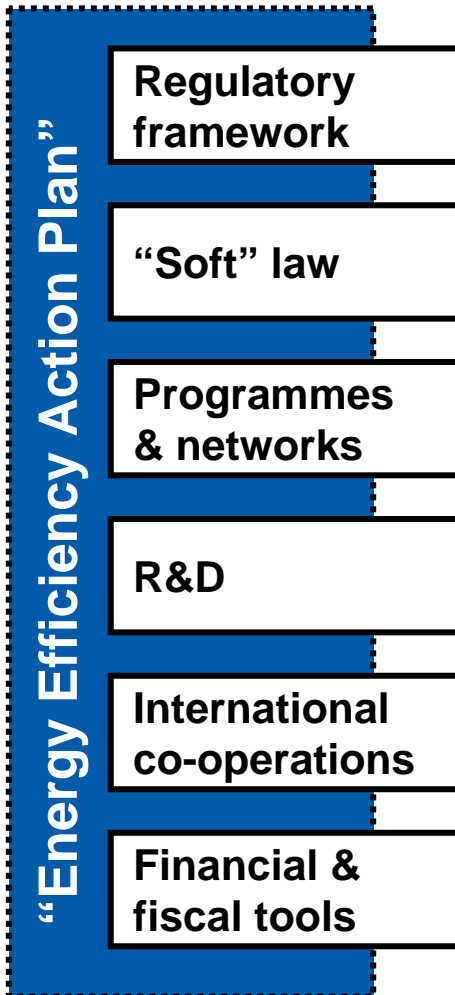
## ● Energy savings potential





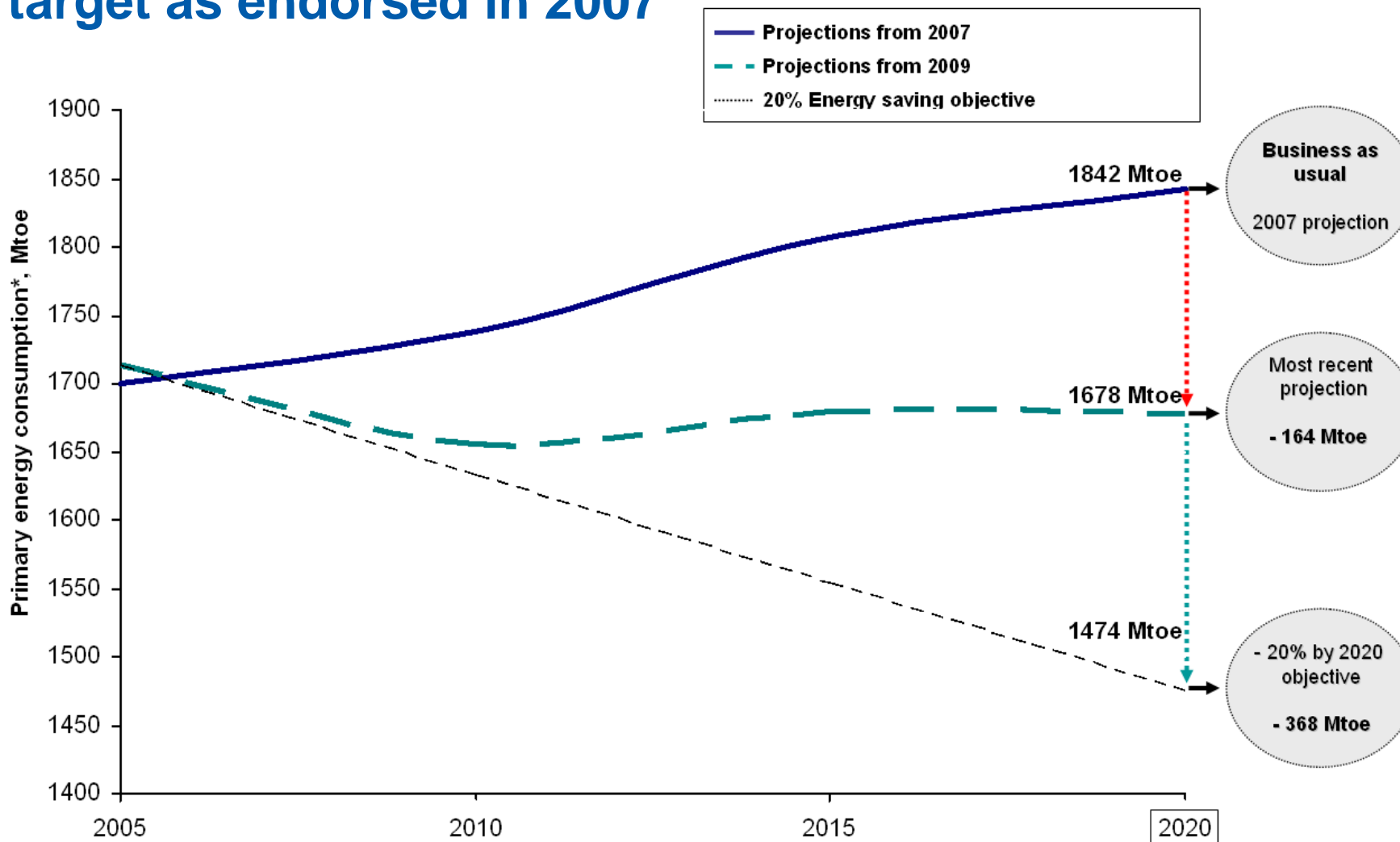
# Energy efficiency

State of Play: Already ambitious Energy Efficiency Policy Mix



- ESD, CHP, EPBD, Eco-design and labelling of products, etc.
- Voluntary agreements (e.g. GPP, EMAS, eco-design for some products), and standards
- IEE (e.g. concerted actions, specific EE projects), Covenant of Mayors, Sustainable Energy Europe Campaign, ManagEnergy Network, BUILD UP
- Framework Programme 7 (e.g. Concerto)
- IPEEC, bilateral dialogues
- Cohesion policy funds, ELENA, IFIs support, reduced VAT rates

# The EU will fall short of reaching its 20% energy saving target as endorsed in 2007



Directorate-General  
for Energy



\* Gross inland consumption minus non-energy uses

Source: DG ENER data

# OVERVIEW OF KEY ELEMENTS OF THE NEW EEP

Energy efficiency targets

## Two step approach:

- **2011:** Stringent binding energy efficiency measures and indicative national targets (set by MS in the context of Europe 2020 and their NRPs)
- **2013:** COM to assess progress. In case of likely non achievement of EU target by 2020, COM will propose binding national targets

Sectoral energy efficiency measures

## Sectors with important energy efficiency potentials

- Leading role of the public sector
- Buildings and appliances
- Transport
- Industry (incl. energy supply)

Horizontal energy efficiency measures

## Initiatives facilitating energy efficiency:

- Leveraging private investments through EU financing
- Incentives
- Smart grids incl. smart meters

## NEW PROPOSALS IN 2011

[ Energy networks, diversifying energy sources and increasing energy efficiency ]