

# New aspects in European energy policy and their implementation on regional level

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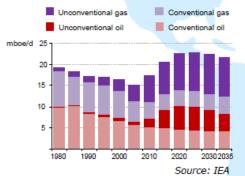
### New realities in the global energy market

Impact of the financial crisis

Fall in private investment, tight financing conditions

#### Shale gas

US oil and gas production



Rising demand
rising prices

By 2030, world economy
set to double and energy
demand to rise by 1/3

#### **Fukushima**

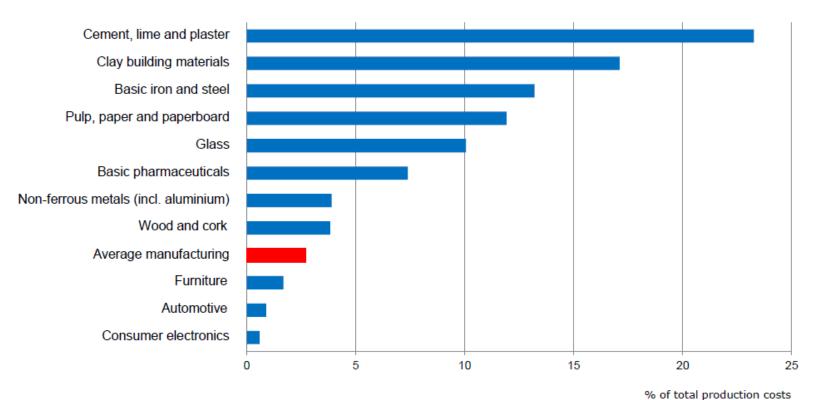


Some countries phase out nuclear power production



### **Energy-intensive industries are most exposed**

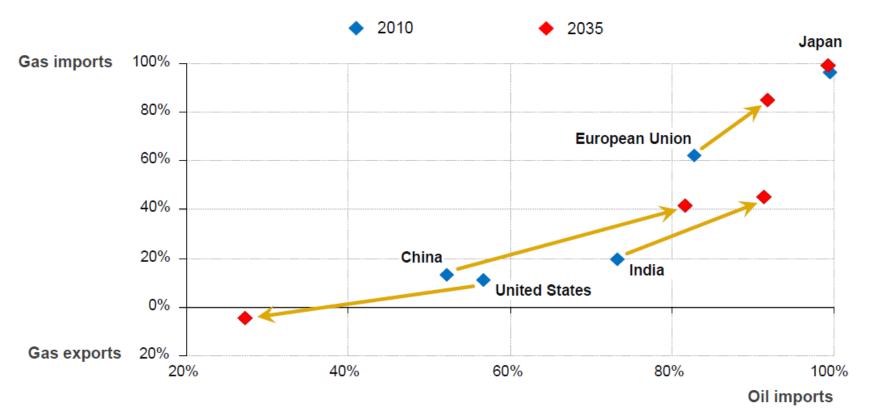
# Share of energy in % of production costs – selected sectors in Germany (2010)





## **Europe's dependence is set to increase**

#### Net oil and gas import dependence by region

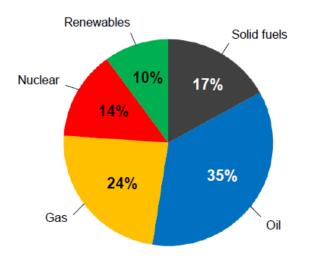


Source: IEA

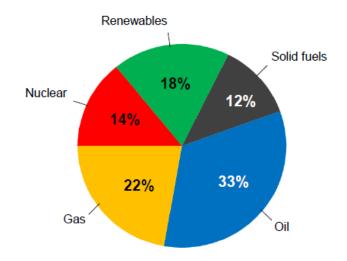


#### Our energy mix will evolve

# EU gross inland consumption 2011

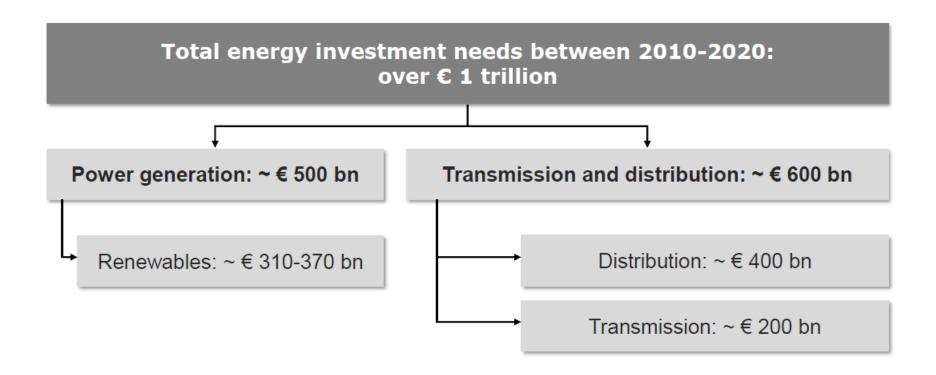


# EU gross inland consumption 2030 (scenario)





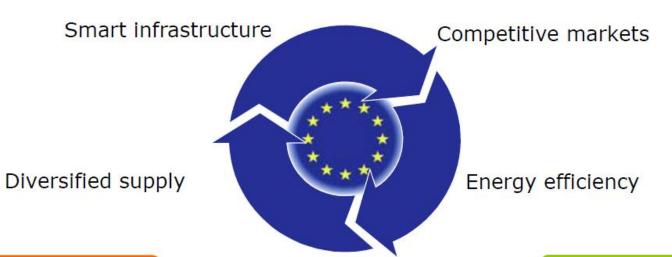
#### Massive investments are required





## A "no regrets" scenario for Europe

Competitiveness



Security of supply

Sustainability

Renewable sources



#### **Priority 1. Boosting energy efficiency**

#### Benefits of EU energy savings target of 20% by 2020

2.6 billion barrels

Barrels of oil the EU does not have to import per year € 193 billion

Money saved at conservative 73 EUR/barrel per year

1 000 fewer coal power plants

GDP of Finland

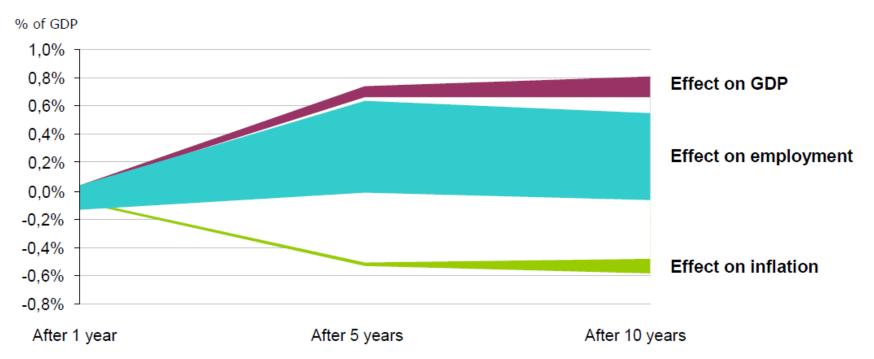
(in 2012)



# Priority 2. Completing the internal energy market

#### Estimated effects of opening gas & electricity markets

(in % of GDP - ranges)





# Priority 3. Better interconnected and smarter infrastructure used in a cost-effective way

In electricity...



...and in gas





### Priority 4. Cost-effective use of renewable sources

#### **Production costs versus subsidies for renewables**

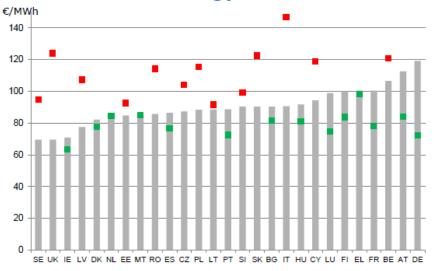
(averages, in €/MWh, latest year available)

Production costs

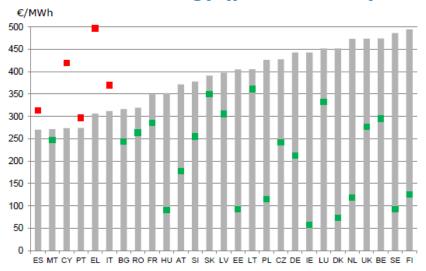
Subsidies over production costs

Subsidies below production costs

#### Wind energy on-shore



#### Solar energy (photovoltaics)



Source: Fraunhofer



## **Priority 5. The external dimension**

**Corridor opening (2018 - Shah Deniz II)** 

