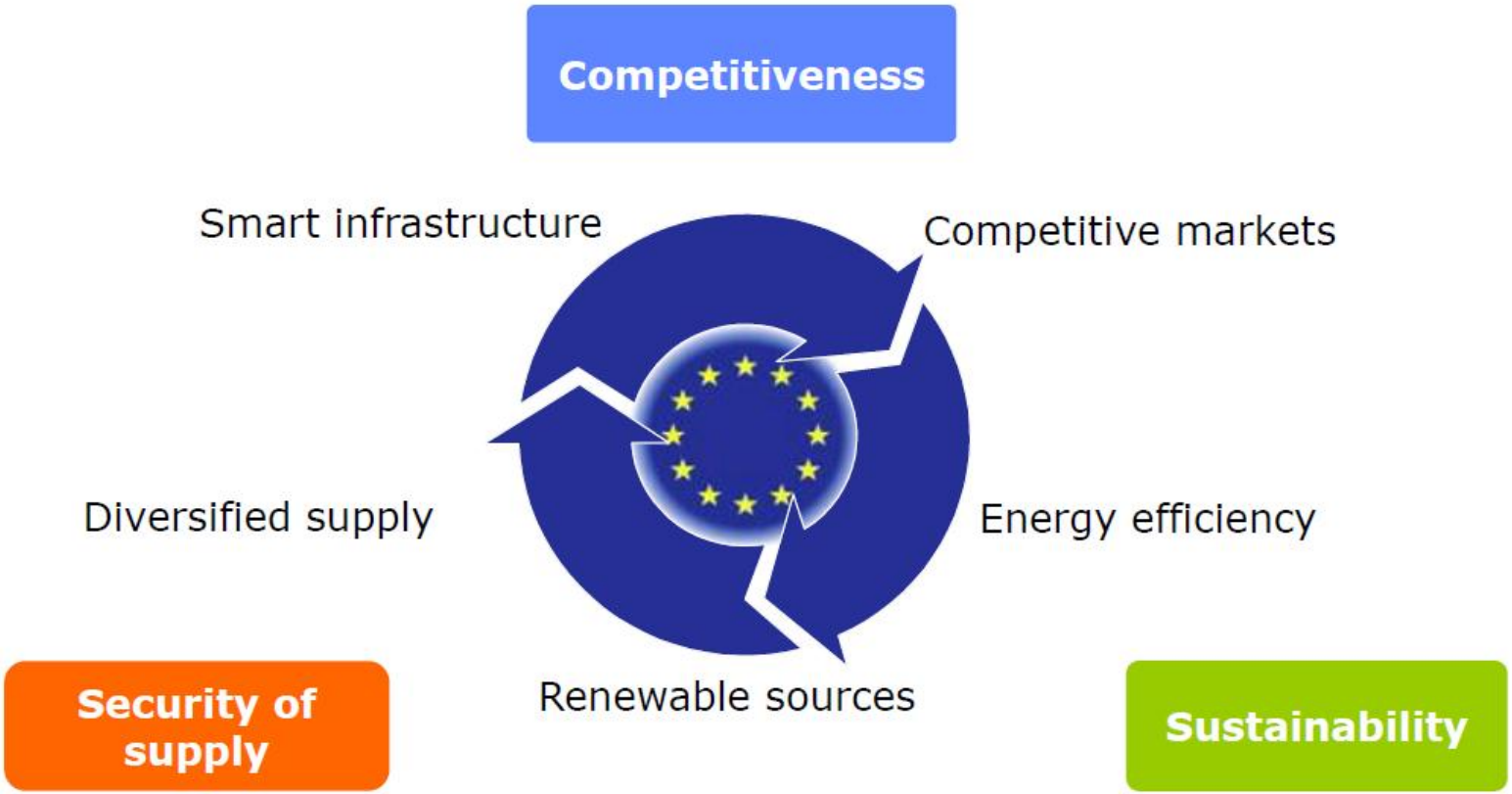
2030 FRAMEWORK for CLIMATE & ENERGY

#EU2030

Marten Westrup
European Commission
DG Energy, Unit A1

Objectives of EU energy policy



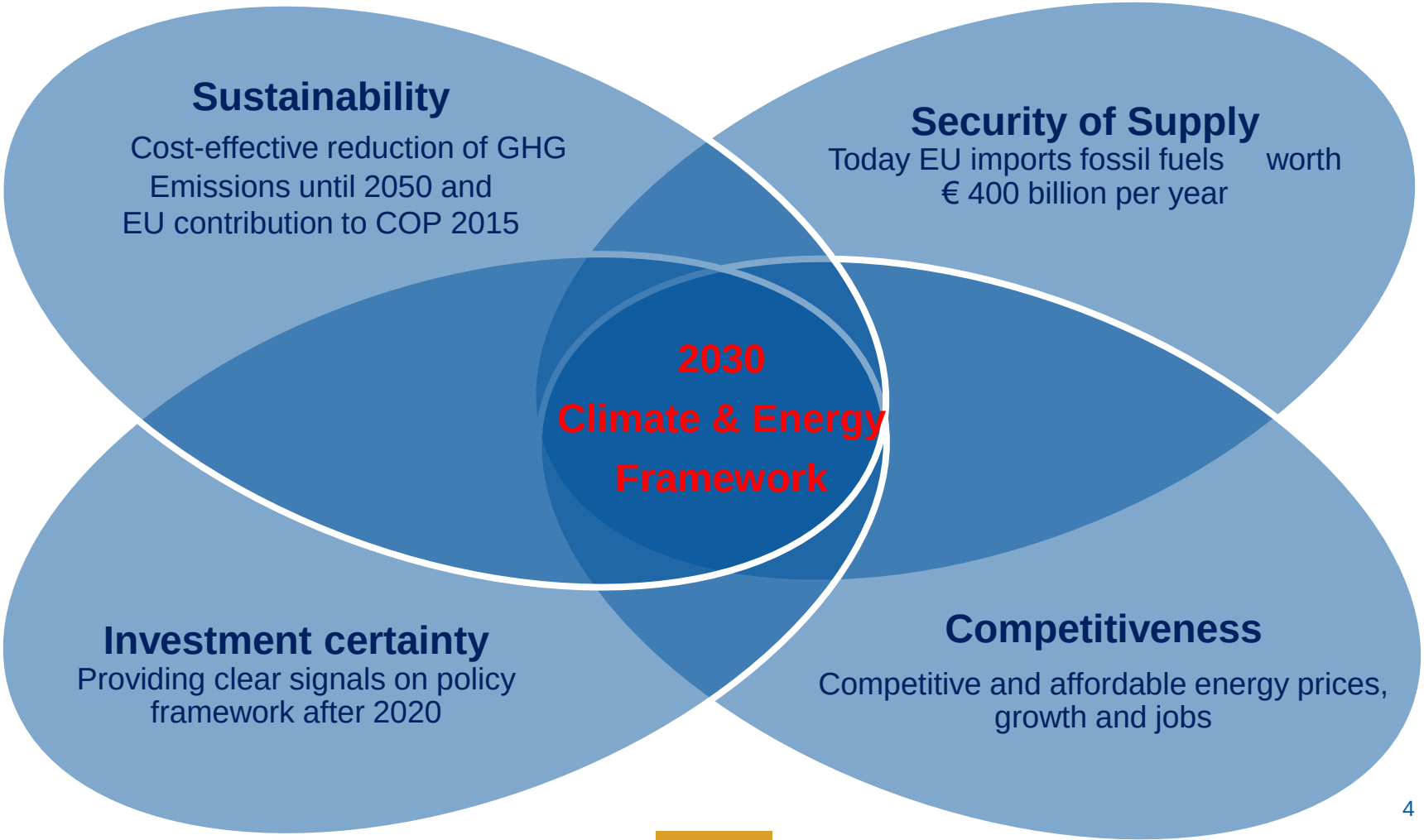
Setting the long term strategy

2008/2009 → **2011** → **2014**

The EU climate and energy package

Energy roadmap 2050

Why a 2030 framework?



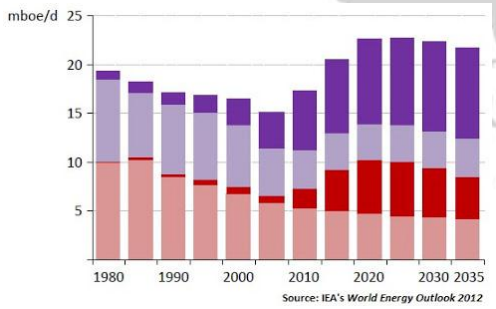
Changed context since 2020 targets were agreed

Ever increasing GHG emissions on the global level

Renewable energy
– cost decreases and new challenges

Financial crisis
- Fall in private investment, tight financing conditions

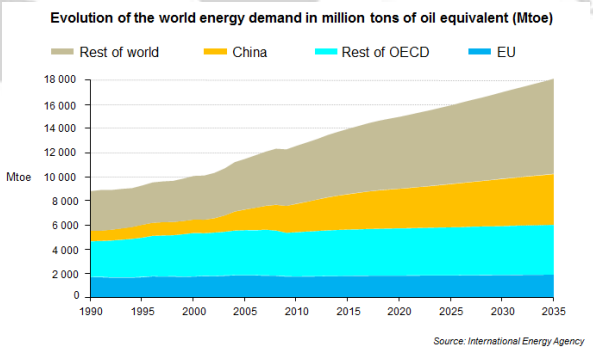
Shale gas
US oil and gas production



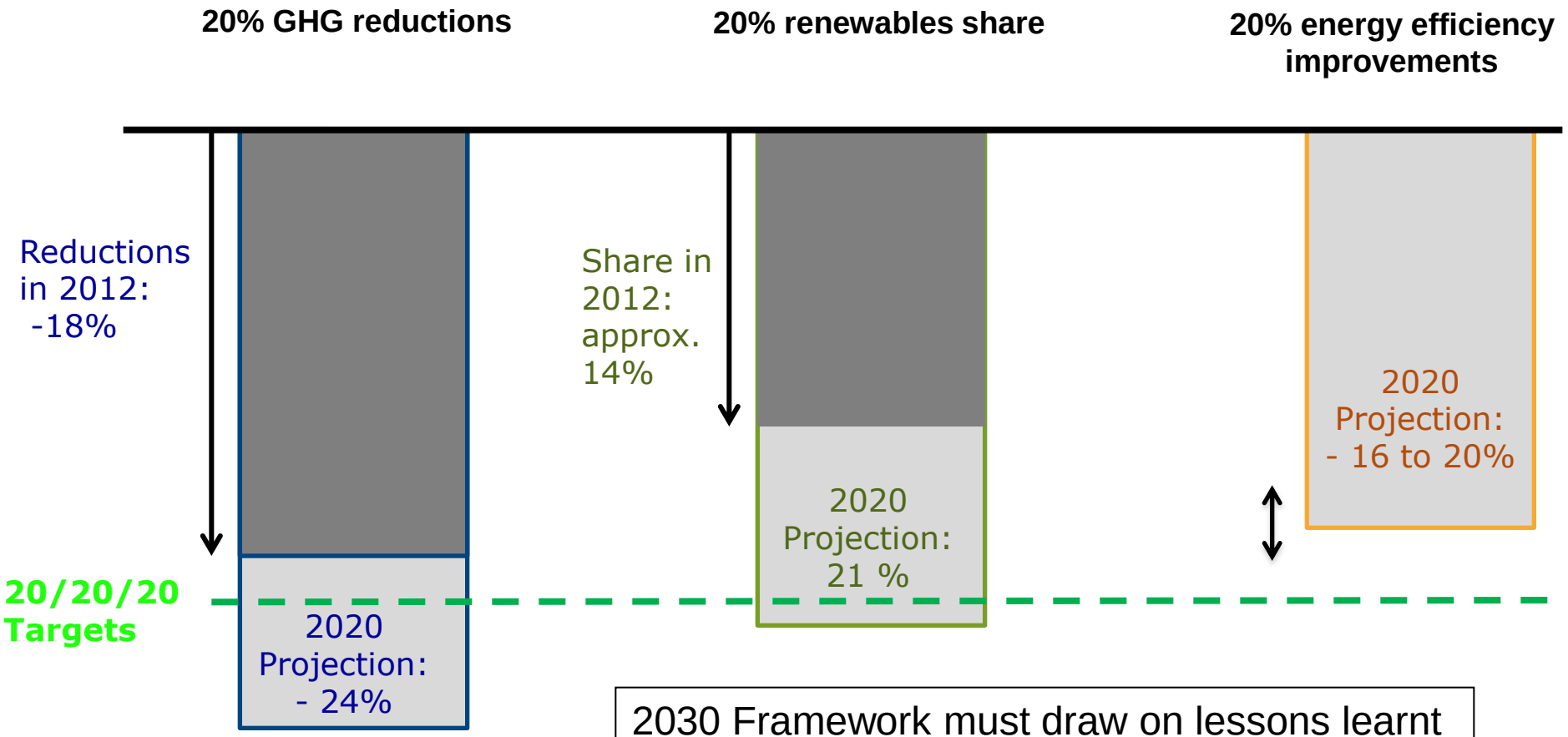
Unconventional gas
Unconventional oil
Conventional gas
Conventional oil

Fukushima
- Review of nuclear policies

Rising demand, rising prices

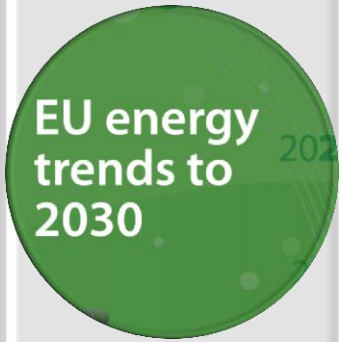


Progress towards 2020 targets



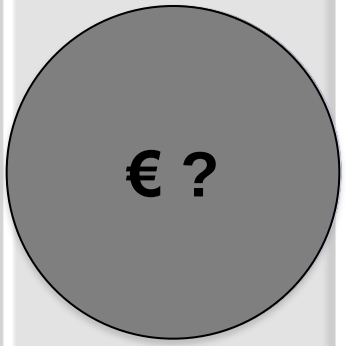
2030 Framework must draw on lessons learnt from 2020 approach

Impact Assessment - Main conclusions



Reference scenario

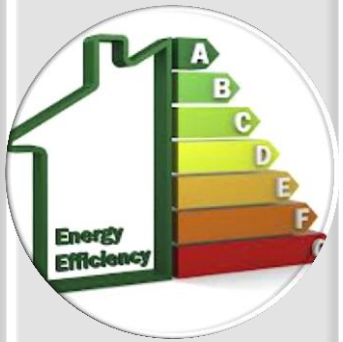
- **32%** GHG reductions
- **24%** RES
- **21%** Energy savings



Costs related to more ambitious targets / policies are **relatively limited** if implemented in a **cost-effective** way

Ambitious **EE and RES** have **positive impacts** on

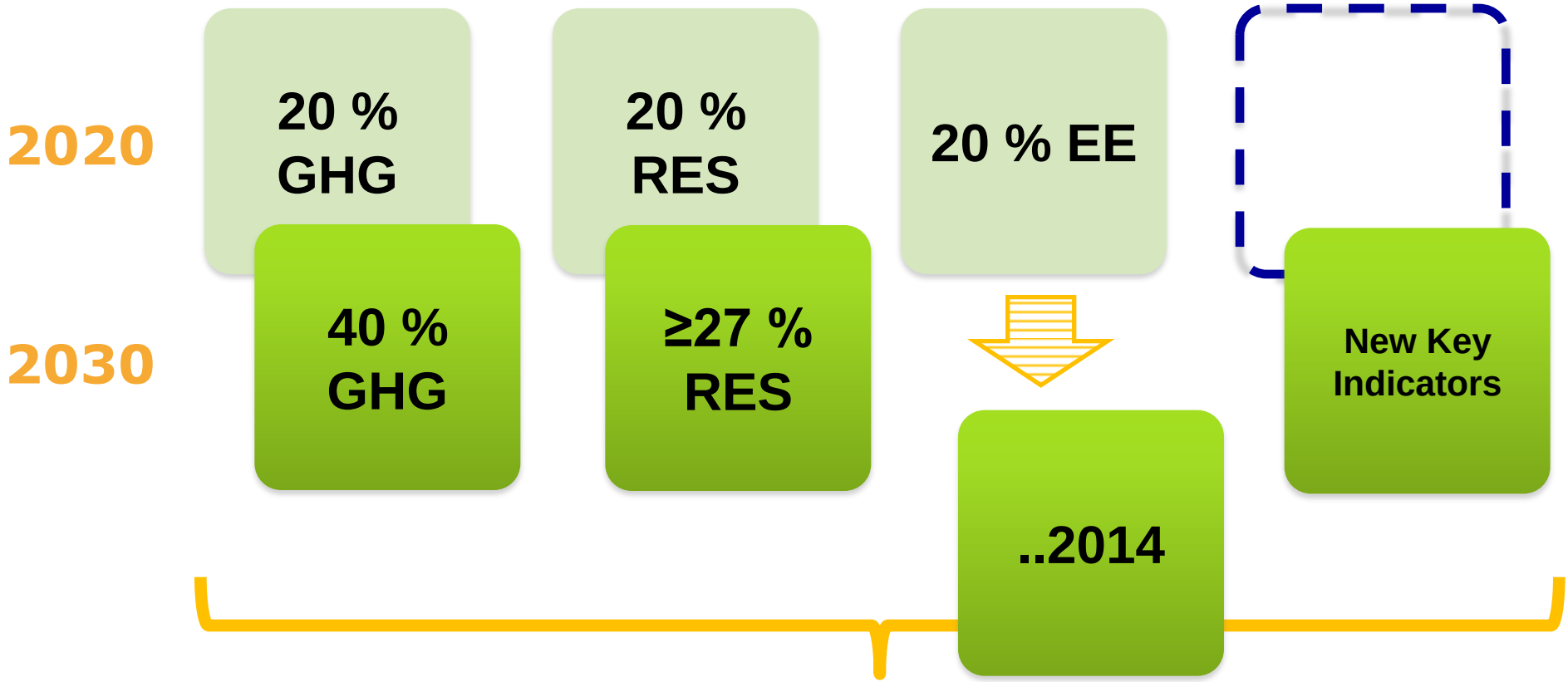
- External fuel bill
- Health (lower pollutants)
- GDP and jobs



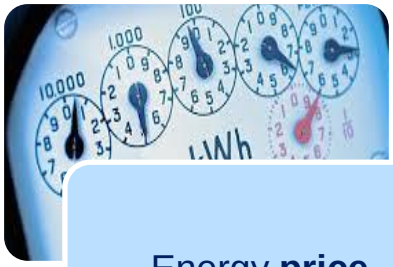
Energy Efficiency is key to **contain energy cost** increases

Global climate efforts will have positive impacts EU competitiveness

2030 Framework for climate and energy



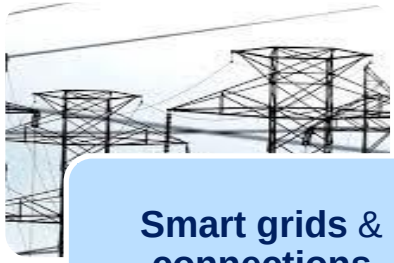
Key energy indicators for competitiveness and security of supply



Energy **price differentials**

Diversification imports,

share of **indigenous energy**



Smart grids & **connections** between Member States

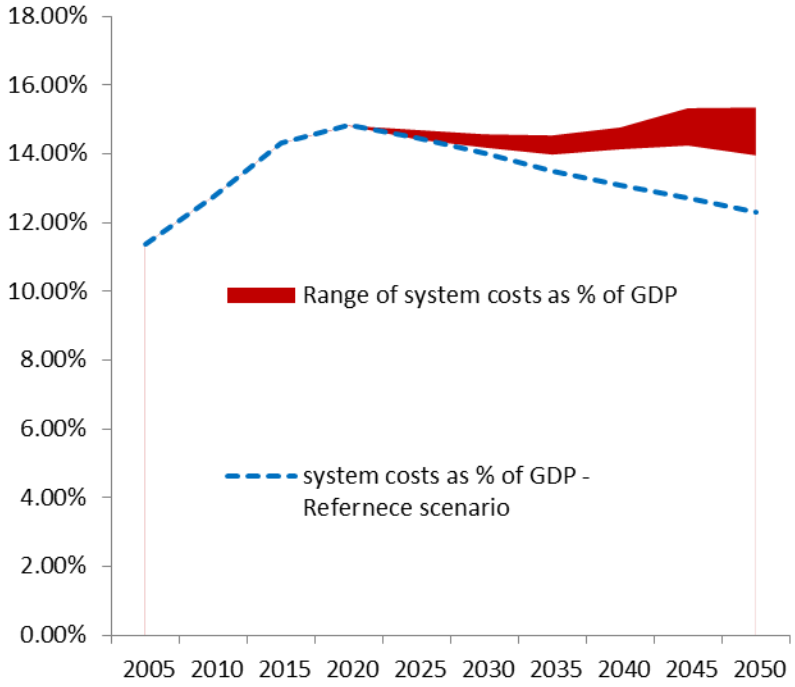
Market coupling

Competition and market concentration

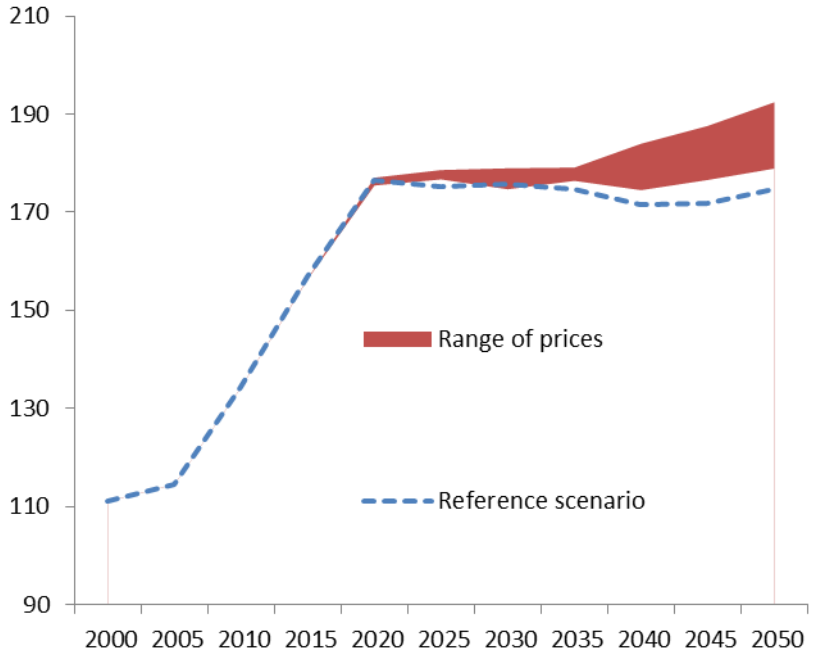
Technological **innovation**

Impacts on costs and prices can be modest compared to reference projections…

Energy system costs (% of GDP)

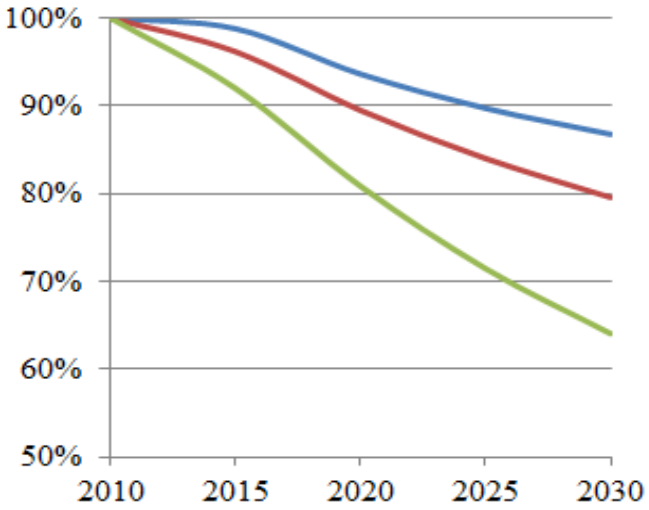


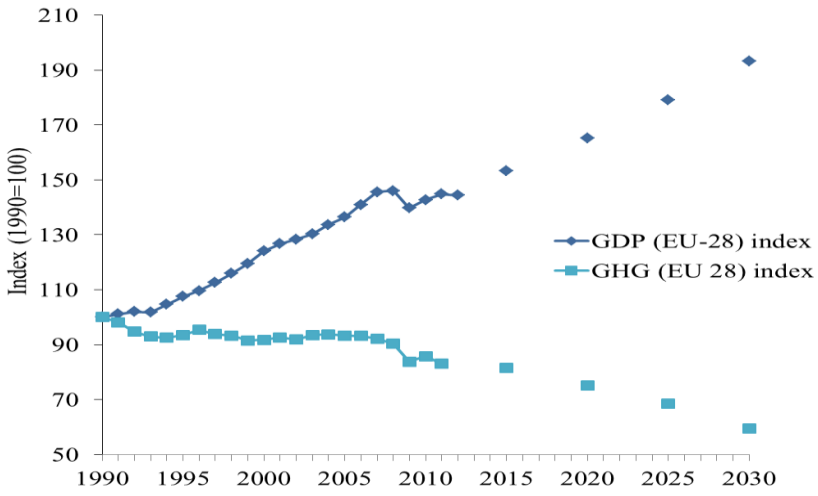
End-user electricity prices (const. €/Mwh)



…if targets are met in an optimal way.
Shift from opex to capex ➔ investment challenge

Meeting the objectives comes with significant benefits

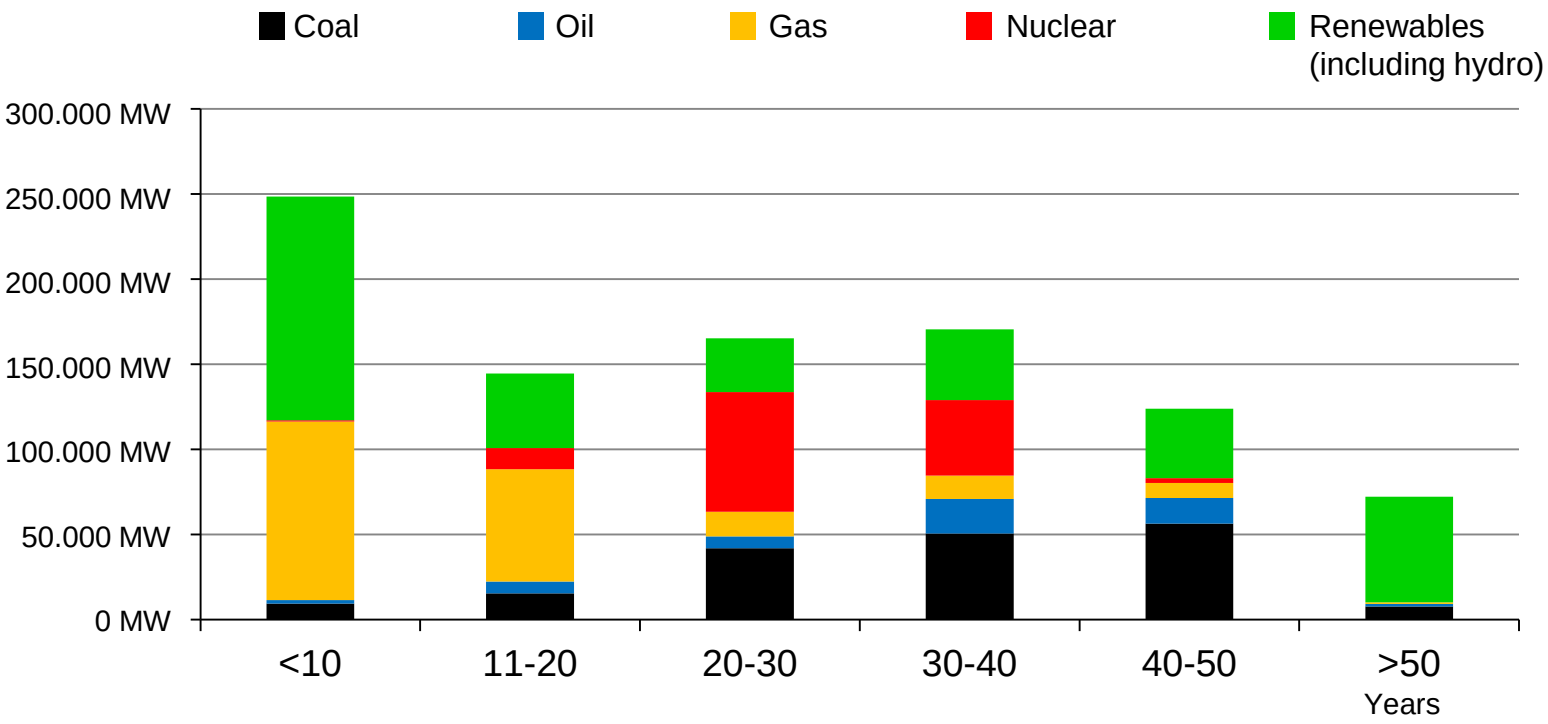




- **Fuel savings:** up to €14 billion on an average annual basis between 2010-2030
- **Energy security:** up to 19% cut in energy imports in 2030 compared to 2010, fossil fuel net imports bill up to €22 billion lower annually.
- **Innovation:** jobs & growth
- **Health and air pollution benefits:** €7-33.2 billion in 2030

Challenge: Ageing European generation capacity

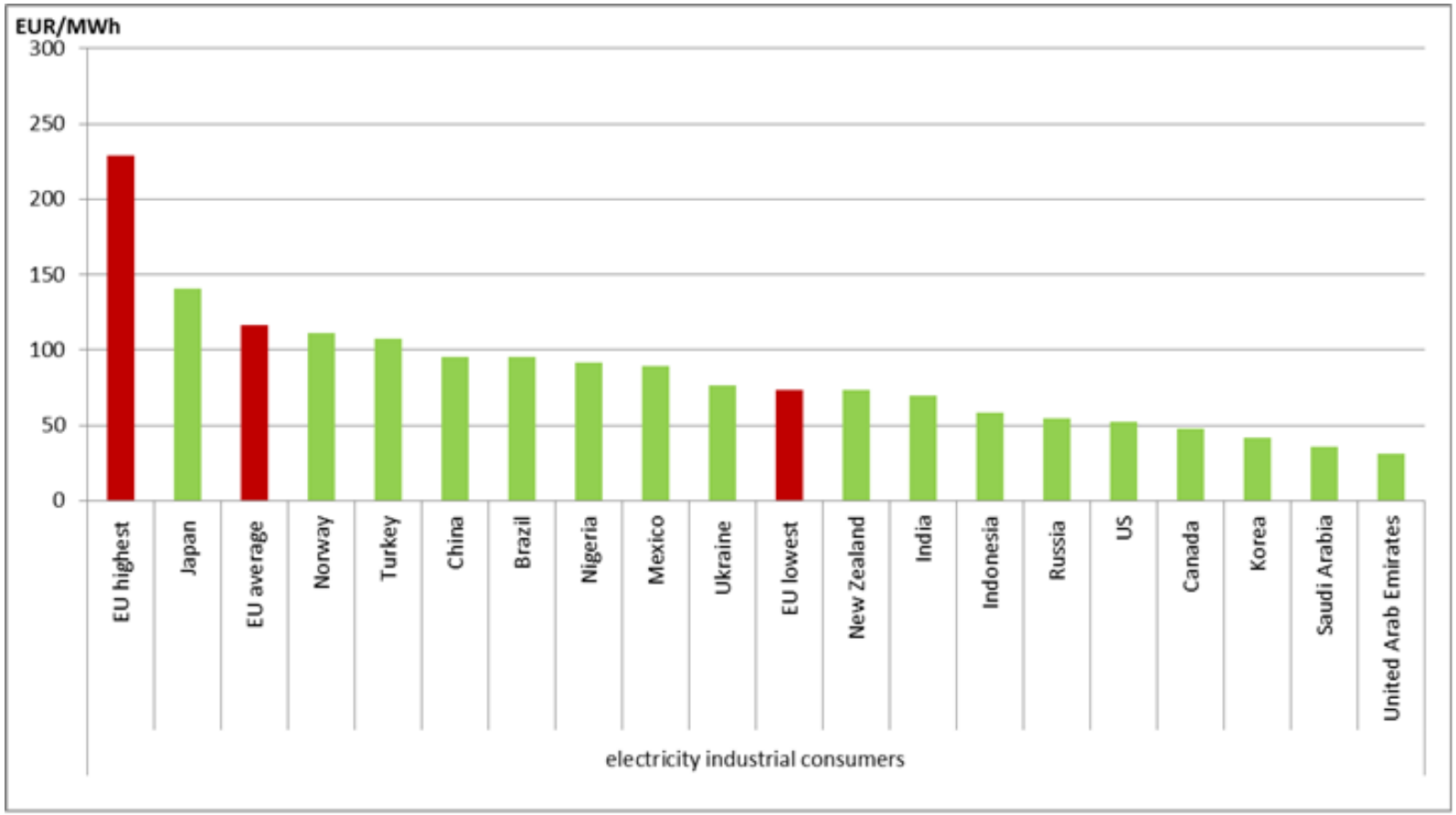
Age of power generating capacities in the EU in 2013 (in years)



Based on presentation of J.M Barroso to the European Council, 20-21 March 2014

Source: Platts Power Vision

Challenge: EU price competitiveness



Process

At European level

February 2014: European Parliament Resolution (« 40/30/40 »)

20-21 March 2014: European Council

May: Informal Energy and Environment Coiuncils

Beginning of June: Energy Council

End of June: European Council (stocktaking)

Energy Efficiency Review: Mid 2014 Review

October: "final decision" by European Council

And at international level

Fall 2014: Ban Ki-moon Climate Summit of World leaders

End 2015: Paris conference adopts international agreement

2030

FRAMEWORK for CLIMATE & ENERGY

#EU2030

ec.europa.eu/energy/2030