





"EU's Sustainable Energy Policies and Integration with Energy Union Governance" *

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EU energy goals



Sustainability

Reduction of emissions

Reduction of energy consumption

Development of renewable energy sources

Security of energy supply

Diversification of energy sources, supply countries and routes

Grid Stability

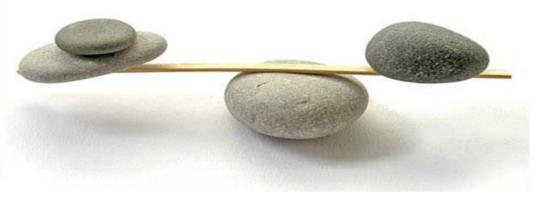
Adequate energy infrastructure

Competitiveness

Affordable and competitive prices

Promotion of new technologies, growth and jobs

Improved energy efficiency





EU 20 & 30 Energy targets

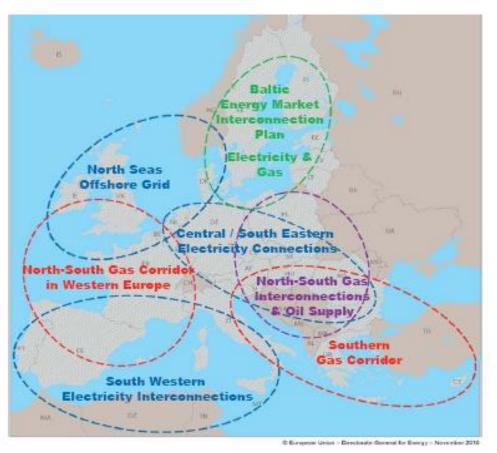


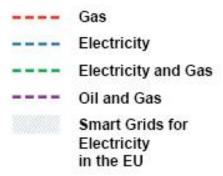
New governance system



Infrastructure priorities by 2020







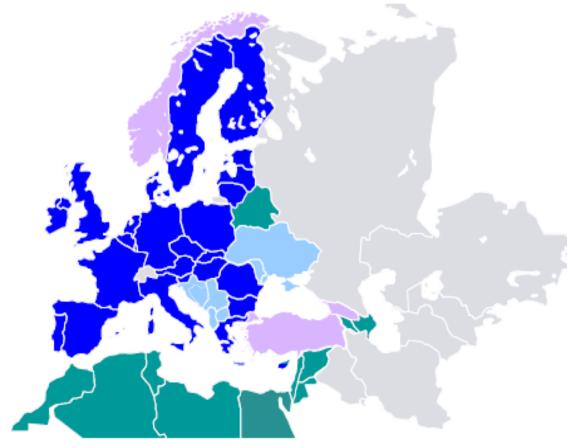
The Commission has identified priority infrastructures of European interest to be delivered by 2020. See: http://ec.europa.eu/energy/infrastructure/strategy/2020_en.htm



Extension of the EU energy market



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



The EU is projecting its energy market model as well as political and economic stability in neighbouring countries including through the Energy Community Treaty. See: http://www.energy-community.org

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Energy Roadmap 2050 – scenarios analysed



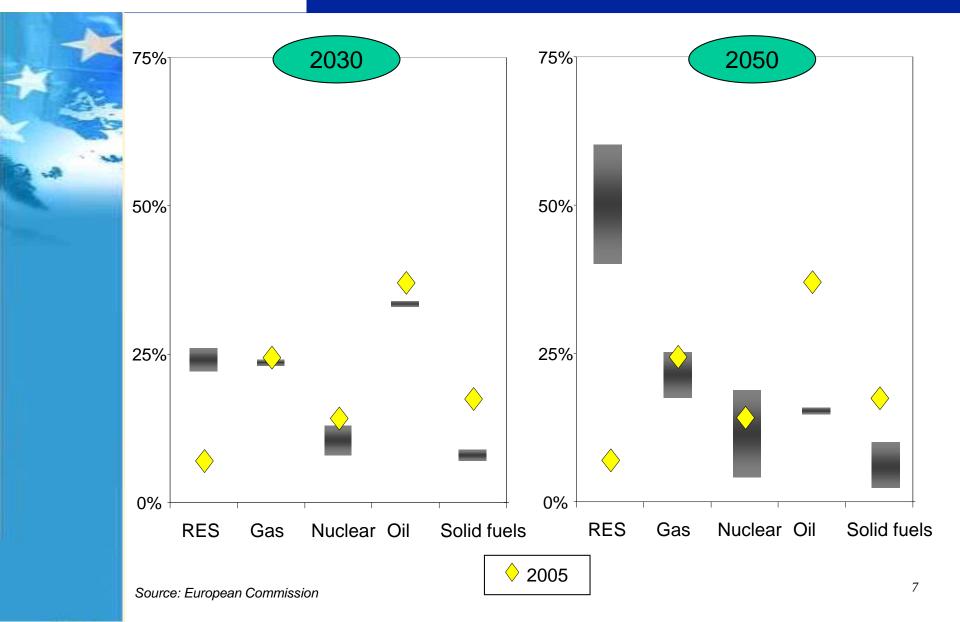
Current trends scenarios

Decarbonisation scenarios

- Business as usual (as of March 2010)
- Current Policy Initiatives (as of April 2011)
- High Energy Efficiency
- Diversified Supply Technologies
- High RES
- Delayed CCS
- Low Nuclear



Road Maps 2030 & 2050





Conclusions of scenarios



Energy efficiency gains throughout system

Renewables move centre stage

 All decarbonisation options can contribute: EE, RES, nuclear, CCS

 Gas is in every scenario – its long-term contribution depends on CCS



EU Energy Security Strategy



EU Energy Security Strategy

The way forward



- Energy security STRESS TESTS
- EMERGENCY & SOLIDARITY mechanisms at regional & EU level
- Encourage the increase of STORAGE, REVERSE FLOWS & LNG





EU: State of Play



- Energy represents ~80% of EU GHG emissions
- Dependence on limited suppliers
- Import dependency ~80-90% by 2030 (~ 60% today)
- Investment challenge around € 1 trillion by 2020



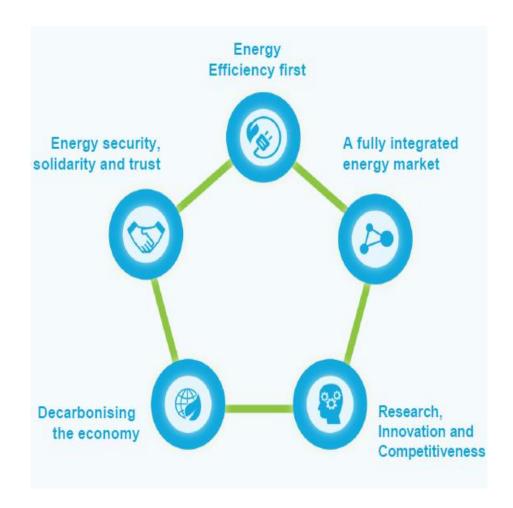
More than 70% of world oil and gas reserves are within the European market's economic reach



Energy Union Strategy



AN ENERGY UNION BASED ON 5 MUTUALLY SUPPORTIVE AND INTERLINKED DIMENSIONS





Why do we need a legal framework?



THE ENERGY SYSTEM OF TOMORROW WILL HAVE TO LOOK DIFFERENTLY

2030

50 % of electricity to come from renewables



2050

Electricity completely carbon free





We have the most ambitious **climate commitments** in the world, thanks to the EU



With leadership comes responsibility

Unique opportunity to modernise our economy and to

boost competitiveness

create the growth and jobs we need



What are our Goals?



CREATING JOBS & GROWTH, BRINGING DOWN GREENHOUSE GAS EMISSIONS, SECURING ENERGY



Putting energy efficiency first



Demonstrating global leadership in renewables



Delivering a fair deal for consumers



How do we get there (1)?



THE RIGHT REGULATORY FRAMEWORK FOR POST – 2020

" In essence the new package is about tapping our green growth potential across the board"

Commissioner Miguel Arias Cañete (2016)





Energy Efficiency

(Energy Efficiency Directive, European Performance of Buildings Directive)



Renewables

(Revised Renewable Energy Directive)



New Electricity Market Design



Energy prices and costs report



What can we expect in terms of Results?



2016 2030



The package presents a dual opportunity to speed up decarbonisation and to speed up growth and job creation.



Investment:

- extra 177bn EUR euros per year of investment from 2021 to meet 2030 climate & energy targets
- Crucial role for EFSI



Economic growth*:

- 1% increase in GDP
- 190bn EUR into the economy
- 900,000 new jobs *Upper end of estimates



Decarbonisation:

- Carbon intensity of the economy 57% lower in 2030 than in 2015
- 72% share of non-fossil fuels in electricity generation in 2030



Turkey: State of Play



- Significant increase in demand
- Dependence on imports
- Investment needs
- Potential for renewables
- Potential for energy efficiency



Turkish energy policy



- Liberalising energy markets
- Discouraging import dependency
- Securing energy supply
- Diversifying resources, routes and technologies
- Ensuring maximum use of renewable energy
- Increasing energy efficiency
- Minimising negative environmental impact



East-West corridor: Turkey



East

- Large resources
- Weak economies
- Non-payment
- Lack of investment

West

- High demand
- Import dependence
- Strong economies
- Capital to invest



East-West corridor: Synergy

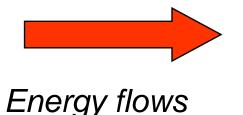
West



East

- Export/transit energy
- Attract investment
- Market reforms
- Improved technology

- Security of supply
- Investment opportunities
- Energy trade
- Access to resources





Investment flows



Main Challenges for the EU & Turkish energy markets



- Both Turkey and the EU are largely dependent on imports
- Both Turkey and the EU are developing energy strategies to respond to the three energy objectives of security, sustainability and competitiveness
- Both Turkey and the EU are developing competitive models for their energy markets
- However, what is lacking is the interconnection and integration of their energy markets through stable and transparent legal framework



EU -Turkish energy policies



- The common energy objectives and policies of the EU and Turkey are largely overlapping, and indeed complementary
- Turkey's position is enviable. Geopolitically, it is a link between the oil- and gas-rich regions
- Economically, it is potentially an attractive market for investment in infrastructure, energy efficiency and renewable energy



EU-Turkey energy cooperation



Cooperation on a common energy policy & practices;

- Enhance energy security both for EU &Turkey
- Develop Turkey's transit position
- Create good investment opportunities
- Establish solid regulatory framework for Turkey
- Enhance energy trade between EU & Turkey
- Intensify technological cooperation







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