



# **Energy and Research Policy of the European Union**

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- **European strategic vision on energy and climate change as a chance to reshape society**
  - **competitiveness for European economy (often perceived as a burden, the energy policy should actually reduce costs, create new market opportunities and contribute to employment),**
  - **energy security and**
  - **environmental concerns (air quality + climate change)**
- **Opportunities created by the Lisbon Treaty**
- **Current work to further European integration with regard to energy and climate change policies**
- **Policy challenges and budgetary resources post-2012**

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# European Strategy for Energy and Climate Change

- **20% GHG emissions reduction in 2020  
(30% if there is an international climate  
agreement)**
- **20% share of renewables by 2020**
- **20% more energy efficiency by 2020 (not  
binding)**

# The Lisbon Treaty

Lisbon Treaty 1 December 2009

New powers to Europe in several policy areas such as energy, climate change and scientific research

Energy is a shared responsibility (EU and MS)

Lisbon Treaty sets clear objectives: a functioning single internal energy market, security of supply, energy efficiency and the promotion of energy networks and renewable sources of energy

Climate change is a shared responsibility (EU and MS)

Lisbon Treaty reinforces international leading role of Europe

# Roadmap to a low carbon economy in 2050

Objective 80 to 95% overall GHG reduction by 2050

Sectors responsible for Europe's emission – power generation, industry, transport, buildings and construction – must all prepare the transition to a low-carbon economy

Cost effective and gradual transition requires a 40% domestic reduction of greenhouse gas emissions (compared to 1990) and a 60% reduction in 2040 as a milestone for 2030 leading to the 80% figure by 2050

All Member States should develop national low carbon Roadmaps

Electricity will play a central role:

- Investment in smart grids
- Development of energy storage technologies
- The key driver for this transition will be energy efficiency

# Energy Efficiency

Energy efficiency is at the heart of European policies for smart, sustainable and inclusive growth

Public sector organisations should play an “exemplary role”

EU energy efficiency plan targets public buildings

The energy efficiency objective (20%) is not a binding target but mandatory national targets may be proposed in 2013 if the voluntary approach has not worked

# Energy infrastructure priorities for 2020

**A new EU energy infrastructure policy is needed to implement the energy strategy**

**An integrated European grid will bring benefits in terms of security of supply and the stabilisation of consumer prices**

**Europe will define priority corridors for the transport of electricity, gas and oil**

**Around €200 Billion must be invested in energy transport, in gas pipelines and power grids**

**As part of its proposals for the next multiannual financial framework, the Commission proposes initiatives that will address the regulatory and financial aspects, notably through an Energy Security and Infrastructure Instrument and mainstreaming of energy priorities in different programmes**



# Policy challenges and budgetary resources for a sustainable European Union after 2013

Energy security and the fight against climate change in Europe will require major and sustained investment in Europe

Public private financing mechanisms are key to overcoming initial financing risks and cash flow barriers

A fully functioning single market depends on modern, high performance infrastructure connecting Europe particularly in the areas of transport, energy and information and communication technologies (ICT)

The Commission proposes to allocate €40 billion for the 2014-2020 period to the Connecting Europe Facility to be complemented by an additional ring fenced €10 billion for related transport investments inside the Cohesion Fund.

This amount comprises €9.1 billion for the energy sector, €31.6 billion for transport (including €10 billion inside the Cohesion Fund) and €9.1 billion for ICT.

# Policy challenges and budgetary resources for a sustainable European Union after 2013

The Commission proposes to allocate €80 billion for the 2014-2020 period for the Common Strategic Framework for Research and Innovation, complemented by support for research and innovation in the Structural Funds. For example, in the period 2007-2013 around €60 billion was spent on research and innovation across Europe's regions and similar levels of spending can be expected in the future.

The Commission proposes to allocate €15.2 billion in the area of education and training and €1.6 billion in the area of culture for the 2014-2020 period. This funding will be complemented by important support for education and training in the Structural Funds. For example, in the period 2007-2013 around €72.5 billion was spent on education and training across Europe's regions and similar levels of spending can be expected in the future.

The European Investment Bank, the European Bank for Reconstruction and Development play a role in providing additional financing

# EU Research and Innovation after 2013

- Substantial increase of funding
- Simplification
- A single framework for FWP, EIT and CIP
- Synergies between EU, national and regional funding
- Three pillars: science, industrial and societal challenges driven

We need ambitious measures to deliver a prosperous and sustainable Europe

We need investment in modern and smart energy infrastructure, enhanced energy efficiency, renewable-energy projects in research and development as well as the deployment of new energy technologies