



Actions for a Post-Industrial Revolution

The Action Plan



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THE ACTION PLAN

- **Fully realising the Internal market for electricity and gas and improving interconnections**
- **Making solidarity a daily reality**
- **Strong measures to improve energy efficiency**
- **Longer term and binding targets for renewables**
- **A strategic approach to energy technology, with a priority for low carbon technologies**
- **A clear perspective on nuclear**
- **A common international energy policy and a common voice in negotiations with external partners**
- **Market analysis and reporting**



1. INTERNAL ENERGY MARKET

Policy Actions (1)

- **Enhancing the role of national regulators:**
 - On third party access to networks and gas storage
 - Balancing mechanisms
 - Cross-border issues
 - Market surveillance and consumer protection

- **Reinforcing co-ordination of regulators at EU level => OPTIONS**
 - Enhanced co-operation between national regulators
 - Binding power decision making to the European Regulators Group for Gas and Electricity
 - A new, single Community body



1. INTERNAL ENERGY MARKET

Policy Actions (2)

- **Non-discriminatory access to networks through unbundling => 2 OPTIONS**
 - Ownership unbundling as the most efficient means
 - Independent System Operator (ISO) second-best
- **Interconnection: more co-ordination between Transmission System Operators (TSOs)**
- **Increased Transparency of the market**
- **Binding network security standards**
- **Energy Customers Charter**
- **Assessment of Investment needs**



1. INTERNAL ENERGY MARKET

Energy Customers Charter

The Commission will develop an Energy Customers' Charter to, inter alia:

- tackle fuel poverty (public services obligations)
- improve the minimum level of information available to citizens to help them choose between suppliers and supply options and to increase energy efficiency
- reduce red tape when customers change suppliers
- protect customers from unfair selling practices in compliance with the relevant EC directives



1. INTERNAL ENERGY MARKET

Priority Interconnection Plan

- **Continuous identification of missing infrastructure**
- **European coordinators for 4 priority projects:**
 - Power-Link Germany, Poland Lithuania,
 - Connections to off-shore wind power Northern Europe,
 - Electricity interconnections France-Spain,
 - Nabucco pipeline
- **TEN-E projects of “European interest”: planning and approval procedures to be completed in maximum 5 years**
- **Possibility to increase funding for TEN-E (155 millions € for the period 2007-2013)**
- **New Community mechanism for TSOs coordination of network planning**



2. SOLIDARITY IN SECURITY OF SUPPLY

- **A fully functioning internal energy market is the best guarantee of supply security and contributes to a better prediction of demand**
- **Gas Coordination Group**
- **Oil Supply Group**
- **Energy Correspondents Network**
- **Communication on strategic stocks (oil and gas)**
- **Effective mechanisms for energy crisis management**
- **Electricity Interconnections**



3. ENERGY EFFICIENCY

Saving 20% energy by 2020

Energy Efficiency Action Plan - adopted on 19 October 2006

Realising the Potential:

- **Transport: fuel efficient cars; better use of public transport; introduction of biofuels**
- **Appliances: tougher standards and better labelling**
- **Buildings: improving the energy performance of the EU's building stock**
- **Improving the efficiency of heat and electricity generation, transmission and distribution**
- **Competitiveness and Innovation Programme (CIP) funds the intelligent energy-Europe programme
=> 640 millions € for the period 2007-2013**



4. RENEWABLE ENERGY SOURCES

20% RES by 2020

- **Commission proposes a binding overall EU 20% target by 2020 and a 10% minimum binding target for biofuels for each Member State.**
- **Member States to set national targets and to adopt action plans on:**
 - **RES in electricity**
 - **Heating and cooling**
 - **Biofuels**



5. RESEARCH

Strategic Energy Technology Plan

- **Ready by the end 2007**
- **To be discussed by the Spring European Council 2008**

- **Sustainable coal and gas: to make power plants Carbon Capture and Storage (CCS) ready by 2020**
- **Second generation biofuels, photovoltaic, large-scale offshore-wind, hydrogen fuel cells**
- **Generation IV fission power, nuclear fusion**
- **Energy efficient transports, appliances and industrial systems**



5. RESEARCH Funding

In the 7th Framework Programme (FP) energy funds increased by 50% in comparison with the last FP:

2007-2013

- **Non nuclear Energy: €2350 million (>50% for RES and energy efficiency)**
- **Environment : €1890 million (including climate change)**
- **Nuclear (Euratom): €2751 million (of which €1947 for fusion, €517 CCR research and 287€ for fission)**



5. RESEARCH

Sustainable Fossil Fuels

- **Up to 12 industrial-scale demonstration facilities of sustainable power generation from fossil fuel in Europe;**
 - **Clear timeframe for installation of CO₂ capture & storage (CCS) for coal- and gas-fired power plants;**
 - **CCS fitting any new fossil fuel plant after 2020;**
 - **Retrofitting of existing plants to be examined**
 - **Improvement of the legal framework (eg CCS in Emission Trading Scheme; storage) and public acceptance**
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6. THE FUTURE OF NUCLEAR

- Around 1/3 of the electricity and 15% of the EU energy mix is from nuclear; 15 Member States concerned
- CO₂-free source with importance in low emission scenarios
- Concerns on nuclear waste and decommissioning
- Illustrative Nuclear Programme (PINIC) describes present EU and world situation of the nuclear sector

Policy Actions:

- EU High Level Group on Nuclear Safety and Waste Management
- Support R&D on waste management under FP7 research programme
- Nuclear Forum to be set up (with all stakeholders)



7. INTERNATIONAL ENERGY POLICY (1)

- **NEGOTIATIONS & AGREEMENTS on energy, climate, trade and technology:**

- Post-2012 climate regime to be discussed in UN framework
- World Bank Gas Flaring Reduction Partnership
- Extractive Industries Transparency Initiative
- Energy Charter Treaty to be fully functioning
- Extension of Emission Trading Scheme (ETS) to global partners and to other sectors
- International agreement on energy efficiency of interest for all major consumers of energy, including Russia
- Energy Star (office equipment)

- **ENERGY RELATIONS WITH EU NEIGHBOURS:**

(Norway, Ukraine, Energy Community Treaty, European Neighbourhood Policy, Egypt, Mashrek/Magreb, Libya, Algeria, Turkey)



7. INTERNATIONAL ENERGY POLICY (2)

- **EU - RUSSIA ENERGY COOPERATION**
 - Energy partnership in the framework of the post-PCA agreement and strengthening the energy dialogue through joint works.
- **COOPERATION WITH KEY ENERGY PRODUCERS, TRANSIT COUNTRIES AND CONSUMERS**
 - OPEC, Gulf Cooperation Council, Central Asia (e.g. MoU Azerbaijan, Kazakhstan), Baku Initiative
 - Latin America, Caribbean
 - Africa-Europe Partnership
- **NETWORK OF ENERGY CORRESPONDENTS**
- **NON-PROLIFERATION and NUCLEAR SAFETY AND SECURITY with IAEA**



III. Costs and benefits(1)

- ❑ **Investments in a low carbon economy:
0.5% of total global GDP 2013-2030**

- ❑ **20% share for renewables:**
 - **additional costs of €18 billion/year (oil prices of \$48/barrel by 2020)**
 - **or €10.6 billion (\$78/barrel)**
 - **no additional costs if carbon price at €20**

- ❑ **Business as Usual : \$100/barrel in 2030 would add €170 billion to our bill**

- ❑ **What about the cost of inaction ? Sir N.Stern said it could be between 5 to 20% GDP as a result of the climate damages.**



III. Costs and Benefits(2)

Improvement of the Emission Trading Scheme

- ✓ Reduction of abatement costs for regulated industries and sectors but need to extend sectoral and geographical coverage;
- ✓ Stimulation of growth and job creation and innovation

Saving 20% energy by 2020

- ✓ Would save €100 billion and around 780 Mt CO₂/year in 2020 or 1/5 of today's emissions

Technical progress fostered by clear policies

- ✓ Efficiency gains
- ✓ New technologies being developed to make fuel mix more sustainable and to deploy renewables sources of energy

Internal Market

- ✓ Efficiency gains and competitive prices
- ✓ Downward pressure on costs for downstream industries and consumers;
- ✓ Enhanced solidarity between Member States
- ✓ Credibility of EU speaking with common voice



IV. THE EUROPEAN COUNCIL ACTION PLAN 2007-2009

- **European Council fully endorsed on 9 March 2007 an action plan for An Energy Policy for Europe, based on Commission's proposals.**
- **European Parliament had been more ambitious in its resolution of 14 December 2006.**
- **Legislative proposals to be tabled by the Commission (eg internal market and Renewables) in autumn 2007.**
- **UNFCCC & Kyoto Protocol processes (2007-2009)**
- **G8 meeting in Heiligendamm under German Presidency.**



ENERGY FOR A CHANGING WORLD

THANK YOU FOR YOUR ATTENTION

All documents on the climate and energy package
are available on:

http://ec.europa.eu/energy/energy_policy/index_en.htm