



E3G

The EU Strategic Energy Review

Driving Investment in Clean and
Secure Energy

E3G

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About E3G

E3G is an independent, non-profit European organisation operating in the public interest to accelerate the global transition to sustainable development.

E3G builds cross-sectoral coalitions to achieve carefully defined outcomes, chosen for their capacity to leverage change.

E3G works closely with like-minded partners in government, politics, business, civil society, science, the media, public interest foundations and elsewhere.

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The EU Strategic Energy Review: Driving Investment in Clean and Secure Energy

The Strategic Energy Review, initiated by President Barroso and a main topic for the German Presidency of the EU in the first half of 2007, could decisively move Europe onto the investment path for a clean and secure energy system and infrastructure. This new energy system would provide stable energy services to European citizens, while achieving energy and climate security goals and acting as a stimulus for improved European economic performance. The European Council meeting of March 2007 provides a unique opportunity for Europe to forge a new integrated energy and climate security strategy which will set the benchmark for other major economies.

Over recent years the pervasive disconnection between energy security and climate goals has reduced Europe's ability to deliver its internal policy objectives, and this in turn has reduced Europe's global influence and leadership. These problems can only be overcome if European leaders grasp the opportunity of the strategic review; no single council formation can ensure the necessary integration. Without ambitious, clear and integrated action Europe will be unable to drive global cooperation to deliver its 2°C climate security goal.

European citizens expect stable energy services and want to see action to deliver climate security. Only through European cooperation can the Member States deliver these outcomes for their citizens. This is the moment for European Union leaders to demonstrate how an effective Europe acting together can deliver security for its citizens.

Driving Investment in Energy and Climate Security

Energy and Climate security are global public goods. Markets can only make the right decisions to deliver them if governments give the right incentives and efficient frameworks. Setting ambitious targets and building emissions trading markets is a first step, but unless the investment in energy infrastructure is able to respond to these signals, action will be slow, expensive and inefficient. Experience shows that current European energy systems are not responsive to weak carbon price signals, and we are far from having the right structures in place. Stronger more directive signals are needed. Liberalisation and unbundling must be used to drive incentives for radical energy efficiency, investment in modern intelligent infrastructure, and low carbon innovation.

Europe is better-placed than any other major economy to overcome the structural barriers to achieving the large economic, environmental and security gains from radical energy efficiency improvement. Europe has the opportunity through cooperative regulation to move to a modern energy services economy, rather than continuing to rely on outdated and wasteful approaches to supplying energy commodities. Europe as a global actor could use its research and development funds strategically as part of broad market innovation incentives to drive energy and climate security goals worldwide.

Six Steps to an Integrated Energy and Climate Security Policy

The steps below would put Europe on the path to an integrated approach:

1. Pan-European coordination of regulation to ensure low carbon incentives are at the heart of liberalisation and unbundling.

Lessons from the UK and others have shown that explicit duties and regulations are needed to harness the forces of increased competition to public goals, ensuring:

- a. the form of liberalisation/unbundling in the energy market is designed to explicitly deliver investment in distributed energy infrastructure and grids;
- b. liberalisation gives real incentives to companies to save energy not just sell more;
- c. reform gives strong incentives for new entrants and innovation in all areas;
- d. investment flows to priority pan-European network projects for delivering energy and climate security; such as a direct current grid to facilitate use of European high volume renewables e.g. offshore wind, geothermal and large scale solar thermal.

2. A set of mandatory targets in the field of efficiency, cars, renewables and zero emission power plants.

Energy and climate policy must drive investment into zero and low carbon technologies; the timescale for this needs to be 2020, not 2030.

The type of signal that works at this pace is regulatory, not political. Political agreement (including targets) provides the basis for subsequent regulation but will not drive investment: political objectives must be enshrined in specific policy instruments in order to move capital.

A regulatory timetable is needed to provide investment certainty, setting out when policy instruments will be introduced to support the political objectives agreed at the March 2007 European Council:

- a. **Stronger efficiency target:** the Energy Efficiency Action Plan, if implemented with ambition, could set the global standard for new appliances, cars and buildings. The 20% target should be increased to 30% by 2020 to set a stretch target for innovation. Achieving this target would be the most effective and efficient policy the EU could deliver, and must be matched with commensurate implementation resources within the Commission and Member States.
 - b. **Mandatory doubling of car efficiency:** cars are by far the main users of imported oil in Europe, and the fastest growing source of absolute levels of carbon emissions. No energy security strategy will have any impact unless it can reduce demand for imported oil. While biofuels have their place, the fastest and cheapest approach would be to set targets for doubling vehicle efficiency by 2015. This target could be co-ordinated with other major countries, such as China and Japan, in order to share risk, drive innovation faster and lay the foundations for global agreement.
 - c. **Renewables targets** for primary energy of at least 25%, including biofuels and renewable heat.
 - d. **Zero emission power plants:** under all scenarios for achieving energy and climate security the electric power sector is one of the first which needs to become zero-carbon. To give the strong and credible signal needed to drive large scale investment, Europe should regulate that all new-build power plants must be zero emission after 2015. Plants built before then should be “CCS ready” for Carbon Capture and Storage technology so that after 2015 they can be retrofitted, making it possible for the entire sector to be zero-emissions emissions by 2025.
- 3. An energy security goal to reduce substantially the overall risks to the European economy resulting from price instability and potential supply disruption in imported hydrocarbons.**

Such an energy security goal would address both demand and supply side issues:

- a. providing clear metrics of how energy efficiency, renewables and CCS are providing tangible benefits in reducing risks from external energy dependence. This would provide a basis to justify on-going public support and investment in these areas;
- b. driving a more systematic and powerful approach to energy diplomacy. This would increase European security through strengthened cooperation with suppliers in Central Asia, Middle East, North Africa and Sub-Saharan Africa to stabilise the impact of hydrocarbon exports on their economies and societies. This would involve targeted assistance and instruments such as the Extractive Industries Transparency Initiative (EITI), and explicitly measure and respond to the long term risks of depending on undemocratic and repressive regimes.

4. A common external energy and climate security policy for Europe is needed to drive global cooperation.

The world will not successfully cooperate to address climate change, if at the same time it continues to compete over dwindling fossil fuel resources. All major consumers have an interest in a predictable, rules-based approach to achieving energy and climate security together, but only a co-ordinated Europe has the weight to drive this process forward through cooperation with China, India, Japan and the USA:

- a. The EU should explicitly focus on developing mutual agreement between major energy consumers for a stronger legal underpinning for rules-based, transparent international markets for energy;
- b. EU bilateral relationships with major consumers should include stronger measures to increase energy efficiency, and drive forwards the development and deployment of new, efficient and low carbon energy technologies. This would include joint investment programmes and market coordination, not just upstream R&D spending; for example, subsidy removal from high carbon activities, standards harmonisation and tariff reduction. These bilateral agreements are more likely to drive effective and immediate action than the proposed international agreement on energy efficiency.
- c. EU R&D spending should be fully integrated into international cooperation on low carbon technologies.

- d. Exploration of new regional dialogues; for example, an EU-North Africa dialogue focusing on large scale, low carbon energy development in the region; such as solar thermal. The announcement that six countries in the region have applied to the IAEA to develop nuclear energy for desalination and other development purposes should make this process an EU security priority.

5. An ambitious 2020 Greenhouse Gas Emissions Reduction Target for Europe of at least 30% below 1990 levels

The package of measures outlined above will create the space for Europe to adopt a 2020 target that is ambitious and achievable. This decision will assist in moving the international climate negotiations and should sit at the core of the March Council.

6. Funding climate and energy security through the EU budget

To indicate European political commitment, the Strategic Energy Review should signal that energy and climate security will be a priority theme of the EU budget review in 2008-9.

These six steps would generate the basis for Europe to effectively engage third parties in generating the political will to cooperate on the broad goals of achieving energy and climate security, and on specific areas of collaboration to shift global investment flows and technology development towards a low carbon economy.