



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR ENERGY

# **2013 Management Plan**

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## 1. MISSION STATEMENT

Under the political guidance of Commissioner Günther H. Oettinger, the Directorate-General for Energy is responsible for developing and implementing a **European energy policy**.

Through the development and implementation of innovative policies, the Directorate-General aims at:

- Contributing to setting up an energy market providing citizens and business with affordable energy, competitive prices and technologically advanced energy services.
- Promoting sustainable energy production, transport and consumption in line with the EU 2020 targets and with a view to the 2050 Energy Roadmap.
- Enhancing the conditions for secure energy supply in a spirit of solidarity between Member States.

In developing a European energy policy, the Directorate-General aims to support the Europe 2020 strategy which, for energy, is captured in the Energy 2020 strategy presented by the Commission in late 2010.

The Directorate-General carries out its tasks in many different ways. For example, it promotes the completion of the internal energy market; carries out energy market monitoring; supports the reinforcement of energy infrastructure, ensures that indigenous energy sources are exploited in safe and competitive conditions; ensures that markets can deliver agreed objectives, notably in efficiency and renewable energies; facilitates energy technology innovation; develops the most advanced legal framework for nuclear energy, covering safety, security and non-proliferation safeguards. Across all areas, it develops strategic analyses and short, medium and long term policies for the energy sector; monitors the implementation of existing EU law; encourages the exchange of best practices; provides information to stakeholders; and promotes and conducts an EU external energy policy.

All these activities are aided by expert input from the Executive Agency for Competitiveness and Innovation (EACI), the Euratom Supply Agency (ESA) and the Agency for the Cooperation of Energy Regulators (ACER).

## 2. THIS YEAR'S CHALLENGES

**Significant achievements during 2012 have prepared the ground for 2013:**

- **Adoption of the new Energy Efficiency Directive (2012/27/EU)** to cover the whole energy chain – from supply to final use – and to speed up energy efficiency improvements crucial to get EU back on track towards reaching the 2020 energy efficiency target.
- **Political agreement on a new Infrastructure Regulation** and good progress towards an agreement on the **Connecting Europe Facility**, which proposes over 9 billion euros to energy infrastructure.

- **Concrete steps towards a reinforcement of Europe's external energy policy** including through the adoption of the **Decision on information exchange on intergovernmental agreements**.
- Presentation of a **Communication on the Internal Energy Market**, which highlighted how the completion of the internal energy market can benefit consumers, stimulate growth and facilitate the transition to low carbon energy systems.
- Wide-ranging support for the Commission's in depth assessment of how to transform European energy systems over the next four decades, as part of the EU's commitment to reduce greenhouse gas emissions by at least 80% by 2050 and to improve long term security of supply and competitiveness, as outlined in the **2011 Energy Roadmap 2050**, acknowledged in **Presidency Conclusions endorsed by 26 Member States** under Danish EU Presidency.
- Presentation of a **Communication on renewable energy** which confirmed the market integration of renewable energy whilst identifying areas for renewed efforts for meeting the renewable energy goals in a cost-efficient way.
- **Completion** of the comprehensive risk and safety assessments (**stress tests**) of all EU nuclear power plants following the Fukushima accident confirmed the high safety standards in Europe; however, it also showed a need for further safety improvements.
- Review of the **nuclear safety** framework legislation in the EU to present legal amendments to continuously improve nuclear safety after Fukushima.
- Adoption by the Commission of its proposal for a Council Regulation (Euratom) establishing a **Community system for registration of carriers of radioactive materials**.

Politically, 2013 is likely to be dominated by actions to deal with the economic crisis. Ensuring effective implementation of existing energy policy initiatives and where necessary strengthening the current policy framework will be key contributions to ensuring European economic **recovery**. The transition towards a more competitive, sustainable and secure energy system through e.g. infrastructure development, renewable sources of energy, and energy efficiency improvements, and roll-out of energy technologies and innovation, with high levels of safety and security, can have important economic impacts. The energy system is expected to empower consumers, ensure higher predictability of prices and reduced fuel import dependency and turn Europe into a technology and innovation leader. European funding can be a key catalyst for leveraging the resources for sustainable energy use and infrastructure development. A well interconnected, open and competitive energy market of 500 million consumers will provide the necessary scale and will help ensuring that investments are made in a cost effective way.

DG Energy's priority initiatives for 2013 reflect the five priorities of the Energy 2020 Strategy and the Energy Roadmap 2050:

**1. Building a truly pan-European integrated energy market:** Based on the discussion of concepts presented in the **Energy Roadmap 2050 we will present an Energy 2030 framework**. It should put equal emphasis on competitiveness, sustainability and security of supply of the EU energy system in 2030 perspective. In follow-up to the 2012 **Communication on the Internal Market for Energy (IEM)** we will pursue the implementation of the actions foreseen in the Action Plan. We will evaluate the framework for the assessment and improvement of generation adequacy in the electricity sector and provide a framework for national interventions in the energy system, to ensure that market interventions to deliver competitive, sustainable and secure supply are necessary and

proportionate. We will pursue our focus on the monitoring of the transposition and implementation of Energy acquis by Member States. Implementation of the new infrastructure regulation will enable the establishment of the first Union-wide list of projects of common interest. We will closely monitor the implementation of this regulation, in particular the establishment by Member States of the one-stop-shop for permit granting procedures. We will prepare effective implementation of the Connecting Europe Facility – Energy as from 2014. We will also propose a new legal base for Regulation on the notification of investment projects in energy infrastructure. In the area of renewable energy we will provide guidance on renewable support scheme reform and the facilitation of trade in renewable energy. Further guidance will be provided to the implementation of smart grids and meters in Member States and on the most effective forms of the protection and assistance for vulnerable consumers.

**2. Achieving an energy efficient Europe: We will support Member States in effectively transposing and implementing the new Energy Efficiency Directive,** including through the adoption of interpretative notes. This Directive is expected to promote public and private investments, boost the energy services market and encourage energy companies to promote energy savings. Planned **eco-design and energy labelling measures** will be pursued. They make an important cost-effective contribution to energy saving. We will also vigorously monitor full implementation by Member States of the energy performance of buildings Directive, and continue 2012's accelerated pace of implementation of ecodesign and energy labelling requirements for products.

**3. Achieving the highest level of safety and security:** In the follow-up to the adoption of EU legislation on the safety of offshore oil and gas operations, implementing and delegated acts to facilitate its transposition by Member States will be prepared. With respect to nuclear energy and following the conclusion of the nuclear "stress test" process, DG Energy's main **legislative outputs** for 2013 will be a proposal for a revision of the nuclear safety directive, as well as a new legislative initiative on nuclear insurance and liability. As regards the implementation of the stress tests recommendations, the national action plans, which should be prepared by national regulators and made available by the end of 2012, will undergo peer reviews in early 2013, in order to verify that these recommendations are consistently implemented in a transparent way throughout Europe. A Communication on nuclear emergency preparedness and response is also foreseen.

**4. Extending European leadership in energy technology and innovation: A Communication on energy technology and innovation** should set out an EU energy technology strategy until and beyond 2020. It will develop which technologies are under which circumstances needed for a cost effective transition, and how to ensure the market uptake of technologies and innovations. SET-Plan and Horizon 2020 will be key instruments to achieve this.

**5. Strengthening the external dimension of the EU energy market:** We will pursue the **implementation of actions foreseen in the recent Communication on security of energy supply and international cooperation.** This will include the implementation of the Decision creating an information exchange mechanism for intergovernmental agreements between Member States and third countries as well as the negotiations on a Trans Caspian Gas Pipeline and on the electricity system operation in the Baltic States.

2013 will conclude the 2009-2013 Financial Framework and be the last entire working year of this Commission. It will bring new challenges and demands for us all, but I am confident that we'll make significant progress in the coming twelve months. Working closely together, both

as a Directorate General, and with the Irish and Lithuanian EU Presidencies, the European Parliament and all our stakeholders, will help us steer the changes our energy system needs.

For information on all these policies and more, you can visit our website:  
[http://ec.europa.eu/dgs/energy/index\\_en.htm](http://ec.europa.eu/dgs/energy/index_en.htm).

Philip Lowe

### 3. GENERAL OBJECTIVES BY POLICY AREA

DG Energy's work contributes to the objectives set by the Commission, particularly the priorities and headline targets identified in the EU 2020 Communication. DG Energy breaks down the overall objectives into three different "general objectives" which in turn are broken down into a number of more "specific objectives". The general objectives for Energy policy are:

1. To contribute to setting up an energy market providing citizens and business with affordable energy, competitive prices and technologically advanced energy services.
2. To promote sustainable energy production, transport and consumption in line with the EU 2020 targets and with a view to the 2050 decarbonisation objective.
3. To enhance the conditions for secure energy supply in a spirit of solidarity between Member States.

**The following specific objectives reflect the five priorities of the Energy 2020 strategy and contribute to the three general objectives:**

#### *Building a truly pan-European integrated energy market<sup>1</sup>*

- (1) To shape a long-term vision and strategy for the energy system, post 2020.
- (2) To contribute to the completion of the internal energy market both at retail and wholesale level by removing barriers to competition and cross-border trade while establishing a European framework for effective and efficient operation of networks and markets.
- (3) To create a framework that stimulates the development of smart grids and the roll-out of smart meters.
- (4) To facilitate investments in the infrastructure for electricity, gas, oil and CO<sub>2</sub> transport needed for the completion of the internal energy market, connecting remaining energy islands<sup>2</sup>, ensuring security of supply and integrating renewable energy sources.
- (5) To stimulate investments in the European energy sector, contributing to economic growth and job creation<sup>3</sup>.

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<sup>1</sup> European Council conclusions February 2011: "The internal market should be completed by 2014 so as to allow gas and electricity to flow freely."

<sup>2</sup> European Council conclusions February 2011: "No EU Member State should remain isolated from the European gas and electricity networks after 2015 or see its energy security jeopardized by lack of the appropriate connections."

- (6) To create a framework that protects energy consumers and helps to empower them to effectively exercise choice with respect to energy supply contracts and arrangements, to actively control their energy consumption and energy bills.
- (7) To facilitate an increase in the share of renewable energy in overall energy consumption of 20% by 2020 through a common framework based on mandatory targets.
- (8) To put in place framework measures that will permit the achievement of the higher shares of renewable energy after 2020.

#### *Achieving an energy efficient Europe*

- (9) To facilitate a 20 % reduction of energy consumption compared to PRIMES 2007 projections for 2020 – with underlying changes in the state of the economy taken into account – through policy measures promoting energy efficiency particularly in the energy, residential and services sectors and industry.
- (10) To support projects promoting renewables and increasing energy efficiency in different sectors of the economy including transport, through addressing the non-technological barriers and involving local actors (Intelligent Energy Europe programme).

#### *Empowering consumers and achieving the highest level of safety and security*

- (11) To contribute to solidarity and coordinated actions to prevent and mitigate the consequences of supply disruptions in gas and electricity, crude oil and petroleum products.
- (12) To promote best industry and regulatory practices and standards in the exploration and production, including offshore, of indigenous fossil fuels.
- (13) To implement and further develop the framework for nuclear safety, security and non-proliferation.
- (14) To strengthen protection of the health of workers and the general public against the dangers arising from ionizing radiations.
- (15) To ensure that declared nuclear materials are used only for their intended purposes through the implementation of nuclear safeguards.

#### *Extending Europe's leadership in energy technology and innovation*

- (16) To support the development and demonstration of cost-effective technologies for low carbon energy production and distribution and energy efficiency.

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<sup>3</sup> Distinction of two infrastructure objectives (1. general infrastructure objective and 2. European energy programme for recovery) due to different budgetary headings (1. Trans-European Networks and 2. Conventional and Renewable Energies).



- (17) To facilitate the dissemination and replication of the results of demonstration projects to the European industry through industry and stakeholder platforms, project networks and information systems.

*Strengthening the external dimension of the EU energy market*

- (18) To contribute to a consistent EU external action on energy that strengthens partnerships for secure, safe, sustainable and competitive energy, builds up the external dimension of the internal energy market, improves access to sustainable energy for developing countries and better promotes EU policies beyond its borders, notably with neighbouring countries.
- (19) To reinforce nuclear safety in neighbouring countries and globally.
- (20) To strengthen security of nuclear fuel supply.

DG Energy measures progress towards these objectives using "impact indicators". These are listed in the table below for each general objective.

It is important to note that implementation of the Management Plan (and in particular achieving objectives and seeing improvements in the indicators) does not only depend on the Commission. It is for the European Parliament and Council to decide on the Commission's proposals and then primarily for the Member States to implement them. In addition, there are often measures that will contribute to the actions that are outside the scope of EU competence. Finally, external factors, such as energy price fluctuations, can have a significant influence.

**Table 1: DG Energy Impact Indicators**

POLICY AREA : Energy				
<u>General objectives</u>	<u>Impact indicators</u>			
	<u>Indicator</u>	<u>Target (long-term)</u>	<u>Milestones</u>	<u>Current situation</u>
<p><i>1. To contribute to setting up an energy market providing citizens and business with affordable energy, competitive prices and technologically advanced energy services.</i></p>	<p>Degree of energy price convergence in the EU<sup>4</sup></p>	<p>1:2</p>	<p>1:2 (medium term)</p>	<p>30/06/2012 (Prices of the first half of 2012 without taxes)</p> <p>-Electricity</p> <p>households: 1:3.3</p> <p>industry: 1: 3.4</p> <p>-Gas</p> <p>households: 1:3.9</p> <p>industry: 1: 2.8</p> <p>30/06/2011 (Prices of the first half of 2011 without taxes)</p> <p>-Electricity:</p> <p>Household: 1:2.5</p> <p>Industry 1:2.9</p> <p>-Gas</p> <p>Household: 1:4</p> <p>Industry: 1: 2.8</p>

<sup>4</sup> Measurement unit: price variation ratio between cheapest and most expensive Member State for both household and non-household consumers source: Eurostat and Energy Regulators.

POLICY AREA : Energy				
General objectives	Impact indicators			
	Indicator	Target (long-term)	Milestones	Current situation
				30/06/2010 (Prices of the first half of 2010 without taxes)  - Electricity: Household 1:2.4 Industry: 1:3.14  -Gas Household 1:3.7 Industry 1:2.6
2. To promote sustainable energy production, transport and consumption in line with the EU 2020 targets and with a view to the 2050 decarbonisation objective.	Energy efficiency and savings. Primary energy savings achieved in 2020 measured against the baseline (%) <sup>5</sup>	20% by 2020	Review of the progress towards the 2020 energy efficiency target by June 2014	12.1% (2011, expert estimation) 10.6% (2010) 13.3% (2009) 8.6% (2008) 8.5% (2007) 7.3% (2006) 7.5% (2005) <sup>6</sup>

<sup>5</sup> Baseline is PRIMES 2007 in 2020, which includes policies to be implemented up to 2006 with an oil price of \$61 per barrel and reference year 2005. Calculated as Gross Inland Consumption minus Final Non-Energy Use Consumption. Source: Eurostat, Commission studies.

<sup>6</sup> [Explanation: When e.g. looking at EU-27 primary energy consumption in 2006, we would save 7% of the projected primary energy consumption for 2020, assuming constant consumption until 2020]

POLICY AREA : Energy				
General objectives	<i>Impact indicators</i>			
	<i>Indicator</i>	<i>Target (long-term)</i>	<i>Milestones</i>	<i>Current situation</i>
	Renewable energy share in final EU energy consumption (%)	20% by 2020	Member States' progress reports, due 12/2011 Commission's progress report due 12/2012 Trajectory with interim targets contained in Annex 1b of Dir. 2009/28/EC: 2011/2012: 10.8% 2013/2014: 12% 2015/2016: 13.7% 2017/2018: 16%	All received by June 2012 2010: 12.66% 31/12/2009: 11.7% 31/12/2008: 10.3% 31/12/2007: 9.2% 31/12/2006: 8.74% 31/12/2005: 8.5%
	Share of renewable energy in EU energy consumption for transport <sup>7</sup>	10% by 2020	5.75% by 2010	2010: 4.7% 31/12/2009: 4.2% 31/12/2008: 3.5% 31/12/2007: 2.6% 31/12/2005: 1%

<sup>7</sup> in %; Source: national reports under the renewable energy directive and Directive 2003/30.

POLICY AREA : Energy				
General objectives	Impact indicators			
	Indicator	Target (long-term)	Milestones	Current situation
3. To enhance the conditions for secure energy supply in a spirit of solidarity between Member States.	Number of major energy supply disruptions	0	<p>Maintain each year 0 gas disruptions with cross-border impact</p> <p>Maintain each year 0 electricity blackouts with cross-border impact</p>	<p>2012: 1 event – extreme weather conditions in February resulting in historic peak demand for gas in 6 Member States and for electricity in 2 Member States. Electricity export restrictions due to force majeure introduced in 3 Member States. No blackouts in electricity but occasional gas disruptions from Turkey affecting Greece.</p> <p>2011: 0 gas disruptions or electricity blackouts</p> <p>2010: 1 (Gas disruption originating in Belarus and affecting 2 Member States)</p> <p>2009: 1 (Gas disruption originating in Russia and affecting 12 Member States)</p> <p>2008:0</p> <p>2007: 0</p> <p>2006: 1 [Electricity originating in Germany and affecting 7 Member States]</p>
	Number of extra-EU countries supplying at least 3% of the EU market for coal	Stabilisation		<p>6 (medium term)</p> <p>31/12/2010: 6</p> <p>31/12/2009: 6</p>

**POLICY AREA : Energy**

<b><u>General objectives</u></b>	<b><u>Impact indicators</u></b>			
	<i>Indicator</i>	<i>Target (long-term)</i>	<i>Milestones</i>	<i>Current situation</i>
				31/12/2008: 6 31/12/2007: 7 31/12/2006: 6
	Number of extra-EU countries supplying at least 3% of the EU market for gas	Stabilisation/Increase	6 ( <i>medium term</i> )	31/12/2010: 6 31/12/2009: 5 31/12/2008: 5 31/12/2007: 5 31/12/2006: 4
	Number of extra-EU countries supplying at least 3% of the EU market for oil	Stabilisation/Increase	9 ( <i>medium term</i> )	31/12/2011: 8 31/12/2010 :9 31/12/2009: 9 31/12/2008: 9 31/12/2007: 7 31/12/2006: 7
	Number of extra-EU countries supplying at least 3% of the EU market for uranium. (Source Euratom Supply Agency Annual Report)	Above 5	Above 5 (medium term)	31/12/2011: 7 31/12/2010: 6 31/12/2009: 7 31/12/2008: 7

**POLICY AREA : Energy**

<b><u>General objectives</u></b>	<b><u>Impact indicators</u></b>			
	<i>Indicator</i>	<i>Target (long-term)</i>	<i>Milestones</i>	<i>Current situation</i>
				31/12/2007: 6 (EU27) 31/12/2006: 5 (EU25) 31/12/2005: 8 (EU15)
	Percentage of indigenous primary energy production of gross inland consumption of all fuels	Increase	48.1%	2010: 47.6% 2009: 48.1% 2008 :46.8% 2007: 47.0% 2006: 47.6% 2005: 48.7%

#### **4. SPECIFIC OBJECTIVES FOR OPERATIONAL ACTIVITIES**

The three general objectives of DG Energy are implemented through four "Activity-Based Budgeting" (ABB) activities.

Each of the four ABB activities is set out in more detail in subsequent sections, with the specific objectives that seem most relevant under this ABB activity; and with the "result" indicators to measure progress. It should be noted that some objectives are implemented by more than one ABB activity (see table 2 in annex for an overview on this).

Along with the ABB activities, objectives and indicators, information on the most significant policy-related and expenditure-related outputs planned for 2012 is also included.



#### 4.1. Trans-European Networks

By supporting the strengthening of European infrastructure, this activity makes an important contribution to enhancing European competitiveness and cohesion and implementing the EU 2020 flagship initiative "Resource-efficient Europe", as well as the actions of the Single Market Act II relating to infrastructure. In March 2009 the European Council called for a review of the TEN-E (Trans-European Network) framework. A new financial and legal framework was proposed on 19 October 2011, to replace the current TEN-E guidelines and Financial Regulation under the new Multiannual Financial Framework after 2013. The new framework should facilitate trans-European energy infrastructure development to meet the challenges related to the 2020 and 2050 Energy and Climate Policy goals.

<b>Specific objective:</b> To facilitate investments in the infrastructure for electricity, gas, oil and CO2 transport needed for the completion of the internal energy market, connecting remaining energy islands <sup>8</sup> , ensuring security of supply and integrating renewable energy sources.		
Result Indicator	Latest known result	Target (mid-term result)
N° of PEI and PCI for electricity and gas finalised on schedule [PEI – Projects of European Interest] [PCI – Projects of Common Interest]	31/12/2012: Next update on projects in two yearly report spring 2013  15/03/2010: (source two-yearly TEN-E implementation report)  Electricity: 5 PEI; 12 PEI on schedule  Gas: 2 PEI finalised; 3 PEI on schedule  31/12/2008: Electricity: 7 PEI, 3 PCI on schedule. 1 PCI finalised  Gas: 2 PEI  31/12/2007  Electricity: 4 PEI, 3 PCI on schedule.  Gas: 1 PCI finalised, 2 under construction, 2 partially under construction	Implementation of 32 PEI out of 164 PCI projects in the electricity sector and 10 PEI out of 122 PCI projects for gas.

<sup>8</sup> European Council conclusions February 2011: "No EU Member State should remain isolated from the European gas and electricity networks after 2015 or see its energy security jeopardized by lack of the appropriate connections."

**Main policy outputs**

TEN-E Decision mid-2013

Proposal of the Union-wide list of projects of common interest.

Report on TEN-E implementation 2010-2012 and follow-up of the infrastructure 2010 Communication

Adoption and implementation of 19 Commission Decisions following the Call 2012

**Main expenditure –related outputs:**

TEN-E Programme:

2013 planned budget: : 20 million €implemented through the annual call and pilot project bonds initiative

#### **4.2. Conventional and renewable energy**

Energy policy on conventional and renewable energy aims to ensure sustainable energy use and to ensure security of energy supplies and competitiveness of the energy system. Our policy aims to promote the delivery of safe, secure, sustainable and technologically innovative energy services at affordable and competitive prices. For the period beyond 2020, recent EU energy policy initiatives is aim at giving predictability to policy makers and the energy sector and illustrate possible pathways as presented by the Energy Roadmap 2050. To provide predictability and certainty of the regulatory framework is also one of the main objectives of the Commission's 2013 initiative on a 2030 energy framework.

Actions undertaken in the field of fossil and renewable energy will contribute to a large extent to support the shift towards a resource efficient and low-carbon economy at the lowest possible cost. A particular focus will be on energy infrastructure and efficiency, including the development and roll-out of smart grids, which have immediate environmental, economic and energy security benefits, including high job-creating and investment leverage potential. The provisions governing the internal energy market should be fully and effectively implemented as reflected in the Single Market Act II. European-wide guidelines and network codes should be put in place to promote efficient operation of networks and markets. Activities underway aim also at ensuring inside and outside the EU the necessary conditions for a secure energy supply. The European Energy Programme for Recovery contributes to achieving the energy policy objectives as well as sustaining the recovery of the European economy. The Intelligent Energy Europe programme continues to finance the Commission's efforts to promote the use of renewable energy and to increase energy efficiency throughout the economy.

<b>Specific objective:</b> To shape a long-term vision and strategy for the energy system, post 2020.		
Result Indicator	Latest known result	Target (mid-term result)
Progress made in reaching political consensus on the medium to long term objectives of EU energy policy.	Presidency conclusions on the Energy Roadmap 2050 supported by 26 Member States adopted in June 2012.	Political agreement on the framework for EU energy policy for 2030.
<b>Main policy outputs</b>		
New climate & energy framework for the period up to 2030		
<b>Main expenditure –related outputs:</b>		

<b>Specific objective:</b> To contribute to the completion of the internal energy market both at retail and wholesale level by removing barriers to competition and cross-border trade and establishing a European framework for effective and efficient operation of networks and markets.		
Result Indicator	Latest known result	Target (mid-term result)
<p>(1) Number of markets coupled</p> <p>(2) Number of TSOs certified as unbundled (Commission opinion adopted)</p> <p>(3) Number of open infringement procedures</p> <p>(4) Number of Member States with at least 3 significant electricity/gas suppliers (with more than 5% market share each)</p>	<p>End 2012:</p> <p>(1) 21 MS have introduced market coupling at least on one of their borders (source, market monitoring).</p> <p>(2) 32 TSOs certified (Commission opinions adopted); 7 certifications in process (notified by (AT, CZ, DE, LV)</p> <p>(3) second package infringement cases: 6 open infringement procedures for electricity; 5 open infringement procedures for gas (for 4 of which the referral to the Court was adopted)</p> <p>Third package infringement cases (non-communication)</p> <p>11 open infringement procedures for electricity (for 3 of which the referral to the Court was adopted) 11 open infringement procedures for gas (for 3 of which the referral to the Court was adopted)</p> <p>Gas Security of Supply infringement cases: 1 open infringement case</p> <p>(4) In 20 MS at least 3 significant electricity suppliers. In 17 Member States at least 3 significant gas retailers.</p>	<p>(1) 25 MS should be coupled by the end of 2014, coupling of MT is dependent on the cable project to Italy. For CY no connection is foreseen yet.</p> <p>(2) 75-100 (estimation) TSOs (all) certified by end 2013</p> <p>(3) 0 open second package infringements procedures (elec. &amp; gas Regulations) by the end of 2013 (except for cases where a referral to the Court has been adopted)</p> <p>Having opened several infringement cases for non-compliance cases with the third package by end of 2013. 0 open third package non-communication infringement procedures (electricity/ and gas Directives) by the end of 2013</p> <p>(4) 27 MS should have at least 3 significant electricity/ and gas suppliers by 2014</p>

<b>Main policy outputs</b>
Guidelines Governance Framework for electricity capacity allocation and congestion management Framework for national interventions in the energy sector  Multiple actions on establishment of Network codes and guidelines (gas and electricity) Establishment of implementing acts under REMIT.
<b>Main expenditure –related outputs:</b>

<b>Specific objective:</b> To create a framework that stimulates the development of smart grids and the roll-out of smart meters.		
Result Indicator	Latest known result	Target (mid-term result)
Number of MS having completed cost-benefit analysis as required in the 3 <sup>rd</sup> package	September 2012: 12 MS for electricity and 11 MS for gas.	mid-2013: 27 MS for gas and electricity
Proportion of households with smart meters installed	15% in early 2012	At least 80% of households assessed positively in cost-benefit analysis by 2020
<b>Main policy outputs</b>		
<p>Benchmarking report for Member States' CBAs on smart meters roll-out and country specific recommendations</p> <p>Commission Recommendation on assessment of the impact of smart meters on privacy and security of personal data</p>		
<b>Main expenditure –related outputs:</b>		

<b>Specific objective:</b> To stimulate investments in the European energy sector, contributing to economic growth and job creation		
Result Indicator	Latest known result	Target (mid-term result)
Number of completed interconnection projects	<p>End 2012:</p> <p>Further 7 projects technically completed: 5 in gas: Slovenia, Spain, reverse flows projects Poland-Czech Republic, Hungary, Poland,) and 2 in electricity interconnection Ireland-UK and reinforcement in Malta)</p> <p>End 2011:</p> <p>Further 12 projects technically completed: 9 in gas(gas BE, SK-1 and 2- reverse flow, AT -2, 3 and 4 reverse flow, , CZ-1 reverse flow, HU reverse-flow, PL reverse flow) and 3 in electricity (reinforcement PT 1 and 2 and transmission AT-HU).</p> <p>End 2010:</p> <p>3 projects technically completed (HU/RO, HU/HR, AT-reverse flow)</p> <p>44 Commission decisions notified covering, 43 projects, all started</p>	<p>By 2014: Completion of the implementation of 37 (out of 43) projects</p> <p>Final target: 44 Commission decisions and subsequent implementation of 43 projects</p>
Number of completed carbon capture and storage demonstration projects	<p>None of the projects completed. 1 project was terminated in 2012. None of the remaining 5 projects have yet adopted the final investment decision initially planned for 2010/2011.</p>	<p>At least one Final Investment Decision in 2013.</p>
Number of completed off shore wind projects	<p>1 project completed, 2 more to be completed by end 2013.</p>	<p>At least one Final Investment Decision on EEPR wind grid projects in 2013.</p>



### Main policy outputs

Annual Report on the implementation of the European Energy Programme for Recovery.

Council Regulation concerning the notification to the Commission of investment projects in energy infrastructure within the European Union

### Main expenditure – related outputs:

**Offshore wind** energy: A total of €565 million has been committed for expenditure on 9 projects, selected under the European Energy Programme for Recovery, on the basis of individual grant agreements. 203 million EUR payments executed by October 2012.

**CCS:** on-going implementation of 5 projects and execution of payments within the framework of a total commitment of €820m.

**Interconnections:** total of 2,267,574,463€ has been committed for expenditure on 43 infrastructure projects, selected under the European Energy Programme for Recovery.

**Specific objective:** To create a framework that protects energy consumers and helps to empower them to effectively exercise choice with respect to energy supply contracts and arrangements and to actively control their energy consumption and energy bills.

Result Indicator	Latest known result	Target (mid-term result)
<p>Number of suppliers of electricity and gas for consumers (measured at national level; source of data: regulators)</p>	<p>2012: In 25 Member States at least 3 suppliers in electricity and in 24 Member States at least 3 gas suppliers</p> <p>31/12/2010: In 22 Member States there are at least 3 suppliers in electricity, and in 19 Member States in gas.</p> <p>31/12/2009: In 22 Member States there are at least 3 suppliers in electricity, and in 17 Member States in gas.</p> <p>31/12/2008: In one third of Member States there are less than 3 significant gas or electricity suppliers (&gt;5% share). In gas at wholesale level, 60% of Member States have still less than 3 gas suppliers.</p> <p>31/12/2007: In one third of Member States there are less than 3 significant gas or electricity suppliers (&gt;5% share). Moreover in gas at wholesale level, even two thirds of Member States have less than 3 gas suppliers.</p>	<p>31/12/2013: At least 3 suppliers for consumers</p>
<p>Number of MS with completed transposition of consumer-related provisions in the 3<sup>rd</sup> package</p>	<p>30/10/2012: Full transposition notified by 20 Member States for both electricity and gas; Full transposition for electricity and partial for gas notified by 1 Member State; Partial transposition for electricity and gas notified by 5 Member States</p>	<p>27 MS compliant by complete transposition of both electricity and gas by 2014</p>

<b>Main policy outputs</b>
Guidance document on Definition and Protection of Vulnerable Consumers
<b>Main expenditure –related outputs:</b>

<p><b>Specific objectives:</b> To facilitate an increase in the share of renewable energy in overall energy consumption of 20% by 2020 through a common framework based on mandatory targets.</p> <p>To put in place framework measures that will permit the achievement of the higher shares of renewable energy after 2020.</p>		
Result Indicator	Latest known result	Target (mid-term result)
% of renewable electricity in total EU electricity consumption (measurement unit % TWh renewable / TWh total EU; source: Eurostat; Member States)	19.6% (2010) 18.9% (2009) 16.6% (2008) 15.6% (2007) 14.6 % (2006) 15 % (2005)	31/12/2012: 22% <sup>9</sup>
Share of renewables in total EU energy consumption for transport (Measurement unit: %; Source: national reports under the biofuels directive)	31/12/2010: 4.7% 31/12/2009: 4.2% 31/12/2008: 3.5% 31/12/2007: 2.6 %	6% by 2012 <sup>10</sup> 10% by 2020
<b>Main policy outputs</b>		
<p>Technical follow-up to RES Communication: 1) Guidance on support schemes and support scheme reform and 2) Guidance on the use of the co-operation mechanisms of Directive 2009/28/EC</p> <p>1<sup>st</sup> Report on Progress on Renewable Energy in the Member States (as required by Article 23.3 of Directive 2009/28/EC)</p>		
<b>Main expenditure –related outputs:</b>		

<sup>9</sup> "expected" as indicated through national renewable energy action plans

<sup>10</sup> "expected" as indicated through national renewable energy action plans

<p><b>Specific objective:</b> To facilitate a 20 % reduction of energy consumption compared to PRIMES 2007 projections for 2020 – with underlying changes in the state of the economy taken into account - through policy measures promoting energy efficiency particularly in the energy, residential and services sectors and industry.</p>		
Result Indicator	Latest known result	Target (mid-term result)
Member States deliver national energy efficiency targets for 2020 in the framework of the Europe 2020 strategy	23 Member States provided information on their voluntary national 2020 targets. These translate to ca. 206.9 Mtoe of primary energy savings. If all the remaining Member States take the same average level of ambition, the EU in 2020 would reach only 14% of savings. The new Energy Efficiency Directive (2012/27/EU) together with the measures in the Transport White paper of March 2011 is expected to contribute to a significant reduction of the gap.	All MS to report on their national indicative energy efficiency targets for 2020 by 30 April 2013 as required by Article 3 of Directive 2012/27/EU.
Degree to which legislative act and additional 'soft-law' instruments in follow-up to the March 2011 Energy Efficiency Plan address the remaining cost-effective potential in all supply and demand side sectors	Existing policy framework insufficient for delivering the 20% objective. A new Energy Efficiency Directive was adopted. It will contribute to a significant reduction of the gap.	Comprehensive policy framework should be in place at Member States level to realise the remaining cost-effective savings potential in 2020. Implementation of the Energy Efficiency Directive is expected to significantly contribute to the target.
Increase of levels of ambition of National Energy Efficiency Action Plans (NEEAPs) to meet the target and objectives of the Energy Services Directive (2006/32/EC) (measurement units: levels of national targets set by the Member States, comprehensiveness of measures set by the Member States to achieve these targets, volume of new measures launched by the Member States; source: NEEAPs and other information provided by the Member States	27 Member States submitted their Second NEEAPs. On average they show an improvement compared for the first NEEAPs of 2007-2008 mainly as regards increased levels of ambition and better comprehensiveness of the sets of policy measures addressing key sectors of energy end-use.	Mid-term target for the reports coming in mid 2014: all NEEAPs include comprehensive energy efficiency programmes on buildings, transport and public sectors and, to the extent possible, based on the Commission template.
Cumulative reductions of primary energy consumption triggered by the regulatory measures on the energy efficiency of products.	About 400 TWh <sup>11</sup> (expected impact in 2020 of the first 20 implementing measures in force by end of 2012)	Increase (additional implementing measures to be adopted between end of 2012 and end of 2014 should lead to a further 600

<sup>11</sup> Annual savings in final energy by 2020, calculated according to the Methodology for the Ecodesign of Energy-related products (MEErP). Mtoe (Mega Tonnes of Oil Equivalent)

		TWh reduction expected in 2020)
Planned energy saving targets for 2020 based on the Sustainable Energy Action Plans implemented by the Signatory cities and regions of the Covenant of Mayors	159 million tonnes of CO2 saved by 2020	Average reduction: 28.61% by 2020 (300 million tons calculated equivalent)
<b>Main policy outputs</b>		
<p>Multiple regulatory measures on ecodesign and energy labelling of products</p> <p>Mid-term evaluation report of the European Energy Efficiency Fund</p> <p>Seven interpretative notes on key provisions of the Energy Efficiency Directive and a related template and guidance for the next National Energy Efficiency Action Plans</p> <p>Report on progress by Member States towards increasing the number of nearly zero-energy buildings</p>		
<b>Main expenditure –related outputs:</b>		

**Specific objective:** To support projects promoting renewables and increasing energy efficiency in different sectors of the economy including transport, through addressing the non-technological barriers and involving local actors (Intelligent Energy Europe Programme).

Result Indicator	Latest known result	Target (mid-term result)
Cumulative investment made by European stakeholders in sustainable energy triggered by IEE programme (measurement unit EUR)	31/12/2012: EUR 1636 million 31/12/2011: EUR 1000 million 23/11/2010: EUR 500 million	31/12/2013: EUR 2 billion
Additional annual renewable energy production triggered by actions supported by IEE programme. (measurement unit toe)	31/12/2012: 48 580 toe/year 31/12/2011: 58000 toe/year	Increase
Additional annual energy savings triggered by the actions supported by IEE programme (measurement unit toe)	31/12/2012: 90 350 toe/year 31/12/2011: 88 000 toe/year	Increase
Additional annual reductions of greenhouse gas emissions triggered by the actions supported by IEE programme (measurement unit CO <sub>2</sub> e)	31/12/2012: 517 000 toe 31/12/2011: 500 000 toe	Increase

Main policy outputs
A Communication setting out the key role of Energy Technologies and Innovation
<b>Main expenditure –related outputs:</b>
<p>2013 IEE budget (commitment appropriations) amounts to EUR132.25 million, and distributed as following:</p> <p>Budget of EUR 64.98 million is earmarked for funding promotion and dissemination projects (executed by the Executive Agency for Competitiveness and Innovation) in the areas of:</p> <ul style="list-style-type: none"> <li>-STEER : to promote energy efficiency and the use of new and renewable energy sources in transport;</li> <li>-ALTENER: to promote new and renewable energy sources and to support energy diversification;</li> <li>-SAVE: to foster energy efficiency and the rational use of energy resources;</li> <li>- Integrated initiatives: combine several of the specific fields SAVE, ALTENER and STEER or relating to certain EU priorities such as the BUILD UP skills initiative and the Mobilising Local Energy Investments (MLEI).</li> </ul> <p>Budget of EUR35 million is earmarked for the continuation of the European Local Energy Assistance facility (ELENA) in cooperation with the European Investment Bank (EIB), the KfW and the European Bank for Reconstruction and Development (EBRD);</p> <p>Budget of EUR20.02 million cover actions of a strategic nature (such as preparatory studies for energy efficiency and renewable energy policy initiatives or technical assistance for the implementation and monitoring of the recent and forthcoming legislation) as well as membership of IRENA<sup>12</sup> and IPEEC<sup>1314</sup>.</p> <p>Budget of EUR9.1 million for Concerted Actions supporting the transposition and implementation of the Renewable Energy Sources and Energy Efficiency Directives</p> <p>Budget of EUR3.15 million for initiatives to develop standards required for implementing the energy efficiency and renewable energy legislation and related EC policies to be prepared by CEN/CENELEC.</p>

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<sup>12</sup> International Renewable Energy Agency

<sup>13</sup> International Partnership for Energy Efficiency Cooperation

<sup>14</sup> International Partnership for Energy Efficiency Cooperation



**Specific objective:** To contribute to solidarity and coordinated actions to prevent and mitigate the consequences of supply disruptions in gas and electricity, crude oil and petroleum products.

Result Indicator	Latest known result	Target (mid-term result)
<p>1) Level (in days) of strategic oil stocks (source: Member States)</p> <p>2) Number of MS not fulfilling their overall 90 day stock obligations (i.e. overall stock levels below 90 days)</p> <p>3) Number of MS partially incompliant with their 90 day stock obligation (i.e. meeting 90 days in aggregate terms but below the target in one or two of the three product categories)</p> <p>Result indicators are to be revised from 2013, in line with the new oil stocks directive (2009/119/EC) as follows:</p> <p>1) Level of emergency oil stocks (in days of net imports)</p> <p>2) Number of MS not fulfilling the overall stockholding obligation (90 days of net imports or 61 days of consumption, whichever is higher; derogation: until the end of 2014 and for non-IEA MS with no domestic production of petroleum products, the obligation is 81 days of net imports)</p>	<p>1) EU-27 level all categories</p> <p>02/10/2012: 125 days (including 1 Member State with transitional period)</p> <p>09/09/2011: 121 days (including 2 Member States with transitional period)</p> <p>13/09/2010: 125 days (including 2 Member States with transitional period)</p> <p>31/12/2009: 122 days (including 2 Member States with transitional period)</p> <p>20/11/2008: 120 days (including 7 Member States with transitional period)</p> <p>31/12/2007: 115 days (including the 8 Member States with transitional period)</p> <p>31/12/2006: 121 days (including 8 MS with transitional period)</p> <p>2) 02/10/2012: 1 MS</p> <p>09/2011: 2 MS</p> <p>09/2010 2 MS</p> <p>3) 02/10/2012: 3 MS</p> <p>09/2011: 1 MS</p> <p>09/2010 1 MS</p>	<p>By 31/12/2012</p> <p>1) At least 90 days (at any time)</p> <p>2) 0 Member States</p> <p>3) 0 Member States</p> <p>Targets from 2013:</p> <p>1) At least 90 days</p> <p>2) 0 Member States</p>

<p>N° of Member states fulfilling N-1 standard for gas networks as required by regulation 994/2010 <sup>15</sup></p>	<p>Number of Member States having carried out Risk Assessment: 24 (2 exemptions, 1 missing)</p> <p>N-1 currently fulfilled by Member States (ddl is Dec. 2014, 5 exemptions): 14</p> <p>Number of Member States having notified their draft Preventive Action Plan (2 exemptions): 8 (ddl for adoption of Plans is Dec. 2012)</p> <p>Number of Member States having notified their Emergency Plans (2 exemptions): 10 (ddl for adoption of Plans is Dec. 2012)</p> <p>Number of ICs for which reverse flow assessment has been carried out: 100% of all notifications</p>	<p>Full compliance with Regulation by 31/12/2014</p>
<p><b>Main policy outputs</b></p>		
<p><b>Main expenditure –related outputs:</b></p>		
<p>N/A</p>		

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<sup>15</sup> N-1 standard : The gas network has to be able to compensate for the fall-out of the largest gas infrastructure

<b>Specific objective:</b> To promote best industry and regulatory practices and standards in the exploration and production, including offshore, of indigenous fossil fuels.		
Result Indicator	Latest known result	Target (mid-term result)
1) Number of fatalities/major injuries (potentially also per million hours worked) on oil and gas offshore installations  2) Mass/volume of accidental hydrocarbon releases into sea or atmosphere (in BOE/kg)  3) Number of major collisions/fires on installations	Comparable EU wide data not yet available, subject to legislation proposed by the Commission in 2011 and to be adopted by early 2013	By 2015:  1) 10% reduction for the period 2012-2015  2) 10 % reduction for the period 2012-2015  3) 1 or less per 100 installations
<b>Main policy outputs</b>		
Implementing Act on Common formats for safety Data Reporting in European Offshore		
<b>Main expenditure –related outputs:</b>		

<p><b>Specific objective:</b> To contribute to a consistent EU external action on energy that strengthens partnerships for secure, safe, sustainable and competitive energy, builds up the external dimension of the internal energy market, improves access to sustainable energy for developing countries and better promotes EU policies beyond its borders, notably with neighbouring countries.</p>		
Result Indicator	Latest known result	Target (mid-term result)
% compliance of legislation in Contracting Parties to Energy Community Treaty complying with the EU acquis (source: assessment based on regular reports established by the ECT secretariat)	31/12/2012: 85 (estimate at end 2012) 31/12/2011: 80 (estimate at end 2011) 31/12/2010: 80 (estimate at end 2010) 31/12/2009: 75 31/12/2008: 75 (estimate at end 2008) 31/12/2007: 50-60 (average in 2007)	90
Progress on the implementation of the 43 actions proposed in the Communication: "Security of Supply and International Cooperation – The EU Energy Policy engaging with partners beyond our borders"	Further to the adoption of the Communication on September 2011 a number of follow up initiatives have been implemented. The overall review of the status of implementation will be consolidated in a report to be prepared by the Commission by the end of 2013	Launching or concrete step forward for one third of the 43 actions proposed in the Communication by end 2013.
Notification of all existing IGAs (Inter-Governmental Agreements) as defined in regulation 994/2010 by Member states, and via the Decision on information exchange on Intergovernmental Agreements (IGAs), adopted on 7 September "	Under Art. 13.6 a) of the Regulation 994/2010 all MS have notified their IGAs.  Not yet available as the date of entry into force of the Decision 994/2012/EU is 16 November 2012 and Member States have three months to notify their IGAs.	31/12/2012: 100 % notification rate by Member states  The entry into force of the Decision is 16 November 2012 and MS have to notify within three months. By mid 2013 all existing IGAs must be notified.
<p><b>Main policy outputs</b></p>		
<p>Negotiation mandate for Electricity Trade Agreement with Switzerland</p> <p>Commission's proposal to the Ministerial Council of the energy Community for a recommendation on implementing certain elements of the Regulation EU 994/2010 on Security of Gas Supply</p> <p>Report from the Commission on the state of implementation of the 2011 Communication on Security of energy supply and International Cooperation and in particular the 43 actions proposed in the Communication:</p>		
<p><b>Main expenditure –related outputs:</b></p>		

### 4.3. Nuclear energy

The Commission has significant responsibilities under the Euratom Treaty on nuclear safety and security. In particular, the Commission has to monitor nuclear material used for civil purposes so that it is only used for the uses their users have declared them to be used for (i.e. nuclear safeguards); and to protect citizens against the dangers from ionising radiation by ensuring the respect of EU legislation on radiation-protection and by having a high level of nuclear safety in all Member States. Nuclear energy can play a role in enhancing competitiveness, promoting sustainable development, fighting climate change and reducing external energy dependence. While it is up to the Member States to choose whether or not to use nuclear energy, the role of the EU is to develop in the interest of all Member States the most advanced EU legal framework for nuclear energy, meeting the highest standards for safety, security and non-proliferation. The "comprehensive and transparent risk and safety assessments (stress tests)" of EU nuclear plants, which were launched by the Commission and the European Nuclear Safety Regulators Group (ENSREG) just after the Fukushima nuclear accident, confirmed that the standards of safety of nuclear power plants in Europe are generally high. Nevertheless, the stress tests have revealed that further improvements of nuclear safety in the EU are needed. Furthermore, the Euratom Supply Agency (ESA), an Agency established by the Euratom Treaty and operating under the supervision of the Commission, is entrusted with the task to ensure a regular and equitable supply of nuclear fuels for all users in the EU.

<b>Specific objective:</b> To implement and further develop the framework for nuclear safety, security and non-proliferation.		
Result Indicator	Latest known result	Target (mid-term result)
Establishment of a common EU framework for nuclear safety	<p>4 October 2012: Adoption by the Commission of the "Communication on the comprehensive risk and safety assessments ("stress tests") of nuclear power plants in the European Union and related activities" COM(2012) 571.</p> <p>25 June 2009: Council unanimous adoption of the Nuclear Safety Directive (OJ L 172, 02/07/2009, p. 18–22)</p> <p>Transposition status: Commission has still one open infringement procedures against 1 MS which has not complied with the transposition deadline.</p>	<p>Revision of the Euratom nuclear safety legislative framework by spring 2013, based on the mandate from the European Council and taking into account the results of the EU stress tests, the evolutions at international level and the stakeholders' input.</p> <p>Preparation of a Communication in 2013 on the status of emergency preparedness and response for a nuclear accident in the EU.</p> <p>Preparation of a Council directive proposal for nuclear insurance and liability.</p> <p>Transposition of the Nuclear Safety Directive by those MS which have not yet complied with this obligation. Conformity checks on the transposition have started.</p>

Result Indicator	Latest known result	Target (mid-term result)
Reinforcement of the international nuclear safety framework	<p>Council Mandate to negotiate improvements on the nuclear safety convention (CNS) during the August 2012 extraordinary meeting.</p> <p>Nuclear stress tests in neighbouring countries (Switzerland, Ukraine, Armenia, Turkey, Croatia)</p>	Support a revision of the CNS in 2014 in line with the revised EU nuclear safety legislation.
Establishment of a binding EU framework legislation on the management of spent fuel and radioactive waste.	Directive adopted by the Council on 19 July 2011	<p>Transposition by MSs: 2013</p> <p>Preparation of Guidance to Member States on the establishment of national programmes.</p>
Implementing commitments to decommission nuclear power plants not upgradeable to international standards	<p>Council Regulation on Union support for the nuclear decommissioning assistance programmes in Bulgaria, Lithuania and Slovakia, proposed by the Commission in November 2011</p> <p>Ignalina, units 1-2 closed</p> <p>Bohunice, units 1-2 closed</p> <p>Kozloduy, units 1-4 closed</p>	<p>Adoption of the Regulation by Council and Parliament</p> <p>Continue decommissioning so that closed nuclear power plants cannot be reopened.</p> <p>Progress on safe decommissioning of the closed down facilities in line with the MS commitments.</p>
Verification of absence of radioactive contamination of equipment; radiological protection of staff ; safety and security of radioactive sources	<p>15/12/2012: No significant contamination, no overexposure. Assessment of exposure incident, which occurred in October 2011, was concluded in September 2012.</p> <p>Implementation of strengthened safety rules.</p> <p>11/11/2011: No significant contamination. No overexposure (pending final assessment of exposure incident which occurred in October 2011)</p> <p>11/11/2010: No significant contamination, no overexposure</p> <p>31/12/2009: No significant contamination, no overexposure</p> <p>31/12/2008: No significant contamination, no overexposure</p>	No identification of significant radioactive contamination of nuclear safeguards metal seals, measurement and surveillance equipment; no exceeding of annual dose limits of Commission staff occupationally exposed to radiation (DG ENER, AIDCO, HR); certification of the laboratory according to ISO 17025 norm; management of radioactive sources and fissile materials calibration standards.

Result Indicator	Latest known result	Target (mid-term result)
Number of Installations reporting Nuclear Materials transactions/ Number of registered installations	2012: 728/1022 (=0.71) (12/2011-10/2012) 2011: 725/1019 (=0.71) (12/2010-11/2010) 2010 : 756/1024 (=0,74) 2009: 716/996 (=0.72)	Period of 2012 covers only 11 months.  1
Number of installations whose reports have been transmitted to the IAEA/Number of "IAEA reporting" installations	2012: 445/688 (=0.65) (12/2011-10/2012) 2011: 458/687 (=0.67) (12/2010-11/2010) 2010 : 442/716 (=0,62) <sup>16</sup> 2009: 428/687 (0.62)	Period of 2012 covers only 11 months.  </=1
For the receipt of Additional Protocol (AP) declarations from nuclear operators and Member States under the requirements for regular reporting:  1. Number of AP declarations received on time / Number of AP declarations required.  For the provision of AP declarations to the IAEA under the requirements for regular reporting:  2. Number of AP declarations sent on time IAEA / Number of AP declarations required.	2012: 480/520 (0.92)  2012: 400/400 (1)	1  1
Number of Installations reporting Nuclear Materials transactions/ Number of registered installations	2012: 728/1022 (=0.71) (12/2011-10/2012) 2011: 725/1019 (=0.71) (12/2010-11/2010) 2010 : 756/1024 (=0,74) 2009: 716/996 (=0.72)	Period of 2012 covers only 11 months.  1

<sup>16</sup> No reports for a number of minor installations required

Result Indicator	Latest known result	Target (mid-term result)
Number of IAEA triggered CA (Complementary access at short notice) to which the Commission was able to participate	2012: 5/5 (1) up to 7/11/2012 2011: 25/27 (0.93) up to 29/11/2011 2010: 28/30 (0.93) 2009: 33/37 (0.89)	All (1)
Number of agreements signed and successfully implemented	01/01/2012: Entry into force and implementation of a new agreement with Australia 11/2012: 8 bilateral agreements signed and membership of 5 IAEA International Conventions	Conclude necessary agreements with EU suppliers and clients to ensure the security of nuclear fuel supply and full membership of International Conventions

<b>Main policy outputs</b>
<p>Proposal on Nuclear Safety</p> <p>Concluding the Euratom-Canada agreement</p> <p>Negotiation mandate for Euratom-China Agreement</p> <p>Negotiating mandate for Euratom-South Korea Agreement</p> <p>Finalisation of the Euratom-South Africa agreement</p> <p>Proposal on nuclear insurance and liability</p> <p>Communication on nuclear off-site preparedness and response</p> <p>Recommendation on the collection, storage, reporting and preservation of radioactive waste data by the Member States</p> <p>Implementing act for the development of the software "ESReg"</p>
<b>Main expenditure –related outputs:</b>
<ul style="list-style-type: none"> <li>• For <b>decommissioning</b>: €67M in commitment appropriations</li> <li>• For <b>safety</b> €2.2M <ul style="list-style-type: none"> <li>Joint agreement AIEA: €600,000 [<i>Integrated Regulatory Review Service</i>]</li> <li>Study contracts: €770,000</li> <li>Missions : €50,000</li> <li>Other services and purchase: €780,000</li> </ul> </li> </ul>



<b>Specific objective:</b> To strengthen protection of the health of workers and the general public against the dangers arising from ionizing radiations.		
Result Indicator	Latest known result	Target (mid-term result)
Comprehensive radiation protection legislation across all exposure situations and categories of exposure	<p>Final Commission proposal on the basis of EESC Opinion adopted on 3.5.2012</p> <p>Final Commission proposal for Euratom Drinking Water Directive adopted on 28.3.2012</p> <p>Report to the European Parliament and the Council on the application of Euratom Article 37 during 2004-2011 (2012/ENER/033)</p> <p>Commission Communication on the application of Article 35 of the Euratom Treaty: Verification of the operation and efficiency of facilities for continuous monitoring of the level of radioactivity in the air, water and soil (Report, 2008-2012)</p>	<p>EP opinion expected in May 2013, adoption by Council July 2013</p> <p>EP opinion expected in January 2013, adoption by Council March 2013</p> <p>Early 2013: to resolve questions on the form (Communication or CSWP) and content (transparency).</p> <p>Early 2013</p>
<b>Main policy outputs</b>		
<p>Revision of Council Regulation N°3954/87 laying down maximum permitted levels of radioactive contamination of foodstuffs and feedstuffs following a nuclear accident or any other case of radiological emergency</p> <p>Report to the European Parliament and the Council on the application of Euratom Article 37 during 2004-2011</p> <p>Commission Communication on the application of Article 35 of the Euratom Treaty: Verification of the operation and efficiency of facilities for continuous monitoring of the level of radioactivity in the air, water and soil (Report, 2008-2012)</p>		
<b>Main expenditure –related outputs:</b>		

<b>Specific objective:</b> To ensure that declared nuclear materials are used only for their intended purposes through the implementation of nuclear safeguards.		
Result Indicator	Latest known result	Target (mid-term result)
Level of the Commission's safeguards criteria satisfaction in facilities inspected (E1)	January 2012 - November 2012: 0,96	1 (equals full satisfaction of the Commission's safeguards criteria in facilities inspected)
Proportion of reports that have been issued by the Commission within the set deadlines (E1)	January 2012 - November 2012: 90%	Over 90 %
Ratio of inspections performed to inspections planned at the beginning of the year	1st semester 2012: 1,09	To keep it between 0,8-1,2
<b>Main policy outputs</b>		
<b>Main expenditure –related outputs:</b>		
2013 BUDGET:		
Inspection missions – Budget €2.6 million		
Equipment – Budget €4.1 million		
Services (including maintenance, studies, laboratories, informatics) – Budget €13.9 million		

<b>Specific objective:</b> To reinforce nuclear safety in neighbouring countries and globally		
<b>Result Indicator</b>	<b>Latest known result</b>	<b>Target (mid-term result)</b>
Risk and safety assessments (stress tests) in EU neighbouring countries and other third countries	<p>7 EU neighbouring countries have committed to the process of stress tests;</p> <p>Switzerland, Ukraine and Croatia participated fully in the EU stress tests and the peer review process. Turkey has submitted its own report while the report of Armenia is expected soon.</p> <p>Other countries are doing similar assessments according to their specifications.</p>	<p>Performance of stress tests in as many third countries as possible; acceptance of peer reviews by those countries to validate the results.</p>
Revising the international legal framework on nuclear safety	<p>Consideration is being given at IAEA level to revise the international conventions governing nuclear safety and early notification of an accident.</p> <p>Participation in the "Effectiveness and transparency" Working Group of the Convention on Nuclear Safety (CNS) and preparation of the possible revision of the convention by 2014</p>	<p>Making the relevant international conventions more effective and legally binding.</p>
<b>Main policy outputs</b>		
Negotiation directives from the Council for amending the IAEA Convention on Nuclear Safety		
<b>Main expenditure –related outputs:</b>		

<b>Specific objective:</b> To strengthen security of nuclear fuel supply.		
Result Indicator	Latest known result	Target (mid-term result)
Timely conclusion, by the Euratom Supply Agency, of nuclear materials supply contracts submitted by EU nuclear market players	Latest known result: 130 contracts (of which 118 timely concluded, 12 with minor delays) by end October 2012. Target (i.e. to handle within 10 work days) achieved in 90,76% of cases, no complaints received.	Target: 100% within 10 working days deadline, starting from the submission of a complete file; except cases when Commission's authorisation is required.
Timely acknowledgement, by the Euratom Supply Agency, of nuclear fuel transformation services submitted by EU nuclear market players	Latest known result: 150 notifications timely acknowledged.	Target: 100% within 14 calendar days, starting from the submission of a complete file.
Continuous monitoring, by the Euratom Supply Agency, of EU nuclear fuel market developments; coverage of the full year on a regular basis and timely publication of reports	Regular, timely publications ensured	Target: 100% quarterly and annual publications.
<b>Main policy outputs</b>		
Review / Revision and development of supply policy : a)as related with the Corfu Statement; and b)on research reactor and isotope production targets' materials		
<b>Main expenditure –related outputs:</b>		

#### 4.4. RTD activities related to energy

Energy is a technology-based sector. The progressive integration and liberalisation of the national energy markets has led to the need for pan-European systems (e.g. for gas and electricity transmission and distribution). The European energy and climate policy aims towards decarbonisation; a new energy system has to replace the current carbon dependant one through the deployment of efficient, reliable and affordable low-carbon energy technologies.

These RTD and innovation activities under FP7 are guided towards accelerating the market uptake of the whole portfolio of technologies with high potential in view of achieving the 2020 objectives and the Energy Roadmap 2050; pooling and private resources at national and EU levels; and sharing the high technological risks associated. A particular focus in 2013 will be on supporting the demonstration leg of the Technology Roadmaps of the six technology-oriented European Industrial Initiatives under the Strategic Energy Technology (SET) Plan (Wind, Solar, CCS, Grid, Bioenergy, Nuclear) and to support the integration of technologies and energy efficiency solutions in cities and communities through the European Industrial Initiative on Smart Cities and Communities.

<b>Specific objective:</b> To support the development and demonstration of cost-effective technologies for low carbon energy production and distribution and energy efficiency.		
Result Indicator	Latest known result	Target (mid-term result)
Strategic Energy Technology Plan – European Industrial Initiatives implementation: Cost reduction in production of low energy carbon technologies inducted by funded projects <sup>17</sup>	31/12/2010: Reduction of costs through FP6 projects: - 2.5% per year	09/11/2012: 15% cost reduction for the period 2008-2013.
Increase in energy efficiency for cities participating in demonstration projects integrating Renewable Energy Sources (RES) and Energy Efficiency (EE), CONCERTO	09/11/2012: 57 Concerto communities. By today all CONCERTO communities have a target of at least 30% energy reduction beyond the national regulations.	Intermediary results by end 2013 to show an at least 30% energy reduction beyond the national regulations.
Results achieved through Smart Cities and Communities demonstration projects [t CO2 avoided, m2 of low-energy buildings built or refurbished; outreach in number of citizens living in demonstration projects and pilot cities]	First projects started in autumn 2012.	Key Performance Indicators to be developed in collaboration with Stakeholder Platform by 2013.

<sup>17</sup> Source: Key Performance Indicators system under SETIS and developed by JRC as well as evaluation and monitoring criteria of the funded projects) measurement unit: EUR/KW installed; EUR/KWh (heating and cooling); EUR/liter(biofuels); EUR/tons

**Main policy outputs**

Communication on carbon capture and storage (1<sup>st</sup> semester 2013) Communication on Energy Technologies and Innovation in a future European Energy Policy, including Intelligent Energy Europe II

**Main expenditure –related outputs:**

FP7 energy budget for 2013: €224 million in commitment appropriations (including the contribution of about €27 million to the Fuel Cells and Hydrogen Joint Undertaking).

- Large industrial demonstration projects;
- Pre-commercial industrial scale demonstration plant on paraffinic biofuels for use in aviations;
- Large-scale demonstration of innovative transmission system integration and operation solutions for (inter)connecting renewable electricity production;
- European scientific multidisciplinary "think-tank" to support energy policy and to assess the potential impacts of its measures;
- Demonstration of optimized energy systems for high performance energy districts;
- Horizontal activities, e.g. financing CORDIS, COST, Eureka, etc.;
- Funding of International Energy Agency implementing agreements;
- Funding of Fuel Cells and Hydrogen Joint Undertaking.

<b>Specific objective:</b> To facilitate the dissemination and replication of the results of demonstration projects to the European industry through industry and stakeholder platforms, project networks and information systems.		
Result Indicator	Latest known result	Target (mid-term result)
Dissemination of the results and progress of CCS demonstration projects via the CCS Project Network (supported under FP7)	07/11/2012: The CCS Project Network currently has 6 members. Several knowledge sharing reports have been published on <a href="http://www.ccsnetwork.eu/">http://www.ccsnetwork.eu/</a> . The biggest threat to the Network is the uncertain future of the EU demonstration projects.	Under the assumption that several EU demonstration projects go ahead, build from the Network knowledge sharing framework to establish wider and deeper cooperation (e.g. with projects outside the EU).
CONCERTO dissemination effort: new website as virtual community platform	Number of CONCERTO Premium website visits from 08/06/2012 till 08/11/2012: 7031	15% increase of number of website visits.
Smart Cities and Communities dissemination efforts: Outreach in number of entities registered in the new Smart Cities Stakeholder Platform	07/11/2012: Smart Cities Stakeholder Platform registered users: 1172	1300 members of Smart Cities Stakeholder Platform by 31/12/2013.
<b>Main policy outputs</b>		
<p>SET-Plan conference and Smart Cities and Communities Conference.</p> <p>Strategic implementation plan for Smart Cities.</p> <p>Publication of the CCS Project Network knowledge sharing reports.</p> <p>Concerto Conference with consolidated results of the initiative and workshop on public building refurbishment to support Energy efficiency directive.</p> <p>Policy recommendations generated from analysis of CONCERTO demonstration projects.</p>		
<b>Main expenditure –related outputs:</b>		
<p>CCS: the FP7 Support Action CCS-PNS is financed over 3 years with €3 million. Deliverables include regular progress reports, stakeholder workshops, on-going analysis and international outreach.</p> <p>Smart Cities Stakeholder Platform: budget of €1.4 million over two years. Output includes reports, conferences, workshops, interactive website.</p> <p>Concerto Premium contract: budget of about €4.5 million over three years.</p>		