European Commission

2015

Annual Activity Report

Directorate-General for Energy

Foreword

Introductory message by the Director General

This Annual Activity Report covers the activities of the Commission's Director-General for Energy (DG ENER) for 2015. The purpose of this report is to give an outline of the operations of the DG and to help in understanding the different challenges that are faced.

Part 1 provides an overview of the policy achievements of the DG for 2015 and tries to give a flavour of the wide range of activities going on in the DG. Part 2 gives information on the management of the allocated resources as well as on the internal organisation of the DG.

For more information on the activities of DG ENER, please visit our website:
http://ec.europa.eu/energy/index_en.htm

Dominique Ristori

Director-General of DG ENER

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INTRODUCTION

The DG in brief

Under the political guidance of Commissioner Arias Cañete within the Energy Union project team led by Vice-President Šefčovič, the Directorate-General for Energy (hereafter "DG Energy") is responsible for developing and implementing a **European energy policy**. In 2015, DG Energy continued to be a policy-making oriented DG, which assumed further political responsibilities with the transfer of the ITER project in July 2015.

DG Energy has **659 staff**, including external staff (contract agents and SNEs). Three Directorates, accounting for half of the staff, are based **in Brussels**: they deal with energy policy, internal energy market, renewables, research and innovation, and energy efficiency. The other two Directorates are based **in Luxembourg**[1] and cover nuclear safety, fuel cycle and ITER on one hand, and nuclear safeguards on the other hand.

The work of DG Energy is also supported by the "Shared Resource Directorate" (SRD), shared with and technically assigned to DG Transport, with currently 154 staff in Brussels and Luxembourg, dealing with financial resources (including budget), operational finances and project financing, human resources, informatics and logistics and with document management/archiving.

DG Energy is responsible for developing and implementing the **Energy Union**[2], one of the Juncker Commission's priorities. DG Energy proposes, implements and reviews legislation under the Energy Union framework strategy, focusing on five key dimensions:

- Energy security, built on solidarity and trust between EU countries
- A fully functional internal energy market
- Energy efficiency as a contribution to moderation of energy demand
- Decarbonisation of the economy
- Research, innovation and competitiveness

The Directorate-General's main objective is to contribute to secure, sustainable, competitive and affordable energy for all EU citizens. It does so by creating the conditions for an integrated energy market which works for consumers, by supporting sustainable energy production and consumption, and by ensuring that energy supply can meet EU demand. Its policies contribute to the decarbonisation of the European economy and help the EU to meet its ambitious 2020 and 2030 climate and energy targets.

This work is supported by a number of funding instruments such as the Connecting Europe Facility (CEF) 2014-2020 which has earmarked EUR 5.35 billion for trans-European energy infrastructure projects. DG Energy has oversight over 195[3] projects of common interest, which may receive funding under the Connecting

[1] with the exception of the ITER Unit based in Brussels

[2] COM(2015) 80 Final, 25.2.2015

[3] As identified in the Commission Delegated Regulation C(2015) 8052 of 18.11.2015

Europe Facility. Moreover, the European Fund for Strategic Investments (EFSI) 2015-2018 can finance strategic energy infrastructure, energy efficiency, and renewable energy projects.

Among its other tasks, the DG proposes legislation or ensures the adequate EU legislative framework for the safe use of nuclear energy, ensures the application of the Euratom Treaty governance for nuclear energy, and supports the secure and peaceful use of non-power applications using nuclear material. Finally, the DG contributes to the development of nuclear fusion energy technologies through the ITER project.

All this work is supported by the Executive Agencies for Innovation and Networks (INEA) and for Small and Medium-sized Enterprises (EASME), by the Euratom Supply Agency (ESA), by the Agency for the Cooperation of Energy Regulators (ACER) and by the Fusion for Energy (F4F) Joint Undertaking.

Main spending programmes for DG Energy in 2015 were:

- The "**European Energy Programme for Recovery**" (EEPR), accounting for around 34% of DG Energy's spending. EEPR was established in 2009 to address both Europe's economic crisis and European energy policy objectives. EEPR spending is used to co-finance EU energy projects relating to gas and electricity infrastructure, offshore wind energy and carbon capture and storage.

- The "Trans-European Energy Network" (**TEN-E)**, accounting for around 2% of DG Energy's spending. The programme supports the effective implementation of the internal energy market by financing trans-European networks for transporting electricity and gas.

- **Research programmes** (6th and 7th Framework Programmes for Research and Technological Development and Horizon 2020), accounting for around 9% of DG Energy's spending (EUR 102 million). In close coordination with DG RTD, different research programmes have been supported in order to contribute to the achievement of the Europe 2020 targets by supporting projects for the development of renewable technologies, decarbonisation and energy efficiency.

- The "**Nuclear Decommissioning programmes**" for the nuclear plants of Bohunice (Slovakia), Ignalina (Lithuania) and Kozloduy (Bulgaria), accounting for around 13% of DG ENER's spending (indirectly). Financial support is attributed either through national agencies or the International Decommissioning Support Funds (IDSF) managed by the European Bank for Reconstruction and Development (EBRD).

- Finally, the **ITER** project has been transferred under the responsibility of DG Energy on 1 July 2015, representing around 34% of DG Energy's spending (indirectly). ITER aims at demonstrating fusion as a viable and sustainable source of energy. ITER is being built in South of France with the support of seven international partners that represent half of the world's population (the European Union, Russia, Japan, China, India, South Korea and the United States). The European contribution to the ITER International Organization (IO) for the construction phase of the project is channelled through the Joint Undertaking, Fusion for Energy, located in Barcelona, Spain.

The year in brief

The EU headed into 2015 with a commitment to deliver secure, sustainable, competitive and affordable energy to its citizens and businesses. 2015 was marked by the adoption, on 25 February, of the Strategic Framework for the Energy Union. As part of the Strategy, a roadmap detailing 43 initiatives to be developed in the years to come was also adopted. The creation of an Energy Union is one of the key priorities put forward by President Juncker in his Political Guidance for his mandate. The Energy Union strategy builds further on the European Energy Security Strategy[4] and on the EU's 2030 framework for energy and climate[5]. The fundamental goal of the Energy Union is to ensure that prices are affordable and competitive, and energy is secure and sustainable, with more competition and choice for EU consumers and businesses.

Implementation of the Energy Union and its Roadmap has started immediately after the adoption of the Energy Union Strategy. Key achievements were made in the course of 2015 both with regard to the internal energy market and interconnections with the adoption of the second Union list of Projects of Common Interest, the expansion of efficient capacity allocation via flow-based market coupling and the adoption of a significant number of network codes both for gas and electricity. The consultative Communication on market design and the Communication proposing a New Deal for Energy Consumers launched in July have been important first steps towards the redesign of the EU electricity market while energy efficiency was boosted by the proposals on energy labelling published as part of the same package.

Regional cooperation has also been strengthened notably in the creation of the High Level Groups for gas and electricity interconnectivity of the Iberian Peninsula and the Central East South Europe Gas Connectivity. This cooperation will contribute to reaching the 10% interconnector target set out in the Commission's February communication[6] as well as further integrating the internal gas market. Concrete progress has been made with the with the agreement of the Gas interconnector between Poland and Lithuania (GIPL), the start of the construction of the LitPol Link electricity interconnector and Nordbalt between Sweden and Lithuania as well as the Inelfe project doubling the interconnection capacity between Spain and France.

This year, several major external events continued to have a direct impact on the policy achievements for DG Energy. 2015 has been characterized notably by the continuation of the Ukraine crisis which had an impact on EU energy relations with Russia, instabilities in the Middle East, plummeting oil prices, the emergence of North America as a major energy producer and new gas discoveries in the Mediterranean. These elements have all triggered profound transformation of the energy market and required a constant adaptation of EU energy policies. Finally, 2015 was marked by the first-ever universal, legally binding global climate deal reached at the Paris climate conference (COP21) in December 2015, the implementation of which will require key action in the energy field.

On 1 July 2015, the responsibility for the ITER file and the ITER units were transferred from DG Research to DG Energy. Considerable efforts went into

[4] COM(2014) 330 final, 28.5.2014

[5] COM(2014) 15 final, 22.1.2014

[6] COM(2015) 82 final, 25.2.2015

strengthening the management capacity of ITER, with actions being taken to define, clarify and structure the response of the Commission to address the challenges of the ITER project.

EXECUTIVE SUMMARY

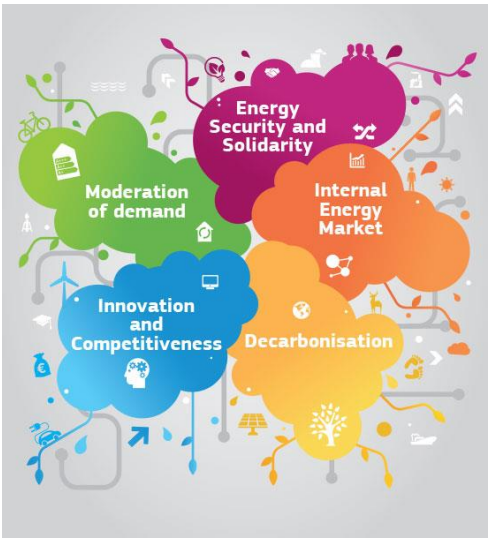
The Annual Activity Report is a management report of the Director-General of DG ENER to the College of Commissioners. It is the main instrument of management accountability within the Commission and constitutes the basis on which the Commission takes its responsibility for the management of resources by reference to the objectives set in the management plan and the efficiency and effectiveness of internal control systems, including an overall assessment of the costs and benefits of controls.

a) Policy highlights of the year

DG Energy's priority initiatives in 2015 were in line with the DG's Mission Statement, the priorities defined by the Energy Union, the Energy 2020 Strategy, the 2030 Framework and the Energy Roadmap 2050.

In 2015, important policy developments took place in the European energy policy: the **Energy Union** was launched in February[7]. Since the start of the new Commission mandate, definition of the **European Investment Programme**, together with the Energy Union preparation have been on the agenda. In 2015 DG ENER produced several initiatives on the **five dimensions of the Energy Union**: i) Energy security, solidarity and trust; ii) A fully integrated European energy market; iii) Energy efficiency contributing to moderation of demand; iv) Decarbonisation of the economy; v) Research, innovation and competitiveness.

Encompassing all these five dimensions, the **first State of the Energy Union** released on 18 November looked at progress made over the last nine months and identified key action areas for 2016[8]. It also presented key building blocks for a **governance mechanism** leading to more predictable, transparent and stable policies, in order to deliver on the objectives of the Energy Union.



[7] COM(2015) 80 final, 25.2.2015

[8] COM(2015) 572 final, 18.11.2015

1. Energy security, solidarity and trust: Following the Ukraine/Russia crisis, on 28 May 2014, the Commission presented its **European Energy Security Strategy**[9]. The First Report on the European Energy Security Strategy was presented alongside the State of the Energy Union in November 2015[10].

The Commission continued the process of mediation between Russia and Ukraine in 2015, aimed at facilitating an agreement to avoid the interruption of gas supplies from Russia to Ukraine. This resulted in the signature of an agreement in September to secure the continuation of gas supply to Ukraine and reliable transit to the EU.

In parallel, DG Energy pursued the reinforcement of Europe's external energy policy through various initiatives. Various initiatives were taken to strengthen the Energy Community and in this way engage closer with the countries in its closest neighbourhood **Western Balkan countries, Ukraine and Moldova**. In the Black and Caspian Sea region, the Commission continued to stimulate the development of the Southern Gas Corridor. Moreover the Energy cooperation with the **Southern Mediterranean region** was further intensified by the launch of three dedicated platforms. Finally, the Energy dialogue with the **US, China, India and Central Asian countries** was further enhanced.

2. A fully integrated European energy market: In July 2015 DG Energy issued a **Communication on the redesign of the European electricity market**[11], launching a public consultation on what the new electricity market design should look like in order to meet consumers' expectations, deliver real benefits from new technology, facilitate investments, notably in renewables and low carbon generation, and recognise the interdependence of EU Member States when it comes to energy security. In parallel a **Communication on delivering a new deal for energy consumers**[12] was published with the aim to better link wholesale and retail energy markets and to give consumers a wide choice of action, technologies and reliable services to participate in the energy transition.

The Commission continued its efforts to **remove existing barriers to cross-border trade and coordinated grid operation** through appropriate **harmonisation**, strengthened its legislative framework against market manipulation on energy markets through **new transparency legislation** and worked actively on the **implementation of internal market rules** for the wholesale markets.

In February 2015, along the adoption of the Energy Union strategy, the Commission presented a **Communication on how to achieve a 10% electricity interconnection target** in all Member States by 2020[13]. In November 2015, the Commission adopted a **list of 195 key energy infrastructure projects** – known as Projects of Common Interest (PCI) – which will help deliver Europe's energy and climate objectives and form key building blocks of the EU's Energy Union[14].

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[9] COM(2014) 330 final, 28.5.2014

[10] SWD(2015) 404 final, 18.11.2015

[11] COM(2015) 340 final, 15.7.2015

[12] COM(2015) 339 final, 15.7.2015

[13] COM(2015) 82 final, 25.2.2015

[14] C(2015)8052 with SWD(2015)247, 18.11.2015

3. Energy efficiency contributing to moderation of demand: Following the Energy Union Communication and building on the existing measures, the Commission started in 2015 to adapt and enhance energy efficiency policy and legislation to allow the EU to reach its 2020 and 2030 objectives through collective efforts, complemented where necessary by EU measures.

As a first concrete step in the implementation of the Energy Union Roadmap, the Commission adopted in July 2015 a proposal for a revised Energy Labelling Regulation aimed at improving consumer understanding of the label and strengthening market surveillance[15]. The revised energy label will save consumers a further EUR 15 per year, adding to the current savings of EUR 465 per year from ecodesign and energy labelling regulations. Energy labelling is recognised and used by 85% of European consumers. Products related energy efficiency legislation (eco-design and energy efficiency framework) delivers close to half of the 20% energy efficiency target by 2020.

Along the First State of the Energy Union, DG Energy published the first report on progress made in implementing the Energy Efficiency Directive[16].

4. Decarbonisation of the economy: One of the fundamental goals of the Energy Union is to tackle climate change through the transition to a low-carbon, climate-friendly economy. In December 2015, the Paris Agreement confirmed the EU's path to a low carbon economy. In that context, the EU has been the first major economy to present its climate plan (i.e. Intended Nationally Determined Contribution or "INDC") on 6 March 2015, reflecting the 2030 climate and energy policy framework set by the October 2014 European Council.

In 2015, DG Energy continued to focus on the implementation and transposition of the Directive on the promotion of the use of energy from renewable sources and towards ensuring that Member States' renewable energy support schemes are market-oriented, economically sustainable and reliable for investors. DG Energy issued, in June 2015, the **biennial Renewable Energy Progress Report** providing a mid-term assessment of the progress of the EU and its Member States towards the 2020 renewable energy targets[17]. It was followed in July by a guidance document with **Best Practices on Renewable Energy Self-consumption** in order to assist Member States developments in the area[18].

DG Energy also pursued its work linked to the notification by Member States of investments in the nuclear domain, which also provides an opportunity for decarbonising electricity production, with the adoption of six opinions in 2015.

5. Research, innovation and competitiveness: In September 2015, the Commission adopted the new Strategic Energy Technology (SET) Plan[19]. The SET Plan has been a cornerstone of the EU's energy and climate policy since it was established in 2007. The **upgraded SET Plan** proposes ten focused research and

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[15] COM(2015) 341 final, 15.7.2015

[16] COM(2015) 574 final, 18.11.2015

[17] COM(2015)293, with the SWD(2015)117, 15.6.2015

[18] SWD(2015)141, 15.7.2015

[19] C(2015) 6317 final, 15.9.2015

innovation actions to accelerate the energy system's transformation and create jobs and growth.

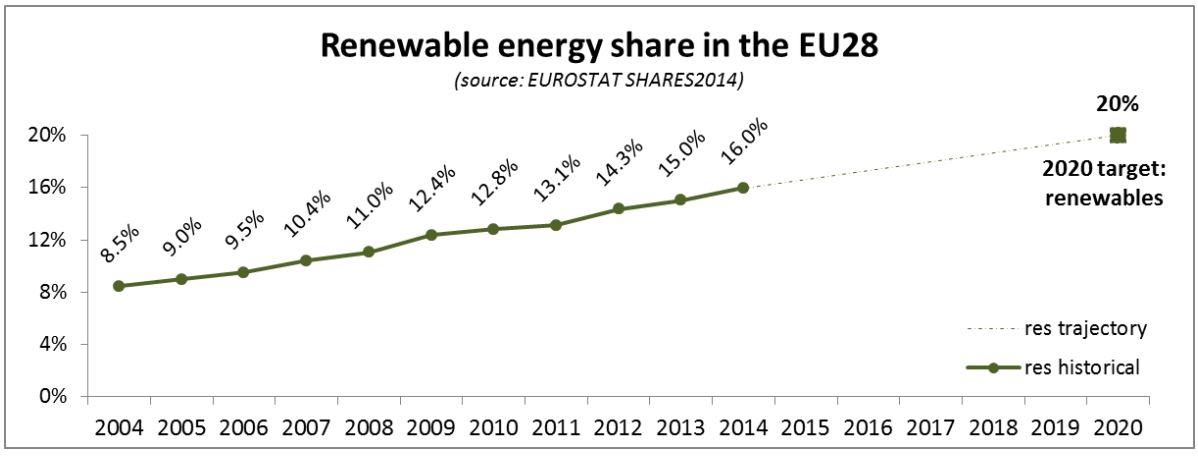
In the course of 2015, DG Energy continued the cooperation with the International Atomic Energy Agency to further strengthen cooperation on nuclear safety, nuclear security, safeguards, nuclear applications, and research and innovation in nuclear energy.

Finally, DG Energy has been strongly involved in the **development of the Investment Plan for Europe**, notably in a special Task Force with the European Investment Bank (EIB) in an effort to focus a significant attention on energy investments. As a result, energy sectors are properly represented among the investment priorities for 2015-2017.

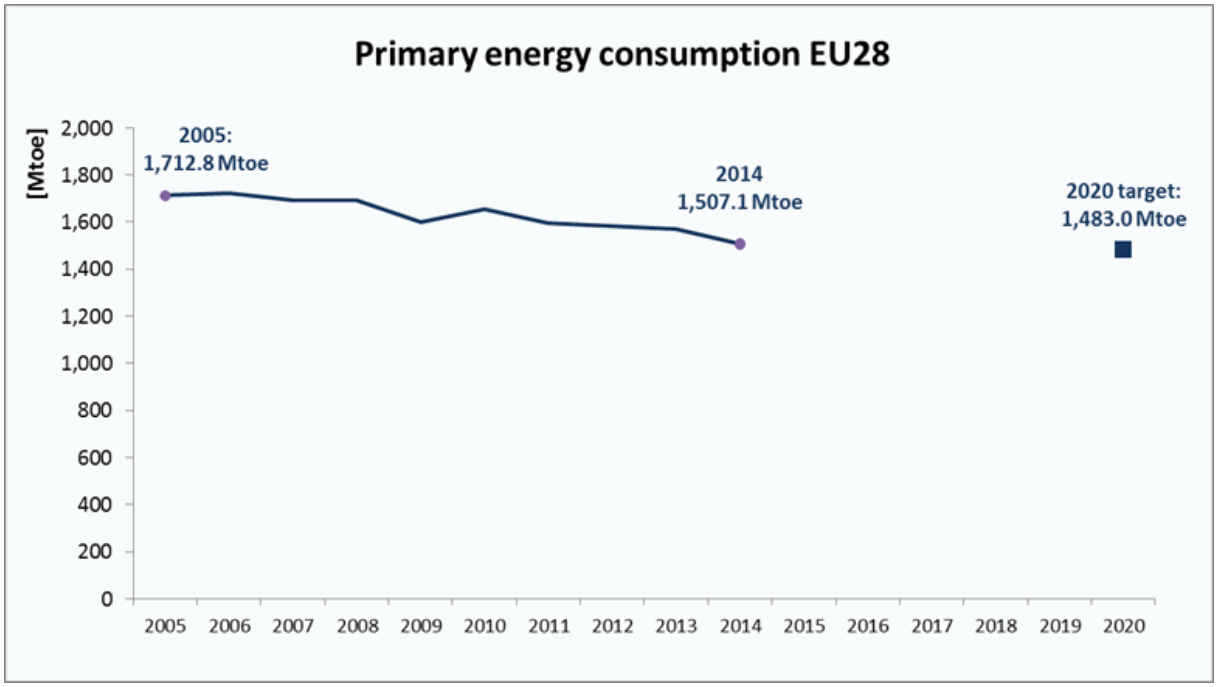
b) Key Performance Indicators (5 KPIs)

DG ENER has chosen five Key Performance Indicators for monitoring the policy performance and the DG's most significant achievements.

Result/Impact indicator (description)	Target (or milestones)	Latest known results as per Annual Activity Report
Most relevant KPI 1 ***Renewable energy share in gross final EU energy consumption (%)*** *(source: Article 3 of the Renewable Energy Directive 2009/28/EC)*	**20% by 2020**	**16% in 2014** (Sources: Eurostat, SHARES 2014 available at: http://ec.europa.eu/eurostat/documents/38154/4956088/SUMMARY-RESULTS-SHARES-2014.xlsx/04529edf-13f5-464a-9993-df7a09aee3a9)



Most relevant KPI 2 ***Energy Efficiency Primary energy consumption reduction in 2020 measured against the baseline (%)*** *(source: Eurostat)*[20]	**20% by 2020** Primary energy consumption not more than 1 483 Mtoe in 2020	Progress in 2014 regarding primary energy consumption: 1 507.1 Mtoe (Source: Eurostat, preliminary 2014 data) Reduction of **-18.7%** compared to 2020 baseline consumption

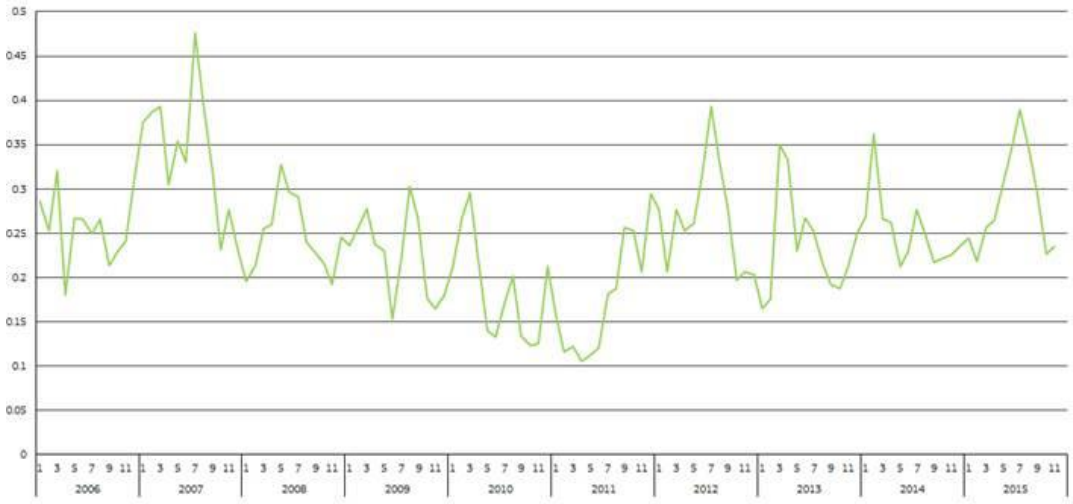


[20] Baseline is PRIMES 2007. Calculated as Gross Inland Consumption minus Final Non-Energy Use Consumption. Source: Eurostat, Commission studies.

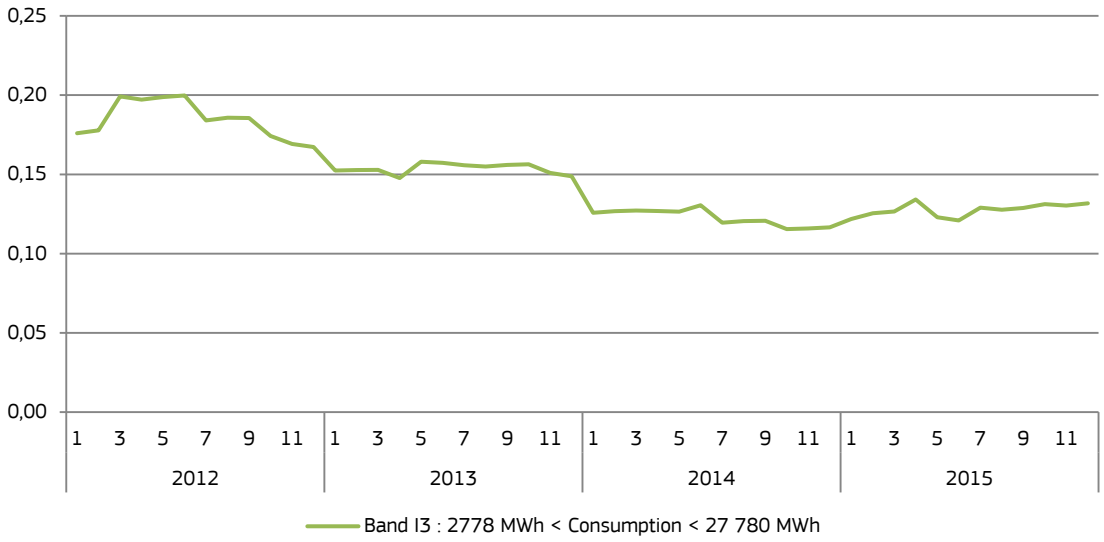
Most relevant KPI 3 ***Degree of Energy price convergence in the EU***[21] *(source: Eurostat)*	Convergence of wholesale electricity and gas prices both for industry and household in the EU internal energy market	Standard deviation for industrial consumer having a medium level of annual electricity consumption (between 500 MWh and 2,000 MWh): September 2012: 0.3178 September 2013: 0.2850 September 2014: 0.2788 September 2015: 0.2808 Standard deviation for industrial retail natural gas prices for medium level of annual gas consumption (between 2,778 MWh and 27,880 MWh): September 2012: 0.1855 September 2013: 0.1559 September 2014: 0.1208 September 2015: 0.1288

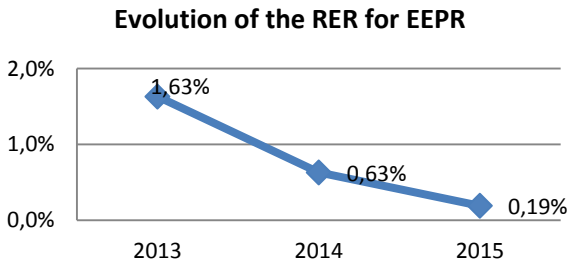
[21] These indicators represent the ratio of the most and the least expensive EU member state regarding the retail electricity and gas prices households and industrial consumers pay (data are given half-yearly, the last available one represents the first half of 2014). The aim of presenting of this indicator is to provide a metrics for the convergence of retail electricity and gas prices in the EU internal energy market, decreasing ratios should result in better convergence.

Relative standard deviation of regional wholesale electricity prices in the EU



Relative standard deviation of regional wholesale gas prices in the EU



Most relevant KPI 4 ***Implementation of short term key security of supply infrastructure projects (by the end of 2017) (Annex of the EESS)***	10 out of 12 projects commissioned in 2017.[22]	**8 out of 12 projects commissioned as of 31 December 2015** 3 project were commissioned in 2014 5 projects were commissioned in 2015: - Klaipeda-Kiemena pipeline upgrade - Polish Liquefied Natural Gas (LNG) terminal - Slovakia-Hungary gas interconnector - Nordbalt 1 - LitPol Link (first stage)
Most relevant KPI 5 Residual Error Rate for EEPR	Target < 2%	

c) Key conclusions on Management and Internal control (executive summary of section 2)

In accordance with the governance statement of the European Commission, (the staff of) DG ENER conducts its operations in compliance with the applicable laws and regulations, working in an open and transparent manner and meeting the expected high level of professional and ethical standards.

The Commission has adopted a set of internal control principles, based on international good practice, aimed to ensure the achievement of policy and operational objectives. The financial regulation requires that the organisational structure and the internal control systems used for the implementation of the budget are set up in accordance with these standards. DG ENER has assessed the internal control systems during the reporting year and has concluded that the internal control principles are implemented and function as intended. Please refer to AAR section 2.3 for further details.

In addition, DG ENER has systematically examined the available control results and indicators, including those aimed to supervise entities to which it has entrusted budget implementation tasks, as well as the observations and recommendations

[22] Two projects have deadlines beyond 2017: EL-BG interconnector and BG storage upgrade (both projects were initially included in the list of short term projects of the EESS Annex)

issued by internal auditors and the European Court of Auditors. These elements have been assessed to determine their impact on the management's assurance as regards the achievement of control objectives. Please refer to Section 2 for further details

In conclusion, management has reasonable assurance that, overall, suitable controls are in place and working as intended; risks are being appropriately monitored and mitigated; and necessary improvements and reinforcements are being implemented. The Director General, in his capacity as Authorising Officer by Delegation has signed the Declaration of Assurance albeit qualified by two reservations concerning:

- **The FP7 Program**: as the residual error rate observed by ex-post controls on grants given under the Seventh Research Framework Programme is higher than the control objective (2%);

- **The Nuclear Decommissioning Assistance Programmes**: on the grounds of a non-systematic deficiency in DG ENER's assessment in 2014 of the ex-ante conditionalities to be fulfilled by the Member States (BG, SK and LT) for the Nuclear Decommissioning Assistance Programmes (NDAP), required by the 2013 Regulations (No 1368/2013 and No 1369/2013), in particular regarding the robustness of the financing plans established by Member States.

d) Information to the Commissioner

The main elements of this report and assurance declaration, including the reservations envisaged, have been brought to the attention of Commissioner Arias Cañete, responsible for Climate Action and Energy.

1. KEY RESULTS AND PROGRESS TOWARDS THE ACHIEVEMENT OF GENERAL AND SPECIFIC OBJECTIVES OF THE DG

1.1 Achievement of general objectives

The general objectives for energy policy are:

1- **Competitiveness**: To contribute to setting up an energy market providing citizens and business with affordable energy, competitive prices and technologically advanced energy services.

2- **Sustainability**: To contribute to sustainable energy production, transport and consumption in line with the EU 2020 targets and with a view to the 2050 decarbonisation objective.

3- **Security of supply**: To enhance the conditions for safe and secure energy supply for EU citizens and businesses in a spirit of solidarity between Member States.

External factors

DG Energy measures progress towards these objectives using impact and result indicators. It is important to note that implementation of the policy priorities (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 external factors that are outside the scope of the Union's competence and can have a significant influence on energy policy development. Those externals factors include but are not limited to i) the continuous growth of global energy demand mostly driven by the economic growth registered in China, India and the Middle East; ii) technological improvement, such as those leading to the "shale gas revolution", that might have an impact on energy price fluctuations; iii) unforeseen natural or geopolitical events that may influence European energy policies as well as public opinion; iv) and the impact of the economic crisis and sluggish economic recovery the European Union has experienced in recent years.

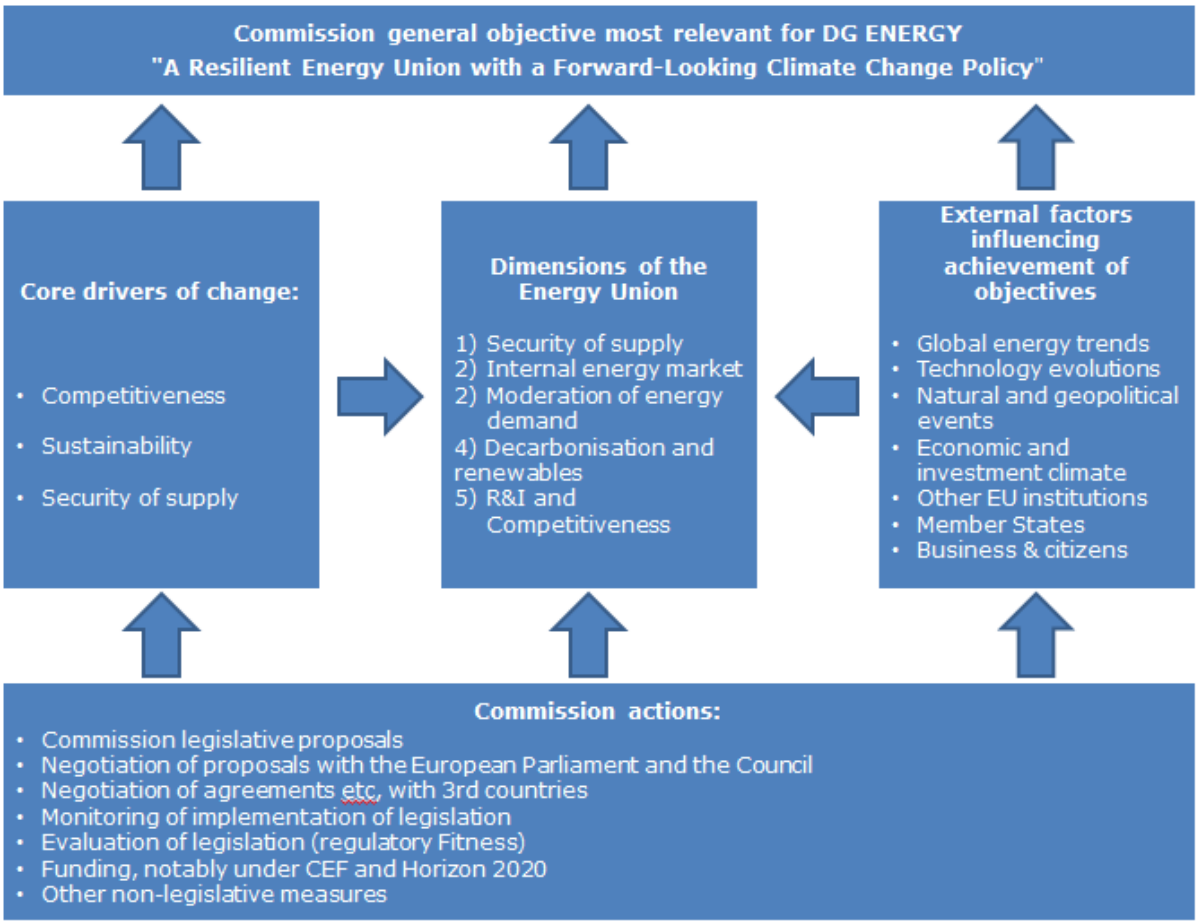

Commission general objective most relevant for DG ENERGY
"A Resilient Energy Union with a Forward-Looking Climate Change Policy"
Core drivers of change:
• Competitiveness
• Sustainability
• Security of supply
Dimensions of the Energy Union
1) Security of supply
2) Internal energy market
2) Moderation of energy demand
4) Decarbonisation and renewables
5) R&I and Competitiveness
External factors influencing achievement of objectives
• Global energy trends
• Technology evolutions
• Natural and geopolitical events
• Economic and investment climate
• Other EU institutions
• Member States
• Business & citizens
Commission actions:
• Commission legislative proposals
• Negotiation of proposals with the European Parliament and the Council
• Negotiation of agreements etc. with 3rd countries
• Monitoring of implementation of legislation
• Evaluation of legislation (regulatory Fitness)
• Funding, notably under CEF and Horizon 2020
• Other non-legislative measures

Table 1: DG Energy Impact Indicators

General objective 1 - Competitiveness To contribute to setting up an energy market providing citizens and business with affordable energy, competitive prices and technologically advanced energy services.			☒ Programme-based (CEF)
Impact indicator: Volume of public and private investment in projects of common interest (source: CEF Programme Statement)			
Baseline (2013)	**Current situation**	**Milestone 2018**	**Target (2022)**
0	EUR 797 million of EU funds granted following the evaluation of the first call for proposals under CEF Energy up to 31 December 2015[23]	EUR 19.9 billion	Energy: EUR 90 billion[24]

[23] This amount does not take into account the result of the second call for proposals in 2015 which was given a positive opinion by the CEF Coordination Committee on 19 January 2016 and endorsed by the Commission Implementing Decision of 11 February 2016.

[24] Initial target of EUR 104 billion in 2020 has been recalculated on the basis of the consolidated PCI Report of ACER, which indicates that major investments will occur later than initially foreseen. It is important to note that the EUR 90 billion target for 2022 is based on an estimate of costs for those Projects of Common Interest listed in the delegated regulation of 14 October 2013 [Following COM(2013) 711]. This target will be achieved through the combination of measures under the TEN-E guidelines (permitting, regulatory) and not only CEF (grants and financial instruments).

General objective 2 - Sustainability **To promote sustainable energy production, transport and consumption in line with the Europe 2020 targets and with a view to the 2050 decarbonisation objective.**			☒ Non programme-based
Impact indicator: Energy efficiency. Primary energy consumption of 1483 Mtoe achieved in 2020 (source: Art 3 of Directive 2012/27/EU)[25]			
Baseline (Projection for primary energy consumption in 2020)	**Milestone**	**Current situation (31 Dec 2014)**	**Target (March 2007 European Council, Europe 2020 Target, Directive 2012/12/EU)**
1 853 Mtoe (based on PRIMES2007 projections)	No milestone foreseen in Directive 2012/27/EU	Progress in 2015: **1 507.1 Mtoe** (Source: Eurostat, preliminary 2014 data) Reduction of **-18.7%** compared to 2020 baseline consumption	20% by 2020 (i.e. 1 483 Mtoe primary energy in 2020)
Impact indicator: Renewable energy share in final EU energy consumption (%) (source: Annex 1b of Dir. 2009/28/EC)			
Baseline (2012)	**Milestones**	**Current situation (31 Dec 2014)**	**Target (2020, Europe 2020 Target)**
2012: 14.1%	Trajectory with interim targets contained in Annex 1b of Dir. 2009/28/EC (2011/2012: 10.8%; 2013/2014: 11.9%; 2015/2016: 13.7%; 2017/2018: 16%)	16.0%	20% by 2020 (Europe 2020 Target)

[25] 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.

General objective 3 – Security of supply **To enhance the conditions for safe and secure energy supply in a spirit of solidarity between Member States ensuring a high degree of protection for European citizens.**	☒ programme-based (CEF)

Impact indicator: Implementation of short term key security of supply infrastructure projects (Annex 2 of the European energy security strategy (EESS))

Baseline (2014) 3	Current Situation 8 as of end 2015	Target 10 (out of 12) in 2017

External factors: Economic situation in concerned Member States (especially access to finance of project promoters); efficiency of national permitting procedures; regulatory environment in Member States

Evaluations: Among the 12 short-term projects in Annex 2 of the EESS, 10 are projects of common interest and thereby directly benefit from the dispositions of the TEN-E Guidelines (Regulation No 347/2013). Two projects (Nordbalt and SK-HU gas interconnector) have been co-financed with the help of the European energy programme for recovery (EEPR) and were both completed. Following the first call for proposals under CEF, one project (Klaipeda-Kiemena pipeline) has been selected to receive funding under CEF (Regulation 1316/2013) and was completed in 2015. This is also the case for the first stage of the LitPol Link project, which received funding from CEF under the second call for proposals and was inaugurated in December 2015. The Polish LNG terminal in Swinoujscie, which has received contributions from the EEPR, has also been completed. Progress of the projects still to be completed will be evaluated on a yearly basis with input from the monitoring report published by ACER, from INEA (for funded projects) and from the reporting obligations for EEPR. Additionally, continuous follow-up with the project promoters will allow identifying any delays at an early stage.

1.2 Achievement of specific objectives

Specific objectives have been defined under each Activity-Based Budgeting (ABB) activity to meet all three general objectives of energy policy. These specific objectives also cover the general objectives of the spending programmes under the Multiannual Financial Framework (MFF). Detailed result indicators and related expected outputs for 2015 have been defined in DG Energy's Management Plan 2015 and are reported on in Annex 12 – Performance tables.

1.2.1 ABB activity 1: Conventional and Renewable Energy

Specific objective 1: Preparing EU long-term energy policy framework (first steps towards the establishment and implementation of the Energy Union, follow up on the 2030 climate and energy framework)

The Energy Union Framework Strategy[26], adopted in February 2015, created a new momentum to bring about the transition to a low-carbon, secure and competitive economy.

The Commission has also committed to report annually on the state of the Energy Union[27] in order to address the key issues and steer the policy debate. The State of the Energy Union, published for the first time on the 18 of November 2015, looked at progress made over the last nine months and identified key action areas for 2016. It also provided policy conclusions at Member State, regional and European levels. The State of the Energy Union will remain a central element to monitor the implementation of this key priority of the Juncker Commission.

The State of the Energy Union also presented key building blocks for the definition of a reliable and transparent governance system. It included guidance to Member States on the development of integrated national energy and climate plans for the period from 2021 to 2030. These plans are necessary instruments to create a more strategic and coherent planning across the Energy Union spectrum, with a view of delivering collectively on the EU-level 2030 targets for renewable energy and energy efficiency. The State of the Energy Union also proposed a methodology on key indicators as a first step towards measuring and monitoring the delivery of the Energy Union. It was also accompanied by 28 factsheets providing an assessment of the progress towards delivering the Energy Union for each Member State.

Specific objective 2: Contributing to supply security, based on solidarity and trust.

An over-arching objective of the Energy Union strategy is to ensure energy security. All five dimensions of the Energy Union contribute to increasing our energy security. One risk factor is Europe's import dependency, which is expected to continue increasing to 55% in 2030 and 57% by 2050. The Energy Union followed up the comprehensive EU

[26] COM(2015) 80 final, 25 February 2015

[27] COM(2015) 572 final, 18 November 2015

energy security strategy adopted in May 2014[28] in response to concerns surrounding the delivery of Russian gas via Ukraine.

2015 represented an important year in terms of efforts deployed to diversify import sources, notably with respect to natural gas. Significant progress was achieved in the implementation of import related infrastructure projects and the Southern Gas Corridor Advisory Council was set up in order to politically streamline the development of the corridor. The signature of the Declaration on energy cooperation between Turkmenistan, Turkey, Azerbaijan and the European Commission on 1 May 2015 and the subsequent establishment of the Working Group have been important steps towards enabling the gas deliveries from Central Asia to the European markets.

The EU's energy security is also closely linked to its neighbourhood's energy security. Due to this interdependence, the Commission advanced in 2015 discussions on the common security of gas supply framework with the Contracting Parties of the Energy Community, and proposed a package of measures consisting of general policy guideline "Future Joint Act on Security of Gas Supply", implementation in Energy Community of the Energy Efficiency Directive 2012/27/EU[29] and of the TEN-E Regulation 347/2013[30].

In addition, 2015 registered progresses in energy dialogues with e.g. Turkey, Algeria, Norway, the US, Canada, China and multilateral fora such as the G7 and G20.

With regard to nuclear energy, one DG Energy's activity in 2015 was focused on every stage of the fuel cycle and considering nuclear energy's significant contribution to the EU's electricity production.

EU-added value

Projects of Common Interest (PCI)

Gas PCIs end the energy isolation of Member States, provide for the diversification of gas sources, suppliers and routes in regions which for historical reasons were dependent on a single gas supplier, thus strengthening security of supply in the EU.

Electricity PCIs allow for greater integration of renewables and directly increase the cross-border transmission capacity between Member States.

Furthermore, PCIs contribute directly to building the internal energy market; they increase internal and cross-border trade, strengthen competition, increase market liquidity and have a positive impact on energy prices.

[28] COM(2014) 330 final, 25 May 2014

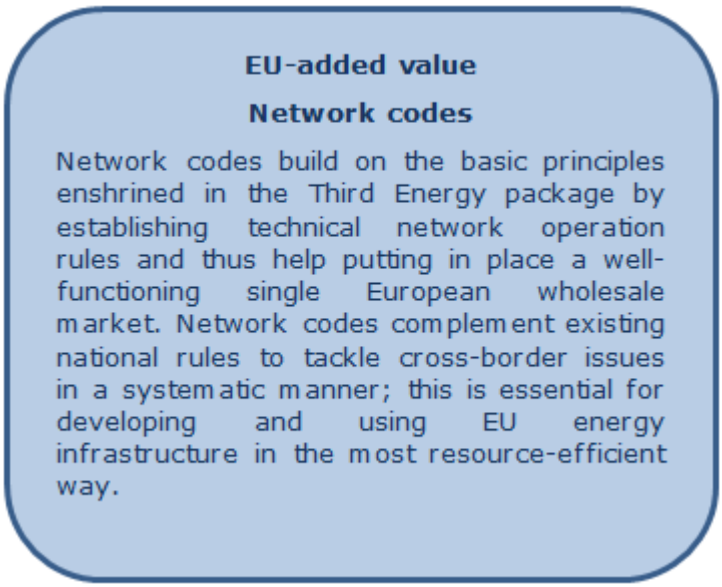
[29] OJ L 315, 14.11.2012, p. 1–56

[30] OJ L 115, 25.04.2013, p. 39

Specific objective 3: Further work towards a well-functioning and fully integrated internal energy market, including with interconnections

To create a genuine internal market for energy is one of the Energy Union's priority objectives. The existence of a competitive internal energy market is a strategic instrument in terms both of giving European consumers a choice between different companies supplying gas and electricity at reasonable prices (Consumer Market Scoreboard shows good achievements in consumer perception of choice; Cf. annex 12), and of making the market accessible for all suppliers, especially the smallest and those investing in renewable forms of energy.

The Third Energy Package requires the introduction of a regime of 'network codes and guidelines' whose objective is to minimise barriers to cross-border trading. 2015 saw the agreement in comitology and adoption of a number of these regulations in both electricity and gas. Adoption and implementation will continue to be a priority into 2016.



These actions alone, however, will not deliver the market arrangements needed to address current and upcoming challenges as Europe's energy system evolves. The Commission, therefore, launched in July 2015 a consultation on a new energy market design[31], addressing issues such as how to better link wholesale and retail markets, the market arrangements needed to ensure a flexible, secure and sustainable electricity system, and how to improve cooperation.

The state of play of retail markets was assessed in a Communication presented by the Commission on 15 July 2015[32]. The Communication notes that, while the past decade has transformed the energy sector in Europe, retail energy markets have not kept up.

With regards to energy infrastructure, the interconnectivity of the European electricity and gas transmission systems is increasing but significant investments are still needed. By the end of 2015, 13 projects from the first Union list of Projects of Common Interest (PCIs) in energy infrastructure for gas and electricity have been completed. Slightly more than 100 PCIs are in the permit granting phase and can be expected to enter the

[31] COM(2015)340 final, 15 July 2015

[32] COM(2015)339 final, 15 July 2015

construction phase shortly. However, still a quarter of PCIs face delays mainly due to permit granting and/or financing issues.

Together with the State of the Energy Union, the Commission published a second Union list of PCIs[33]. The accompanying Commission Staff Working Document offered a comprehensive stock-taking of all European infrastructure issues including further interconnectivity needs, financing, enhanced regional cooperation, best practices and remaining challenges also in the context of the wider neighbourhood cooperation. The implementation of the PCIs is also the primary way to reach the specific minimum interconnection target of 10% of installed electricity production capacity of the Member States by 2020[34], and get closer to the 15% by 2030 defined as objective by the European Council in October 2014. Currently, there are still 8 Member States below this target.

Since the launch of the Connecting Europe Facility (CEF) in 2014, EUR 796 million have been allocated in the form of grants to proposals covering studies and works for key energy infra-structure projects across Europe. Another EUR 550 million was made available for the second call for proposals in 2015[35]. In addition, the European Fund for Strategic Investments launched in the autumn 2015 will provide further support to energy projects of strategic significance.

To address more effectively specific infrastructure problems in some regions of Europe, enhanced regional cooperation between concerned Member States has been stepped up during 2015.

Achievements of the CEF can be illustrated by the construction of the first phase of the LitPol Link electricity interconnector between Poland and Lithuania. This project, funded by CEF with EUR 27 million and inaugurated in December 2015 will connect, for the first time, the electricity markets of the Baltic States with the Polish electricity network.

Similarly, the gas interconnector between Poland and Lithuania (GIPL) was launched in October 2015. This project, funded by CEF with around EUR 300 million, will end the long lasting gas isolation of the Baltic Sea Region.

It resulted in the creation of High-Level Groups for the gas and electricity interconnectivity of the Iberian Peninsula and Central East South Europe Gas Connectivity (CESEC) as well as a reform of the High-Level Group for Baltic Sea region (BEMIP). The Groups are expected to propose concrete solutions to infrastructure problems and to ensure implementation of the relevant projects.

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[33] C(2015)8052 with SWD(2015)247, 18 November 2015

[34] The measures needed to achieve the 10% electricity interconnection target by 2020 were set out in the Communication COM(2015) 82 final adopted on 25 February 2015

[35] https://ec.europa.eu/inea/en/connecting-europe-facility/cef-energy/apply-funding/cef-energy-calls-proposals-2015

Specific objective 4: Promoting the moderation of energy demand

Energy efficiency has a fundamental role to play in the transition towards a more competitive, secure and sustainable energy system with an internal energy market at its core. The "moderation of demand" dimension of the Energy Union calls for a step-up of efficiency in energy consumption in all sectors of the economy. In 2015, the Commission set up actions to respond to the European Council conclusions of October 2014 that the EU energy efficiency target in 2030 has to be of at least 27%, and has to be reviewed by 2020 having in mind an EU level of 30%. In 2015, DG Energy published the first report on progress made in implementing the Energy Efficiency Directive[36], showing that the indicative Member States' targets for 2020 still do not add up to the 20% EU level target and that numerous barriers to reaping the full potential of energy efficiency. However, the Commission remains optimistic that the 20% target will be achieved provided existing EU legislation is fully implemented, Member States increase the level of ambition and investment conditions for energy efficiency continue to improve across the EU.

The full implementation and strict enforcement of the acquis on energy efficiency has been ensured through constant collaboration with the Member States[37] and, when necessary, followed up with infringements regarding both for the Energy Efficiency Directive (EED[38]) and the Energy Performance of Buildings Directive (EPBD[39]). The adequate implementation of key EPBD provisions is a pre-condition for energy efficiency investments in buildings funded by the European Structural and Investment Funds. A majority of Member States fulfilled these pre-conditions in 2015.

In 2015, the Commission completed the assessment of the National Building Refurbishment Strategies under the Energy Efficiency Directive, resulting in a generally positive outlook. Ten of these strategies addressing energy efficiency refurbishment investment needs in the national building stocks were considered as exemplary.

Still in 2015, the Commission finalised the review of the Energy Labelling and Eco-design Directives[40], concluding that, while the Eco-design Directive is still broadly fit for purpose, the Energy Labelling Directive should be revised mainly to address the reduced effectiveness of the A+ to A+++ classes on the label and the reduced savings due to weak enforcement. On 15 July 2015, the Commission adopted a proposal for a revised Energy Labelling Regulation. The revised energy label will save consumers a further EUR 15 per year[41], adding to the current savings of EUR 465 per year from ecodesign and energy labelling regulations. Moreover, five new ecodesign measures[42] and four energy labelling measures[43] were adopted between October 2014 and

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[36] COM(2015) 574 final, 18 November 2015

[37] Meetings of the Energy Efficiency Committee, meetings of the Concerted Action, seminars, workshops and regular missions to the Member States are taking place.

[38] 2012/27/EU

[39] 2010/31/EU

[40] COM(2015)341 final, 15 July 2015

[41] Impact assessment accompanying the Proposal for a Regulation of the European Parliament and of the Council setting a framework for energy efficiency labelling and repealing Directive 2010/30/EU, SWD(2015) 139 final

[42] For ventilation units, professional refrigeration, solid fuel boilers, local space heaters and solid fuel local space heaters. (Commission Regulations (EU) No 1253/2014, 2015/1095, 2015/1189, 2015/1188 and 2015/1185, respectively)

[43] For residential ventilation units, professional refrigeration, solid fuel boilers and local

31 December 2015. Together these measures are expected to save 40 mtoe of primary energy per year by 2030.

EU-added value

Eco-design and Energy labelling

An EU harmonised regulatory framework rather than having rules at Member State level brings down costs for manufacturers. Regulating at EU level has ensured energy efficiency of products, while preventing that this could otherwise be invoked by Member States to justify barriers to goods entering (or leaving) their territories.

An EU harmonised framework also strengthens competitiveness in other ways, notably through effects on global convergence and the promotion of industry consolidation leading to greater economies of scale with manufacturing firms capable of operating on a global scale.

As regards efforts to increase investment in Energy Efficiency, DG Energy established an Energy Efficiency Financial Institutions Group ("EEFIG") that delivered in February 2015 its landmark Final Report, addressing buildings and Industrial/SME related energy efficiency investments. EEFIG Report recommendations will be used in a follow-up of the Energy Union Communication actions in particular the "Smart Finance for smart buildings initiative", in order to support the mobilization of energy efficiency investments, which will contribute to the Investment Plan of President Junker.

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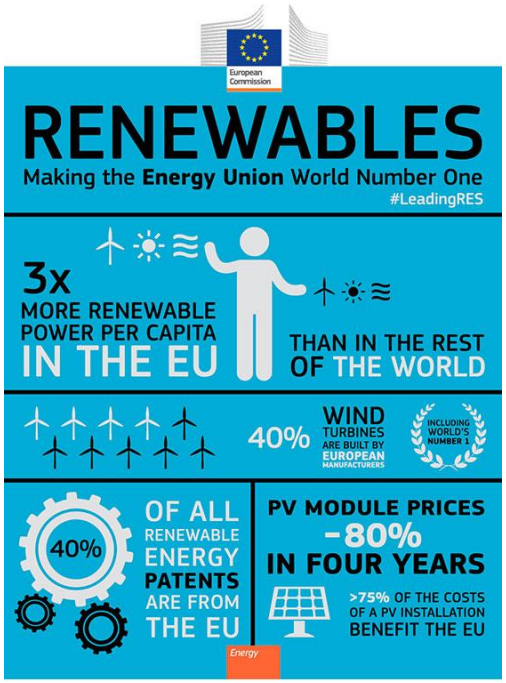
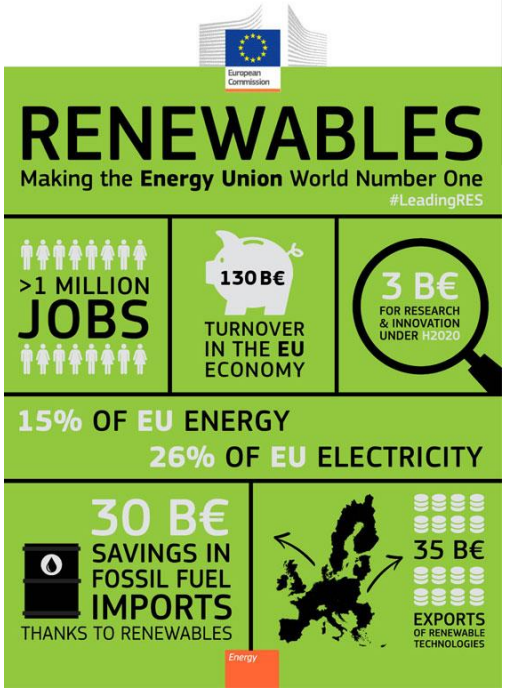
space heaters (Commission Delegated Regulations (EU) No 1254/2014, 2015/1094, 2015/1187 and 2015/1186, respectively)

Specific objective 5: Promoting the decarbonisation of the EU energy mix and the increase of energy production from low carbon energy sources, in particular renewables





Renewables are playing a key role in helping the EU meet its energy needs while decarbonising the energy system. Leadership in renewable energy is a political priority of the European Commission. This leadership articulates around five key areas:

- Empowering citizens at the core of the Energy Union
- Boosting energy security by generating locally
- Leading in renewable technologies and system integration
- Rolling-out renewables inside the EU
- Maintaining and creating sustainable jobs and added value

The existing Renewable Energy Directive forms an integral part of the EU energy policy. Its implementation is assessed on a biennial basis. In June 2015, the latest Renewable Energy Progress Report[44] concluded that the majority of Member States are currently on track to meeting their 2020 renewables target. The report highlighted that 26 Member States met their first 2011/2012 interim target and 25 Member States met their 2013/2014 target. However, as the trajectory towards the 2020 target becomes steeper over the coming years up to 2020 some Member States may need to intensify their efforts to keep on track.

[44] COM(2015)293, with SWD(2015)117, 15.6.2015

In 2015, the European Commission turned its membership to IRENA (International Renewable Energy Agency) into an active and constructive participation to the work of IRENA to fully benefit from this international commitment. The Commission is ensuring a coordinated EU position for both the IRENA Council and General Assembly, and is taking an active role in agenda setting and work plan proposals to ensure that renewable energy is high on the international agenda. Together with IRENA, DG Energy has set up a unique "Renewable Energy track" at the COP21 that enabled having renewable energy high on the solution agenda, together with profiling the EU as a front leader in this sector.

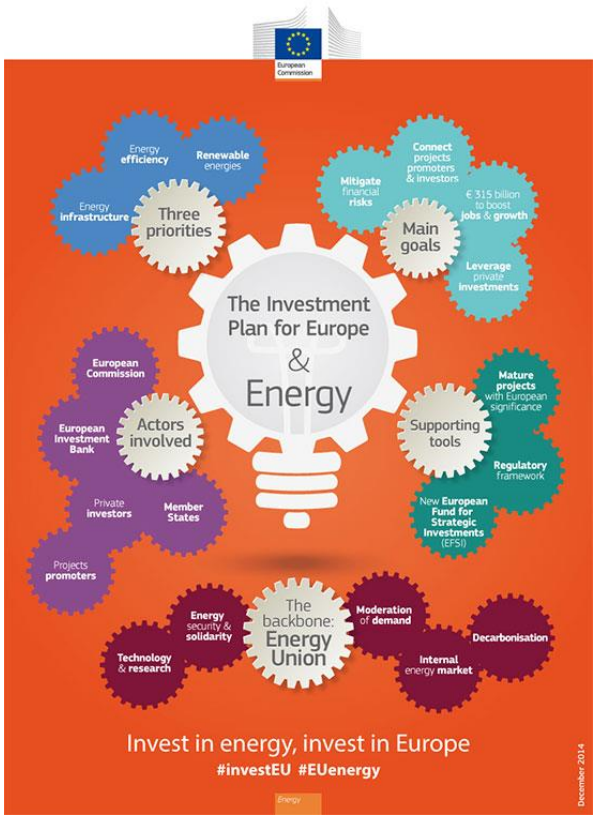
Specific objective 6: Tapping the job and growth potential of the energy sector

In 2015 Europe's competitiveness continued to be affected, yet to a minor extent, by energy price and cost differentials across the world, especially in the case of energy intensive industries exposed to intensive international trade. Today's lower energy prices should not be taken for granted. While wholesale gas and electricity prices in the US still remain below European prices, Asian – particularly Japanese prices (where there is less competition and diversity of supply) – remain higher. Europe must therefore continue to take the measures that mitigate energy cost exposure while addressing the other dimensions and objectives of the Energy Union.

In the course of 2015, the Commission continued to monitor the competitiveness of EU energy system, *inter alia*, assuring adequate follow up to the 2014 energy prices and costs report. New indicators allowing for a regular screening on EU competitiveness have been proposed in the State of the Energy Union, also in the context of the new governance of the Energy Union.

With the aim of stimulating investments in the European energy sector, contributing to economic growth and job creation, significant funds were allocated to different projects via the European Energy Programme for Recovery (EEPR)[45]. DG Energy is working closely with the two remaining although severely delayed carbon capture and storage (CCS) demonstration projects (Road in the Netherlands and Don Valley in the UK) as well as with relevant Member States to enable these projects to take a positive Final Investment Decision (FID) as quickly as possible. These two, as well as other European CCS projects, continued their knowledge sharing activities via the European CCS Demonstration Project Network.

[45] See Commission's Report on the Implementation of the European Energy Programme for Recovery and the European Energy Efficiency Fund adopted on 8 October 2015 (COM(2015) 484 final).



Finally, the launched Investment Programme for Europe with its powerful financing tool under the European Fund for Strategic Investments (EFSI) will be of a great assistance to the energy sector transformation. With 5 out the first 9 operations approved for EFSI guarantee being in the energy sector and the overall target of mobilising of at least EUR 315 billion worth of investment across the EU, the instrument shows its potential for catalysing sufficient volumes of long term financing to energy investments. This will be further amplified by an intelligent use of the structural and cohesion funds by the Member States. Not only are the funds concentrated on climate mainstreaming low carbon investment (e.g. in 2014-2020 EUR 18 billion of ESI Funds has been allocated for supporting energy efficiency investments) but the increased use of financial instruments rather than grants should increase the leverage and maximise the volume of projects that can be triggered.

1.2.2 ABB activity 2: Research and innovation activities related to energy

The European energy system is highly innovative: Europe is leader in many technologies and engineering solutions. New technologies are at the heart of the energy transition and a key element to build an Energy Union.

Specific objective 7: Further developing energy technologies (Horizon 2020)

The European energy R&I strategy is built on the Strategic Energy Technologies Plan. Since its launch in 2007, annual total R&D investment in the EU for the SET Plan technologies[46] increased from EUR 2.8 billion to EUR 7.1 billion in 2011. Over EUR 4.1 billion came from the corporate sector, stirred by European and national energy policies that have created the necessary economies of scale. Horizon 2020 contributes EUR 6 billion to the energy challenge.

Based on an analysis of the SET Plan work and a broad stakeholder consultation[47], as

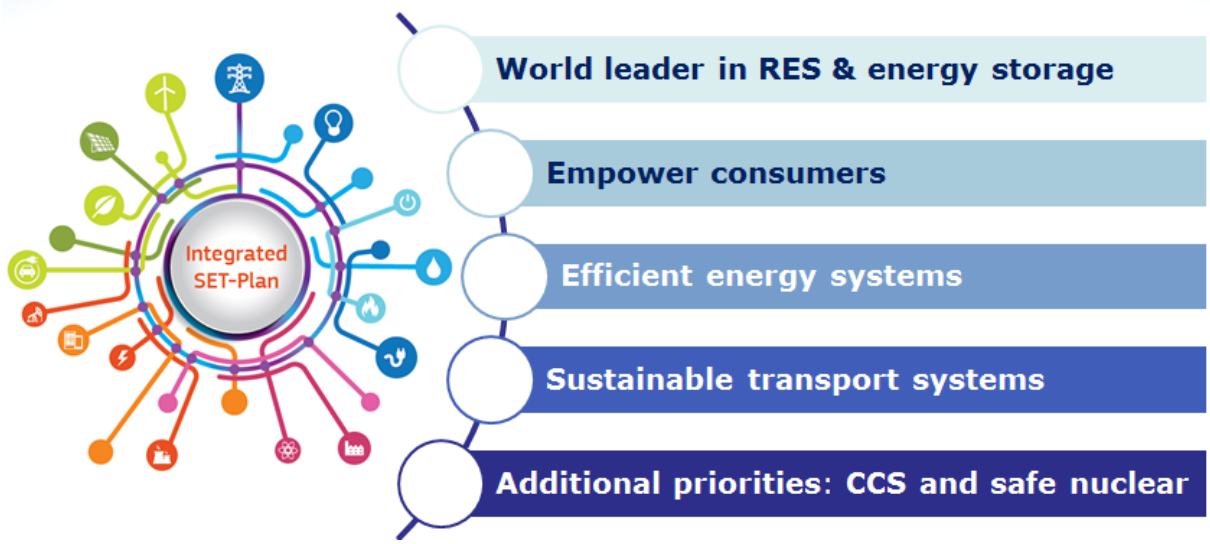
[46] Bioenergy, CCS, electricity grids, nuclear fission, solar, wind, fuel cells and hydrogen technologies

[47] the Energy Technologies and Innovation Communication of 2013 and the Integrated Roadmap developed with Member States and stakeholders in 2013-2014

well as an analysis of the strengths and weaknesses of the EU's energy technology sector, in September 2015 the Communication "Accelerating the energy system transformation through an Integrated SET Plan"[48] introduced i) a more targeted approach to drive European R&I in the energy sector around 10 actions; ii) an increased integration of other key technologies, such as ICT; iii) a revised SET Plan Structure based on improved transparency, accountability and monitoring that will promote more synergies and avoid unnecessary duplication.

The 10 actions of the Integrated SET Plan will focus on the following aspects:

- Sustain technological leadership in the next generation of key renewable technologies (in particular photovoltaics) and reduce the costs of renewable technologies through regional cooperation.
- Bring together ICT and energy innovators to accelerate the creation of technologies for the smart home and services for energy consumers and develop a Roadmap for smart energy-system solutions. The EU will also develop a research strategy on socio-economic aspects related to energy.
- Mobilise R&I cooperation in the area of new materials and technologies for energy efficient buildings.
- Stimulate, in the area of transport, the market uptake of sustainable renewable fuels and prepare a European strategy on batteries.
- Promote the collaboration with Member States to step up R&I activities in Carbon Capture and Storage (CCS).
- Continue nuclear cooperation focusing on nuclear safety and, in the long-term, on the development of nuclear fusion.



In 2015, the budget of DG Energy under Horizon 2020 – the EU's R&D Framework Programme for the period 2014-2020 – was around EUR 348 million. It was mainly disbursed under "Competitive low-carbon energy", "Smart cities and communities", "Energy efficiency', "Stimulating the innovation potential of SMEs for a low carbon and efficient energy system" and "Fast track to innovation for energy" open calls for proposals.

[48] C(2015)6317 final, 15 September 2015

The second Horizon 2020 calls for proposals were undertaken during 2015. Six new projects were selected in the field of Low Carbon Energy dealing with the electricity transmission network, including large scale storage facilities and HVDC grid projects. These are mostly Innovation Actions, i.e. projects involving a large number of partners with significant EU contribution per project. In addition, four "'Lighthouse projects' were selected in the field of Smart Cities covering energy, ICT and transport aspects.

Externalisation for economy and efficiency

In 2015 project management tasks for Horizon 2020 energy projects have been completely externalised to the Executive Agencies INEA and EASME as this allowed a better use of Commission resources and allocation of the resources to the most relevant objectives.

INEA

In 2015, INEA implemented under Horizon 2020 two calls for proposals 'Competitive Low-carbon Energy' and 'Smart Cities and Communities'. The Agency fully met the time requirements to inform and grant the projects under these two calls.

EASME

In 2015, EASME implemented two call deadlines for Energy Efficiency part of Horizon 2020 – Societal Challenge 3 and continued managing the legacy of the IEE programme. The Agency's time-to-notify per grant (8 months) is on track to be met.

The ex-post audit carried out by EASME regarding the average error rate for the IEE programme in 2015 revealed the error rate of 2.45%, which is above the materiality threshold of 2%. It might be partly due to the broadening of the audit sample and the inclusion of smaller organisations that do not always have a robust financial management system in place. To address the issues, the EASME Control Strategy was adopted in May 2015. In parallel, a capacity building exercise has been launched to remind all IEE beneficiaries of the main sources of errors.

1.2.3 ABB activity 3: Nuclear Energy

Specific objective 8: Promoting the safe and secure use of nuclear energy

The EU promotes the highest safety standards for all types of civilian nuclear activities, including power generation and waste storage, research and medical uses. Primary responsibility for the safety of nuclear power plants lies with their operators who are supervised by the national independent regulators. Better understanding the needs of investments across the whole nuclear fuel cycle remained high on the agenda, given the contributions that nuclear technology can make to increase security of energy supply and decarbonising the EU economies, taking also into account that many nuclear power plants are approaching the end of their original life time.

Work has continued in close co-operation with Member States to ensure effective implementation of the re-enforced EU nuclear safety framework. Workshops were organised to support Member States in transposing the amended Nuclear Safety Directive as well as the Directive on Basic Safety Standards into national law. Under the Directive for the responsible and safe management of spent fuel and radioactive waste the Commission has reviewed the national programmes for the actual safe and responsible long term management of spent fuel and radioactive waste to ensure that Member States have policy measures in place and that no undue burdens is imposed on future generations.

The progress in the implementation of additional safety measures by national nuclear operators following the EU stress tests was assessed together with ENSREG. With a view to the external dimension of nuclear safety, specific attention was given to the preparation of international peer reviews of nuclear stress tests in Armenia and the planned stress test in Belarus. The principles agreed in the Vienna declaration following the Convention Nuclear Safety (CNS) Diplomatic Conference, held on 9 February 2015 in Vienna, is in line with the Commission's goal to promote beyond the EU's borders the "safety objective" as introduced by the amended Nuclear Safety Directive to prevent nuclear accidents and mitigate their consequences on the population. Furthermore, first steps in the implementation of the Iran – Joint Comprehensive Plan of Action (JCPOA) were taken.

The Commission continued its performance-based implementation of the Bohunice, Kozloduy and Ignalina decommissioning programmes for 2014-2020. Management of the programme will be further strengthened in line with recommendations from the IAS and the European Court of Auditors. In addition, the Decommissioning Funding Group was convened in September in an effort to provide up-to-date knowledge on decommissioning funding and explore ways to further co-operation and harmonisation of nuclear decommissioning at European level. As concerns, the responsible and safe management of spent fuel and radioactive waste, the Commission is finalizing the conformity assessment of the notified measures with the provisions of the Directive 2011/70/Euratom as well as the assessment of the National Programmes and National Reports. Slovakia submitted its National Programme and Report in August 2015, Bulgaria in September while Lithuania submitted its National report in August 2015 and its National Programme in January 2016.

DG Energy gave full support to the Luxembourgish EU presidency for preparing the Council conclusions on off-site nuclear emergency preparedness and response. The ENEF plenary was held in Prague in May 2015 and focused on the role of nuclear energy in the Energy Union, on the importance of ensuring that the highest standards for nuclear safety are implemented and continuously improved in the EU and on the perspectives for the nuclear decommissioning market. The conclusions highlighted the crucial involvement of civil society, noting that all actors have to strengthen their efforts to provide transparent and complete information about future developments.

Specific objective 9: Ensuring the peaceful use of nuclear materials for their intended purposes

Nuclear materials such as uranium and plutonium can be used both for peaceful and military purposes. Nuclear safeguards were established as a guarantee that nuclear materials would not be diverted to purposes other than the peaceful purposes for which they were originally declared; they are also a guarantee concerning the proper management of nuclear materials.

Nuclear safeguards include measures that i) oblige users of nuclear material to keep a system of operational and accountancy records and to make declarations about the nuclear material they hold and process to the European Commission; ii) mandate the European Commission to verify these declarations with regard to their correctness and completeness in order to assure citizens, supplier states and the international community that the nuclear material is properly managed and remains in use only for peaceful purposes.

DG Energy carried out 1 229 inspections to nuclear installations in 2015 (3 817 inspection person-days), which is in line with past trends since 2006. No case of nuclear material diversion was detected for the year 2015. However, for 10 installations negative conclusions were drawn because management of the nuclear material was not in line with the expected level of quality requested and/or did not fully meet the Euratom safeguards obligations. Corrective actions have been taken by the nuclear operators in all cases, which are closely monitored by DG Energy.

1.2.4 ABB activity 4: ITER

Specific objective 10: Developing nuclear fusion energy technologies (ITER)

ITER is an experimental fusion reactor under construction in St. Paul-Lez-Durance in South of France aiming at demonstrating fusion as a sustainable energy source. ITER is governed by an international agreement signed[49] by the European Commission on behalf of Euratom and China, India, Japan, Korea, Russia, and the USA.

ITER is contributing to the strategic agenda of the European Union for clean and secure energy as well as to the effort to create jobs and growth in Europe. European industry is manufacturing high-tech components for the project with spin-off effects, in many cases,

49 https://www.iter.org/doc/www/content/com/Lists/WebText_2014/Attachments/245/ITERAgreement.pdf

not only in the fusion field but on other sectors of activity. Through its participation in the construction of ITER, European industry has a unique opportunity to gain a competitive advantage in the design of the first generation of the future fusion power plants.

Progress in the construction of this endeavour can be observed on the ITER-site, in particular, in the construction of the Tokamak Building and the Assembly Hall. Also off-site welding of the vacuum vessel segments has started and the foundation work of the buildings for the cryoplant and site services have been completed.

The project is however facing many challenges, in particular in terms of delays, risk of cost-overruns and overall governance. Many of these risks are linked to the inherent nature of the project which goes beyond the current state-of-the-art of fusion technology, and to the complex governance set-up. Others can be however remedied by better project management of the ITER construction.

The ITER Council in March 2015 decided on the appointment of a new Director-General of ITER Organisation, coupled with the adoption of a new Action Plan to improve the project governance and management. In addition in July 2015 the Commission launched the selection procedure for a new Director of Fusion for Energy who took office on 01 January 2016.

In July 2015, DG ENER took over the file from DG RTD and further efforts have been made to (a) accelerate the implementation of the action plans of ITER and Fusion for Energy, (b) bring industrial and project management experience to the International Organisation and Fusion for Energy management structures, (c) align internal procedures with the needs for efficient project execution and (d) bring a cost control and containment culture to International Organisation and Fusion for Energy as a complement to the Action Plans.

A first revised schedule for the ITER construction was presented by the International Organisation at the ITER Council in November 2015. Further work will be needed to arrive at a revision of the schedule that can be adopted by the Parties.

Over the last years, substantial cost overruns in the in-kind contributions have been accumulated by Fusion for Energy – the Joint Undertaking created under the Euratom Treaty by a Decision of the Council. These costs have been estimated for the first time in December 2015. Furthermore, additional financial contributions will be required to cover the expected longer than planned operational expenditure as a new revised schedule is being prepared on which all Parties to ITER will be called to agree.

There is a clear commitment to keep the ITER budget within the current Multiannual Financial Framework limits. The challenge now is to build on the action taken to make sure the project is on track, while ensuring that the schedule is sustainable and realistic.

1.2.5 ABB activity 5: Policy Strategy and Coordination

Specific objectives: Policy strategy definition and coordination, including strategic planning and programming and inter-institutional relations & Support decision-making on new initiatives and simplification of existing regulation by thorough evaluations, including impact assessments and by systematic consultations of stakeholders

Within DG Energy, policy coherence in 2015 was ensured by a number of complementary activities carried out by horizontal services that notably required liaising efficiently and effectively with horizontal Commission services, the cabinets and the other institutions. These activities also included the provision of economic expertise and energy market-related statistics and analysis. DG Energy horizontal services also continued to ensure to specialized units legal advice, revision of legal texts and management of infringements as well as to support the implementation of better regulation practices within the DG, such as the use of evaluation and impact assessment. Horizontal services also continued to promote the DG's main policies through information, communication, awareness raising and dialogue with decision-makers and other key stakeholders, thereby contributing directly to the success of the DG's main policies.

Specific objective: Develop and implement a suitable external communication strategy

In 2015, a new external communication strategy was put in place in order to improve the effectiveness and efficiency of DG Energy's communication actions. It supported all Directorates' communication action with the design and implementation of communication action with the design and implementation of communication plans and the preparation of the relevant communication materials (including press release, memo, defensives, speaking points, website updates, info-graphics, PowerPoint presentations, etc.) on energy matters, notably in the framework of major energy-related initiatives (e.g. Energy Union Strategy, Summer Package, etc.). Approximately 100 info-graphics have been produced to promote the benefits of the energy policy via meaningful facts and figures and effective data visualizing. These were used for social media sharing, internal communication, public presentations and inter-institutional meetings. In collaboration with DG COMM Social Media Team, a Twitter strategy was set-up and the @Energy4Europe account was launched at the beginning of 2015. It has reached over 4 000 followers, engaging citizens and stakeholders in the Energy policy-related debate with 500 tweets.

2. MANAGEMENT AND INTERNAL CONTROL

Assurance is an objective examination of evidence for the purpose of providing an assessment of the effectiveness of risk management, control and governance processes.

This examination is carried out by management, who monitors the functioning of the internal control systems on a continuous basis, and by internal and external auditors. Its results are explicitly documented and reported to the Director-General. The reports produced are:

- the reports by AOSDs;
- the reports from Authorising Officers in other Directorates-General managing budget appropriations in cross-delegation;
- the reports on control results from entrusted entities in indirect management as well as the result of the Commission supervisory controls on the activities of these bodies;
- the contribution of the Internal Control Coordinator, including the results of internal control monitoring at the Directorate-General level;
- the reports of the ex-post audit;
- the opinion of the internal auditor on the state of control and the observations and recommendations reported by the Internal Audit Service (IAS);
- the observations and the recommendations reported by the European Court of Auditors (ECA).

These reports result from a systematic analysis of the evidence available. This approach provides sufficient guarantees as to the completeness and reliability of the information reported and results in a complete coverage of the budget delegated to the Director-General of DG ENER.

Section 2 reports the control results and other relevant elements that support management's assurance. It is structured into (1) Control results, (2) Audit observations and recommendations, (3) Cost-effectiveness and efficiency of the internal control system, and resulting in (4) Conclusions as regards assurance.

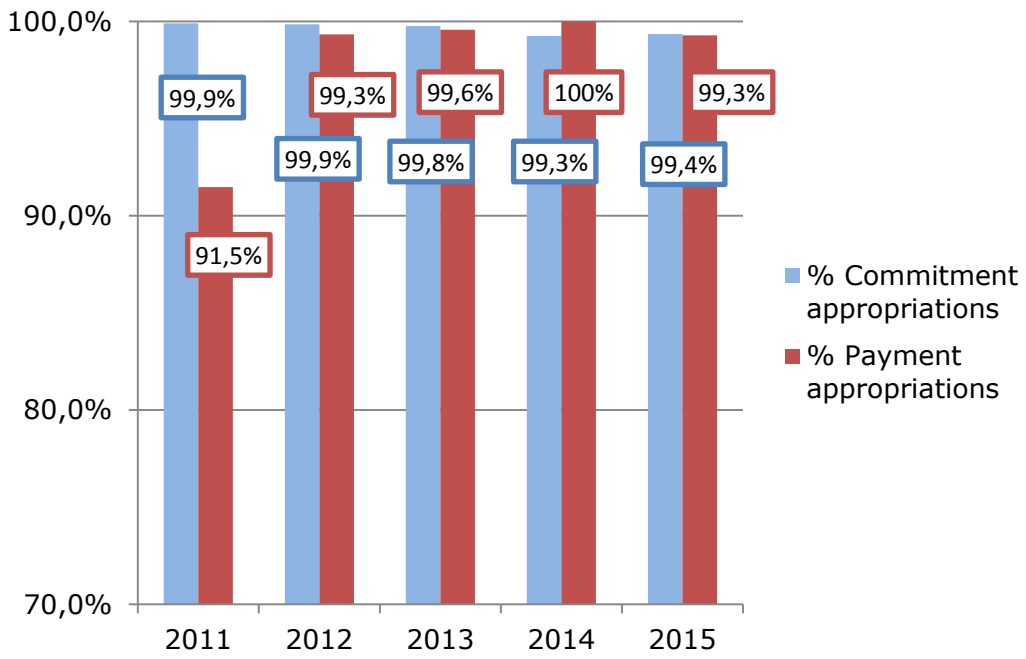
2.1 Control results

This section reports and assesses the elements identified by management that support the assurance on the achievement of the internal control objectives. The DG's assurance building and materiality criteria are outlined in the AAR Annex 4. Annex 5 outlines the main risks together with the control processes aimed to mitigate them and the indicators used to measure the performance of the control systems.

2.1.1 Overview of the 2015 payments

The total payments of DG ENER in 2015 amount to EUR 1.14 billion, the vast majority being operational as the administrative part only accounts for 0.92%.

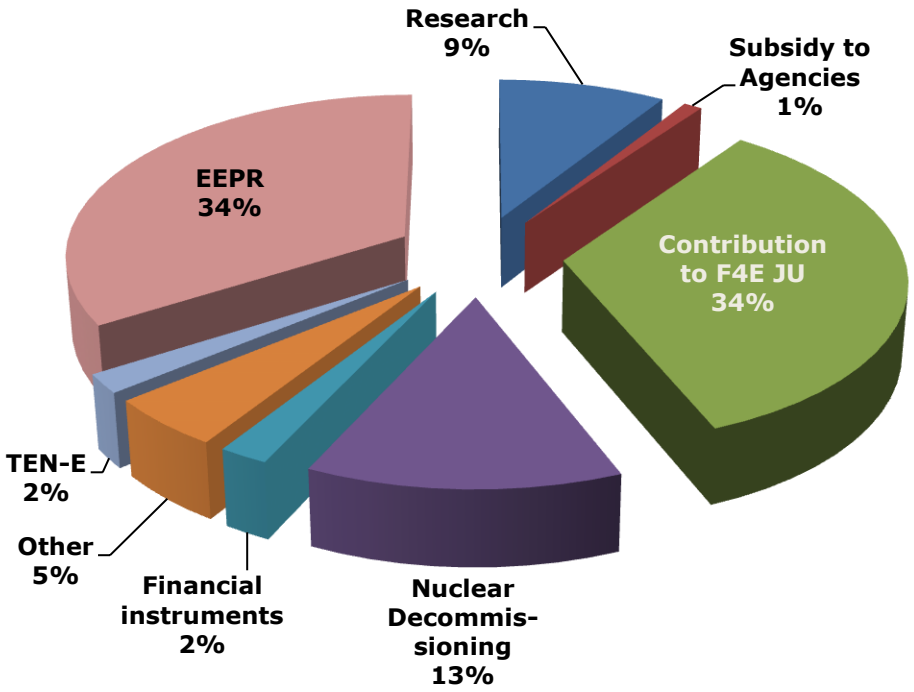
The following chart shows the execution of DG ENER's appropriations[50] over time. In 2015 DG ENER absorbed 99.35% of the commitment appropriations and 99.28% of the payment appropriations.



DG ENER's programmes and activities are implemented under direct management (49.72%) and indirect management (50.28%), with an overview provided in the two charts hereunder. Besides, section 2.1.2.1 covers the payments under direct management by DG ENER and section 2.1.2.2 reports on the amounts entrusted to other AODs or entities.

[50] This chart is based on C1 credits only (commitment appropriations voted in the current budget (C1), budget modifications and other current year commitment appropriations, modifications due to amending budgets and transfers (C1)), while tables 1 and 2 of Annex 3 include all authorised appropriations.

Allocation of the 2015 payments per type of activty



Allocation of the 2015 payments (in EUR million) between direct and indirect management

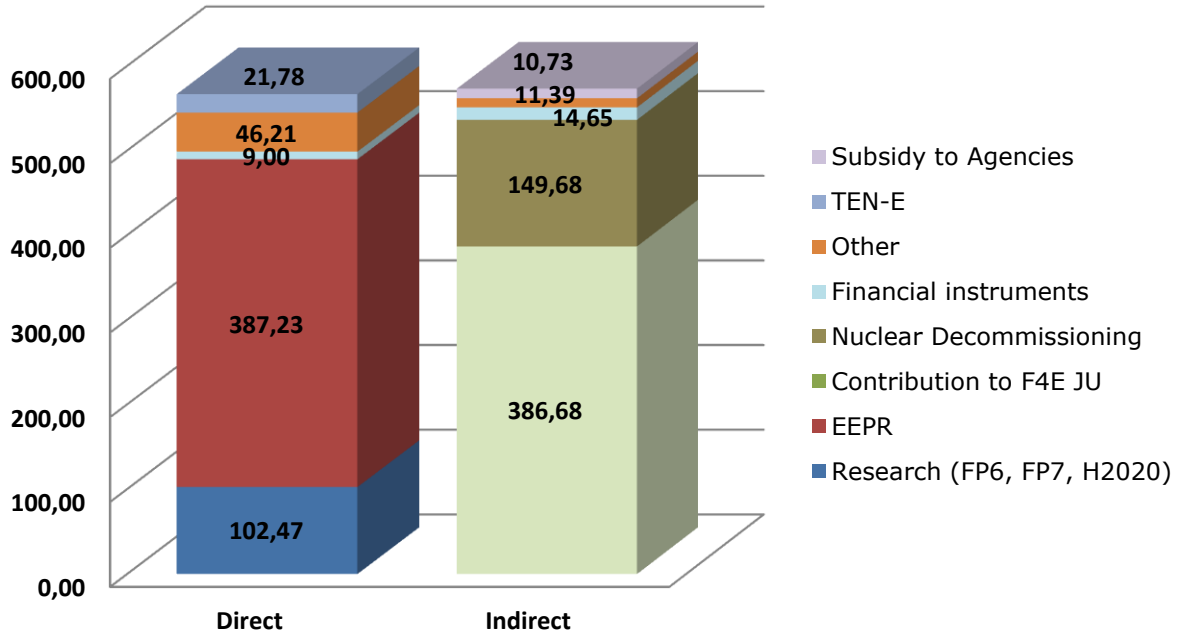


Table 2.1: Overview table: types of activities and main indicators (figures in EUR)

Risk-types / Activities	Grants / Procurements	Cross-sub-delegations to other DGs	Co-delegations to other DGs	Subsidies / funds to EE Delegation Agreements with EE	Available ICO indicator(s)	Control-effectiveness	Independent info from IAS / ECA on assurance or on new/overdue critical recommendations	Reservation	AAR Section
EEPR	387,225,128				RER: 0.19%	☺	N	N	2.1.2.1.2
FP7	96,644,685	389,988			RER: 3.24 %	☺	N	Y	2.1.2.1.1
TEN-E	21,777,276				RER: 1.89%	☺	N	N	2.1.2.1.3
F4E JU				386,677,968	Audit / monitoring activities	Not available	N	N	2.1.2.2.6
Nuclear decommissioning				149,683,984	Audit / monitoring activities / mgnt decl.	☺	Y	Y	2.1.2.2.3
Financial instruments		9,000,000		14,651,461	Audit / monitoring activities / mgnt decl.	☺	N	N	2.1.2.1.4 and 2.1.2.2
ACER				11,266,000	Audit / monitoring activities	☺	N	N	2.1.2.2.5
Other operational expenditure	46,824,726	2,188,490	2,847,285	119,000	Estimated RER <2%	Not available	N	N	(Partly under 2.1.2.1.4 and 2.1.2.2.1)
Administrative expenditure	2,629,813		7,883,616		Estimated RER <2%	Not available	N	N	(Partly under 2.1.2.1.4 and 2.1.2.2.1)
Totals (coverage)	***555,101,628***	***11,578,478***	***10,730,901***	***562,398,413***					
Links to AAR Annex 3	***1,139,809,420***								

The following important points can be drawn from this overview table:

- Based on the main indicator results available, overall suitable controls were in place in 2015 and worked as intended;

- The reservation on FP7 overpayments is maintained as the residual error rate remains persistently above the 2% materiality threshold defined in Annex 4 "Materiality Criteria";

- DG ENER has introduced a reservation following the critical audit finding made by the IAS in their audit report issued in September 2015 on "The Governance and Supervision of the Nuclear Decommissioning Assistance Programmes" as regards the assessment of ex-ante conditionalities carried out in 2014, which must be fulfilled by the Member States.

Reservations are addressed in Section 3.2 of this AAR.

2.1.2 Control effectiveness as regards legality and regularity

DG ENER has set up internal control processes aimed to ensure the adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multiannual character of programmes as well as the nature of the payments concerned.

The 2015 control effectiveness is outlined in:

- Section 2.1.2.1 for the three main programmes directly managed by DG ENER (FP7, EEPR and TEN-E), as well as for the cross-sub-delegations given to other Commission's services;

- Section 2.1.2.2 for the budget entrusted to other entities.

Overall amount at risk

In the context of the protection of the EU budget, at the Commission's corporate level, the DGs' estimated overall amounts at risk and their estimated future corrections are consolidated.

For DG ENER, the estimated overall amount at risk for the 2015 payments made is EUR 13.39 million (see Table 2.2 below for the calculation). This is the AOD's best, conservative estimation of the amount of expenditure authorised during the year not in conformity with the applicable contractual and regulatory provisions at the time the payment is made.

This expenditure will be subsequently subject to ex-post controls and a sizeable proportion of the underlying error will be detected and corrected in successive years. The conservatively estimated future corrections for those 2015 payments made are EUR 9.46 million. This is the amount of errors that the DG conservatively estimates to identify and correct from controls that it will implement in successive years.

Table 2.2: Overall amount at risk and corrective capacity (in EUR)

Activities	(2) Scope: payments made (FY)	(3) Error rate (%)[51]		(4) Amount at risk (FY)	(5) Estimated future correc-tions (FY)[52]	(6) Corrective Capacity (FY)
	(As per AAR Annex 3, table 2)	Detected	Estimated	= (2) * (3)		= (2) * (5)
Subsidies to Agencies	11,385,000		0%	0		
EEPR	387,225,128	1.13%		4,375,644		
TEN-E	21,777,276	7.10%		1,546,187		
F4E JU	386,677,968		0.50%	1,933,390		
Research (FP6, FP7)[53]	98,968,841	4.47%		4,423,907		
Research (H2020 pre-financing)	3,410,265		0.00%	0		
Nuclear de-commissioning	149,683,984		0.50%	748,420		
Financial instruments	23,651,461		0.50%	118,257		
Administrative expenditure	10,513,429		0.10%	10,513		
Other operational expenditure	46,516,067		0.50%	232,580		
Total	1,139,809,420	1.17%		13,388,899	0.83%	9,460,418

[51] In order to calculate the weighted average error rate for the total annual expenditure in the reporting year, detected or - if not available - estimated error rates have been used (not the RER).

[52] Average % of recoveries since 2009 applied to FY payments, excluding non-eligible amounts encoded in the invoices (source: DG BUDG).

[53] For FP6, the same detected error rate as the one for FP7 is used for 2015, given the low amount paid (EUR 1.93 million) and the similarities between the two programs (including as regards beneficiaries).

2.1.2.1 Direct management

This section provides details on the control effectiveness for the three main programmes that DG ENER managed directly in 2015 (FP7, EEPR and TEN-E) as well as for the cross-sub-delegations given to other Commission's services.

The general control objective, following the standard quantitative materiality threshold proposed in the Instructions, is to ensure for each of these three programmes that the residual error rate, i.e. the level of errors which remain undetected and uncorrected, does not exceed 2% by the end of each their respective management cycle.

The question of being on track towards this objective is to be (re)assessed annually, in view of the results of the implementation of the ex-post audit strategies and taking into account both the frequency and importance of the errors found as well as a cost-benefit analysis of the effort needed to detect and correct them.

2.1.2.1.1 FP7 Research Framework Programme[54]

Payments related to FP7 grants represented 8.48% of the total payments made in 2015 by DG ENER (i.e. EUR 96.71 million, out of which EUR 25.32 million of pre-financing).

The control systems are divided into four distinct stages, each with specific control objectives, as detailed in Annex 5. Key indicators have been defined for each stage. However, given that the first two stages of the control system for FP7 (i.e. evaluation of the calls for proposals and contracting) were completed before January 2015, this AAR will only focus on stages 3 and 4.

- **Stage one: Call for an evaluation of proposals**

Not applicable

- **Stage two: Contracting**

Not applicable

[54] In 2015, DG ENER also managed financial operations under the Sixth Framework Programme (FP6) but, given the weight of the amount (i.e. 0.17% of the payments made by DG ENER in 2015) and the fact that these are the residual payments for a programme that is about to be closed, they are not covered in the current AAR.

Payments for H2020 were also made in 2015 for EUR 3.50 million (i.e. 0.31% of the total payments), mostly for pre-financing (EUR 3.41 million). The share cross-sub-delegated to DG CNECT (payments of EUR 1.15 million in 2015) are referred to in Section 2.1.2.1.4. The remaining part is not covered in this AAR due to the limited amount.

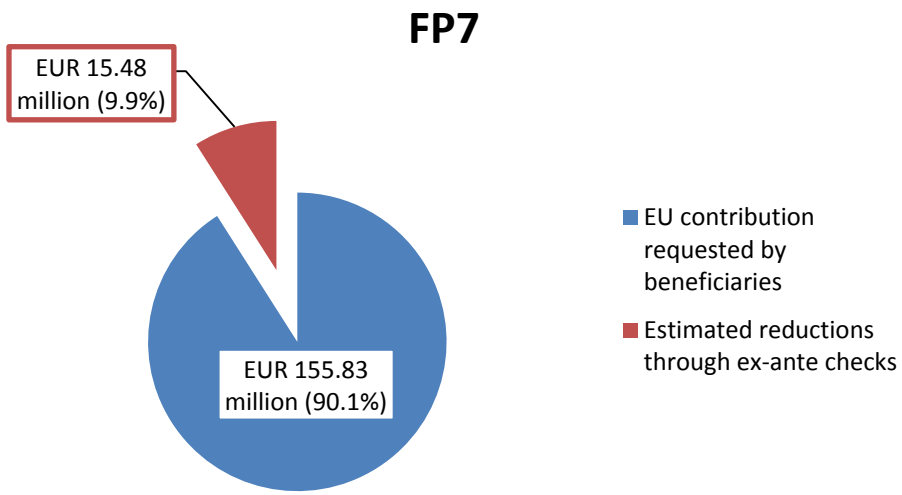
- **Stage three: Monitoring the execution of projects**

The third stage concerns the management of the project and the grant agreement. This stage comprises the technical monitoring and also ex-ante checks of participants' cost claims. The purpose of these ex-ante checks is to ensure that the transactions authorised are in compliance with the applicable rules.

In addition, every cost claim over EUR 375 000 must be accompanied by a certificate on the financial statement (CFS), given by a qualified auditor or a Certified Public Official. The Research family, as well as the European Court of Auditors, have identified that these certificates do not always identify all ineligible expenditure in the cost claim. To assess the effect of this weakness DG RTD carried out a study that showed that cost claims with a CFS had an average error rate 50% lower than those without. This shows that, while not perfect, these CFSs do have a significant positive effect.

The chart below outlines the reductions made to the EU contribution claimed by grant beneficiaries. Ex-ante checks prevented the payment of around EUR 15.5 million, representing 9.9% of the requested EU contribution. The main errors detected in cost claims concerned inconsistencies between the information supplied by grant beneficiaries and that included in the audit certificate when submitted (amount of costs, methods of calculation, periods, etc.), audit certificates incomplete, missing or not provided by a qualified auditor, arithmetical errors, costs incurred outside the eligibility period or not covered by the legal basis.

Effectiveness of ex-ante checks: reductions to the requested EU contribution[55]



[55] Audit results implementation and budget capping not included

- **Stage four: Ex-post controls and recoveries**

The fourth stage includes the ex-post audits as well as the recovery of any amounts found to have been paid in excess of the amount due.

Control objective

The general control objective for FP7 has always been to ensure that the residual error rate does not exceed a cumulative level of 2%[56] by the end of the programme implementation. The key aim is to achieve a good balance between legality and regularity and the achievement of policy objectives, and between trust and control.

As detailed ex-ante controls represent a considerable administrative burden on beneficiaries and the Commission, requiring the transfer of large amounts of information and its detailed checking, it has a seriously negative impact on the time to pay beneficiaries. For this reason the Research family has decided to obtain most of its assurance from ex-post controls and has consequently defined and implemented a common control strategy, the key elements of which are the ex-post audit strategy and the recovery process.

Besides, because of its multi-annual nature, the effectiveness of the control strategy of the Research Directorates-General can only be fully measured and assessed in the final stages of the Framework Programme, once the ex-post control strategy has been fully implemented and systematic errors have been detected and corrected.

Common ex-post audit strategy of the Research DGs

Since 2007, the Research Directorates-General have adopted a common audit strategy intended to ensure the legality and regularity of expenditure on a multi-annual basis including detecting and correcting systematic errors. The audits examine only interim and final claims by beneficiaries. Transactions relating to pre-financing are not included in the population subject to audit.

Since 2012, a Common Representative audit Sample (CRaS) has been introduced across the research family to reduce the audit burden on beneficiaries by reducing the number of repeat audits whilst continuing to provide a representative view of the implementation of FP7. The CRaS is thus intended to estimate the overall level of error in FP7, across all services involved in its management ("representative audits"). It is complemented by risk-based audits, selected according to one or more risk criteria, aiming at detecting and correcting as many errors as possible and to identify possibly fraudulent operators ("corrective audits").

Since 2014, the Common Audit Service (CAS) in DG RTD has undertaken all audits for the DGs that fund research grants (amongst which DG ENER).

Different indicators are calculated to provide a comprehensive view of legality and

[56] Materiality is assessed for the Seventh Framework Programme (FP7) in accordance with Annex 4.

regularity (more information provided in Annex 4):

- **Representative Error Rate**: derived solely from the results of audits on a representative sample of beneficiaries, extrapolated by a statistical method to the overall population (calculated for FP7 as a whole).
- **Residual Error Rate**: The residual error rate, on a multi-annual basis, is the extrapolated level of error remaining after corrections/recoveries undertaken by Commission services following the audits that have been made. To derive assurance, DG ENER is using the residual error rate, which is considered by the Research DGs as a reliable and acceptable indicator for the purposes for which it was intended, i.e. as legality and regularity indicator on the progress made, through its ex-post strategy, in dealing with errors over a multi-annual basis.

↳ Results of FP7 ex-post audits

In the case of FP7, the year 2015 was the seventh year of implementation of the audit strategy.

Detailed data on DG ENER FP7 audit coverage are shown in table 2.3:

Table 2.3 – FP7 audit coverage

	Planned cumulative period	Achieved cumulative period	Planned in 2015	Achieved in 2015
Number of closed audits	152	142	31	35[57]
Total amount audited (EC share in EUR)	n.a.	62 684 976	n.a.	24 559 274

The error rates resulting from the audit work on DG ENER's FP7 projects are:

- **Common[58] Representative Error Rate (RepER)**: Based on 298 cost statements for which the audit is completed (92% out of a sample of 324), this error rate is **4.47%**. The remaining cases are still subject to contradictory procedures with the beneficiaries; consequently, the Common Representative Error Rate may still develop.
- **Residual Error Rate (RER):** At this point in time, this error rate amounts to **3.24%.** As it is above the materiality threshold of 2%, **DG ENER maintains the reservation for FP7**[59]. It also has to be noted that the RER may still vary following the development of the Common Representative Error rate.

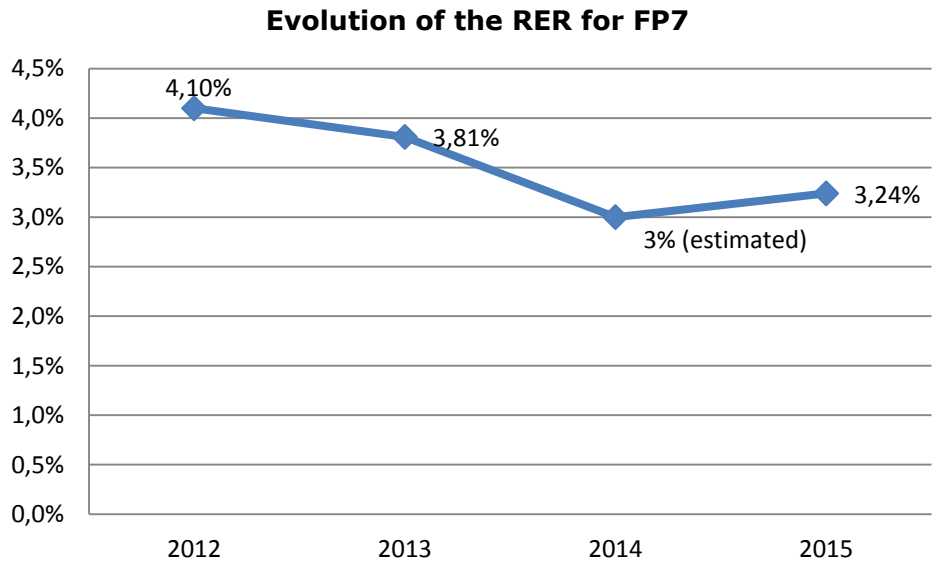
[57] An audit is considered finalised when the final audit report is sent by the Financial Audit Sector (SRD.1.004) to the Financial Management Unit for implementation.

[58] I.e. for the Research family.

[59] Developed in section 3.2.

Table 2.4 – Calculation of the residual error rate for FP7

RepER:	-4.47% (DG RTD)
RepERsys:	-2.40% (DG RTD)
Total EU contribution (P)	EUR 385 124 509
Audited costs accepted by Financial officers (A)	EUR 62 684 976
Total non-audited participations of audited beneficiaries (E) [60]	EUR 80 069 296
Residual error rate: **ResER=(((RepER*(P-A))-(RepERsys*E))/P**	**-3.24%**



Development of the error rates

DG ENER and the Research services will continue their actions to prevent some causes of errors in the FP7 expenditure, however, it seems clear that the maximum 2% residual error target for FP7 will not be attained without a massive increase in the number of audits, or a considerable escalation in the administrative burden imposed on participants

[60] This amount excludes EU contribution of beneficiaries with ongoing extrapolation cases.

through widespread ex-ante controls. Therefore, although the RER remains above 2%, account should be taken of the cost of achieving this target.

Furthermore, a modification of the FP7 legal framework is no longer an option, so the services responsible for Research will continue their actions to prevent some causes of errors in FP7 expenditure (guidance to beneficiaries and certifying auditors, control and audit operations, including recovery and extrapolation of errors to non-audited contracts wherever appropriate). This should have some effect on the error rate, particularly in lowering the RER, but will not provide fundamental changes.

Besides, there are other objectives and interests, especially the success of the Union's research policy, international competitiveness, and scientific excellence, which should also be considered. At the same time, there is a clear need to manage the budget in an efficient and effective manner, and to prevent fraud and waste.

In conclusion, taking these elements in balance, and in the light of the results of the FP7 audit campaign, DG ENER considers that the overall FP7 control strategy ensures that trust, control and other policy objectives are kept in balance. Aiming to achieve a residual error rate of 2% at all costs is not a viable approach.

Finally, so as to reinforce the cleaning effect of the ex-post controls, a third Common Representative Audit Sample will be launched in 2016 by DG RTD.

Implementation of audit results

In total over the period 2010-2015, the results of the FP7 audits relate to 169 participations, out of which 29 were still in the contradictory procedure with the beneficiary (and will most likely be in favour of the Commission). From the remaining 140 participations for which the results were implemented, 53 are in favour of the Commission, 51 in favour of the beneficiary and 36 resulting in "zero" adjustments.

As outlined in the table 2.5 below, by the end of 2015, the adjustments in favour of the Commission concern 82 participations, corresponding to EUR 3.7 million, out of which 53 adjustments (64.6%) for EUR 1.6 million had been implemented, while 29 were still in the contradictory procedure with the beneficiary, as indicated above.

Table 2.5 – Implementation of ex-post audit results in favour of the EC (2010-2015)

Results from external audits		Adjustments in contradictory procedure		Adjustments implemented	
Number	Funding adjustment (EUR)	Number	Funding adjustment (EUR)	Number	Funding adjustment (EUR)
82	-3 701 398	29	-2 080 895	53	-1 620 503

Around 63% of the adjustments implemented were recovered through offsetting from subsequent payments and 37% through recovery orders. In 2015, DG ENER approved EUR 57 734 for waivers of recovery orders related to ineligible costs identified during ex-post audits concerning two FP6 and one old SAVE projects.

Implementation of extrapolation

The extrapolation process allows correcting systemic errors of a beneficiary detected by an audit in all his ongoing participations. These corrections stem from audits made by DG ENER or other DGs in the research family where systematic errors were found.

As can be seen from the table 2.6, by the end of 2015, 95 such participations were found (23 new cases in 2015) and the beneficiaries were asked to rectify the errors in DG ENER projects and submit revised costs statements. On this basis, 58 participations were judged to be concerned by the systematic errors identified by DG ENER or any of the other DGs. Systematic errors have been corrected for 13 participations, of which 5 in favour of the beneficiary. The implementation rate of FP7 recommendations was 53% at the end of 2014, slightly below the rate of 2014 (56%) It has to be noted that it is not unexpected to have open cases at this stage as there might be 18 months before new declarations are received from beneficiaries.

Table 2.6 – Implementation of extrapolation of FP7 audit results (2010-2015)

Participa-tions with expected systematic errors	Participa-tions without systematic errors	Implemented cases				
		In favour of EC		In favour beneficiary		Participations to be implemented[61]
		Number	Value (EUR)	Number	Value (EUR)	
95	37	8	-146 493	5	76,058	45

As for 2015 only, there was no recovery from any FP7 extrapolation.

Tables 2.5 and 2.6 together show that, by the end of 2015, EUR 1.77 million were recovered following audits of FP7.

Liquidated damages

Liquidated damages must be claimed from a beneficiary who is found to have overstated expenditure and who has consequently received an unjustified financial contribution from the EU. In such case, the beneficiary has to repay the overpaid amount plus the liquidated damages. The extent of the liquidated damages is proportionate to the overstated costs and the unjustified amount received by the beneficiary. In several cases, they do not result in a recovery order due to the application of the *de minimis* rule[62].

Since its creation, DG ENER has applied liquidated damages to beneficiaries who received unjustified EU contributions in the FP7. By the end of 2015 there had been 53 cases (six

[61] Cases to be implemented are those for which the Commission has written to the beneficiaries requesting them to submit revised cost statements to correct the systematic issues detected

[62] Liquidated damages will only be applied where the unjustified contribution exceeds 2% of the total contribution claimed for the given period.

new cases in 2015), with recoveries of EUR 487 677 for 42 cases (still two to be issued in 2016). As to the remaining 11 cases, as the amounts due were below the threshold of EUR 200, they were not recovered.

2.1.2.1.2 EEPR

The European Energy Programme for Recovery (EEPR) was designed to inject significant sums into the EU economy quickly in order to stimulate the EU recovery out of recession, while at the same time contributing to the goals of the European energy policy. To this end, all the money had to be committed by the end of 2010.

Given that the first two stages of the control system, i.e. call for proposals, their evaluation and the contracting phase were completed by the end of 2010, this AAR will only focus on stages 3 and 4.

- **Stage one: Call for an evaluation of proposals**

Not applicable

- **Stage two: Contracting**

Not applicable

- **Stage three: Monitoring the execution of projects**

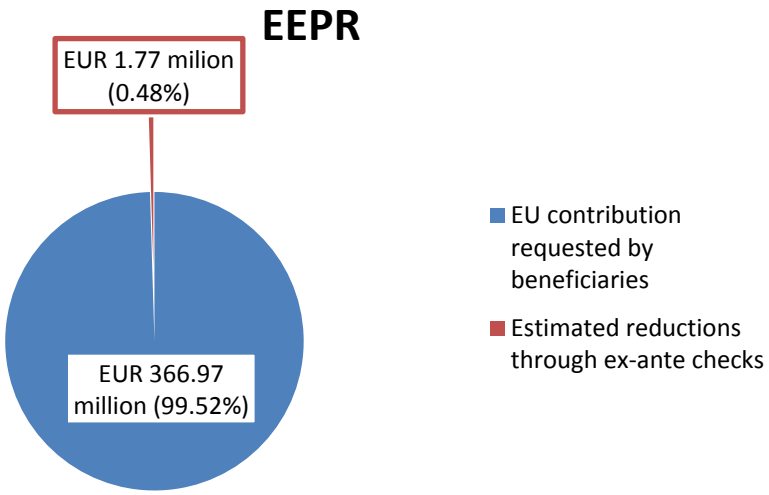
The payments for EEPR grants represented around 34% of the total payments made by DG ENER in 2015.

The third stage concerns the management of the project and the contract. This stage comprises the technical monitoring (with the help of independent technical experts) of the grant agreements/decisions over its lifetime, and also ex-ante checks of participants' cost claims. These ex-ante checks also include audit certificates on cost statements established by external auditors, when required by the grant agreement or decision, and the processing of transactions through Commission financial circuits to ensure that the transactions authorised are in compliance with the applicable rules.

As a result of ECA's findings related to errors in public procurements awarded by beneficiaries of EEPR grants, DG ENER has ensured that checks on procurements are made before the payments.

The chart below outlines the reductions made to the EU contribution claimed by grant beneficiaries. Ex-ante checks have prevented the payment of around EUR 1.77 million, representing 0.48% of the requested EU contribution. The main errors detected in cost claims concerned inconsistencies between the information supplied by grant beneficiaries and that included in the audit certificate when submitted (amount of costs, methods of calculation, periods, etc.), audit certificates incomplete, missing or not provided by a qualified auditor, arithmetical errors, costs incurred outside the eligibility period or not covered by the legal basis.

Effectiveness of ex-ante checks: reductions to the requested EU contribution[63]



Even though for the reporting year, the ex-ante checks only detected 0.48% undue EU contribution from the payments requested, it does not mean that the controls were not effective, but rather that all supporting documents supplied ensured that the expenditure was covered by the legal basis.

- **Stage four: Ex-post controls and recoveries**

The fourth stage includes the ex-post audits as well as the recovery of any amounts found to have been paid in excess of the amount due.

EEPR audits carried out by DG ENER

The audit coverage foreseen in the DG ENER 2016 audit work programme for EEPR is the following: the strategy for the next few years is to reach coverage of 100% of the number of projects and beneficiaries. In principle, beneficiaries will be audited twice (it could be for different projects) to get reasonable assurance that submitted costs claims are free of errors. Beneficiaries will not be selected a third time unless the previous audits have revealed material errors.

Table 2.7 shows that out of the 69 audits launched by the end of 2015, 62 have been finalised (6 in 2011, 8 in 2012 and 22 in 2013, 10 in 2014 and 16 in 2015).

[63] Audit results implementation and budget capping not included.

Table 2.7 - EEPR audit coverage (2010-2015)

Number of audits launched	Number of closed audits	Total amount audited (EC share in EUR)	Overall errors (in EUR) in favour of the Commission	Error rate in favour of the Commission
69	62	858 333 355	-4 412 760	-0.51%

The audit coverage of the EEPR programme, consisting of the audited contributions (EC and ECA) and the non-audited EC contributions of audited companies for which no adjustment was found during previous audit(s), amounted to 83,27% at the end of 2015.

EEPR audits carried out by the European Court of Auditors (ECA)

In addition, given the size of the payments, ECA frequently analyse them as part of their work on the annual "Statement of Assurance" (DAS). In order to ensure that beneficiaries do not have the perception of being audited twice, the Financial Audit Sector accompanies the Court when they visit the beneficiary.

By the end of 2015, ECA had performed 15 audits on EEPR Beneficiaries representing an EC share audited of EUR 284 882 395.

Combined results of all EEPR audits

For the purpose of calculating the combined result of the DG ENER and ECA audits, the following have been taken into account:
- 62 finalised DG ENER audits;
- 15 acknowledged results of ECA audits.

Part of the EC share audited by the ECA has been subject to an audit by DG ENER, so the amount taken into account as EC share audited by ECA alone is EUR 214 874 849. The total EC share audited for these 77 relevant audits is EUR 1 480 603 401 and the findings amount to a total of negative adjustments of EUR -12 163 837 (i.e. -1.13%).

Calculation of the residual error rate (RER)[64]

To take into account the potential risk of errors by EEPR beneficiaries of not respecting public procurement rules when subcontracting, DG ENER has been applying strengthened ex ante and ex-post controls:

- Ex-ante: internal checks on public procurement are carried out before payments are made to beneficiaries;
- Ex-post: high audit coverage.

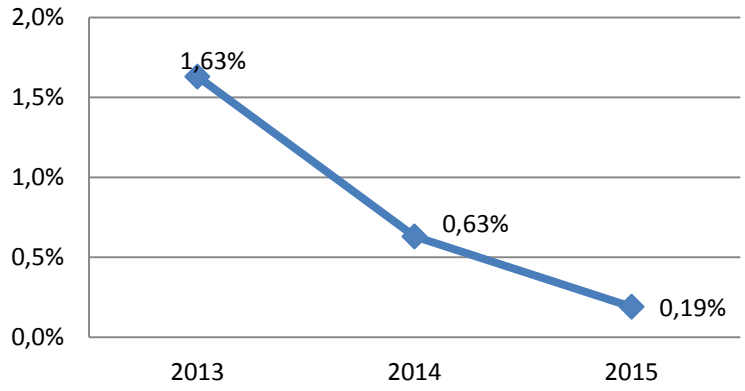
[64] More information on the materiality criteria is outlined in Annex 4.

As a result of the above mentioned approach, the RER is maintained below the materiality threshold of 2% and corresponds to 0.19% for 2015, as detailed in table 2.8.

Table 2.8 – Calculation of the residual error rate for EEPR

Total EC share approved, in EUR (P)	1 782 278 979
Total EC share of all audited beneficiaries, in EUR (A1)	1 480 603 401
Total EC share of audited cost statements in EUR (A2) [65]	622 270 047
Total amount in EUR of negative adjustments as a result of audits (Err) [66]	-12 163 837
Total EC share of audit adjustments in EUR (only results in favour of the Commission) not implemented by Q1 2016 (NonImpErr) [67]	0
ResER% = $\frac{((P - A1) \times (Err / A2)) + NonImpErr}{P}$	**-0.19%**

Evolution of the RER for EEPR



[65] The difference between the amounts of EU contribution indicated under (A2) and (A1) is considered free of errors as the payments concerned were made to beneficiaries for which there were no audit findings and for which all control systems were in place.

[66] This is the EU contribution directly resulting from the ineligible costs identified by the auditors and it may differ from the adjustments actually implemented (for instance due to budget limitations, to technical evaluations modifying the adjustments, or to additional eligibility-proving documents being provided during the contradictory procedure with the beneficiaries).

[67] This amount is zero as all adjustments in favour of the Commission have been the subject of a recovery, an offsetting against payment or a pre-information letter, not resulting in any contestation.

In conclusion, given the audit results, the high audit coverage and the fact that the residual error rate is well below 2%, decreasing significantly since 2013, reasonable assurance can be given on EEPR expenditure.

Implementation of audit results

By the end of 2015, the adjustments have been finalised for 77 participations, of which:

- 25 with an adjustment in favour of the Commission (EUR 10 537 777);
- 4 with adjustments in favour of the beneficiary (EUR 165 643);
- 48 with no adjustment.

86% of the adjustments (i.e. EUR 8 963 108) were implemented through recovery orders and the rest via offsetting from subsequent payments.

Table 2.9 shows the cumulated amounts of the implementation of EEPR audits in favour of the EC. It has to be noted that it is not unexpected to have open cases at this stage as there might be 18 months before new declarations are received from beneficiaries.

Table 2.9 – Implementation of EEPR ex-post audit results in favour of the EC (period 2010-2015):

Adjustments in contradictory procedure		Adjustments implemented	
Number	Funding adjustment EUR	Number	Funding adjustment EUR
4	-8 631 291	25	-10 537 776.74

2.1.2.1.3 TEN-E

Improving the trans-European energy networks (TEN-E) is a crucial element in the overall strategy for improving the efficiency of Europe's energy systems, increasing security and flexibility of energy supply and transmission networks, and supporting economic and social development across the Union.

Given that the first two stages of the control system, i.e. call for proposals, their evaluation and the contracting phase were already completed prior to 2015, this AAR will only focus on stages 3 and 4.

- **Stage one: Call for an evaluation of proposals**

Not applicable

- **Stage two: Clarification phase and notification of individual decisions**

Not applicable

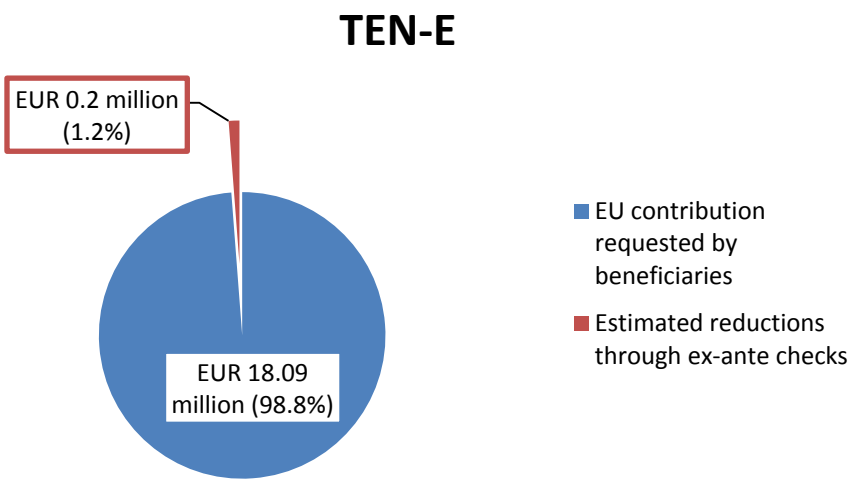
- **Stage three: Monitoring the execution of projects**

The payments for TEN-E represented around 1.9% (EUR 21.78 million) of the total payments made by DG ENER in 2015.

The third stage concerns the management of the project and the contract. This stage comprises the normal management of the contract over its lifetime, and also ex-ante checks of participants' cost claims. These ex-ante checks include audit certificates on cost statements established by external auditors, and the processing of transactions through Commission financial circuits to ensure that the transactions authorised are in compliance with the applicable rules.

The chart below outlines the reductions made to the EU contribution claimed by grant beneficiaries. Ex-ante checks have prevented the payment of EUR 0.22 million, representing 1.22% of the requested EU contribution.

Effectiveness of ex-ante checks: reductions to the requested EU contribution[68]



Even though for the reporting year, the ex-ante checks only detected 1.2% undue EU contribution from the payments requested, it does not mean that the controls were not effective, but rather that all supporting documents supplied ensured that the expenditure was covered by the legal basis.

[68] Audit results implementation and budget capping not included.

- **Stage four: Ex-post controls and recoveries**

The fourth stage includes the ex-post audits as well as the recovery of any amounts found to have been paid in excess of the amount due.

TEN-E audit coverage

In 2015, the TEN-E beneficiaries having been granted an EU contribution of at least EUR 300 000 were to be selected for an audit.

Table 2.10 – TEN-E audit coverage (2011-2015)

Total EU contribution TEN-E (EUR)	EU contribution audited (EUR) (a)	EU contribution of audited beneficiaries (EUR) (b) [69]	Payments selected (EUR) / total payments TEN-E	Payments of beneficiaries selected (EUR) / total payments TEN-E
92 671 216	58 738 648	67 939 022	63.38%	73.31%

Error rates[70]

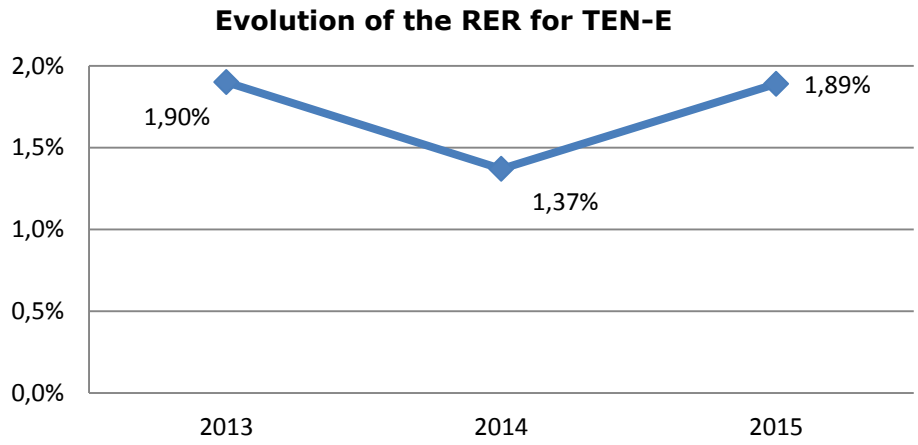
Given the high coverage of 73.31%, the cumulative detected error rate of -7.10% leads to a residual error rate of -1.89% (as indicated in the calculation table below).

[69] (b): In addition to (a), (b) also includes the EU contribution claimed by beneficiaries with no audit findings either on a TEN-E grant or on an EEPR grant (as these grants are identical) by DG ENER or the ECA.

[70] More information on the materiality criteria is outlined in Annex 4.

Table 2.11 – Calculation of the residual error rate for TEN-E

Total EC share approved, in EUR (P)	92 671 216
Total EC share of all audited beneficiaries, in EUR (A1)	67 939 022
Total EC share of audited cost statements, in EUR (A2)[71]	58 738 648
Total amount of negative adjustments as a result of audits, in EUR (Err)[72]	-4 170 449
Total EC share of audit adjustments (only results in favour of the Commission) not implemented by 1Q2016 (NonImpErr) [73]	0
ResER% = $\frac{((P - A1) \times (Err / A2)) + NonImpErr}{P}$	**-1.89%**



[71] We consider that the difference between the amounts of EU contribution indicated under (A2) and (A1) is free of errors as the payments concerned were made to beneficiaries for which there were no audit findings and for which all control systems were in place.

[72] This is the EU contribution directly resulting from the ineligible costs identified by the auditors and it may differ from the adjustments actually implemented (for instance due to budget limitations, to technical evaluations modifying the adjustments, or to additional eligibility-proving documents being provided during the contradictory procedure with the beneficiaries).

[73] This amount is zero as all adjustments in favour of the Commission have been the subject of a recovery, an offsetting against payment or a pre-information letter, not resulting in any contestation.

Since the potential residual error rate calculated is below 2%, reasonable assurance can be given on TEN-E expenditure.

Implementation of audit results

As outlined in table 2.12, by the end of 2015, the cumulated adjustments since 2011 concern 46 participations, out of which 2 were in contradictory procedure with the beneficiaries and 44 were implemented (for EUR 3.99 million). About 57% of these cases (25 out of 44) did not lead to any adjustments, while 41% (18 out of 44) resulted in adjustments implemented in favour of the Commission (for EUR 4.03 million), mostly through recovery orders (98%).

Table 2.12 –Implementation of TEN-E audit results (2011-2015) in EUR

Results from external audits		Adjustments in contradictory procedure		Adjustments implemented	
Number	Funding adjustment EUR	Number	Funding adjustment EUR	Number	Funding adjustment EUR
46	-4 483 812	2	-494 871[74]	44	-3 988 940

2.1.2.1.4 Cross-sub delegations

As in previous years, DG ENER has cross-sub-delegated a number of activities to different services within the Commission, in order to arrange the provision of certain operations more efficiently. Being a Commission service itself, the AOD of the cross-delegated service is required to implement the appropriations subject to the same rules, responsibilities and accountability arrangements.

The cross-delegation agreement requires the AOD of the concerned DGs to report on the use of these appropriations. In their reports for the year 2015, the AODs did not communicate any events, control results or issues which could have a material impact on assurance. However, FP7 payments subject to a cross-sub-delegation to another DG are covered by the reservation addressed in Section 3.2.

In 2015, DG ENER gave cross-sub-delegations to DGs DIGIT, CNECT, GROW, OP, RTD, MOVE and ECFIN for the following amounts and purposes:

- To DG **DIGIT**: EUR 91 775 were committed in 2014 and were fully paid in 2015 for the general support to energy policy. Also an amount EUR 78 009 was committed in 2015.

[74] Identified in 2014.

- To DG **CNECT**: An amount of EUR 1 960 846 was committed in 2014 for HORIZON 2020 programme of which EUR 980 423 were paid in 2015. Besides EUR 1 959 662 were committed in 2015 for the same H2020 programme of which EUR 164 918.

- To DG **GROW**: EUR 56 672 of commitment appropriations for security of energy installations and infrastructures were still outstanding at the end of 2014 for which no payment was made in 2015.

- To **OP**: EUR 30 205 of commitment appropriations for the completion of the FP7 programme were still outstanding at the end of 2014 of which EUR 24 891 were paid in 2015.

- To DG **RTD**: EUR 876 833 of commitment appropriations for the completion of the FP7 programme were still outstanding at the end of 2014 of which EUR 235 271 were paid in 2015.

- To DG **MOVE**: EUR 1 071 936 of commitments appropriations for the completion of FP7 as well as for the support to energy policy were still outstanding at the end 2014 of which EUR 982 703 were paid.

- To DG **ECFIN**: EUR 74 048 497 of commitment appropriations for the completion of the Intelligent Energy programme were still outstanding at the end of 2014, from which EUR 9 098 497 were paid in 2015.

Most of this amount (EUR 9 million) represents the 2015 contribution of DG ENER to the **European Local Energy Assistance (ELENA) facility**, launched by the European Commission and the European Investment Bank (EIB) in December 2009 to support local and regional authorities via grants to contribute to the "20-20-20" Initiative[75] and mobilise local stakeholders, including local banks, towards integrated European Union wide large-scale actions leading to broader utilisation of innovative technologies, processes, products, policies or practices and facilitate their market uptake.

To do so it is providing EUR 30 million in funding from the Intelligent Energy Europe (IEE) programme to help cities and regions implement viable investment projects in the areas of energy efficiency, renewable energy and sustainable urban transport.

The ELENA facility is thus project development assistance (PDA) under the IEE Programme entrusted to a number of international financial institutions (Council of Europe Development Bank, European Bank for Reconstruction and Development, European Investment Bank, Kreditanstalt für Wiederaufbau).

DG ECFIN is responsible for monitoring the management of the instrument and reports regularly to DG ENER on the basis of a cross-delegation agreement given by DG ENER.

Since 2009, the ELENA facility has constituted a pipeline of more than 80 projects out of which 29 were approved in 2015 by the Commission.

In 2015, DG ECFIN organised four monitoring visits to review the internal control system

[75] This initiative aims at reducing greenhouse gas emissions by at least 20%, increasing the share of renewable in energy consumption to at least 20% and improving energy efficiency by at least 20%, all by 2020.

and the administration and management of the special accounts as well as the reporting. None of these four cases revealed major findings. As to the case identified last year with a possible problem concerning tendering procedures, the issue was confirmed and the corresponding amount recovered in 2015.

Besides, an interim evaluation was carried out by PwC in 2015 on PDA, with resulting preliminary findings summarised as follows: ELENA has mostly achieved its strategic and operational objectives: it has contributed effectively to develop investments, going beyond the existing practice with organisational and financial innovation, in particular where national and regional programmes did not provide support.

2.1.2.1.5 Recovery of undue payments (Annex 3)

For information, table 8 of Annex 3 displays the total amounts recovered by DG ENER for undue payments made to beneficiaries. Note that these amounts include corrections implemented both before and after payments distinguishing between errors, irregularities and those notified to OLAF if applicable. In other words, the amounts in this table do not only include the recoveries issued following the implementation of audits and extrapolations but also other types of recoveries of undue payments.

2.1.2.2 Indirect management

DG ENER has entrusted parts of its budget of indirect management implementation by:

- Co-delegations to other AOD;
- Executive Agencies (INEA and EASME);
- A National Agency (CPMA in Lithuania) – also see Annex 6;
- The EBRD;
- The EIB;
- A Decentralised Agency (ACER) - also see Annex 8;
- The Euratom Supply Agency;
- A Joint undertaking (Fusion for Energy (F4E), for ITER) – also see Annex 6.

For all these cases, the DG's supervision arrangements are based on the principle of controlling "with" the relevant entity. For details, see the Internal Control Template on indirect management in Annex 5.

2.1.2.2.1 Co-delegations

The Commission may delegate powers concerning a given budget line to one or more authorising officers by delegation, i.e. various AODs are responsible for the same item of expenditure, but each one for a specific type of transaction. For ENER, this is the case with PMO, HR, OP DIGIT and DEVCO. Being Commission services themselves, these DGs are required to implement the appropriations subject to the same rules, responsibilities and accountability arrangements as DG ENER.

In 2015, payments amounting to EUR 10.73 million were made through co-delegations.

2.1.2.2.2 Executive Agencies (INEA and EASME)

a) EASME

The Executive Agency for Small and Medium-sized Enterprises (EASME) replaced and succeeded the Executive Agency for Competitiveness and Innovation (EACI) and was established for the period 1 January 2014 to 31 December 2024 by Commission Implementing Decision 2013/771/EU, repealing Commission Decisions 2004/20/EC and 2007/372/EC.

Its considerably extended mandate is to manage, in close cooperation with seven DGs (DG GROW, RTD, ENV, CLIMA, MARE, CONNECT and ENER, present since its creation) of the Commission, EU actions related to the following Union programmes:

(a) Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (COSME) 2014-2020;

(b) Programme for the Environment and Climate Action (LIFE) 2014-2020;

(c) European Maritime and Fisheries Fund (EMFF) including the Integrated Maritime Policy (IMP), Control and Scientific advice and Knowledge;

(d) The Framework Programme for Research and Innovation 2014-2020 (Horizon 2020) - parts of 'Part II – Industrial Leadership' and 'Part III Societal challenges';

(e) Parts of the Competitiveness and Innovation Programme 2007-2013.

DG ENER defines the policy, the strategic objectives and the priority areas of action while EASME manages the entire project lifecycle, communicates and interacts with beneficiaries and gives key feedback to DG ENER. DG ENER is responsible for devising and implementing supervision and monitoring strategy towards EASME.

In 2015, DG ENER did not pay (directly) any subsidy to EASME.

Supervision arrangements

The Agency and its parent DGs signed a Memorandum of Understanding specifying the modalities and procedures of interaction.

In performing its tasks, the Agency works closely together with its parent DGs. Project-level performance in terms of output and impact is measured by the EASME and closely supervised by the parent DGs.

Close contacts between the Agency and its parent DGs took place at different levels:

- Steering Committee meetings with all parent DGs (organised at least four times a year): this Committee is responsible for the supervision of the Agency. Its tasks include the adoption of the Agency's administrative budget and the Annual Work Programme (comprising detailed objectives and performance indicators), as well as the Annual Activity Report and the Annual Accounts. It is also responsible for the Agency's implementing rules for personnel management;
- Participation in the parent DGs' management meetings;
- Regular programme-specific meetings;

- Quarterly reports provided on the use of resources and performance of the tasks;
- Further regular contacts at unit and working level, regarding the implementation of the Agency's work programme (for H2020 and the legacy of the IEE programme).

The supervision of EASME has continued throughout the year 2015. DG ENER received the draft Annual Activity Report of the Agency, coordinated and reviewed by the Steering Committee. In 2015, the residual error rate is below 2% for the Eco-Innovation and EEN programmes but is estimated to be above this materiality threshold for the CIP Intelligent Energy Europe programme II (2.45%), which is why the Agency Director, in his capacity as AOD, signed the declaration of assurance with a reservation.

From DG ENER's point of view, EASME has for now satisfactorily addressed this issue and listed a number of mitigating actions in its AAR (such as intensifying the ex-ante controls; raising beneficiaries', project and financial officers' on the most common errors identified during the ex-post controls; increasing the ex-post audit coverage of the IEE II programme).

EASME is subject to audit by the Internal Audit Service of the Commission and by the European Court of Auditors and DG ENER uses their reports as an element of the supervision of this body.

- ECA found the 2014 annual accounts of the Agency legal and regular in all material aspects and that they presented fairly in all material respects the financial position of the Agency. The Court made three observations related to some weaknesses in the budget planning, to which the Agency provided replies and justifications.

- IAS:
    - Follow up audit on the "Control Strategy": the IAS concluded that the remaining two important recommendations related to ex-ante checks and anti-fraud strategy had been adequately implemented and could be closed.
    - Audit on the "Preparedness of the management and control systems for the SME Instrument": IAS concluded that EASME managed successfully the SME Instrument in 2014 and proposed three very important recommendations that would further improve the control environment. The implementation of the corrective actions is foreseen for 2016.
    - Audit on the "Preparedness of the management and control systems for the LIFE 2014-2020". The draft audit report was received in December 2015 and contained three very important recommendations.

b) INEA

DG ENER is one of four parent DGs (with MOVE, CNECT and RTD) for the Innovation & Networks Executive Agency (INEA). INEA started its life as TEN-T Executive Agency in 2006 and was initially responsible for implementing the TEN-T Programme and the TEN-T projects from the 2000-2006 and 2007-2013 financial perspectives.

Thanks to a new mandate, approved on 23 December 2013[76], the Agency became the Innovation and Networks Executive Agency from 1 January 2014 and its lifetime has been extended to 31 December 2024.

The Commission has delegated to INEA the task of executing the operational budget and performing tasks linked to the implementation of its delegated Union programmes in the field of transport, energy and telecommunications infrastructure (Connecting Europe Facility programme or "CEF") and in the field of transport and energy research and innovation (H2020). In addition, the Agency is also managing the legacies of the TEN-T and Marco Polo programmes.

As to DG ENER, the Agency mandate covers the energy part of the CEF programme and the energy research part under the H2020 programme. DG ENER defines the policy, the strategic objectives and the priority areas of action while INEA manages the entire project life cycle, communicates and interacts with beneficiaries and gives key feedback to DG ENER. DG ENER is responsible for devising and implementing supervision and monitoring strategy towards INEA.

In 2015, DG ENER did not pay (directly) any subsidy to INEA.

Supervision arrangements

The Commission Decision establishing INEA and the Commission Decision delegating powers to INEA set out the governance and supervision arrangements. These are complemented by a specific Memorandum of Understanding (MoU) signed between the Parent DGs and INEA that contains reporting and supervision provisions and consists of a two-layer document:

- A top layer, aiming to harmonise the modalities and procedures of the interaction between the parent DGs and INEA and that includes amongst other:
  - the membership of the Steering Committee (ensuring that the work of the Agency is in line with the Agency's Annual Work Programme);
  - the requirement for INEA to report regularly on the use of resources and performance of tasks (using the Key Performance Indicators agreed between INEA and the parent DGs in INEA's Annual Work Programme 2015: rate of execution of C1 payment appropriations, residual multi-annual error rate, net time to pay and time to grant);
  - the preparation of the Agency's annual budget, in coordination with the parent DGs;
  - the definition of objectives and priorities in the Annual Work Programme of INEA (approved by the Commission);
  - the establishment of security related procedures and processes, including Business Continuity Planning, in consultation with its parent DGs;
  - the assessment of the activities carried out by the Agency through the Annual Activity Reports.
- A middle layer, with specific provisions for the implementation for CEF and H2020.

[76] Commission Implementing Decision 2013/801/EU

It has to be noted that work is ongoing on the update of the top layer of the MoU as well as on the middle layer for H2020. This update was considered necessary to accommodate practical cooperation issues brought forward during the first year of collaboration with the Executive Agencies.

In practice, the Steering Committee of INEA, chaired by the Director-General of DG MOVE, meets 4 times a year and oversees the running of the Agency. In particular, at each meeting the Director reports on key issues relevant to the work of the Agency, among which, on the performance of the Agency against the key performance indicators set out in the Agency's Annual Work Programme and on the implementation of the administrative budget and any issue that could have a significant negative impact on his assurance.

Meetings and exchanges of information between the parent DGs with INEA on Horizon 2020 and CEF as well as meetings between INEA and the relevant units in DG ENER on H2020 and CEF notably take place regularly.

Furthermore, with regards to the human resources, as the management of these Executive Agencies are Commission staff on detachment, the parent DGs maintain a close contact with these seconded officials by associating them to the work and life of the parent DG.

The close contacts between DG ENER and INEA is considered essential for the achievement of their respective goals and allows avoiding difficulties impacting on the good governance of INEA.

According to the draft Annual Activity Report of the Agency, all the KPIs have met their target and in particular the residual error rate is below 2% for the TEN-T and Marco Polo programmes managed by INEA and the Agency Director, in his capacity as AOD, has signed the declaration of assurance without reservations.

The Agency is also subject to audit by the Internal Audit Service of the Commission and by the European Court of Auditors and DG ENER uses their reports as an element of the supervision.

- ECA found the 2014 annual accounts for the administrative expenditure of INEA legal and regular in all material aspects and that they presented fairly in all material respects the financial position of the Agency. The Court made one observation related to a technical budgetary issue (high levels of carry-overs for committed appropriations for titles II and III), to which the Agency provided replies and justifications.
- The Shared Internal Audit Capability of DG ENER and DG MOVE published on 12 January 2015 a review of DG ENER relations with INEA, in which the auditors concluded that DG ENER adequately managed the handover processes with INEA in 2014 and recommended to formalise its supervision strategy (even if DG ENER had already got some tools deriving from the Memorandum of understanding signed with INEA) as well as the knowledge transfer strategy and to participate to panels for any relevant staff recruitment at INEA.
- The IAS issued on 29 January 2016 its final audit report on "The Preparedness of the Management and Control system for CEF and Horizon 2020", in which they acknowledged the efforts made by INEA to define a control strategy covering the grant management process for CEF and H2020 in a relatively short timeframe and had one very important observation, which INEA accepted: "An insufficiently developed control strategy without adequate control objectives and robust KPIs used for monitoring and reporting on the effectiveness and efficiency of the

controls may prevent proper performance management, delay mitigating measures to address performance issues and result in unreliable reporting on performance aspects to external stakeholders. Furthermore, the late definition and implementation of ex-ante and ex-post controls may limit the assurance building process".

c) Conclusion

The regular supervision of EASME and INEA did not identify any particular events, issues or problems that could have a material impact on the assurance of DG ENER. While it has to be noted that EASME has introduced a reservation for its IEE programme as the residual error rate is above 2% for 2015, DG ENER considers that the relevant corrective measures are being put in place to address this issue.

DG ENER considers that overall its supervision of the Executive Agencies is effective and appropriate.

2.1.2.2.3 EBRD and CPMA for the Nuclear Decommissioning Assistance Programme

DG ENER has entrusted the implementation of the Nuclear Decommissioning Assistance Programme to two implementing bodies: the European Bank for Reconstruction and Development (EBRD), with contributions to the respective International Decommissioning Support Funds (IDSF) and, for Lithuania, also to the national agency, the Central Project Management Agency (CPMA).

In October 2014 Slovakia expressed its wish to implement the decommissioning assistance programme through a national agency, the Slovak Innovation and Energy Agency, and sent a formal proposal in this regard to the Commission. The Commission has examined compliance with the Financial Regulation, including an on-the-spot pillar assessment, and will take a decision in 2016.

a) The European Bank for Reconstruction and Development (EBRD)

The Commission delegated the management of most of the EU financial assistance for the programmes for decommissioning nuclear power plants in Lithuania, Bulgaria and Slovakia to the EBRD, which had managed nuclear safety projects and decommissioning facilities since the early 1990s, so as to optimise the use of public money.

To this end, together with some European countries, three International Decommissioning Support Funds (IDSF) - a dedicated one for each Member State - were set up in 2000. These multi-donor funds are managed by the EBRD and governed through the IDSF Assembly of Contributors (convened twice a year to approve the EBRD work programmes). The Commission is the largest contributor (to date over 95% of all contributions) and the sole contributor since 2004. Accordingly, in 2014, the funds rules were revised to enhance the Commission's monitoring power as well as its decision and control role.

A new Financial and Administrative Framework Agreement between the EU and the EBRD was signed on 1 June 2015 for the financial framework 2014-2020. Individual delegation

agreements for the three funds were signed on 5 June 2015, expiring on 1 December 2022, notably introducing improved reporting requirements.

The three Monitoring Committees, co-chaired by the Commission and the Member States (vice-minister or state secretary rank) are convened twice per year per each country and assess the progress in the activities, taking the appropriate corrective measures when necessary.

The implementing body (EBRD) and the beneficiaries (mainly the nuclear power plant operators) report on progress to the Monitoring Committees. The Member States bear ultimate responsibility for the safe decommissioning of the nuclear power plants.

The Commission services implement a risk management plan and carry out on-site visits at least twice a year to verify progress and to re-assess the risks.

In 2015, DG ENER paid EUR 97.47 million to the EBRD, from commitments established before 2014. Payments are requested by the EBRD and determined based on procurement forecasts - as defined in the relevant delegation agreements - and progress in project implementation.

b) The Central Project Management Agency in Lithuania

In Lithuania, since 2003, an increasing portion of the tasks have been entrusted to a national Central Project Management Agency (CPMA), in addition to the funds managed by the EBRD. Thus, the Ignalina programme is managed through two channels. The Agency is the only implementation channel for all new projects while the EBRD continues the implementation of on-going projects (i.e started prior to 2014 and to be completed before 2022).

A new Delegation Agreement between the EU and the CPMA was signed on 1 June 2015 for the financial framework 2014-2020, expiring on 31 December 2026.

The CPMA is responsible for the implementation of the measures under the Ignalina Programme and its management responsibilities are similar to those of the EBRD.

The Ignalina Monitoring Committee[77], co-chaired by the Commission and the Member State (vice-minister or state secretary rank) is convened twice per year and assesses progress in the activities, taking the appropriate corrective measures when necessary.

The implementing body (CPMA) and the beneficiary (INPP, Ignalina Nuclear Power Plant) report on progress to the Monitoring Committee. The member state bears the ultimate responsibility for the safe decommissioning of the nuclear power plant. The Commission services implement a risk management plan to carry out on-site visits at least twice a year to verify progress and to re-asses the risks.

In 2015, DG ENER paid EUR 52.22 million to the CPMA, out of which EUR 2.18 million were paid on commitments established in 2015 as pre-financing of the agency

[77] Established by Decision C(2014)5449

renumeration, while EUR 50.04 million were paid on commitments established before 2014. Payments are requested by CPMA and determined based on procurement forecasts - as defined in the relevant delegation agreement - and progress in project implementation.

c) Conclusion

In 2015, the three decommissioning programmes met the objectives, in line with the baseline adopted by the Commission on 7 August 2014[78].

The newly introduced Earned Value Management indicators showed that performance was appropriate. The schedule performance tends to be lower than optimal as some projects are in delay, while the cost performance appears to be optimal.

It is important to underline that the supervision and monitoring of the Nuclear Decommissioning Assistance Programme was significantly reinforced throughout the years. Important progress in defining and implementing the control strategy occurred during 2014 and 2015 and in particular:

- Adoption of the Rules of Application, which are detailed and prescriptive especially on monitoring issues;
- Improvement of the format of Annual Work Programmes presented by the Member States and enhancement of their appropriation of the programmes;
- Introduction and assessment of key performance indicators and steering of the Member States towards the use of an appropriate earned-value management technique;
- Establishment of new Delegation Agreements, in line with the latest Financial Regulations, introducing clear reporting requirements;
- Modification of the International Decommissioning Support Funds rules, to align them with the predominant role of the Commission as a donor;
- Set up of a formalised risk management plan in support of the control and monitoring action, in particular with regard to the on-site inspections that take place twice a year in each Member State.

Given the above, DG ENER considers that overall its supervision in 2015 of the CPMA and EBRD for the implementation of the Nuclear Decommissioning programmes was appropriate.

However, as indicated in section 2.2.1, the Internal Audit Service conducted in 2015 an audit on the "Governance and Supervision of the Nuclear Decommissioning Assistance Programmes" issuing three recommendations, out of which one critical concerning the assessment of ex-ante conditionalities, one very important on the documentation of the control strategy and one important on co-financing.

Consequently, DG ENER has introduced a new reservation in this AAR. This reservation is

[78] C(2014)5449

related to the adequacy of the assessment in 2014 of the ex-ante conditionalities to be fulfilled by the Member States (BG, SK and LT) for the NDAP, required by the 2013 Regulations (No 1368/2013 and No 1369/2013).

The following points also have to be emphasised within the framework of the reservation:

- DG ENER has put in place an action plan to reduce the risks, which was accepted by the IAS and which is being implemented: two out of three steps are already fulfilled in relation to the critical finding. The third step – an in-depth study of the completeness of the decommissioning and financing plans - will be ready by October 2016.
- The current analysis shows that no financial shortfall should be expected until 2020 for any of the three beneficiaries. For the period post 2020, the financial gaps are limited for SK and BG. The gap is proportionally larger for LT but extends over a very long period (until 2038). In any case, national laws[79] stipulate that the Member States will pay for the decommissioning in case the EU financing is stopped.
- Payments executed under commitments of the 2014-2020 financial framework amount to EUR 2.18 million, which represents 0.19% of DG ENER's total payments in 2015.

2.1.2.2.4 EIB for the financial instruments

a) the European Energy Efficiency Fund (EEE F)

The European Energy Efficiency Fund S. A., SICAV-SIF, was established on 01 July 2011 through a delegation agreement with the EIB. The Fund is an innovative public-private partnership dedicated to mitigating climate change through energy efficiency measures and the use of renewable energy in the member states of the European Union.

The Fund pursues a two track investment approach, either investing directly in projects or via financial institutions. It has a layered risk/return structure to stimulate private investment with a fixed commitment of EU budget funds.

The initial capitalization provided by the European Commission (EUR 125 million) was increased by contributions from the sponsors European Investment Bank (EUR 75 million), Cassa Depositi e Prestiti (EUR 59.9 million) as well as the Investment Manager, Deutsche Bank (€ 5.0 m). The Fund has been benefiting from the European Commission Technical Assistance facility[80] with a budget of EUR 20 million to provide project development support to potential beneficiaries of the EEE F.

In 2015, DG ENER paid EUR 14.65 million to the fund.

For the EEEF, the Commission is represented in the following instances:

- The Supervisory Board, in which the Commission holds two seats out of four,

[79] TAR, 16 June 2014, No. 7639, Amendment law XII-914, 5 June 2014

[80] The Technical Assistance Facility was available until 31 March 2014.

which meets usually twice a year[81]. The Supervisory Board conducts a permanent supervision of the management of the Fund and provides strategic advice to the Management Board on the overall development of the Fund's activities.

- The Management Board, in which the Commission detains one of the three seats and which meets whenever investment and other decisions are required. The Management Board acts on behalf of the Fund, oversees its activities and is responsible for strategic decisions. The Management Board is the legal representative of the Fund. In compliance with EEEF's founding documents and applicable laws and regulations, it has an exclusive power to administer and manage the Fund.
- The Annual Shareholder Meeting, with one representative of the European Commission, who is the largest shareholder.

Consequently, the Commission ensures continuous monitoring of the EEE-F at working level and through its representation in the Supervisory and Management Boards of the EEE-F. It was also responsible for approving Technical Assistance requests prepared by the Investment Manager.

The financial management of the EEE-F is based on investment guidelines and principles laid down by the European Commission and the EIB and follows high banking standards monitored and assessed in the various investment steps.

Sound financial management is thus ensured by the Fund's solid governance structure, and through the reporting and fiduciary duties of the Investment Manager (Deutsche Bank), who conducts the Fund's business on behalf of the Management Board and the Investment Committee. In addition to due diligence, the Investment Manager ensures that projects comply with the investment guidelines. This includes quarterly investment portfolio reports, quarterly and annual reports, in which the financial, social and environmental performance of the Fund are reviewed, as well as annual business plans in which yearly targets are set and impacts on the EEE-F's balance sheet are forecast.

At this stage however, it is still too soon to fully assess cost-effectiveness of the EEE F due to the limited number of finalised projects. The fund is operating in a niche market with important challenges (e.g. requiring time to develop, with relatively long lead and decision times at the public authorities level) that had not been initially taken into consideration, which is why in practice, it has been admitted that the initially foreseen allocation and commitment periods have proven too short. This is the reason why the commitments of all investors have been extended (to 31/03/2017 for the Commission and 31/12/2018 for the other investors). Besides, increasing the number of projects, the geographical coverage of the fund and attracting private investors will be key priorities for 2016.

b) Financial instruments (debt) under the Connecting Europe Facility Regulation (EU) 1316/2013

On 22 July 2015 the Delegation Agreement for the Connecting Europe Facility Debt Instrument (CEF DI) was signed by the Commission and the EIB. This new agreement

[81] The Board exceptionally only met once in 2015.

defines that as of January 2016 the projects in the portfolios of the PBI pilot phase will be merged with the CEF DI.

Subsequently, the Commission adopted the CEF Annual Work Programme 2015 on Financial Instruments, which constitutes a basis for financing projects by means of Financial Instruments and the delegation to the EIB. The total 2015 commitment appropriation for energy is EUR 48.52 million. No payments from CEF DI were made in 2015 by DG ENER.

A joint Steering Committee between the three CEF DGs (DG ENER, DG MOVE and DG CNECT) took place in September 2015, also summarising the state of play on the portfolio of projects signed.

The CEF Committee under the comitology procedure approves the annual allocation amount to the projects presented by the EIB as potentially suitable for the financial instruments.

2.1.2.2.5 ACER - The Agency for the Cooperation of Energy Regulators

DG ENER is the parent DG for the Agency for the Cooperation of Energy Regulators (ACER), whose overall mission is to complement and coordinate the work of national energy regulators at EU level and work towards the completion of the single EU energy market for electricity and natural gas. In 2011, ACER received additional tasks under Regulation (EU) No 1227/2011 on wholesale energy market integrity and transparency (REMIT) and in 2013 under Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure.

In 2015, DG ENER's subsidy to ACER amounted to EUR 11.27 million.

DG ENER, relying on the Agency to achieve its policy objectives, is a member of the Administrative Board, the governing body of ACER, and an observer in the Board of Regulators, deciding on regulatory policy of ACER. Arrangements are in place to ensure that all key proposals to the Administrative Board are properly assessed and the Commission's position agreed.

The monitoring of the Agency's activities includes regular coordination meetings at management level, numerous contacts at working level and reporting. Whenever necessary, bilateral meetings between DG ENER and ACER are organised. In the framework of the supervision by DG ENER of ACER, a set of indicators is used to monitor budgetary and financial execution of the Agency. The Agency provides on quarterly basis information on the budget implementation, the vacancy rate and the audit recommendations follow up.

The Commission provided an opinion on ACER'S Work Programme 2016 to ensure consistency of the Agency's action with the European Union's energy goals.

In accordance with Article 16 of Regulation (EC) 713/2009 of 13 July 2009 establishing ACER, the Commission completed an assessment of ACER and its Director which was the basis for the prolongation of the position of the ACER director for three further years. The conclusions were positive, also outlining the main challenges ahead.

In the DAS 2014, ECA found the annual accounts of ACER legal and regular in all material

aspects and that they presented fairly in all material respects the financial position of the Agency. The Court made three observations, two related to technical budgetary issues and one related to the establishment of a European School in Ljubljana. The Agency has provided replies and justifications in relation to the observations.

In conclusion, the regular supervision of ACER did not identify particular issues that would need to be included in this report. Overall DG ENER considers that its supervision of ACER is effective and appropriate.

2.1.2.2.6 F4E - The European Joint Undertaking for ITER and the Development of Fusion Energy

Objectives

The European Joint Undertaking for ITER[82] and the Development of Fusion Energy (F4E) was created in 2007 for a period of 35 years to provide Europe's contribution to the ITER International Fusion Energy Organisation (IO), the world's largest scientific partnership that aims to demonstrate fusion as a viable and sustainable source of energy. ITER brings together seven parties that represent half of the world's population - the EU, Russia, Japan, China, India, South Korea and the United States. F4E also supports fusion research and development initiatives through the Broader Approach Agreement, signed with Japan – a fusion energy partnership which will last for 10 years. Ultimately, F4E will contribute towards the construction of demonstration fusion reactors.

The construction and exploitation of the ITER experimental reactor, currently being built in Cadarache (France), will allow scientists and engineers to acquire the knowledge and technologies needed to develop in the future fusion power stations that will produce electricity.

Europe supports about 45% of the construction cost and 34% of the cost of operation, deactivation and decommissioning of the facility as well as preparing the site. Europe's contribution to ITER is managed by F4E.

As for the amounts paid by DG RTD and DG ENER to F4E in 2015, they were composed of EUR 362.73 million on operational budget and EUR 46.75 million on administrative budget.

Monitoring and supervision

On 1 July 2015 the responsibility of the monitoring of the ITER project and the Broader Approach activities were transferred from DG RTD to DG ENER.

The monitoring and supervision of F4E activities is organised at different levels:

[82] ITER: International Thermonuclear Experimental Reactor

- **Through the Commission's role in F4E's governance framework and the reporting of F4E Director**

The Commission is represented by DG ENER in the governing bodies of F4E and in particular in its Governing Board (GB), the main body which supervises F4E in the implementation of its activities. The GB brings together representatives from all the members of F4E at least twice per year (four times actually in 2015) and takes decisions on a wide range of matters. For instance the GB receives and approves the main documents regarding the governance of F4E and its activities (the Work Programme, the Project Plan, the Resource Estimates Plan, the Budget, etc.) and appoints the Director. In this respect, the Commission has a special role in the selection of the Director, who is appointed on the basis of a list of candidates proposed by the Commission following a call for expressions of interest published in the Official Journal of the European Union.

Moreover, some key parts of the F4E rules, such as the Financial Regulation and Staff rules, are subject to the agreement of the Commission. Nevertheless, it should be noted that the Council decision of 2007 establishing F4E gives the Commission only a limited number of votes on the GB (5 votes out of 72).

Furthermore, the GB is notably assisted by the following committees: the Administration and Management Committee (AMC) and by the Bureau.

The AMC is meeting in preparation of the GB meetings, provides advice or recommendations to the GB or Director on specific matters related to the administrative and financial planning of F4E and may carry out any other tasks that the Governing Board delegate to it. The AMC is currently composed of eleven members (notwithstanding its Chair) appointed by the Governing Board. One member of the Committee is Euratom.

The Bureau is also meeting several times per year in preparation of the GB meeting and when needed to follow up specific issues under delegation by the GB.

Besides, regular reporting is provided by the F4E Director to the GB and to the Commission.

- **Through regular contacts at working level between DG ENER and F4E**

Given the importance of the ITER project (including the Broader Approach activities with Japan), DG ENER has a unit of 11 people dedicated to following the implementation of it.

Formal and informal contacts are maintained with F4E, but also with the ITER Organisation and with the other partners of the projects.

- **Through independent assessments requested by the Budgetary Authority**

Both the European Parliament and the Council of the EU receive annually an independent assessment on F4E operations and F4E's progress report, carried out upon a specific Council's request made in 2010. DG ENER is a member of the steering committee responsible for the annual F4E independent assessment.

- **Through audit activities**

In terms of audit, F4E's structure includes an internal audit capability and an Audit Committee. The latter is an advisory committee to the Governing Board having an overview of financial reporting and accounting, of internal control and risk management and analysing the results of internal and external audits and the implementation of audits' recommendations. A member of the Audit Committee is proposed by Euratom.

Besides, F4E is also subject to the audits of the Internal Audit Service of the Commission.

Finally, the annual accounts of the Joint Undertaking are subject to the audit by the European Court of Auditors, who gave a positive opinion on the reliability of the 2014 F4E annual accounts and on the legality and regularity of the transactions underlying the accounts. However, the Court observed a number of risks in its "Emphasis of Matter" related to costs overrun, delays and management effectiveness. Other issues raised by the Court concerned the reporting on the advancement of works in progress, the level of implementation of the budget in 2014 (in particular the low level for individual commitments), the need to complete the internal control system and to implement internal audit findings as well as weaknesses in procurement procedures. All of these issues are being followed up by DG ENER.

Challenges of the ITER project and how they were addressed in 2015

The ITER project has suffered from an insufficient performance against the 2010 adopted reference schedule. These delays and costs overrun have been, to a large extent, driven by the nature and complexity of this highly innovative and first of its kind project, by the difficulties encountered in the ITER Organization (IO) project implementation and by the complicated governance structures for an international project.

To address these issues, the Commission has strengthened over the last years the supervision over the ITER project and will maintain and further pursue efforts to promote an effective and efficient project implementation in particular via its active participation in ITER IO governance structures, cooperation with the IO to support the actions undertaken to redress the situation and through a close monitoring of F4E's progresses.

In particular, since the transfer of ITER activities in June 2015, DG ENER has taken actions to define, clarify and structure the response of the Commission to address the challenges of the ITER project, with a view of preparing a solid and stable ground for the Commission to decide on the next steps for ITER. A fully fledged strategic approach to the management of ITER and F4E is under development: from governance issues to relations with the institutions to working methods inside the Commission. DG ENER is therefore revising its approach towards the project and is proposing a comprehensive strategy to ensure its oversight of the efficiency and accountability of IO and F4E.

Radical changes were made to the IO and F4E in early 2015 to improve the functioning of the project. These changes included new management and action plans in the IO and F4E for a new project culture oriented to a more integrated effort in building ITER. DG ENER ensured a steering role in the appointment of the Chief Operating Officer, in charge of the overall technical coordination, a key figure to ensure better and more integrated working relations with the Domestic Agencies (DAs) and in particular with F4E in a time when critical components need to be delivered.

On F4E level, one of the first actions taken by DG ENER was to accelerate the process of

appointment of a new Director and broaden the job profile in the vacancy notice to include persons with an industry background. Mr Johannes Schwemmer was appointed by the F4E GB and took over his duties as new Director of F4E on 1 January 2016.

Key developments observed in 2015

- On 24 March 2015, an action plan for improvements related to the observations raised by the European Parliament and the Court of Auditors in their reports on the 2013 discharge, submitted by the F4E Acting Director, was approved by the F4E GB. This action plan complements the ITER action plan, approved by the IC on 5 March 2015, in a number of respects and identifies further improvements in the Joint Undertaking's own operations. Since March 2015, these actions plans are being implemented, with progress already ongoing in different areas.

- The IO, in cooperation with the DAs, developed a revised long-term schedule for completing the construction of the project. The result of this work was presented at the ITER Council (IC), the governing body of the IO, of 18-19 November 2015.

  During the meeting, the IC recognized the extensive efforts made since March 2015 to improve the project culture and acknowledged the much-improved understanding of the scope, sequencing, risks, and costs of the ITER Project achieved by this systematic and integrated analysis and review, resulting in an overall schedule through First Plasma (i.e. beginning of operations).

  Besides, the IC recognized, with appreciation, the tangible progress made since March 2015 on construction and component manufacturing.

  However, the IC did not approve the revised schedule. The Commission, representing Euratom in the IC, insisted on the need to establish a technically feasible and tightly resourced long-term schedule for the ITER project by June 2016 on the basis of fully transparent, realistic and not politically motivated assumptions.

  In the meantime, the IC approved a schedule and milestones covering 2016-2017 and the re-allocation of the necessary funding, over a period of two years, to enable adherence to these milestones. The IC also decided to conduct an independent review of the overall schedule and associated resources and to consider possible additional measures for expediting the schedule and reducing costs. The Council plans to complete these reviews and reach agreement on the overall schedule through First Plasma by June 2016.

- **The positive trend observed in the implementation of the main project components continued, with a completion rate rising from 63% in 2014 to 78% in 2015. The broader approach progressed satisfactorily.**

- F4E made a significant effort regarding the implementation of audit recommendation and the correction of observed weaknesses. The observed implementation rate at the end of 2015 is 93%, against 66% in 2013.

- The Commission and F4E have started working on a cost-containment plan with a view to minimise the cost overruns related with the contributions to the ITER project.

- F4E was, for the first time, able to produce an estimated cost at completion with regard to its contribution to the construction of the ITER project. While this estimate needs to further refined, and although it shows that the ITER project is likely to incur further delays and significant cost increases in the future, this greatly improves the transparency on the core issues encountered by this project.

Conclusion

Whereas the magnitude of the risks pertaining to this project, in particular those affecting its implementation beyond 2020, need be recognised, the regular supervision of F4E did not identify any particular events, issues or problems that could have a material impact on the assurance given for the year 2015. The weaknesses and challenges described above as regards among other delays, cost overruns and governance / management are being addressed by DG ENER at both F4E and wider project level. Overall DG ENER considers that its supervision of the F4E JU is effective and appropriate.

2.1.3 Efficiency and Cost-effectiveness

Based on an assessment of the most relevant key indicators and control results, DG ENER has assessed the cost-effectiveness and the efficiency of the control system and reached a positive conclusion.

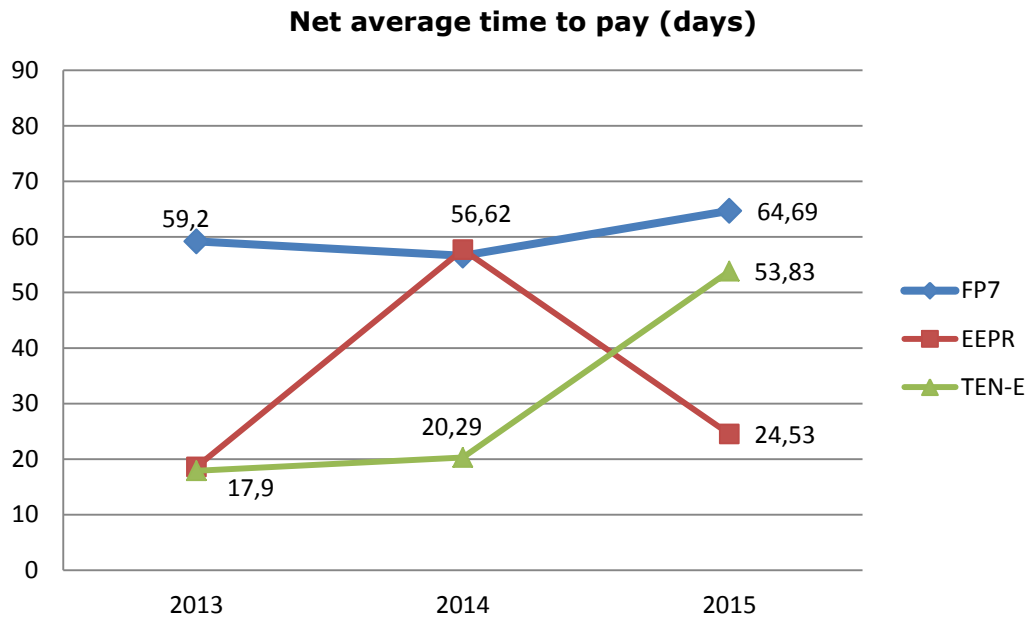
- **Direct management**

For the year 2015, the following efficiency and cost-effectiveness indicators have been estimated related to stages 3 - monitoring (FP7, EEPR and TEN-E) and stages 4 -audits (EEPR and TEN-E, as the FP7 ex-post audits are managed by the Common Audit Service in DG RTD since January 2014). No indicators can be provided for stages 1 and 2, which were not applicable anymore for DG ENER in 2015.

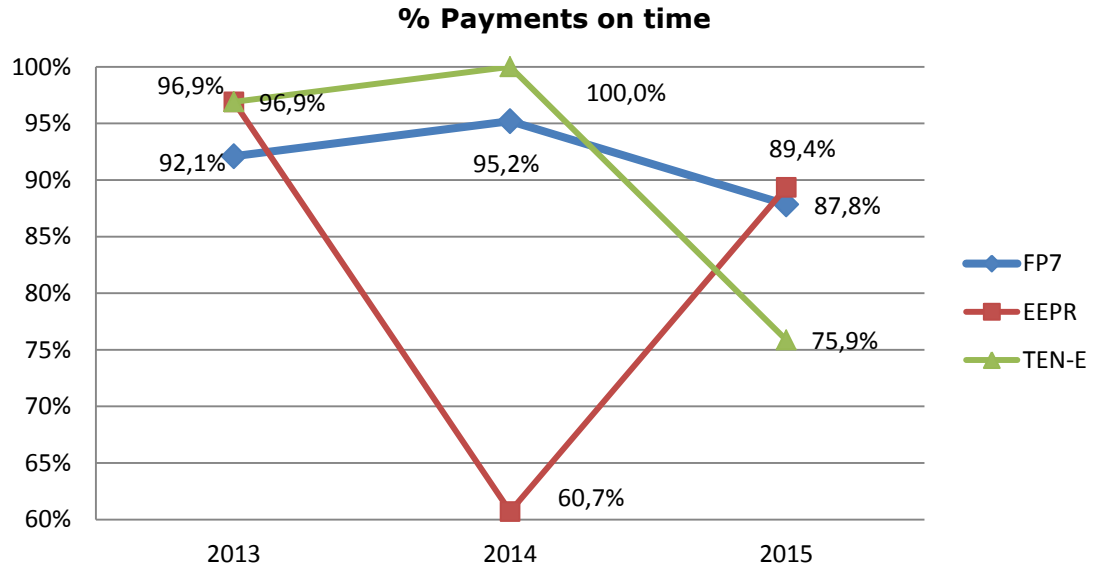
  - **Stage 3**

    - **Efficiency indicator: Time-to-Pay**

The evolution over time of this efficiency indicator is outlined in the charts below for FP7 (time limit of 90 days), EEPR and TEN-E (legal time limit of 45 days):



For 2015, the payments deadlines for these three programmes were below the Commission's average (93.39%), notably due to the lack of payment appropriations encountered by the Commission in 2014, resulting in delayed payments in January 2015.



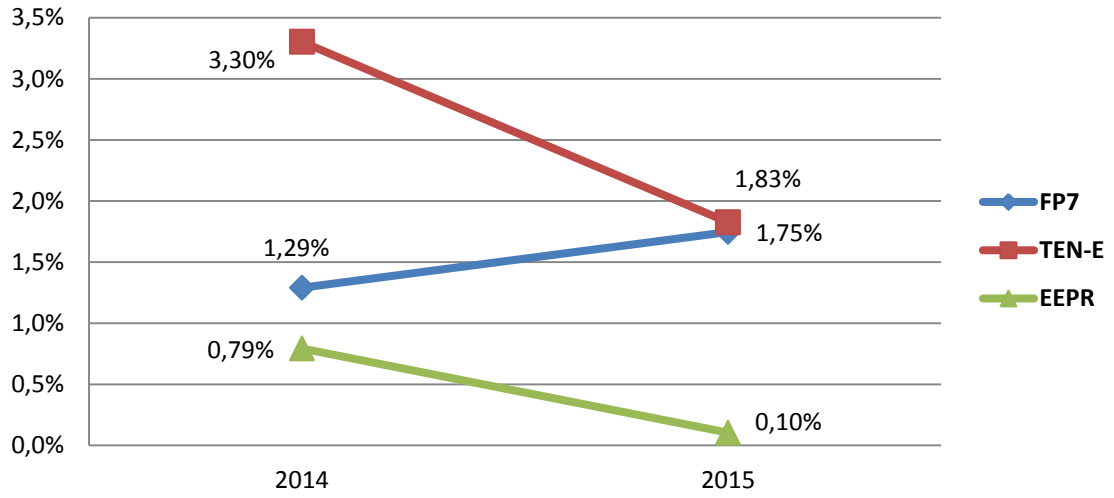
- **Cost-effectiveness indicators**

  - ✓ **Ratio costs over annual amount disbursed**

The overall cost-effectiveness for FP7, EEPR and TEN-E taken globally improved further in 2015 (from 1.80% to 1.23%), mainly due to the increase in the total amounts disbursed compared to 2014.

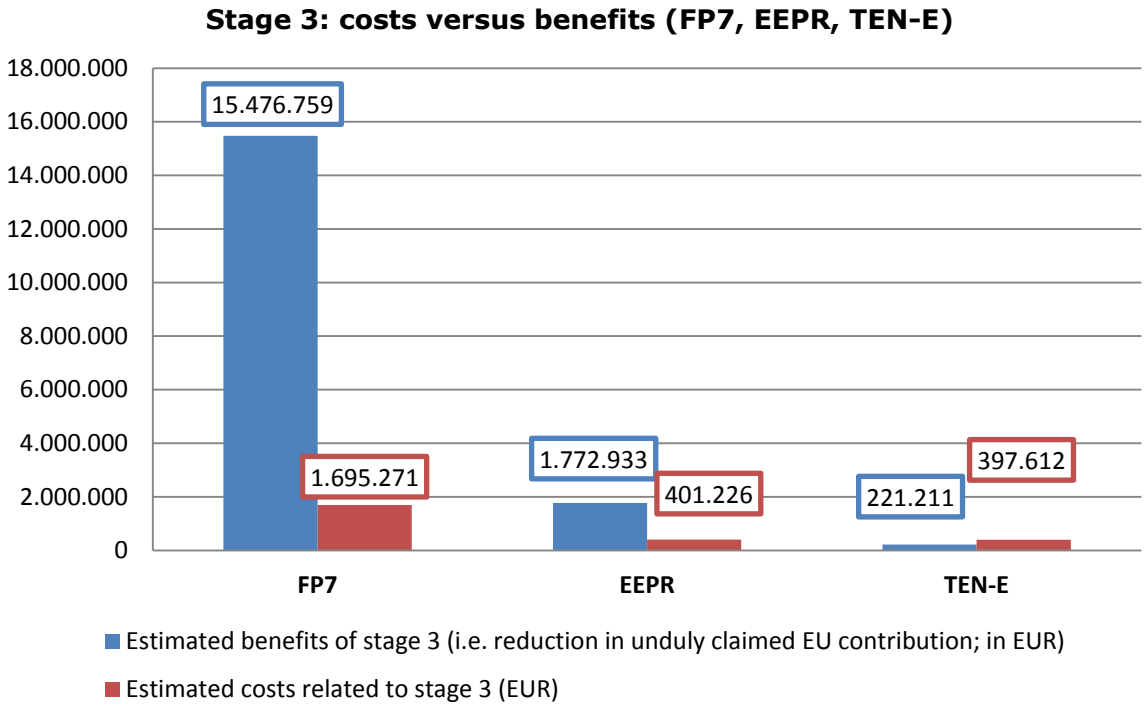
If the cost-effectiveness is analysed separately, as illustrated in the chart below, the ratio increased slightly in 2015 for FP7, due to the fact that less payments were made, while the resources used for the monitoring of the projects remained in a similar range compared to the previous year. The decrease for EEPR and TEN-E is mainly owed to the increase in terms of amounts paid in 2015.

Stage 3: Ratio costs of monitoring /payments made (FP7, EEPR, TEN-E)



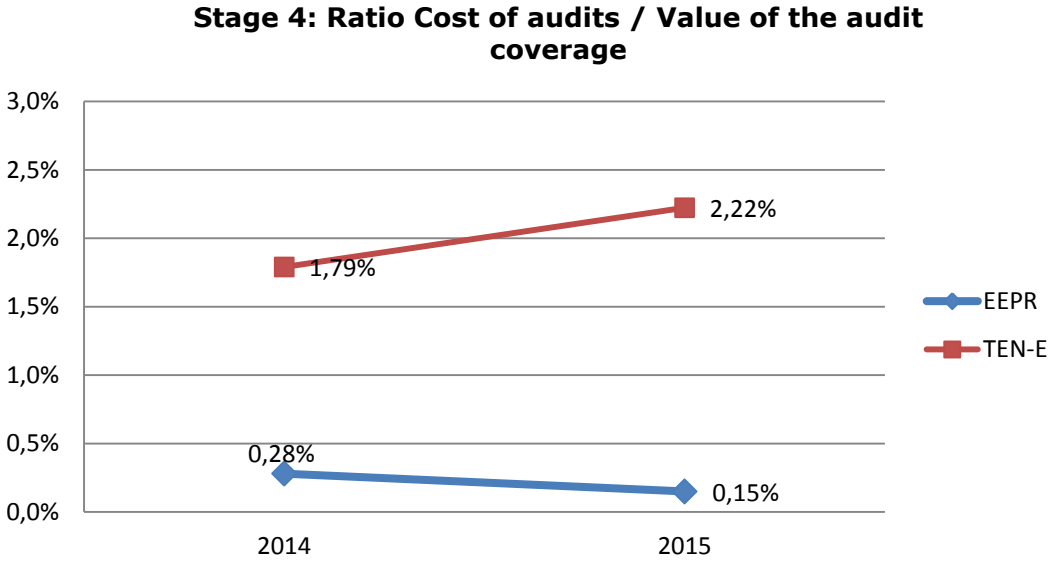
- ✓ **Estimated costs compared to estimated quantifiable benefits**

As for the bar chart hereunder, it underlines the cost-effectiveness of the ex-ante verification for EEPR and FP7 in 2015, while for TEN-E, the estimated costs were higher than the estimated quantitative benefits stemming from stage 3. However, it has to be stressed that TEN-E and EEPR are comparable programmes, with similar reporting requirements and consequently identical ex-ante controls, whereas the resulting cost-effectiveness is incommensurate because of the different scale in the amount of EU contribution paid between these two programmes.



- **Stage 4: cost-effectiveness indicator**

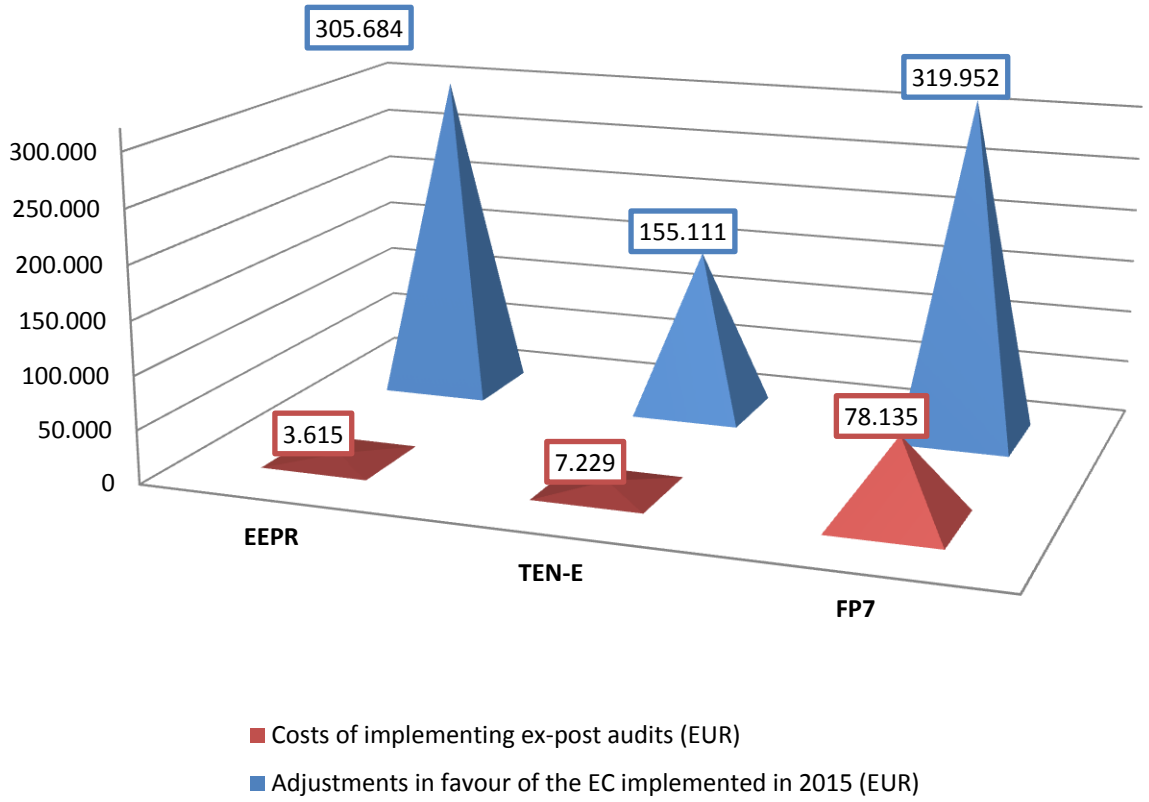
The cost-effectiveness of stage 4 for EEPR and TEN-E is emphasized in the following chart:



While the grants under the EEPR and the TEN-E programmes are similar, the value of the audit coverage was higher for EEPR than for TEN-E (in line with the amounts paid), which explains the higher cost-effectiveness of EEPR compared to TEN-E.

However, the chart below clearly outlines that the costs of implementing the audits are still quite inferior to the adjustments implemented for these programmes.

Stage 4: Implementation of ex-post audits (TEN-E, EEPR, FP7)

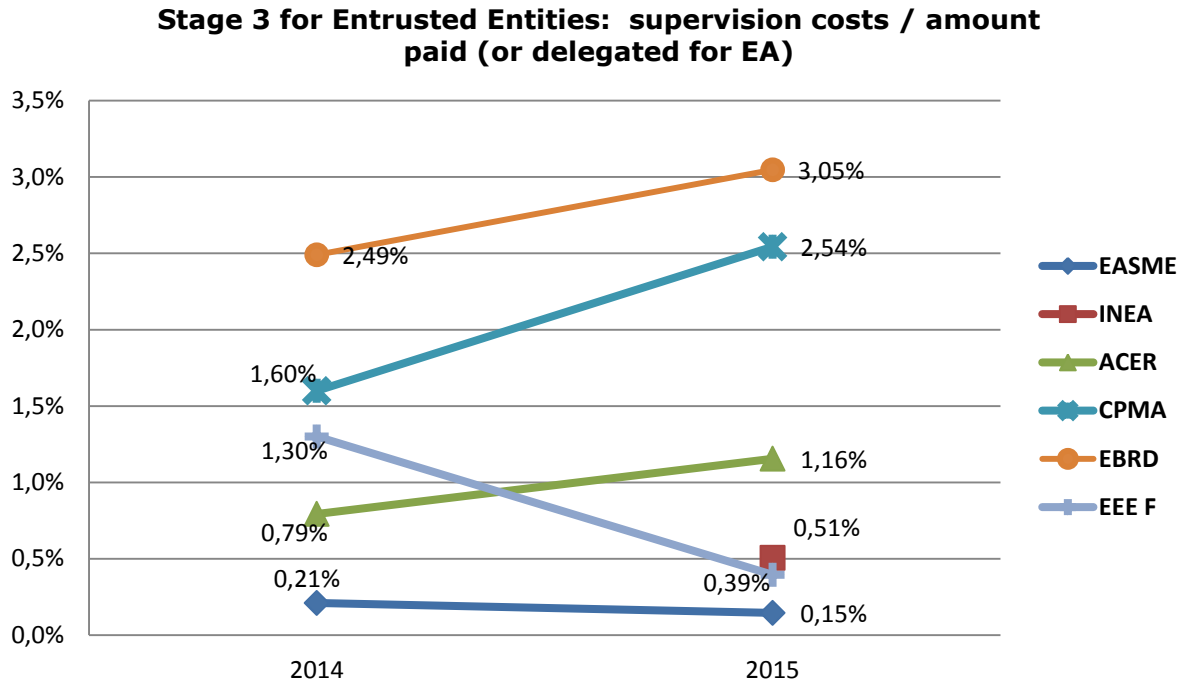


- **Indirect management**[83]

In 2015, the consolidated cost-effectiveness indicator (i.e. for all entrusted entities together) is similar to 2014 (1.30% compared to 1.28%).

Details per entity are provided in the chart below:

[83] F4E not reported, as transferred during the year from DG RTD to DG ENER.



Notes:

- INEA: there was no amount delegated by DG ENER in 2014.
- CPMA: the remuneration was calculated as 3.85% of half the sum allocated under the 2015 Transfer of Funds Agreement.
- EBRD: Remuneration based on the approved2015 budget.
- EEE F: The management fee for 2014 was actually only paid in 2015, but already taken into account in the indicator reported in the AAR 2014. No management fee is due for the year 2015.

- **Conclusion**

Overall, during the reporting year, it can be concluded from the indicators illustrated above as well as from those reported in section 2.1.2.1 that the controls carried out by DG ENER were cost-effective and efficient.

For instance, as regards the expenditure under direct management, for stages 3 and 4, the estimated quantifiable benefits exceeded the costs in 2015 (except for TEN-E, due to the limited amounts paid in 2015 compared to FP7 and TEN-E). Furthermore, it is important to note that the benefits of stage 3 are necessarily affected by the limitation in the depth of ex-ante controls as part of the overall control framework.

Besides, in addition to the quantifiable benefits indicated above, there are also invaluable qualitative benefits stemming from these stages. Indeed, for stage 3, they provide an assurance that the project is running adequately and so will produce the output desired. The analysis of deliverables can be valuable to ensure excellent science / performance, and its appropriate feedback into policy considerations, even if it does not lead to a financial saving. As for the non-quantitative benefits of stage 4, the audits have a positive deterrent effect within the programme, which will ensure system improvements and a better compliance with regulatory provisions. Thus, the benefits are much wider

than the budget implemented in the given year.

Moreover, the efficiency indicators listed for stages 3 and 4 also revealed that the DG allocated an appropriate quantity and quality of resources to ensure a fluent operation of the controls (e.g. time-to grant, time-to-pay, number of audits and extrapolations implemented have improved compared to last year).

As regards the expenditure under indirect management, the estimated ratios of the costs of the control system compared to the level of expenditure remain reasonable.

To summarise, the efficiency and the effectiveness of the controls is definitely sustained as a result of the quantitative and invaluable qualitative benefits, identified for the relevant stages of the process and providing a positive impact on the assurance[84]. The cost-effectiveness of the overall controls is also positive since the benefits for the Commission exceed the costs.

Finally, regarding the possibility foreseen in FR (Art 66.2[85]) to differentiate the frequency and/or the intensity of the DG's controls, DG ENER has not (yet) done so; such review should only be done as from 2016.

2.1.4 Fraud prevention and detection

DG ENER has updated its anti-fraud strategy[86] in September 2015, in line with the practice recommended by OLAF.

The revised strategy recognizes the importance of staff awareness and the growing importance of relations with decentralized bodies as well as the evolution of the cooperation framework between OLAF and the Commission, and between DG ENER and the Research family DGs. The adoption of the new strategy also led to a redefinition of the actions planned. This translates into some actions being cancelled or refocused. As a result, the rate of implementation of actions planned for 2013-2015 was 80% (see table 2.13 below). DG ENER will pay a particular attention to improve the implementation rate of its new anti-fraud strategy during 2016-2017.

In principle, the controls aimed at preventing and detecting fraud are comparable to those intended to ensure the legality and regularity of the transactions. In addition, within the context of anti-fraud, DG ENER ensures notably:

- That internal rules for fraud suspicion handling and reporting are in place;

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[84] Despite the reservation for FP7 overpayments

[85] "For the purposes of paragraph 1, the authorising officer by delegation shall, in accordance with Article 32 and the minimum standards adopted by each institution and having due regard to the risks associated with the management environment and the nature of the actions financed, put in place the organisational structure and the internal control systems suited to the performance of his or her duties. The establishment of such structure and systems shall be supported by a comprehensive risk analysis, which takes into account their cost effectiveness."

[86] Approval of DG ENER's Anti-fraud Strategy, 22 September 2015 [Ares(2015)3900523]

- That potential fraud risks are considered within the annual risk assessment exercise for the Management Plan. The 2015 risk assessment did not identify any critical or significant fraud risks;
- A regular attendance to the Fraud Prevention and Detection network and to the Fraud and Irregularity Committee meetings as well as contacts with other DGs and services. In 2015, DG ENER participated to the working group on the revision of INEA's Anti-fraud Strategy;
- The establishment of a Local Anti-Fraud Correspondent function, in line with the common action plan for the Research family.
- That an appropriate level of cooperation is ensured with OLAF.

During 2015, no new cases were sent to OLAF for investigation by DG ENER.

Table 2.13 – Fraud prevention and detection - indicators

Indicator	Latest known result	Target
Number of files sent to OLAF for investigation in the year.	31.12.2015: None	No target.
Number of penalty decisions[87] adopted in the year and total amount of these decisions.	31.12.2015: None	No target
Implementation of the actions in the DG's Anti-Fraud Strategy.	31.12.2015: 80%[88]	Target: 100% by end of 2015

2.1.5 Other control objectives: safeguarding of assets and information, reliability of reporting

The fixed assets belonging to DG ENER are ranging from simple office furniture to nuclear equipment. At the end of 2015 the net value of these assets was around EUR 10 million.

DG ENER is management centre and its assets comply with the following criteria:

[87] As set out in Article 96 of the Financial Regulation and can include the exclusion of the candidate from EU funding and / or the payment of financial penalties.

[88] After the adoption of the updated strategy, some of the planned actions became obsolete or were realigned. The main outstanding action is the organisation of DG specific awareness raising trainings that is considered ongoing.

- acquisition value above EUR 420;
- controlled by the DG ENER,
- expected to be used during more than one reporting period. Items with an acquisition value below the threshold (currently set at € 420) are booked as expenses in the accounts.

As per Art 157 of the FR and Art 250 of the RAP, physical localisation checks of the inventoried items shall be carried out at least on a three-year basis. DG ENER performs physical localisation checks to ensure the completeness of the inventory. After each inventory mission, the information is uploaded in ABAC ASSETS.

The physical tracking of certain assets is limited due to their nature or their accessibility (e.g. cameras and accessories which are located too high or the tracker cannot get out of the zone).

To address this a register is constantly updated during the inventory visits, in which assets which could not be physically tracked but which have already received a barcode, assets which are located in inaccessible areas or which are tracked but do not have a barcode because they cannot be labelled are recorded.

In conclusion, DG ENER's current procedures and controls are sufficient and work as intended.

2.2 Audit observations and recommendations

This section reports and assesses the observations and conclusions reported by auditors which could have a material impact on the achievement of the internal control objectives, and therefore on assurance, together with any management measures taken in response to the audit recommendations.

2.2.1 Internal Audit service (IAS)

During the reporting period, IAS carried out four engagements related to DG ENER. Two of them were completed:

1. Audit on the Governance and Supervision of the Nuclear Decommissioning Assistance Programmes (NDAP). In its report issued in September 2015, the IAS, while acknowledging the ongoing efforts in re-enforcing the sector, ensuring close coordination and cooperation with the implementing bodies and the Member States in question, concluded that serious shortcomings in the implementation of the Nuclear Decommissioning Programmes were detected. As an outcome three observations / recommendations were formulated. They concerned:

- Assessment of ex-ante conditionalities (critical);
- Adequacy of the control strategy (very important);
- Lack of mechanism ensuring co-financing (important).

DG ENER accepted the recommendations and prepared an action plan to address the identified weaknesses. The plan foresees:

- Preparation of a report summarising the assessment of ex-ante conditionalities done up to date, consultation of the Legal Service and DG BUGD (both completed in 2015), as well as in-depth review/assessment of the robustness of the financing plans provided by the Member States in question.
- Documentation of the definition of a comprehensive control strategy and establishment of satisfactory reporting practices from implementing (partially completed in 2015).
- Definition of guidance on co-financing and ensuring that monitoring reports include complete information on co-financing.

The above actions are planned to be implemented in 2016.

One important recommendation issued by former MOVE/ENER SIAC in June 2014 in its final report of audit on program supporting nuclear decommissioning was followed up by the IAS in the framework of the audit above.

Having carefully considered the IAS critical recommendation issued, DG ENER has concluded that it had an impact on the assurance for the year 2015 and, therefore, it would qualify the declaration of assurance with a reservation.

DG ENER agreed with the IAS conclusions and recognised a shortcoming in the internal control system in 2014. The analysis of the available information and data in 2015 led to the conclusion that the issue at stake was not of a systematic nature.

DG ENER assesses that no financial shortfall is expected in the period until 2020 for any of the three beneficiaries concerned (SK, BG and LT).

2. Audit on the Supervision of the Implementation of CEF in DG ENER. In its final report, issued end of January 2016, IAS concluded that further improvements were necessary to ensure effective supervision arrangements on the implementation of the CEF programme and on the achievement of the CEF and TEN-E objectives. Three observations/recommendations were formulated:

- DG ENER's Supervision strategy on PCIs development (very important);
- Commission's Communication on PCIs implementation (important);
- CEF mid-term evaluation (important).

DG ENER accepted the recommendations. The action plan to address the identified weaknesses (by the end of 2016) was prepared.

Internal Audit Service – conclusion on the state of internal control:

Since the reorganisation of the audit functions at the Commission, IAS has been entrusted with the responsibility to issue a conclusion on the state of internal control. In its conclusion the IAS stated that the internal control systems audited were in principle working satisfactorily except in the area of the NDAP where serious shortcomings were identified.

2.2.2 European Court of Auditors (ECA)

a) Audit work 2015 - Statement of assurance (DAS) 2014

In the context of DAS 2014, ECA assessed *Energy* as part of the *Competitiveness for Growth and Jobs* chapter[89]. ECA concluded for the whole chapter that the testing of transactions indicates that the most likely error present in the population is 5.6% and that the overall audit evidence indicates that accepted expenditure is affected by a material level of error. *Energy* payments represent 8.8% of the total of the whole chapter.

ECA selected five transactions (out of the total 166 transactions sampled for the Chapter) for review in the field of Energy: one payment related to FP6, two payments related to EEPR, and two payments related to the Nuclear Decommissioning programme.

From the five sampled payments in the field of energy ECA found errors:

- In the FP6 payment – a non-quantifiable error related to delay in transfer of funds to beneficiary and lack of non-essential documents;
- In a payment from the EEPR programme with observations related to ineligible expenses and late payment.

For the remaining three payments related to the EEPR programme and to the Nuclear Decommissioning programme ECA did not issue any observation.

The findings of ECA on which the Commission agreed are subject to a systematic follow-up.

As a result of its review of the DG ENER 2014 AAR, ECA made an observation related to a technical issue for the calculation of the weighted average error rate. However, as the only programme concerned by this issue was FP7, the impact on DG ENER's weighted average error rate (+0.41%) and on the resulting amount at risk (+ EUR 2.5 million) was very limited. In addition, ECA made an observation related to the methodology used by DG ENER for calculating the residual error rate for EEPR as reported in the 2014 AAR, as DG ENER has included in its calculation for the residual error rate of EEPR the results of audits carried out by the Court, but only for the findings corroborated by DG ENER's analysis.

The ECA recommended that the Commission[90]:

(i) use all the relevant information available to prevent, or detect and correct errors before reimbursement;

(ii) based on its experience under the FP7, develop an appropriate risk management and control strategy for Horizon 2020, including adequate checks of high-risk beneficiaries such as SMEs and new entrants and costs declared under specific eligibility criteria;

(iii) ensure that its services take a consistent approach to the calculation of weighted

[89] Chapter 5 of the ECA's annual report 2015 (OJ C 373, vol. 57, 10.11.2015)

[90] Chapter 5 of the ECA's annual report 2014 (OJ C 373, vol. 58, 10.11.2014, paragraph 5.35)

average error rates and the resulting assessment of amounts at risk.

The Commission accepted the Court's recommendations. The follow-up actions on recommendations (i) and (ii) are described in details in DG RTD's AAR 2015. Concerning recommendation (iii), DG ENER is taking all the necessary measures to ensure consistency of the approach for the calculation of the weighted average error rates and the amounts at risk.

In addition, still for the purpose of the 2014 Statement of Assurance, the Court performed an audit of the accounts of DG ENER as at 31.12.2014. This included analysis of closure operations, substantive testing of invoices and pre-financings and analysis of cut-off data. The Court did not issue any observations.

b) Audit work 2015 – Special reports

In 2015 the ECA completed the **Performance Audit on improving the security of energy supply.** *"Improving the security of energy supply by developing the internal energy market: more efforts needed.* **The Special Report was published on 15 December** (SR n°16/2015). This audit sought to assess whether the security of energy supply was effectively improved by EU internal energy market policy measures and spending on energy interconnectors and storage infrastructure It is one of the priorities of the Court and is of considerable importance for the Commission, being linked to the first two dimensions of the Energy Union, i.e. (i) Energy security, solidarity and trust and (ii) a fully integrated European energy market.

The auditors concluded that the energy infrastructure in Europe is generally not yet designed for fully integrated markets and therefore does not currently provide effective security of energy supply.

Eight of nine the recommendations made were accepted by the Commission:

- to complete its assessments of the internal energy market and initiate any necessary infringement procedures against Member States (MS);
- to assure that ACER has the necessary powers to obtain relevant information from MS;
- to promote widespread development of transparent trading mechanisms for both gas and electricity;
- to expedite the process of comitology to ensure approval of the electricity network codes;
- to consider establishing electricity interconnection objectives based on market needs and reassess the potential costs and benefits of the gas target model, and consider alternatives to the extensive construction of gas pipelines;
- to identify cross-border energy infrastructure not full used, to work with stakeholders in the MS on improvement of its use, and to explore the benefits for setting up regional transmission system operators (TSOs);
- to draw up a comprehensive EU-level energy infrastructure needs assessment as a basis for the development of the internal energy market and to put in place a capacity to model energy market;
- to refine planning procedures and prioritisation and funding of projects of common interest (PCIs) in the light of a comprehensive EU-level energy infrastructure needs assessment.

These recommendations are being acted upon. As of end 2015, the Commission had scrutinised national laws of all 28 MS and infringement procedures (pilot letters, reasoned opinions, etc.) had been launched where necessary. The priorities for a better targeting/planning with respect to energy infrastructure were set out in the relevant legal framework (TEN-E regulation) and in the Ten Year Network Development Plans.

Regarding planning procedures and prioritisation, The Commission works closely with the EIB and other stakeholders to increase technical assistance for improving the pipeline of projects of strategic interest.

The Court also recommended making legislative proposals on how to make its decisions to select energy infrastructure projects for funding subject to the proper and continuous functioning of the energy market in the MS.

The Commission strongly believes that equal progress is needed on infrastructure and market regulation for ensuring an effective internal energy market. However, a rigid conditionality would be too complex to implement in a legally enforceable manner and risks being detrimental to the development of needed infrastructure.

c) Follow-up of recommendations issued in previous years

DG ENER has implemented the remaining correction to errors detected by the ECA in its 2008°Annual Report, concerning ineligible costs in the nuclear decommissioning funds.

As regards to the previous DAS observations accepted by the Commission, all have been closed by DG ENER or EASME.

2.2.3 Overall conclusion

Overall, internal and external audit work contributes significantly to the continuing improvement in DG ENER systems and operations.

The IAS makes recommendations that are subject to a systematic follow up by the Directorate-General.

After reviewing these cases, and taking into account in particular the critical shortcoming identified by the IAS in their report "Audit on the Governance and Supervision of the Nuclear Decommissioning Assistance Programmes (NDAP)", DG ENER has decided to introduce a new reservation related to the adequacy of the assessment in 2014 of the ex-ante conditionalities to be fulfilled by the Member States (BG, SK and LT) for the NDAP.

As developed in previous sections, an action plan has been agreed and a number of actions have already been implemented while an external evaluation is currently ongoing, which will be taken into account in the mid-term evaluation. An interim report is scheduled for beginning of May followed by a final report in October 2016.

Finally, ECA findings and recommendations are similarly subject to a systematic follow-up. Action plans have been put in place and implemented.

2.3 Assessment of the effectiveness of the internal control systems

The Commission has adopted a set of internal control standards, based on international good practice, aimed at ensuring the achievement of policy and operational objectives. In addition, as regards financial management, compliance with these standards is a compulsory requirement.

DG ENER has put in place the organisational structure and the internal control systems suited to the achievement of the policy and control objectives, in accordance with the standards and having due regard to the risks associated with the environment in which it operates.

DG BUDG launched in 2015 a consultation on the new framework of internal control system at the Commission. Some important changes are discussed. The new setup is expected to be adopted by mid-2016.

2.3.1 Source and methodology for the assessment

DG ENER annual review of its implementation of the Internal Control Standards (ICS 15) was based on a number of measures and sources of information including:

- Internal control standards self-assessment;
- Implementation of the action plan for the prioritised internal control standard for 2015 (ICS 12);
- Analysis of the register of exceptions and non-compliance events;
- Analysis of the results of IAS and ECA audit work;
- Implementation of action plans stemming from audit recommendations;
- Assessment of the internal control coordinator;
- Information on internal control issues received through the AOSD's Management Reports.

2.3.2 2015 DG ENER Internal Control Standards Self-Assessment

The 2015 internal control self-assessment included – on top of the methodology proposed by the DG BUDG – a number of reliable auditing techniques (e.g. online survey for staff, interviews with management and key staff, analyses, verification of documents, inspections of archives). Such an approach aimed to provide a more reliable basis for the final assessment.

Fifteen standards covering six "building blocks" were tested. Following the decision to centralise the internal audit function within IAS early 2015, the assessment of the ICS16 Internal Audit Capability became obsolete.

Based on work performed, no weakness, error, fact or action that would significantly jeopardise the effectiveness of DG ENER internal control system was identified. Only minor issues were noticed for some standards. In two cases (Business Continuity and

Document Management) they resulted in the 'Partially effective' rating. This, however, did not in any way influence the overall assessment.

2.3.3 Exceptions and non-compliance events

The functioning of the internal control systems was closely monitored throughout the year by the systematic registration of non-compliance events (16 in 2015) and one exception.

The analysis of DG ENER 2015 exceptions and non-compliance register outlined that the main common sources of errors related to:

- commitments;
- missions procedures;
- contractual and financial procedures;
- organisation of meetings (with external experts).

The exception event registered related to contractual and financial procedures.

The impact of these errors on the assurance of the authorising officer was not assessed as major. In January 2016 a communication to all concerned was issued as a reminder way of the rules in place.

2.3.4 Prioritised ICS

For 2015, DG ENER decided to prioritise ICS12 Information and Communication.

An action plan for the prioritised standard was developed and fully implemented. This plan aimed at making the communication activities more targeted, adapted to the needs and objectives of the DG and effective. The action plan was implemented in 2015.

A new external communication strategy was put in place to improve the effectiveness and efficiency of DG ENER's communication actions. In order to raise staff awareness and engagement on communication and to increase collegiality on communication matters, an internal communication network has been set up and improvements were brought to the communication-related intranet section. Cooperation with the Cabinet, SPP and DG COMM has been reinforced, with particular attention being paid to finding communication synergies with DG CLIMA.

In order to deal with legal and regulatory requirements related to communication (including copyright law or instructions and guidelines from central services), a communication compliance officer was appointed, and the compliance-related section of the intranet improved.

The current revision of the internal control standards foresees that DGs will no longer be required to define prioritised standards in the management plan. Additionally, this new internal control framework was not yet decided and adopted. As a consequence, DG ENER will not prioritise any standard for 2016.

2.3.5 General risk environment

In 2014, DG ENER was confronted with a lack of payment appropriations on three main legacy programmes (TEN-E, FP7 and EEPR) and took measures to mitigate the financial and the reputational impact of this situation as best as possible. Therefore, at the beginning of 2015, DG ENER had signalled this risk as significant. However, the shortage of payment appropriations did not materialise in 2015 and the risk has not been carried over to 2016 either.

In 2015, the IAS audit on the Nuclear Decommissioning Assistance Programmes highlighted several risks (as discussed in sections 2.1.2.2.3 and 2.2.1). Measures were taken, in the framework of the action plan specific to this audit, to address these issues and reduce or mitigate the identified risks. Besides, a new reservation is introduced in Section 3.2 to cover the critical finding made by the IAS in relation to the level of assessment by DG ENER in 2014 of the ex-ante conditionalities to be fulfilled by the Member States for the Nuclear Decommissioning Assistance Programmes.

Moreover, it should be noted that, as developed in section 2.1.2.2.6, the handover to DG ENER on 01 July 2015, of the supervision of the ITER programme implies a significant changes for DG ENER's risk environment. This first of its kind, highly innovative project operates under a specific governance structure and faces significant performance risks.

These risks were taken into account in the framework of the preparation of the 2016 Management Plan and measures are taken to mitigate the financial and the reputational impact of this situation.

2.3.6 Conclusion on the effectiveness of the entire control system

The 2015 internal control self-assessment did not reveal any weakness, error, fact or action that would significantly jeopardise the effectiveness of the DG ENER entire internal control system for the reporting year.

Based on all the elements and factors described in point 2.3 of the present report, we conclude that the internal control system was – to the best of our knowledge – effectively implemented in DG ENER in 2015, except for the elements of the control system of the Nuclear Decommissioning Assistance Programme which had led to the weaknesses identified by IAS audit and for which the mitigating measures were still ongoing in 2015.

The following points also have to be emphasised with respect to DG ENER's conclusion on the entire control system and the IAS conclusion on the state of internal control[91]:

- The critical recommendation refers to a non-systematic shortcoming in a specific process of a single programme which happened in 2014. No major issues were identified in this area in 2015.

[91] "(…) the internal control systems audited are overall working satisfactorily except in the area of the Nuclear Decommissioning Assistance Programmes where serious shortcomings (two findings with one rated as critical and one as very important) were identified." (see point 2.2.1 of the present report)

- The very important recommendation calls for drafting a comprehensive control strategy for the NDAP. A number of elements of such strategy are already in place. Therefore, the risk for the overall effectiveness of the entire control system of DG ENER is limited.

2.4 Conclusions as regards assurance

This section reviews the assessment of the elements reported above (in Sections 2.1, 2.2 and 2.3) and draws conclusions supporting the declaration of assurance and whether it should be qualified with reservations.

The information reported in Section 2 stems from the results of management and auditor monitoring contained in the reports listed. These reports result from a systematic analysis of the evidence available. This approach provides sufficient guarantees as to the completeness and reliability of the information reported and results in an adequate coverage of the budget delegated to the Director-General of DG ENER.

Management has reasonable assurance that overall suitable controls are in place and work as intended (taking into account also the multiannual character of the main programmes); risks are being mitigated and/or monitored thanks to the risk management process; improvements and reinforcements are being implemented.

DG ENER updated its anti-fraud strategy in 2015 and there is no indication that any additional temporary measures are necessary until full implementation of the revised action plan. Furthermore, the risk assessment in 2015 did not identify any critical or significant fraud risks.

As for the results from internal and external audits during the reporting year, they give an overall positive feedback, except for the critical finding identified by the IAS in relation to the audit on the Governance and Supervision of the Nuclear Decommissioning Assistance Programmes, concerning the Commission's assessment in 2014 of the ex-ante conditionalities to be fulfilled by the Member States.

This is the reason why DG ENER has introduced a new reservation as regards this matter and has put in place a solid action plan, agreed by the IAS. The action plan is being implemented and the final step – an in-depth study of the completeness of the decommissioning and financing plans - will be ready by October 2016.

Moreover, the residual risk from the audit recommendations remaining open is not considered to have a bearing on the declaration of assurance.

Furthermore, in relation to the internal control standards, DG ENER has – by the end of the reporting year - fully implemented the measures for priority standard 12 (Information and Communication). Besides, following the assessment made by DG ENER during the reporting year on the effectiveness of its internal control systems, the DG did not identify major areas for improvements.

Overall the controls carried out by DG ENER for the management of the budget, whether implemented directly or indirectly were effective for the reporting year. DG ENER also judges that the resources assigned in 2015 to the activities described in this report were used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.

Finally, the reservation on FP7 expenditure on reimbursements against cost statements is maintained, as set out in section 3.2 below. Indeed, the level of error of FP7 appears to be "persistently high" and the Residual Error Rate is not expected to be below the materiality threshold defined in Annex 4 "Materiality Criteria" by the end of the programming period, despite the ex-ante checks and ex-post controls implemented. Besides, the legal framework for FP7 can no longer be modified as all grant agreements have been signed. Radical simplifications to reduce errors (and to help achieve other policy objectives) were however introduced in Horizon 2020.

Therefore, under the prevailing risk environment and from a managerial point of view, DG ENER's AOD can sign the Declaration of Assurance, qualified with a reservation for the FP7 Research Programme and a reservation for the Nuclear Decommissioning Assistance Programmes, both detailed in section 3.2.

Overall Conclusion

In conclusion, management has reasonable assurance that, overall, suitable controls are in place and working as intended; risks are being appropriately monitored and mitigated; and necessary improvements and reinforcements are being implemented. The Director General, in his capacity as Authorising Officer by Delegation has signed the Declaration of Assurance albeit qualified by two reservations concerning:

- **The FP7 Program**: the residual error rate observed by ex-post controls on grants given under the Seventh Research Framework Programme is higher than the control objective (2%);

- **The Nuclear Decommissioning Assistance Programmes**: on the grounds of a non-systematic deficiency in DG ENER's assessment in 2014 of the ex-ante conditionalities to be fulfilled by the Member States (BG, SK and LT) for the Nuclear Decommissioning Assistance Programmes (NDAP), required by the 2013 Regulations (No 1368/2013 and No 1369/2013), in particular regarding the robustness of the financing plans established by Member States.

3. DECLARATION OF ASSURANCE AND RESERVATIONS

3.1 Declaration of Assurance

I, the undersigned, Director-General of DG ENER, in my capacity as authorising officer by delegation, declare that the information contained in this report gives a true and fair view[92]*.*

State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.

This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls, the opinion of the Internal Auditor on the state of control for years prior to the year of this declaration.

Confirm that I am not aware of anything not reported here which could harm the interests of the institution. However the following reservations should be noted:

- FP7: the residual error rate observed by ex-post controls on grants given under the Seventh Research Framework Programme is higher than the control objective (2%);

- Nuclear Decommissioning Assistance Programmes: non-systematic deficiency in DG ENER's assessment in 2014 of the ex-ante conditionalities to be fulfilled by the Member States (BG, SK and LT) for the Nuclear Decommissioning Assistance Programmes (NDAP), required by the 2013 Regulations (No 1368/2013 and No 1369/2013), in particular regarding the robustness of the financing plans established by Member States.

Brussels, the 07th of April 2016

[signed]

Dominique Ristori

[92] True and fair in this context means a reliable, complete and correct view on the state of affairs in the DG.

3.2 Reservations

DG ENER	Reservation on FP7
Type of reservation	Reservation on materiality grounds
Title of the reservation, including its scope	Reservation concerning the rate of residual errors with regard to the accuracy of cost claims in Seventh Framework Programme (FP7) contracts
Domain	Internal policy / Direct management of FP7 grants paid by the DG or subject to cross-sub-delegations to other DGs
ABB activity and amount	32.04 Horizon 2020 – Research and innovation related to energy Payments made for FP7 amount to EUR 97.03 million[93].
Reason for the reservation	At the end of 2015, the corrected residual error rate is not below the materiality threshold foreseen for the multi-annual period (2%).
Materiality criterion/criteria	The materiality criterion is the residual error rate, i.e. the level of errors that remain undetected and uncorrected, by the end of the management cycle. The control objective is to ensure that the residual error rate on the overall population is below 2% at the end of the management cycle. As long as the residual error rate is not (yet) below 2% at the end of a reporting year within the FP's management lifecycle, a reservation would be made.
Quantification of the impact	The Residual Error Rate is 3.24% for FP7 projects. This rate does not take into account corrections in favour of beneficiaries. The maximum impact is calculated by multiplying the residual error rate in favour of the Commission by the amount of FP7 payments and clearing of previous pre-financing in 2015 (in total: EUR 162.29 million). The estimated amount at risk in 2015 is EUR 5.26 million.

[93] The amount for the ABB activity 32.04 reported in Annex 3, table 2, column 2 "Payments made" show a total of EUR 130.35 million as it also includes payments for FP6 and H2020 projects, to the ELENA facility as well as other expenditure of administrative nature related to energy.

Impact on the assurance	Legality and regularity of the affected transactions, i.e. only payments made against cost claims (interim payments and payments of balance). The assurance is affected within the scope of the quantified budgetary impact. However, the impact on assurance is limited by the reduced net financial impact that will occur in some cases where eligible expenditure is limited by budget ceilings. The amount at risk of EUR 5.26 million represents 0.46% of DG ENER payments in 2015 (1.14 billion). Consequently reasonable assurance can be provided.
Responsibility for the weakness	The main reasons for errors are : - the complexity of the eligibility rules as laid down in the basic acts decided by the Legislative Authorities, based on the reimbursement of actual eligible costs declared by the beneficiaries; - the fact that there are many thousands of beneficiaries making claims, and not all can be fully controlled. The different control provisions set out by the Commission services, along with the audit certificates on financial statements and ex-post audits, can mitigate these risks to a certain extent, but can never be carried out on 100% of the cost claims received.
Corrective action	The possibilities to simplify the FP7 rules have been exhausted, although there is some evidence that the simplification measures introduced in 2011 reduced errors. The remaining scope to reduce errors will be addressed in particular through the following actions by the Research services: - continuing on-going efforts to give guidance and feedback to the participants and certifying auditors to prevent errors occurring; - continuing efforts to give guidance and specific trainings to the staff involved in ex-ante controls; - continuing with its control and audit work in order to further reduce the FP7 residual error rate: a third common representative audit sample has been launched.

DG ENER	Nuclear Decommissioning Assistance Programmes (assessment of the ex-ante conditionalities)
Type of reservation	Reservation on the grounds of a non-systematic deficiency in the internal control system
Title of the reservation, including its scope	Reservation related to the adequacy of DG ENER's assessment in 2014 of the ex-ante conditionalities to be fulfilled by the Member States (BG, SK and LT) for the Nuclear Decommissioning Assistance Programmes (NDAP), required by the 2013 Regulations (No 1368/2013 and No 1369/2013), in particular regarding the robustness of the financing plans established by Member States.
Domain	Indirect management / Nuclear Decommissioning Assistance Programmes
ABB activity and amount	32.03 - Nuclear Energy
Reason for the reservation	The Regulations on Union support for the nuclear decommissioning assistance programmes in Lithuania, Bulgaria and Slovakia under the 2014-2020 MFF, adopted by the Council on 13 December 2013, stipulate that by 01 January 2014 the three Member States had to take the appropriate measures to fulfil three ex-ante conditionalities to provide assurance that the safe completion of the decommissioning can be achieved after termination of Union financial assistance: *"(a) comply with the Euratom Treaty's acquis in the area of nuclear safety, in particular regarding the transposition into national law of Directives 2009/71/Euratom16 and 2011/70/Euratom;* *(b) establish, in a national framework, a financing plan identifying the full costs and the envisaged funding sources required for the safe completion of decommissioning of the nuclear reactor units, including management of spent fuel and radioactive waste, in accordance with this Regulation;* *(c) submit to the Commission a revised detailed decommissioning plan, broken down to detail the level of decommissioning activities, including a schedule and corresponding costs structure based on internationally recognised standards for the estimation of decommissioning costs."* The Regulations provided for the possible suspension of the assistance in case these ex-ante conditionalities were not fulfilled in a satisfactory manner by the time of adoption of the work program for 2014. **Critical finding of the IAS audit** The reservation follows the critical finding of the IAS audit report on "Governance and Supervision of the Nuclear Decommissioning Assistance Programmes in DG ENER", issued on 03 September 2015.

	The IAS audit concluded that in 2014 DG ENER did not assess, as required by the regulations, whether the assurance provided by the financing plans established by Member States was satisfactory. More specifically, the open item for the action plan is about the need to deepen and document the analysis of the robustness of the financing plans. **Reason for the reservation** The reason for reservation is a shortcoming in the DG ENER's internal control system in 2014, concerning the not sufficiently comprehensive assessment of the ex-ante conditionalities of the Member States, in particularly of the financial plans with envisaged funding sources. If the financing plans established by the Member States are not robust, the safe completion of the decommissioning process in the long term may be at risk. The risk has not materialised at this stage. The current analysis performed by DG ENER after the completion of the audit shows no financial shortfall should be expected for the period until 2020 for any of the three beneficiaries. On the basis of the current information, for the period post 2020 the financial gap is limited for SK and BG while it is larger for LT, although it extends over a very long period (until 2038). In any case, national laws stipulate that the Member States will pay for the decommissioning in case the EU financing is stopped. DG ENER is currently carrying out an in-depth assessment of the robustness of the financing plans in each Member State concerned.
Impact on the assurance	The conditionalities followed the Special Report 16/2011 of the European Court of Auditors and the European Parliament's decision on the 2011 discharge for the European Commission. The deficiencies in the assessment of the ex-ante conditions in 2014 could thus have an adverse impact on the fulfilments of Commission’s commitments towards the Discharge Authority. Furthermore, decommissioning remains an area of special interest for ECA, which is finalising its performance audit. Further attention may be expected when the ECA special report is finalised in 2016.
Responsibility for the weakness	DG ENER was responsible for the assessment of the conditionalities. However, it needs to be underlined that: - the deficiencies in the review of the ex-ante conditionalities must be considered as a non-systematic deficiency of the internal control system in 2014 linked to particular circumstances, notably timing constraints for Members States;

	- DG ENER has put in place the appropriate corrective measures, some of which are already implemented.
Corrective actions	The remedial actions are on track to be implemented. To address the recommendations by IAS, DG ENER has adopted an action plan, with the following relevant actions: 1) Produce a report on the assessment of NDAP ex-ante conditionalities, fully documenting the extent of the checks and their conclusions on ex-ante conditionalities set in Art. 4.1(b), and 4.1(c) of Council Regulations 1368/2013 and 1369/2013. The assessment included in this report is that requested in Art. 4.3 of the Council Regulations 1368/2013 and 1369/2013. This report is an in-depth review/assessment of the relevance and feasibility of the detailed decommissioning plans, based on clear internal guidance and standards. - COMPLETED 2) Consult Legal Service and DG BUDG to establish legal options of the Commission vis-á-vis the Member State to provide continued assurance of compliance and address identified weaknesses. - COMPLETED 3) Carry out an in-depth review/assessment of the robustness of the financing plans in each Member State concerned, based on the outcome of deliverable (1) and issues therein identified. – OCTOBER 2016 In addition, a new pillar assessment is planned in 2016 for the Central Project Management Agency (CPMA) and is ongoing for the EBRD.