2015

Annual Activity Report

DG CLIMATE ACTION

Foreword

Climate change is one of the major global challenges. The strong consensus among scientists is that greenhouse gases emitted by human activities are responsible for most of the warming of the Earth's climate since the 1950s. Continued emissions of greenhouse gases will cause further warming and changes to the atmosphere, land and oceans in all regions of the globe. Science has shown that recent climate changes have had widespread impacts on human and natural systems[1]. There is an increasing awareness that climate action is required at several levels, both to mitigate climate change by cutting emissions and to adapt to it by increasing resilience. The European Union is at the forefront of global efforts to address this challenge and 2015 was a milestone year for the climate.

The new universal and legally-binding deal agreed in Paris in December 2015 provides a clear pathway to limit global warming to well below 2 degrees and strengthen our ability to deal with climate impacts. The Paris Agreement will accelerate the transition to low-carbon, climate-resilient economies worldwide. This transition requires ambitious action both to reduce emissions and to prepare for the impacts of climate change.

The EU has made a clear pledge to contribute to the global effort. Climate change is one of the five headline targets set out in Europe 2020 – the EU's ten year strategy for sustainable growth launched in 2010. The climate and energy policy framework 2020 is at the heart of the "resource-efficient Europe" flagship initiative. For the period after 2020, the EU has already agreed to a binding, economy-wide target to reduce domestic greenhouse gas emissions by at least 40% by 2030, compared to 1990 levels, an EU-wide binding target for renewable energy of at least 27% and an indicative energy efficiency target of at least 27% compared to business-as-usual. The 2030 climate and energy framework is in line with the 2050 Roadmap for moving to a competitive low-carbon economy, outlining a low-carbon pathway towards the objective of reducing EU's greenhouse gas emissions by 80-95% by 2050 compared to 1990.

The preparatory work to translate the 2030 climate and energy framework into concrete policy proposals made significant progress in 2015.

[1] In its 5th report published in 2014, the United Nations Intergovernmental Panel on Climate Change (IPCC) confirmed clearly that the planet is warming and that the basic causes are the use of fossil fuels due to human activity and the disappearance of forests.

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INTRODUCTION

The DG in brief

The critical mission of DG Climate Action (DG CLIMA) is to lead the EU in international negotiations in the areas of climate change mitigation and adaptation and the protection of the ozone layer; to develop and implement EU legislation to meet key targets in the 2020 Strategy and the 2030 Climate and energy framework (including robust monitoring, reporting and verification systems); to contribute to the transition towards a low-carbon economy in the EU while increasing resilience to the negative effects of climate change; and the mainstreaming (integration) of climate action into the EU budget and into other EU policies.

DG CLIMA is the smallest operational DG in the European Commission, created in February 2010, with around 180 staff at the end of December 2015. Close to 90 % of staff are active in policy making. DG CLIMA has consistently relied on efficiency gains, keeping support functions and overheads to a bare minimum, and will continue putting the large majority of its resources into frontline activities. The DG benefits, together with DG Environment, from the services of a Shared Resources Directorate (SRD).

In order to bring itself in line with the Commission's key strategic priority, "A resilient Energy Union with a forward-looking climate change policy", and to concentrate human resources on the deliverables of the Commission's Work Programme 2016 and beyond, the DG had an internal reorganisation at the end of the year 2015 and reallocated staff to the agreed priorities. The three existing Directorates are now renamed: "International and mainstreaming", "European and international carbon markets" and "Climate strategy, governance and emissions from non-trading Sectors".

The DG achieves its two general objectives of contributing to keeping global warming well below 2°C and to the recovery of the ozone layer in three ways:

1. By monitoring the implementation of its wide range of climate policies, and ensuring the enforcement of EU climate law.

2. Through the EU emissions trading system, hosted and managed in-house by the Commission.

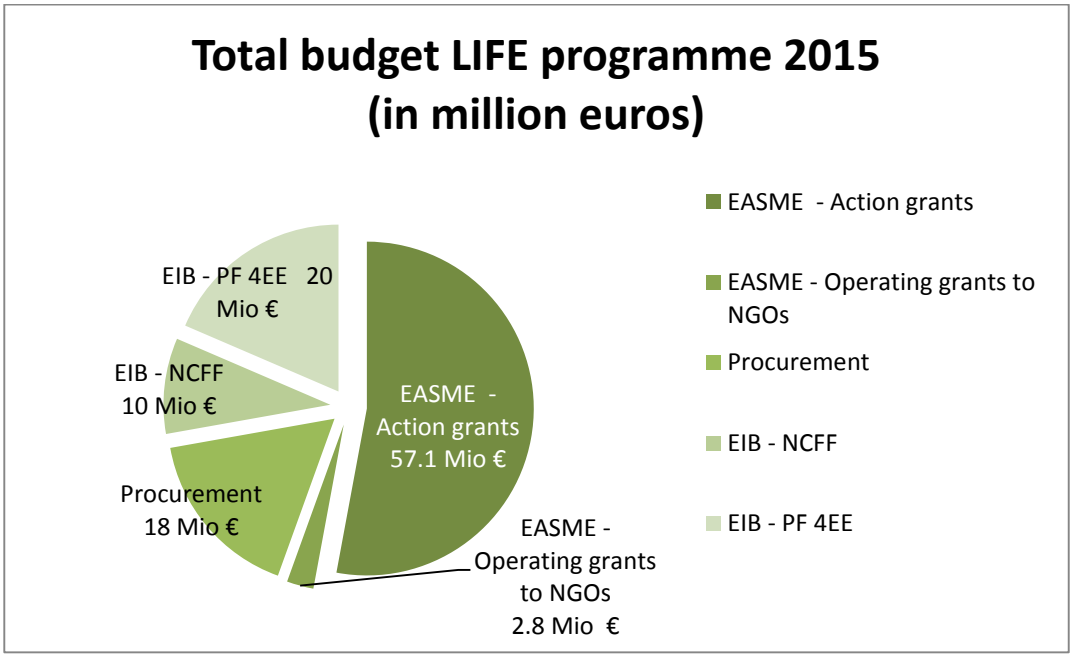
3. Through the climate sub-programme of the LIFE financial programme. The DG, together with DG BUDGET, monitors the achievement of the 20 % climate mainstreaming target in the EU budget[2].

DG Climate Action manages the EU ETS, the flagship market-based instrument covering over 11.000 emitters in power generation and energy-intensive industries, as well as airlines in 31 countries. It is the world's largest company-level cap-and-trade system for trading in allowances to emit greenhouse gases (GHGs). Today, it covers around 45 % of total EU GHG emissions. It also contains assets backing an EU carbon market currently worth around EUR 40 billion per year. The EU ETS is now in its third

[2] The Commission Communication on "A budget for Europe 2020" of June 2011 stated the intent "to increase the proportion to at least 20%". This objective has been confirmed by the European Heads of State in the conclusions of the European Council on 7-8 February 2013: "Climate action objectives will represent at least 20% of EU spending in the period 2014-2020 and therefore be reflected in the appropriate instruments". Furthermore, some instruments have specific targets set in the legal basis.

phase, running from 2013 to 2020, which is proceeding successfully, in terms of auctioning of allowances, and provision of free allocations to industry to avoid delocalisation of industrial sectors due to 'carbon leakage'. The IT system supporting the EU ETS is under continuous risk of fraudulent cyber-attacks. Despite many efforts deployed in cooperation with other DGs to reduce the risks, the system remains critical and relatively vulnerable in the fast-evolving virtual IT environment.

The management of the new climate sub-programme of LIFE has been delegated to the Executive Agency EASME[3] for the action and the operating grants, amounting to EUR 59.8 million in 2015 action grants plus operating grants, and to the EIB[4] for two financial instruments (PF4EE and NCFF)[5] totalling EUR 30 million of commitment appropriations in 2015.



2015 in brief

2015 was the first full year of the Juncker Commission's 2014-19 mandate. DG CLIMA contributed to three of the 10 key priorities of the Commission, but primarily to the key priority 'A resilient energy union with a forward looking climate policy', acknowledged as the general objective of the DG.

The main highlights of 2015 were:

- the adoption of the world's first global climate deal for limiting global warming to well below 2 degrees C at the UN climate conference in Paris (COP 21) where the EU lead the 'High Ambition Coalition'

- the adoption by the Commission of the proposal for review of the EU ETS (phase 4 -post 2020) and

[3] Executive Agency for Small and Medium Enterprises in Brussels

[4] European Investment Bank in Luxemburg

[5] Private Finance for Energy Efficiency Instrument (PF4EE) and Natural Capital Financial Facility (NCFF)

for the creation of a new Modernisation and Innovation Fund;

- the adoption by the Commission of the Energy Union Strategy, prepared by prepared by the Secretariat General in cooperation with DG Climate Action and DG Energy, which includes actions to streamline climate and energy governance, and the publication of the first report on the State of the Energy Union;

- the high compliance rate of 99% of verified emissions under the EU ETS, including the successful compliance exercise for ETS aviation which is an outstanding achievement for climate legislation;

- the adoption by the Legislative Authority (European Parliament and Council) of the Market Stability Reserve;

- the adoption by the Legislative Authority of a Monitoring, Reporting and Verification system for emissions from ships;

- the launch of a new and integrated Covenant of Mayors for Climate and Energy;

- the successful call for LIFE project grants and the first financial agreements signed under two new financial instruments (PF4EE and NCFF); and

- the internal reorganisation of the DG at the end of 2015.

EXECUTIVE SUMMARY

The Annual Activity Report is a management report by the Director-General of DG CLIMA 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 (deliverables) of the year (executive summary of section 1)

The achievements across all policy fields of DG CLIMA support three of President Juncker's key objectives - first and foremost, 'A Resilient Energy Union with a forward looking Climate Policy", secondly ' New Boost for Jobs, Growth and Investment and finally "A Stronger Global Actor" – and are summarised below.

Implementation of the first priority requires a policy and a funding framework supporting the transition towards a resource-efficient and low-carbon economy in the EU. The Commission committed to cutting greenhouse gas emissions by 20% by 2020 (headline indicators in Agenda 2020) and the European Council of October 2014 has agreed on an at least 40% reduction domestically by 2030.

The major achievements of 2015 are summarised below:

The ambitious **global climate deal** reached in **Paris** at the UNFCCC climate summit in December 2015 provides a trajectory for limiting global warming to well below 2°C while aiming for 1,5°C[6]. It was a landmark success paving the way for global action to combat climate change in the decades to come. It is the first-ever universal, legally binding, global climate deal. The outcome also delivers on all of the EU's top priorities: commitments by all Parties, a long-term goal, a robust 5-year review cycle with the flexibility to strengthen ambition over time and a strong common transparency and accountability framework. The EU's leadership role in shaping the deal was indisputable, including its leading role in the progressive High Ambition Coalition which was critical in securing a global deal.

The Paris Agreement is the culmination of years of efforts by the international community to bring about a universal multilateral agreement on climate change. Following limited participation in the Kyoto Protocol and the lack of agreement in Copenhagen in 2009, the EU built a broad coalition of developed and developing countries in favour of high ambition that shaped the successful outcome of the Paris conference. The Paris Agreement sends a clear signal to investors, businesses, and policy-makers that the global transition to clean energy is here to stay and resources have to shift away from polluting fossil fuels.

Progress was also made in efforts to include an amendment to the **Montreal Protocol**, to include hydrofluorocarbons (HFCs) that is expected to lead to an agreement in 2016. The proposed amendment aims to limit the global production and use of HFCs. These are part of the family of fluorinated gases used in refrigeration and air-conditioning as a substitute for ozone-depleting

[6] Although the goal is qualitative, a reference to using the best available science to achieve this indirectly brings the IPCC's range of 40-70% reductions by 2050 (on 2010 levels), into the frame

substances but which contribute to climate warming. Global cumulative benefits would amount to a reduction of an equivalent to 79 gigatonnes (Gt) of CO_2 by 2050 and 127 Gt CO2eq over 40 years.

In April 2015, the EU adopted a Regulation that sets up an EU-wide monitoring, reporting and verification system **(MRV system) for shipping** as the first step in the EU strategy towards cutting emissions in this sector. It requires large ships over 5 000 gross tons using EU ports after 1 January 2018 to monitor and later report their annual verified CO_2 emissions and other energy-related data. The EU's MRV system for shipping emissions is designed to contribute to building an international system in the shipping sector. Discussions on this are ongoing within the International Maritime Organisation (IMO). The EU MRV system for shipping will also provide new opportunities to agree on efficiency standards for existing ships.

The **Energy Union Strategy** approved by the European Council of 19 March 2015 not only aims to secure Europe's energy supply and ensure affordable and competitive energy and an integrated energy system, but also to revise the European emissions trading scheme and encourage private investment in new infrastructure and innovative technologies, while supporting the global deal for climate change agreed in Paris in December 2015.

The European Council endorsed in principle the need for integrated governance and monitoring process for the Energy Union. The first **State of the Energy Union report** in November 2015 with focus on the decarbonisation pillar included a description of the main aspects of the governance system, guidance to Member States on the process and structure of developing the National Energy and Climate Plans, and a set of key energy and climate indicators.

The agreement reached in September 2015 by the Council and Parliament on the introduction of the **Market Stability Reserve** (MSR) from 2019, will strengthen the EU Emissions Trading System (ETS). This aims to counteract the negative impacts of the existing allowance surplus and to improve the system's resilience to future shocks.

In July 2015, the Commission presented a legislative **proposal to revise** the **EU Emissions Trading System** (ETS) for the post-2020 period and create a 'Modernisation Fund' and 'a Innovation Fund' based on the auctioning revenues of the allowances in the EU ETS. By 2030, emissions from power plants and factories covered by the ETS will need to be 43% lower than in 2005 to achieve the EU's overall emissions reduction target. The ETS revision intends to make the ETS fit to play its full role as the main policy tool to achieve this.

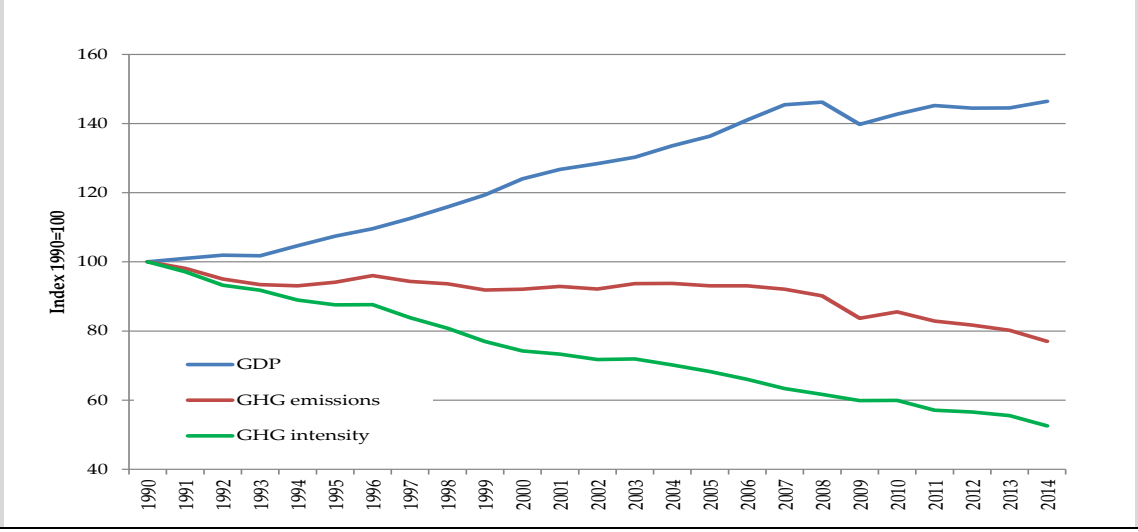
Reaching the EU decarbonisation objectives will require further bold action at local level. With this in mind, On 15 October 2015, the Commission launched a new **Integrated Covenant of Mayors** for Climate & Energy, covering both climate change mitigation and adaptation initiatives. The new Covenant will also have a strengthened international dimension and aims to inspire similar initiatives in other parts of the world. Currently more than 6000 cities have signed up to the Covenant.

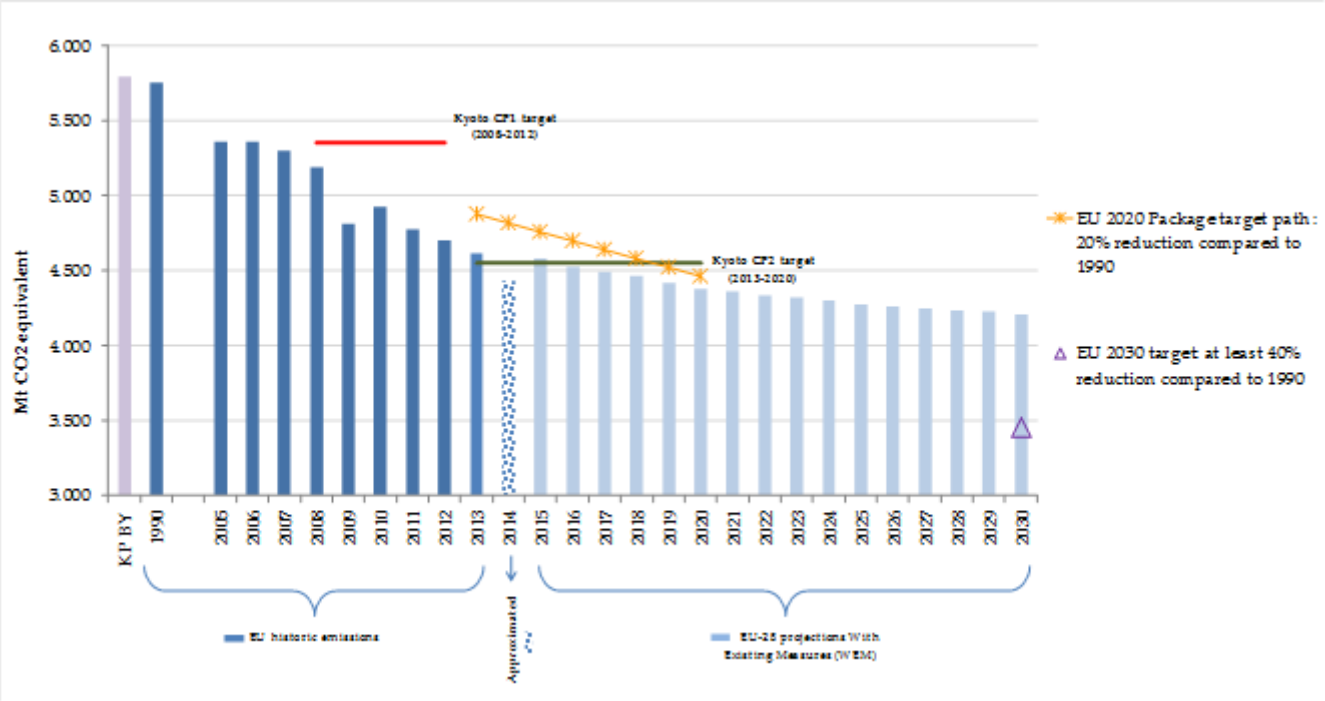
The horizontal integration of climate considerations into all relevant operational policies and spending programmes is an innovative feature of the 2014-2020 Multi-Annual Financial Framework (MFF). The political target to devote 20% of the EU budget to climate–related action (mitigation and adaptation**)** creates a basis for dialogue with all DGs in developing sector-specific mainstreaming methodologies. The total EU budget contribution to **climate mainstreaming** is estimated ex ante at 16,8 % in 2015 compared to 12,7% in 2014. Though progress is clearly being made, the Commission is currently not in a position to assess with confidence whether it is on track to reach the 20% objective over the 2014-2020 period.

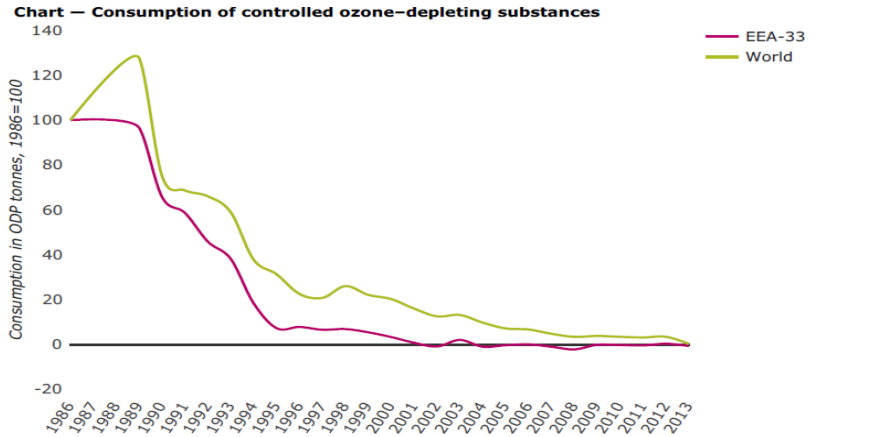
At the end of the second implementation year of the **LIFE Climate Action sub-programme**, all essential elements are fully operational and functional. Two calls for applications (2014 and 2015) have been closed and the commitments for action grants to projects resulting from the 2014 call

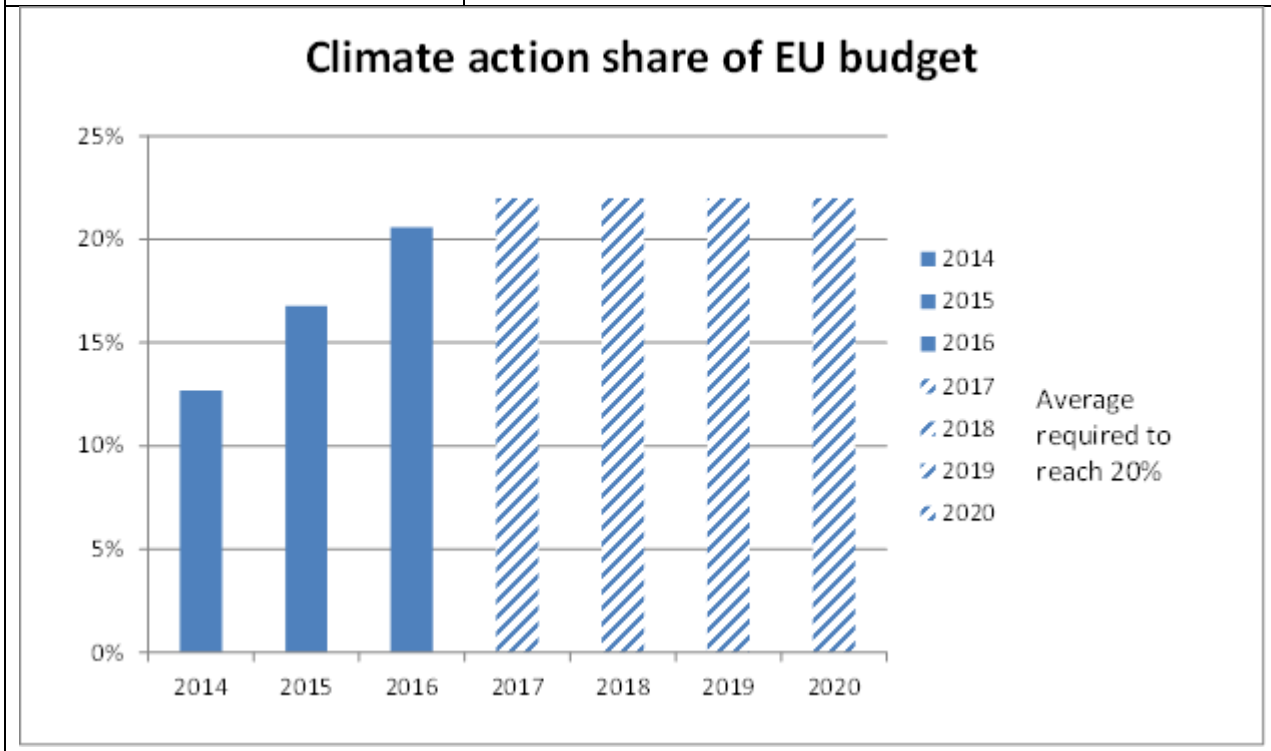
have been completed utilising the entire 2014 budget of EUR 44 million for traditional grants. The evaluation of the 2015 call is in a final stage. The financial instruments have also started to deliver in 2015: three contracts with intermediary banks in the Czech Republic, Spain and France aiming for EUR 200 million Energy Efficiency investments in total have been signed.

b) Key Performance Indicators (5 KPIs)

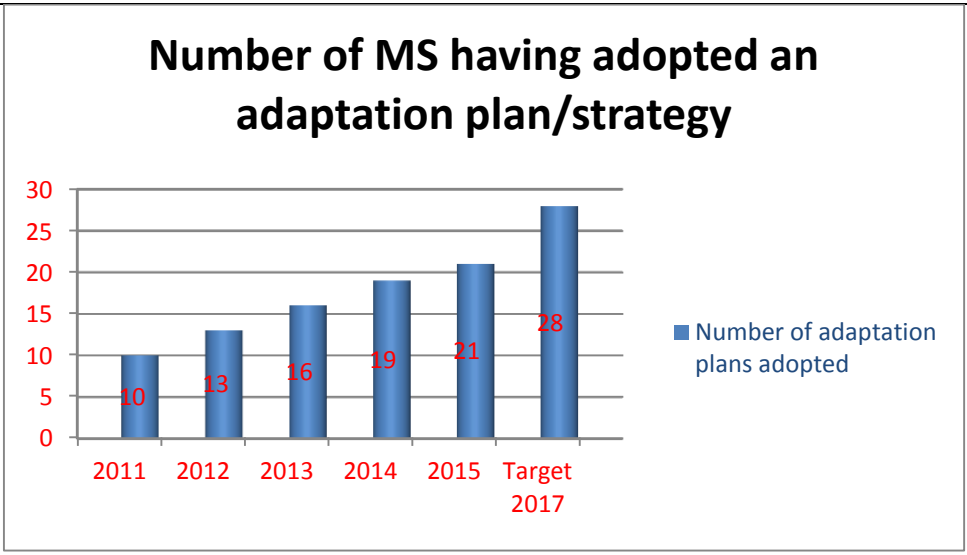
Result/Impact indicator	Trend	Target (or milestones)	Latest known results as per Annual Activity Report
Carbon intensity of the EU economy (**ratio of greenhouse gas emissions to GDP): Index (1990 = 100)** Source: European Commission and European Environment Agency (EEA) progress report	☺	Transition (shift) to a low carbon and climate resilient economy in the EU (by 2050)	Decoupling of GHG emissions and economic growth is a fact The EU continues to successfully decouple its economic growth from its GHG emissions. During the 1990-2014 period, the EU's combined GDP grew by 46 %, while total GHG emissions (excluding land use, land use change and forestry but including international aviation) decreased by 23 %. This decoupling led to the creation of new business opportunities and new jobs and made the energy system of the EU more secure and affordable. The EU has consistently shown that climate protection and economic growth can go hand in hand. The EU's GHG emission intensity of the economy, defined as the ratio between emissions and GDP, decreased by almost half between 1990 and 2014; from 100 (=index) in 1990 to almost 55 by 2014.
				

Most relevant KPI 1: Reduction of GHG emissions (EU 28) Source: European Commission and European Environment Agency (EEA) progress report.	☺	**Progress towards meeting 2020 objective of -20% reduction of greenhouse gas (GHG) emissions (headline target EU 2020 strategy)**  Target: minus 20 % of greenhouse gas emissions by 2020 compared to 1990 Conclusion: EU climate legislation in relation to both the EU Emission Trading System and the non-ETS sectors and its implementation in the Member States, has largely contributed to the considerable progress made. The EU is on track and might even overachieve the target of minus 20% GHG emissions by 2020. A reduction of minus 23% compared to 1990 was already reached in 2014. Emissions decreased 4% in 2014 compared to 2013. The latter result was partly due to an unusually warm year, which lowered energy demand.

Most relevant KPI 2: Consumption of ozone depleting substances (or ODS) (HCFCs = hydrochlorofluorocarbons and methyl-bromide) (EU 28) Source: EEA, UNEP Ozone secretariat CSI 006 , CLIM 049	☺	**Consumption of controlled ozone-depleting substances in the European Economic Area and worldwide (ODP tonnes)** UNEP defines "Calculated levels of Consumption" as "production plus imports minus exports of controlled substances. However, any export of controlled substances to non-Parties is not subtracted in calculating the consumption level of the exporting Party (paragraph (c) of Article 3)". This explains the negative figures. **Are ozone-depleting substances being phased out according to the agreed schedule?** **Fig. 1: Consumption of controlled ozone–depleting substances**  **Note:** Consumption of controlled ozone-depleting substances in the EEA (33) and worldwide in ozone depleting potential tonnes (ODP) (1986=100) NB: EEA-33 is 28 European Union Member States together with Iceland, Liechtenstein, Norway, Switzerland and Turkey Target: Phasing out of all ODS. Ban on both types of ODS (hydrochlorofluorocarbons or HCFCs and methyl-bromide) by 2020 .There has been a significant reduction in the consumption of ozone depleting substances (ODS) in the 33 EEA countries since 1986. This has largely been driven by the 1987 UN's Montreal Protocol. When the Montreal Protocol entered into force, the collective consumption of the EEA 33 was approximately 420 000 ozone depleting potential tonnes (ODP tonnes). Values around zero were reached in 2002 and consumption has consistently stayed around zero since then. Thanks to its legislation on ozone depleting substances (ODS), the EU has even achieved a negative consumption of ozone depleting substances. . In many aspects, the current EU regulation on substances that deplete the ozone layer (1005/2009/EC) goes further than the Montreal Protocol and also accelerated the phasing down of hydrochlorofluorocarbons (HCFCs) in the EU. At the end of 2014, the EU imposed a ban on methyl bromide.

Most relevant KPI 3: Proportion of climate related spending (mainstreaming) in the EU budget Source: DG BUDG reporting on Budget 2015	😐	**Mainstreaming of mitigation and adaptation activities in EU programmes : Share of EU budget devoted to climate-related action** Target: At least 20% (on average) by 2020	2013: 6 to 7% (indicative) 2014: 12,5 % 2015: 16,8 % Preliminary draft budget 2016: 20,6%
			

		The 20% climate mainstreaming target is a commitment from the Commission endorsed by the European Council when the Multi-annual Financial Framework 2014-2020 was proposed/adopted. The progress towards the 20% target has been monitored closely on an annual basis by DG Budget and DG Climate Action in the budgetary procedure. The Commission's tracking methodology has been set up as part of the annual budgetary procedure, in accordance to the' Rio markers methodology' (0%, 40% and 100 % climate dimension). The climate share indicated in the programme statements of the distinct financial programmes of the EU budget is accounted for and added up to an estimated amount for the whole draft budget as compiled by DG Budget. The current ex-ante tracking methodology (a decentralised approach where each DG determines the level of detail for tracking and reports the aggregates) is the only tool available to provide the information on progress towards the 20% target.. The draft 2016 budget estimates the total EU budget contribution to climate mainstreaming at 20.6% (compared to 12,7% in 2014 and 16.8% in 2015). It shows that the efforts by DGs are starting to deliver and generally, many policy areas are on track but that efforts will need to be stepped up in the second half of the MFF (2018-2020).. DG Climate Action is working closely with the other DGs to speed up implementation. Conclusion: Though significant progress is being made, after 2/3 years, it is a bit premature to assess with confidence whether the Commission is on track to reach the 20% objective over the whole 2014-2020 period. But once EU instruments are fully implemented according to the new legal framework, the overall share of climate mainstreaming in the EU budget is expected to meet the 20% target on average for the whole period..	
Most relevant KPI 4: Number of MS having adopted/implemented a climate adaptation strategy or plan Source: CLIMA-Adapt IT tool (EEA report)	😐	Target: For all 28 Member States to have adopted an adaptation plan/strategy by 2017with a view for implementation by 2020	Current situation: End 2011: 10 End 2012: 13 End 2013: 16 End 2014: 19 End 2015: 21



Conclusion:
By the end of 2015, 21 Member States had developed a national adaptation strategy. In most of the remaining Member States, strategies are under preparation. Most Member States have yet to define and implement adaptation plans in vulnerable sectors. The development and implementation of monitoring and evaluations systems remains uneven in most EU countries.
DG Climate Action is monitoring the rather slow progress closely:
Together with the European Environmental Agency in Copenhagen, DG CLIMA developed an "adaptation preparedness scoreboard", identifying key indicators for measuring level of readiness, discussed with the Member States in the Climate Change Committee's Working Group on Adaptation.

Most relevant KPI 5: Residual error rate (RER) for ABB Activity 34 02 Source: internal assessment	☺	Target: As low as possible; below 2% or less	Current situation at end of 2015 Amount at risk – Residual Error Rate (RER): The final amount at risk, calculated as explained in Part 2 of this report, is **€ 0,025 million** compared to the total payments under the operational ABB activity 34 02 'Climate action at Union and international level' amounting to € 28,22 million. The residual error rate is **0,089 %**, which is below the materiality threshold of 2%. Building a trend 2014-15 is too premature as the implementation of the major part of the LIFE programme (grants and financial instruments) has only recently started and has not reached cruising speed yet

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

In accordance with the European Commission Governance Statement, DG Climate Action 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, that aim 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 Climate Action has assessed the internal control systems during the reporting year and concluded that the internal control principles are implemented and function as intended with the exception of the reputational reservation related to the security of the EU ETS Registry systems. Please refer to AAR section 2.3 for further details.

In addition, DG Climate Action 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 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 a reputational reservation concerning the security of the EU ETS Registry Systems.

d) Information to the Commissioner

The main elements of this report and assurance declaration, including the reservation(s) envisaged to the security of EU ETS, have been brought to the attention of Commissioner Miguel Arias Cañete, responsible for EU Climate Action and Energy policies and discussed on 16 March 2016.

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

1.1 Achievement of general policy objectives

Intro

DG CLIMA's prime objective is to ensure that the EU contributes to the two global objectives of keeping global average temperature well below the dangerous 2°C increase compared to pre-industrial levels through a major shift towards a highly energy-efficient, low-carbon and climate-resilient economy in the EU, and the protection/recovery of the ozone layer by phasing out the use of ozone-depleting substances[7].

Contribution to and promotion of these two objectives are considered of paramount importance. They are necessary to protect the planet, citizens and ecosystems from the likely severe, pervasive and irreversible impacts of climate change and a depleted ozone layer. These objectiives are linked to one of the key priorities of the European Commission 2014-19: "A resilient Energy Union with a forward looking climate policy".

Addressing global warming and a damaged ozone layer are challenges that DG Climate Action, a small policy-making department within the European Commission, can only contribute to. By extension it is clear that together the EU and its Members States cannot tackle these phenomena alone. Given that climate change is a global problem, it is difficult to identify the (positive) changes that can be attributed to the European climate action policies, while the financial and macro-economic situation is l beyond its control.

With an active climate action department in the lead, the EU is a frontrunner in global efforts to keep global warming well below 2°C and protecting the ozone layer. EU action is oriented towards the reduction of man-made GHG emissions that cause global warming on the one hand, and adaptation to new climatic conditions on the other. The EU takes initiatives both within the EU (domestic actions in the EU Member States) and outside the EU (negotiation of international agreements such as the Paris Agreement). The Commission has a legislative portfolio for the period up to 2020 under the 2020 Strategy. It is currently designing legislation for the 2020 -2030 period under the 2030 Framework for Climate and Energy. With the Energy Union Strategy, the EU aims to decarbonise further the EU economy. The legislative 'climate acquis' is supported by a dedicated sub-programme for climate action under the financial instrument (LIFE) and by the mainstreaming/integration policy of the climate dimension into other EU policies and the 2014-20 EU budget.

Obviously, the experience of the EU can serve as a valuable example for other countries and continents in the world, as they develop their climate policies while putting their economies on a solid track towards prosperous, low-carbon development. Over the last quarter of a century, EU policy making in the field of climate change has been characterised by active learning. One of the important lessons learned is that there has been no single policy instrument that can bring greenhouse gas emissions down across so many sectors of economic activities. Different approaches

[7] Both threats to human life on this planet are interconnected. Science proves that global warming is due to human interference – emissions of GHG emissions resulting from burning of fossil fuels- and the F-gases, the substitutes of the ozone depleting gases are themselves potent GHG gases

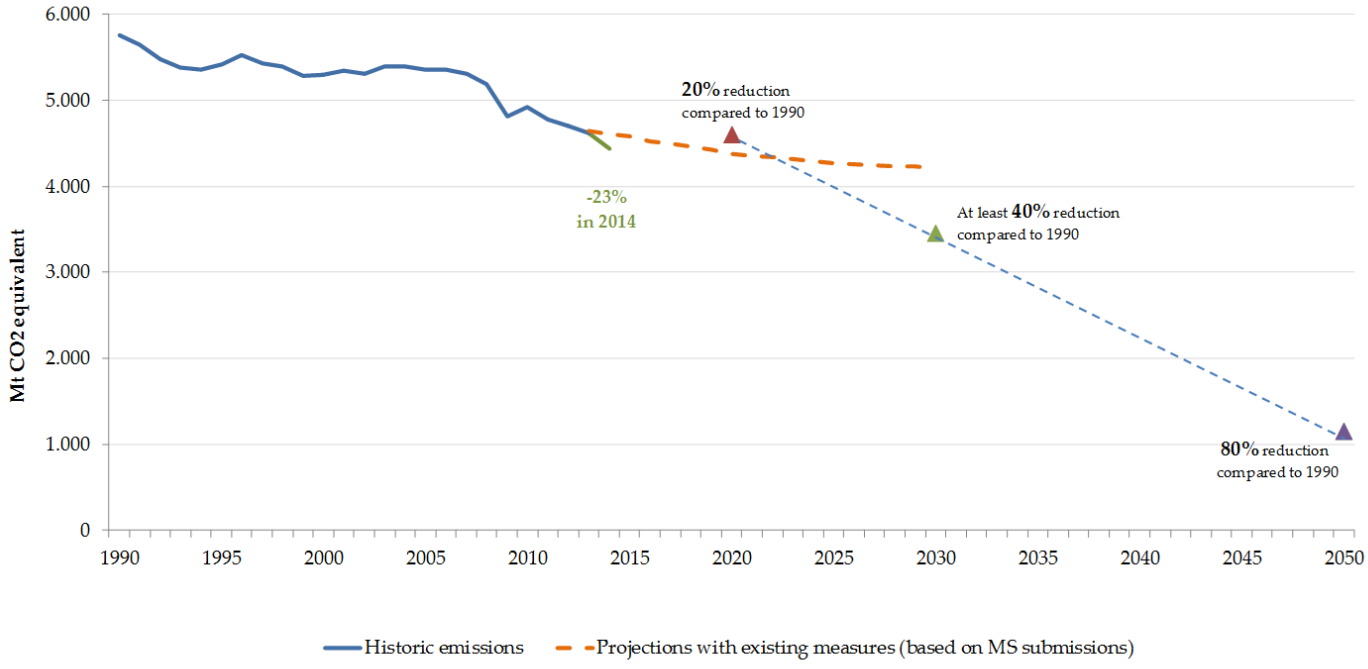
are needed. Solid economic and technical preparation of policy, based on extensive stakeholder consultation,is vital. Risks related to data availability, reliability and interpretation as well as processing methods have to be addressed to gain sufficient understanding and backing at political level and to ensure that the policy context remains as stable as possible. There are often high, and largely conflicting, economic interests at stake, and creating maximum transparency has been a necessary pre-condition for success. The EU legislative procedure, from the submission of a proposal to the College, through debate and adoption by the Commission, followed by final endorsement by the Council and Parliament inevitably results in compromise legislation. This then needs to be implemented and applied correctly in the Member States. Resulting data are reported to the Commission, Eurostat and the European Environmental Agency which provide progress reports. Despite being a small link in the whole EU climate policy chain, DG Climate Action's activities are yielding positive results.

The EU is on track to meet the Europe 2020 and Kyoto Protocol greenhouse gas reduction targets

According to most recent available data[8], in 2014 total EU greenhouse gas (GHG) emissions were 23% below the 1990 level and reached the lowest levels on record. In 2014, emissions decreased by 4% compared to 2013.

Latest projections with existing measures provided by Member States show that the EU is heading for a 24% reduction by 2020 with current measures in place, and a 25% reduction with additional measures already being planned in Member States.

The EU is therefore currently on track to meet and might even overachieve its Europe 2020 20% greenhouse gas reduction target.



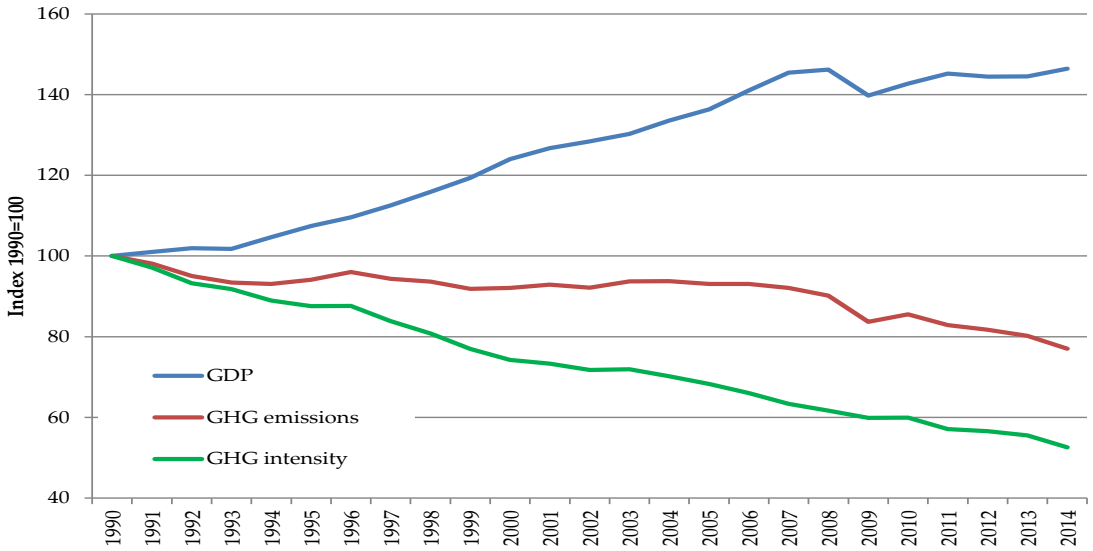
[8] Climate Action progress report, COM(2015)576 of 18.11.2015; "Trends and projections in Europe 2015" Report by EEA of 20.10.2015

Continued successful decoupling of economic activity and GHG emissions

The EU continues to successfully decouple its economic growth from its GHG emissions. During the 1990-2014 period, the EU's combined GDP grew by 46 %, while total GHG emissions (excluding land use , landuse change and forestry (LULUCF) but including international aviation) decreased by 23 %. This decoupling led to the creation of new business opportunities and new jobs and made the energy system of the EU more secure and affordable. The EU has consistently shown that climate protection and economic growth go hand in hand.

The EU's GHG emission intensity of the economy, defined as the ratio between emissions and GDP, decreased by almost half between 1990 and 2014; from 100 (=index) in 1990 till close to 50 by 2014.

Changes in GDP (in real terms), GHG emissions, and emissions intensity of the economy (ratio between emissions and GDP) Index (1990 = 100)



1.2 Major achievements of specific policy objectives

The core business of DG CLIMA includes: policy making in the field of climate; monitoring the implementation of policy measures; influencing other major players and leading by example; the coordination of the management of the climate action sub-programme of LIFE delegated to the Executive Agency for Small and Medium-sized Enterprises (EASME) and the European Investment Bank; the monitoring and active promotion of the 20% mainstreaming target in the EU budget, and the management and implementation of international negotiations.

Specific Objective 1.1: To improve development, implementation and enforcement of the climate mitigation acquis and catalyse and promote integration and mainstreaming of climate change mitigation

The proposal for a revised Emission Trading System post-2020

In July 2015, the Commission presented a legislative proposal to revise the EU emissions trading system for the period after 2020 (phase 4).

This is the first step in delivering on the EU's target to reduce greenhouse gas emissions by at least 40% domestically by 2030, in line with the 2030 climate and energy policy framework and the Energy Union strategy and as part of its contribution to the new global deal in Paris.

Key features of the proposal:

1. Increase in the pace of emissions cuts
To achieve the EU reduction target of at least 40%, the sectors covered by the ETS have to reduce their emissions by 43% compared to 2005. To this end, the overall number of emission allowances will decline at an **annual rate of 2.2%** from 2021 onwards, compared to 1.74% currently.
2. Better targeted carbon leakage rules
The proposal further develops predictable, robust and fair rules to address the risk of carbon leakage. The rules intend to safeguard the international competitiveness of the sectors most at risk of relocating their production outside the EU, which may occur if production is to countries with less ambitious climate policies. This includes:

-Revising the system of free allocation to focus on sectors at highest risk of relocating their production outside the EU.

-A considerable number of free allowances set aside for new and growing installations

-More flexible rules to better align the amount of free allowances with production figures

-Update of benchmarks to reflect technological advances since 2008

It is expected that around 6.3 billion allowances will be allocated for free to companies over the period 2021-2030.

3. Funding low-carbon innovation and energy sector modernisation
Several support mechanisms will be established to help the industry and the power sectors meet the innovation and investment challenges of the transition to a low-carbon economy. These include two new funds:

- Innovation Fund – extending existing support (NER 300 programme) for the demonstration of innovative technologies (renewables and carbon capture and storage) leading to breakthrough innovation in industry
- Modernisation Fund – facilitating investments in modernising the power sector and wider energy systems and boosting energy efficiency in 10 lower-income Member States

Free allowances will also continue to be available to modernise the power sector in these lower-income Member States.

The proposal will guarantee that the EU ETS, Europe's flagship tool to fight climate change, will contribute to delivery of steady emission reductions in the decade to come. Cutting emissions also benefits citizens' health through reduced air pollution and contributes to energy security as it makes Europe less dependent on imported fossil fuels.

Audit reports and evaluations relevant to ETS and ESD

Special Report by the Court of Auditors: "The integrity and implementation of the EU ETS in phase 2(2008-12)",2015

On 2 July 2015 the European Court of Auditors (ECA) published a special report "The integrity and implementation of the EU ETS" in phase 2 (2008-12) for power plants and industrial installations. Overall, the ECA concluded that the management of the EU ETS by the Commission and Member States was suboptimal. The Commission accepted the recommendations issued by the ECA – except for the first recommendation (partly accepted) with regard to market oversight where the results of the changes currently being implemented should be evaluated, as envisaged in the legislation, before taking further actions. The DG has developed an action plan that will address the recommendations from the Court. The Court recognised that many issues identified were specific to phase 2 of the EU ETS (from 2008 to 2012) and have already been addressed at least partially, if not fully, in the current rules for phase 3 running from 2013 until 2020. A few other points required further examination. Taking into account the date of the Court's report, the recommendations could not be included in the proposal for phase 4 made by the Commission in mid-July 2015. However, the co-legislators can take into account the findings of the report during the legislative process. Moreover, there is scope to address some of the recommendations in the future implementing measures for phase 4 post 2020 if appropriate. The recommendations made by the Court are also discussed within the dedicated EU ETS forums.

External evaluation of the functioning of EU ETS Directive

(launched and finalised in 2015)

The final conclusion of the evaluation was that the concept of the EU ETS has been successfully implemented, but it can still be improved. The EU ETS Directive[9] is highly relevant for the EU's climate policy. It is effective in reducing GHG emissions from the sources covered, and it provides the incentives to reduce emissions efficiently (in terms of limited administrative efforts, and by incentivising emission reductions where they are most cost-efficient). The EU ETS in general is coherent with other EU policies, in particular in the areas of energy efficiency, renewables, other climate policies, and environmental regulation for industrial installations. There is significant EU-added value in this legislation.
However, several aspects of the EU ETS could not be fully evaluated, such as in particular the amount of emission reductions caused by the EU ETS or whether carbon leakage is an actual concern or only

[9] Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC

a theoretical concept. Significant investments in low-carbon technologies, required for achieving the EU ETS' long-term goal, are not taking place yet, as they lack economic viability with the current low CO2 prices. Furthermore the funding under the NER 300 programme had less available volume and auction revenues for Member States, were far below expectations. Finally, the low carbon price created a surplus of allowances[10]. However, it must be noted once more that these "teething troubles" of the EU ETS only caused a sub-optimal performance of the EU ETS, while they cannot be claimed to be a proof that the EU ETS is not properly functioning in general.

External evaluation of the 2009 'Effort Sharing Decision'

(launched 2015 –preliminary conclusions of the external consultant)

The Effort Sharing Decision (ESD)[11] sets out annual national binding emission targets for Member States arising from non ETS sectors for the period 2013-2020. Overall, it foresees an EU-wide reduction of 10% of GHG emissions by 2020 compared to 2005. According to the latest projections, the EU and almost all the Member States are well on track to meet their 2020 targets. Although it is difficult to isolate the impact of the ESD in the observed emissions reduction, the preliminary findings of the external study supporting the ESD evaluation show that it has been an effective, efficient and coherent piece of legislation in encouraging Member States to implement climate friendly policies in a cost-effective manner. With the adoption of the Council Conclusions in October 2014 including a target to reduce GHG emissions by 40% by 2030, the ESD remains relevant. The administrative costs relating to the reporting obligations of Member States were found to be limited, though there may still be streamlining opportunities.
This evaluation was however carried out at an early stage of the implementation process; before the first compliance check took place and Member States could made use of the flexibility mechanisms provided. The Member States just started to report to the Commission and info about costs of policies and measures is scarce.
Due to this lack of data and practical experience, some of the evaluation questions could not be answered. The conclusions need to be validated and presented in a Staff Working Document presenting the official opinion of the Commission in the first half of 2016.

CO2 emissions from light duty vehicles (cars and vans) continue to decrease.

New cars and vans (=light duty vehicles) registered in the European Union in 2014 were on average 2.5% more efficient compared to 2013, according to data published by the European Environment Agency.

The current data show that the average emissions level of a new car sold in 2014 was 123.4 grams of carbon dioxide (CO2) per kilometre, significantly below the 2015 target of 130 g. A new van sold in 2014 emitted on average 169.1 grams of carbon dioxide per kilometre, which is already below the 2017 target of 175 g.

Since monitoring started under current legislation in 2010, emissions have decreased by 17 g CO2/km (12 %). Manufacturers will nevertheless have to reduce emissions further to meet the target

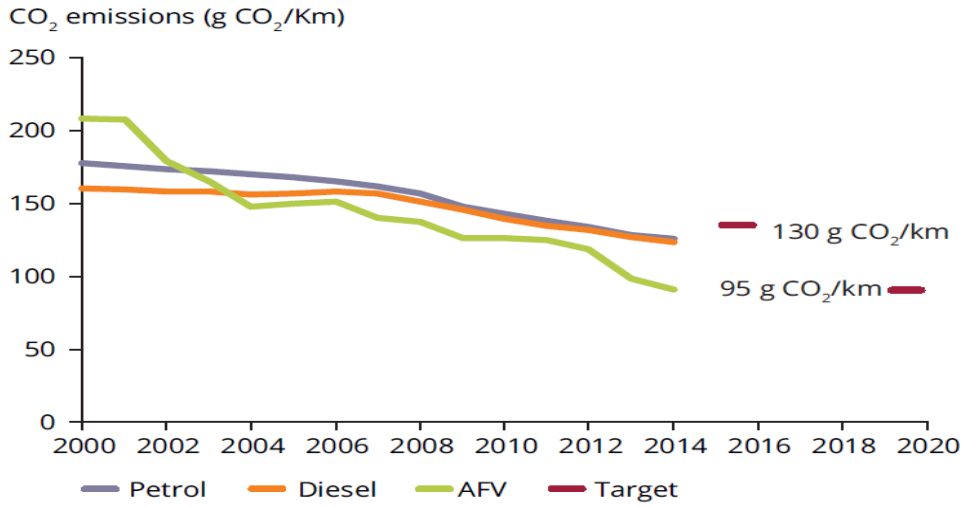
[10] The Market Stability Reserve will address the surplus and improve the system's resilience to major economic shocks by adjusting the supply of allowances to be auctioned (but this is outside the scope of this evaluation

[11] Effort Sharing Decision 406/2009/EC of the European Parliament and of the Council of 23 April 2009

of 95 g CO2/km by 2021 for cars and 147 g CO2/km by 2020 for vans.

Following a statement by the Volkswagen Group on 3 November 2015 that CO_2 emission values for some of their models were incorrectly stated, the Commission has not confirmed the average specific emissions of CO_2 and the specific emissions targets for the Volkswagen Group brands. The figures for the Volkswagen Group will be confirmed once corrected data are available. This may affect EU fleet average emissions of 123.4 g CO2/km.

Figure 3.2 Evolution of CO_2 emissions from new passenger cars by fuel type in the EU-28 (14)



Note: For the calculation of the average CO_2 emissions of AFVs, pure electric, liquefied petroleum gas (LPG), natural gas (NG), ethanol (E85), biodiesel and plug-in hybrid vehicles (diesel-electric or petrol-electric) are all included.

Final evaluation report of Regulations 443/2009 and 510/2011 on the reduction of CO_2 emissions from light duty vehicles (cars and vans)

The evaluation confirms that the 2015 and 2017 emission targets have both been achieved and that manufacturers are in a strong position to meet their 2020 targets for both cars and vans.

The evaluation confirms that the Regulations have a positive impact on emission reductions from both cars and vans as well as on energy security. Also, their impact on competitiveness and innovation seems to be positive.

The common market provides ground to act at EU level rather than Member State level. The subsidiarity principle seems to have been respected and the changes brought by European legislation could not have been achieved to the same extent with national measures only (e.g. voluntary commitments).

Issues of sound programme/policy design, management and implementation, including efficiency and effectiveness were noted.

Two main sources of ineffectiveness were identified in the study:

1) The test cycle does not accurately reflect real-world emissions per kilometre.

2) Since only tailpipe emissions are taken into account, the use of some unconventional energy sources and/or types of vehicles emitting less CO_2 but generating more CO_2 emissions during their production and/or disposal are encouraged by the Regulations.
Both Regulations have generated net economic benefits to society and the targets for both have proved to be much cheaper to reach for manufacturers than predicted.
However, lifetime fuel expenditures savings have been lower than expected, mostly because of the increasing divergence between test cycles and real-world emissions performance.

Specific Objective 1.2: To secure investment for climate related issues (mitigation strand – ETS off-budget funds)

The **NER 300 programme** (= revenues from the sales of the new Entrants Reserve amounting to 300 million ETS allowances), is a demonstration programme providing financial support to highly innovative renewable energy and carbon capture and storage (CCS) demonstration projects. Some 38 renewable energy projects and one Carbon Capture and Storage project were selected for funding in 20 Member States.

Total NER 300 funding will be € 2.1 billion, which is expected to leverage an additional € 2.7 billion of private investment. The NER300 funds are not a part of the EU budget. The governance structure is quite robust and includes the Commission and its services (in their supervisory, decision-making role), the EIB acting as agent for the Commission (in charge of due diligence check, monetisation of ETS allowances, asset management) and Member States (compliance with sound financial management in terms of obligations for disbursement and reporting).

The Verbiostraw project, a first-of-a-kind plant turning agricultural residue into biogas.

The project, which turns straw into biofuel, is a key step in the commercial-scale demonstration of advanced biogas technology. The plant has a capacity of 16.5 megawatt and, once fully operational, will deliver 136 gigawatt hours per year of biogas and use some 40,000 tonnes of straw annually. It will use agricultural residue only and, as a result, does not require farmland to be used to grow energy crops. The biogas will be conditioned to the same quality as natural gas and fed into the natural gas network.

Effectiveness: It is more effective to implement the Verbiostraw project at EU level than at German level only. Due to its location at the German-Polish border it creates a cross-border effect with Poland by using agricultural residue from both sides of the border and explores a connection to the German and Polish natural gas network. An implementation at national level only would therefore miss the links to the neighbouring Member State and could lead to a fragmented national approach.

Efficiency: It is also more efficient to implement the Verbiostraw project at EU level. Resources and expertise can be pooled with other NER 300 first-of-a-kind bioenergy projects in Sweden, Finland and the Netherlands. Furthermore, actions such as common side-events at European bioenergy conferences can be better coordinated with other EU projects.

Synergy: Implementing the Verbiostraw project at EU level created synergies by raising standards on advance biogas technology to feed biogas into the natural gas network in different Member States. Furthermore, the project stimulated the development of advanced biofuels by exploring the use of biogas from agricultural residues in the transport sector. Last but not least, the NER 300 funding of €22 million leveraged €18 million of private investment.

Specific Objective 1.3: To improve development, implementation and enforcement of EU law and catalyse and promote integration and mainstreaming of climate action (adaptation)

New integrated Covenant of Mayors (merging adaptation and energy efficiency)

The Covenant of Mayors, a European movement involving local and regional authorities voluntarily committing to increasing energy efficiency and use of renewable energy sources and its sister initiative Mayors Adapt − committed to preparing for the impacts of climate change −.joined forces in the fight against climate change on 15 October 2015. The new Covenant for Climate and Energy will help cities develop synergies between mitigation and adaptation measures. The focus on cities and -regions is essential as their contribution is crucial in the achievement of a low-carbon economy: they are the first to experience the negative effects of CO_2 emissions and are often at the forefront of of innovative solutions, particularly in environmental standards for buildings

The new Covenant will also have a strengthened international dimension and aims to inspire similar initiatives in other parts of the world.

Cities make an important contribution to reducing emissions, decarbonising energy systems and creating climate-resilient urban environments for citizens. European cities - home to 360 million people or 72% of Europe's population - account for 70% of the continent's energy consumption. These areas are also particularly vulnerable to the unavoidable impacts of climate change, which makes urban spaces a top target for climate and energy action. They are the ideal place for boosting renewable energy, improving energy efficiency in buildings and increasing green areas, and thereby mitigating and adapting to climate change.

A new and integrated Covenant of Mayors for Climate and Energy

In October 2015, two movements of European cities joined forces: The Covenant of Mayors - committed to more energy efficiency and renewable energy - and its sister initiative Mayors Adapt – committed to prepare for the impacts of climate change.

Effectiveness: *This new initiative contributes to the EU's Energy Union priority of reducing emissions and making Europe more climate-resilient. European cities account for 70% of the continent's energy consumption and are particularly vulnerable to the unavoidable impacts of climate change. By joining forces, the new Covenant promotes an integrated approach to tackling mitigation and adaptation to climate change. It will help cities develop synergies between their solutions*

Efficiency: *By merging these initiatives, the new integrated Covenant of Mayors provides efficiency gains and savings. It ensures better coordination between the different measures and the actors involved. Cities share their experience and benefit from mutual exchanges from other local and regional best practices.*

Synergies: *The new Covenant involves more than 6000 cities that voluntarily commit to implement EU climate and energy objectives. Through this initiative, the EU institutions have strengthened their alliance with cities. It is based on a unique bottom-up movement and recognises the importance of urban action, and the EU-added value to set targets and to promote cross-border exchanges at EU level.*

The Covenant involves more than 6,700 signatories voluntarily committing to take climate action, covering 211,791,930 inhabitants in more than 54 countries. During 2015, 24 mayors and representatives of local authorities from six countries in the South Mediterranean (Morocco, Algeria, Tunisia, Lebanon, Palestine and Israel) joined the initiative.

Specific objectives 1.2 and 1.4: To secure investment for climate related issues (mitigation and adaptation strand) in the LIFE programme and through financial mainstreaming

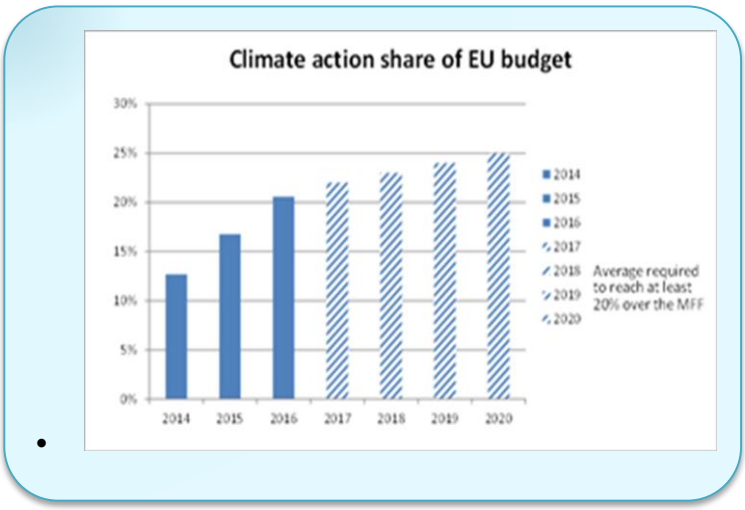
Climate Mainstreaming in the EU budget is broadly on track.

As a part of the approach to integrate/mainstream climate action across all EU policies and programmes, the Commission proposed and the Council and European Parliament endorsed the objective of allocating at least 20% of the 2014-2020 Multi-annual Financial Framework (MFF) to climate related objectives. While no exact comparable data exist, it is certainly a significant increase compared to 2007-2013 MFF (estimated 6-8%). The 'at least 20%' target would yield around €200 billion in climate-related spending over the seven-year period.

The political target for mainstreaming of climate into other policies and programmes is gradually proving to be an effective and innovative incentive to pursue this integration of climate in dialogue with other DGs and the Members States. Perhaps its biggest achievement has been to raise awareness about the potential for climate co-benefits. It is hard to imagine that a separate climate instrument could have been as effective. All DGs have developed sector specific methodologies and worked to integrate climate action objectives, policy-specific targets and indicators in the relevant legal instruments leading to a scaling up climate related action in individual programmes. The key financial instruments contributing to the climate objective are Horizon 2020, the European Structural and Investments Funds (ESIF), the Connecting Europe Facility, the LIFE programme, Development Programmes and the Common Agriculture Programme.

The ex-ante tracking methodology for climate spending based on the Rio Markers (100%, 40 % and 0% climate component) for climate spending has some weaknesses. The Commission has opted for a pragmatic and operational approach, balancing the administrative burden with accuracy. The method does not create excessive reporting requirements or revamping complete information systems, which is important in the tight budgetary context.

In the start-up phase, progress towards the 20% target was monitored only on an annual basis through the annual budgetary procedure. The draft 2016 budget adopted in mid-2015 estimates the total EU budget contribution to climate mainstreaming to be 20.6% (12,7% in 2014; 16.8% in 2015 – see chart). It shows that the efforts by DGs are starting to deliver, that generally, many policy areas are on track and that over the entire period 2014-2020, the 20% target could (on average) be reached. But it is early in the process to assess with confidence. For example, preliminary data on the European Structural and Investment Funds (ESIF), which constitute more than 43% of the current budget, already indicates a high share – above 24 % - of climate related expenditure for the ESIF. DG CLIMA is cooperating with other DGs to speed up implementation.



A performance audit on climate mainstreaming is currently being conducted by the Court of Auditors entitled: "At least 1 € out of 5 for climate action. Is this target for the EU budget likely to be met and added value?"

Specific objectives 1.2, 1.4 and 1.5: To secure investment for climate related issues (mitigation, adaptation and governance strand)

Implementation of the Climate Action Sub-programme of LIFE (2014/2015)

The general objectives of the LIFE programme are: to contribute to the shift towards a resource-efficient, low-carbon and climate-resilient economy; to improve the development, implementation and enforcement of Union climate policy and legislation; to act as a catalyst for, and promote, the integration and mainstreaming of environmental and climate objectives into other Union policies and public and private sector; to support better environmental and climate governance at all levels, including better involvement of civil society, NGOs and local actors; and to support the implementation of the 7th Environmental Action Programme.

It is clear that due to the limited size and envelope of the LIFE programme (EUR 800 million for 7 years) its direct changing power is very limited. However, it is the only dedicated climate instrument available (next to the climate mainstreaming). Its EU added value comes from it being an EU platform for exchange of best practices and knowledge-sharing in climate policy matters and as a catalyst for start-up action, testing of new approaches for scaling up and replication, sharing of best practice, and the creation of synergies between LIFE and other EU programmes (integrated projects) and visibility at EU level.

While the programme implementation is on track, it is too early to assess the effects it will have on the beneficiaries specifically and Member State climate policies in general. A system for tracking the performance indicators at project level was developed. Project-level information has been collected since 2015 and will be used for the mid-term evaluation of the programme. The tracking system is expected to be fully operational for the second LIFE Multi-annual work programme 2017-2020.

More information can be found in the multi-annual work programme LIFE 2014-17, the annual Financial Work Programmes (Financing Decisions) for 2014 and 2015 and in the Programme Statement of the LIFE programme accompanying the proposal for the draft budget 2017[12].

Governance of the (climate sub-programme) of the LIFE programme

- The procurement element (hiring external expertise through studies and service contracts) is managed directly by DG CLIMA and the Shared Resources Directorate.
- Delegation agreements were signed in 2014 with the European Investment Bank for two innovative financial instruments: the Natural Capital Financing Facility (NCFF), conceived to provide loans and investments in funds to support projects which promote the preservation of natural capital, including adaptation to climate change; and the Private Finance for Energy Efficiency (PF4EE), aimed at addressing the limited access to adequate and affordable commercial financing for energy efficiency investments.
- The externalisation of LIFE action grants to the Executive Agency for Medium and Small Enterprises (EASME) was successful. Through a Memorandum of Understanding, a close collaboration was built up to ensure continuity and coherence in programme implementation. DG CLIMA, as a parent DG with observer status, supervises the work externalised through regular reporting and ad hoc contacts with the Agency. In collaboration

[12] Decisions C(2014)1706 of 19/3/2014, C(2014)4204 of 26/6/2014, C(2014)7998 final of 29/10/2014, C(2014)10276 final of 9/1/2015 and C(2015)3967 final of 15/61/2015 amending C(2014)7998 and C(2014)10276 final

with other parent DGs, DG CLIMA plays a direct role in the definition of the annual work programme of the Agency and supports the evaluation of applications. Policy integration is ensured through the definition of the policy priorities. IT support is offered using the existing LIFE + tools. Joint framework contracts are designed for evaluation and monitoring of activities. Furthermore, the DG participates in the Agency's Steering Committee meetings, and Task-Force-Meetings are held regularly at unit level. The Agency produces and disseminates quarterly reports as envisaged in the Memorandum of Understanding. In its own AAR, EASME has given assurance on the use of the corresponding resources.

Key programme achievements to date

According to Regulation No 1293/2013 (LIFE Regulation), the bulk of the funds (at least 81%) is spent on action grants and financial instruments operations on the basis of a bottom-up, demand-driven approach. The remaining part (maximum 19 % of the overall LIFE funds) represents the procurement budget available to support the development, implementation – including communication - and enforcement of all EU environmental and climate policies and related legislation and also covers the operating grants to NGOs

The first calls for proposals awarding the types of grants (project grants, integrated projects, technical assistance, capacity building and preparatory projects) introduced by the LIFE Regulation were successfully evaluated in 2015.

Following the **call for proposals** launched in 2014, 31 traditional climate projects were co-financed at the end of 2015 totalling €44 million covering 22 Member States. Some 122 project proposals were submitted under the 2015 call by the end the year. The first stage of the evaluations of the individual projects has been finalised. Fifty-nine funding requests from NGOs were received, of which 31 proposals were recommended for funding, including many that are significantly climate-related. For the financing of European NGOs working in the environment and/or climate action fields, the Commission succeeded in successfully introducing in 2015 multiannual partnership agreements conceived to provide the partner NGOs with a more forward looking and stable funding framework

First call for integrated projects successful

A call for integrated projects was launched In 2015 for the first time. These are projects implementing on a large territorial scale (regional, multi-regional, national or trans-national scale) environmental or climate plans or strategies required by specific Union environmental or climate legislation, developed pursuant to other Union acts or developed by Member States' authorities, primarily in the areas of nature (including Natura 2000 network management), water, waste, air and climate change mitigation and adaptation*, while ensuring involvement of stakeholders and promoting the coordination with and mobilisation of at least one other relevant Union, national or private funding source

For climate action, five out of eight concept notes for Integrated Projects received were approved (GR (Adaptation), SE (Urban), DE (Mitigation), DK (Urban) and BE (Mitigation)). EASME received and approved two proposals for technical assistance to prepare proposals for Integrated Projects from FI (urban mitigation) and NL (implementation of Dutch Sustainable Fuel Action Plan***).***

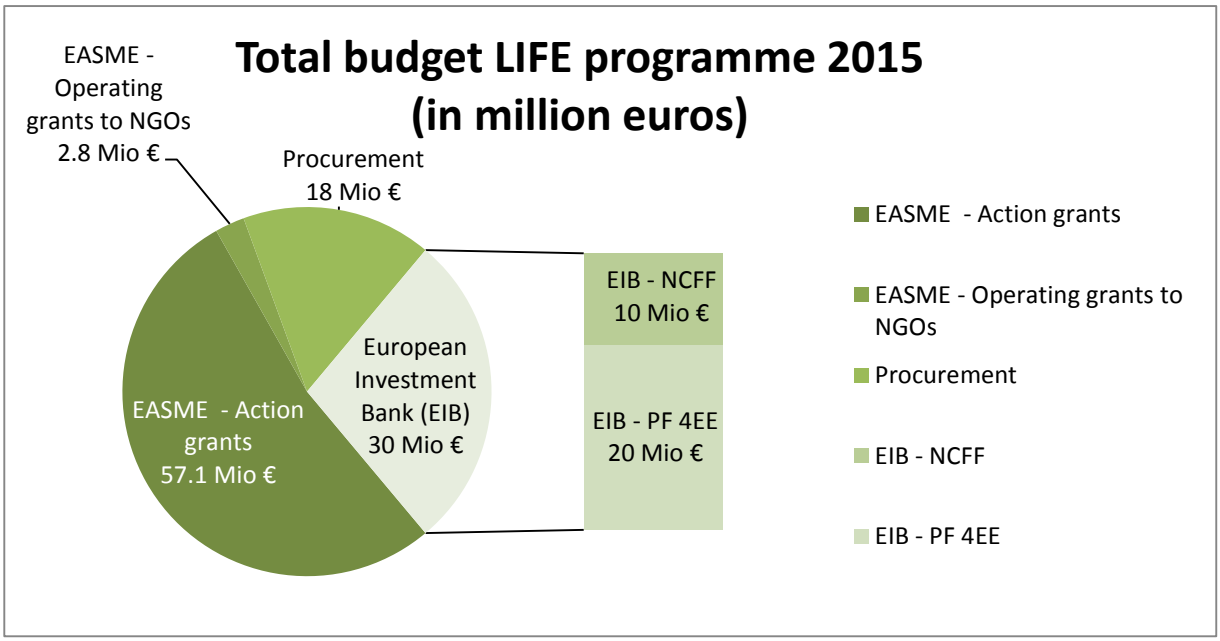
Finally, one joint proposal for a preparatory project (related to LULUCF) of good quality from Italy and Portugal has been submitted and is currently in the revision phase. No results or success stories of the programme are available yet as the implementation of these projects has just started.

Concerning **financial instruments**, under the Private Finance for Energy Efficiency (PF4EE), three contracts with intermediary banks from Czech Republic (objective: €75million EE investments), Spain (objective: €50million EE investments) and France (objective: €75million EE investments) have been signed. While the individual operations are still to be implemented, the signature of three contracts with intermediary banks confirms there is a significant market demand, strong interest from banks and

governments in Member States, and a significant potential for scaling up (e.g. through Cohesion funds).

Under the Natural Capital Financing Facility (NCFF) one operation promoting climate resilience of forests in Ireland (EIB contribution €13 million) and one multi-country operation including Italy, Spain and Romania (EIB contribution €5 million) are under due diligence and signature of the contracts is expected in the first half of 2016.

(c) Several extremely valuable policy achievements were supported by **procurement activities** under LIFE. Of particular importance were the activities undertaken in 2014 and 2015 to support Commission activity that led to the first-ever universal, legally binding global climate deal at the Paris climate conference (COP21) in December 2015. The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C.



Relevant findings of evaluation and/or programme related studies' (if any)

A procurement contract supporting an external and independent mid-term evaluation report is on-going and expected to be completed by mid-2017. All the LIFE-funded projects (81% of the overall amount devoted to the Programme) can be found in a database which is available on line (http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.search&cfid=1662692&cftoken=cff8c895d9f6e978-0657C959-CAD8-28D8-E21AB4FAEC1247BD).

Information on the financial instruments and on the procurement is also regularly published on the DG ENV and DG CLIMA websites:

http://ec.europa.eu/environment/funding/calls_en.htm;
http://ec.europa.eu/clima/tenders/index_en.htm

http://ec.europa.eu/environment/life/funding/financial_instruments/index.htm;
http://ec.europa.eu/clima/policies/budget/life/instruments/index_en.htm

Specific Objective 1.6: Ambitious and agreed global climate action to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

The Paris climate deal

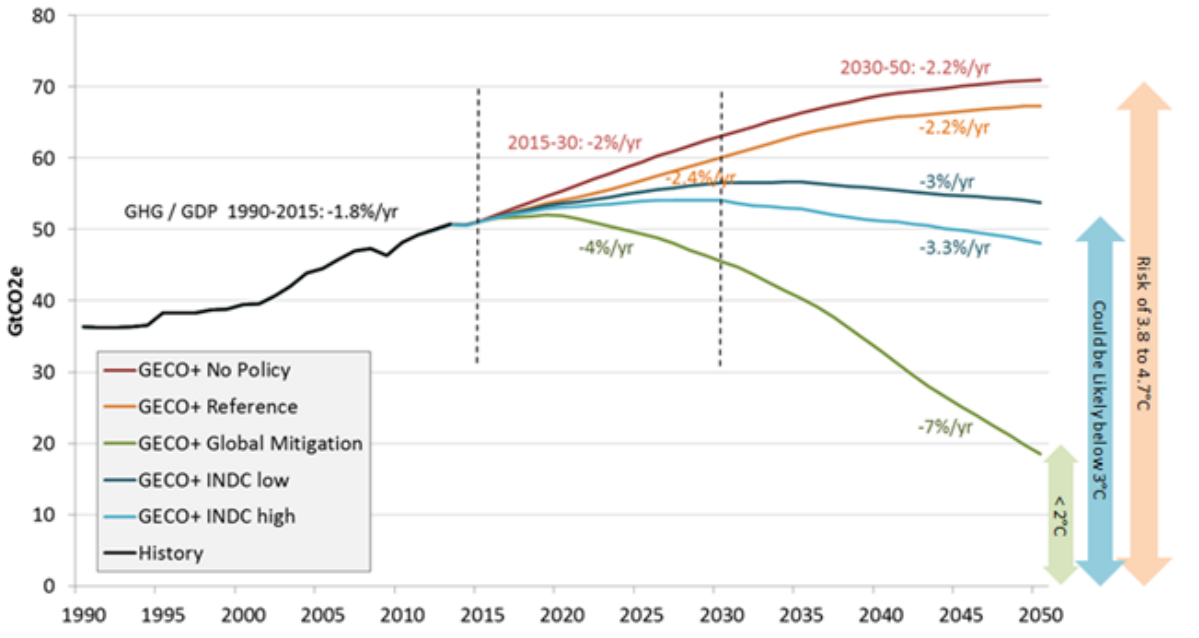
On 12 December 2015, world leaders adopted the first universal, legally binding global climate change agreement. The historic agreement is a bridge between today's policies and climate-neutrality before the end of the century.

Common Ambition: Governments agreed a long-term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels, aiming to limit the increase to 1.5°C since this would significantly reduce risks and the impacts of climate change.

Governments agreed The agreement calls for global emissions to aim for the peaking of global emissions as soon as possible, recognising that this will take longer for developing countries, and for countries to undertake rapid reductions thereafter in accordance with the best available science.

Before and during the Paris conference, countries submitted comprehensive national climate action pledges to reduce their emissions. The sum total of the 189 plans submitted to date are not yet enough to keep the world well below 2°C by the end of the century (see graph below) . However, the agreement traces the way to achieving this target.

World emissions
(GtC02e, total excluding sinks) and percent change
in emission intensity per unit of GDP



Source: POLES – DG JRC model

Commitment for all: Governments agreed to come together every 5 years to set more ambitious targets as required by science. They also accepted to report to each other and the public on how well they are doing to implement their targets, to ensure transparency and oversight. A global stocktake will take place every five years. A robust transparency and accountability system will track progress towards the long-term goal.

Solidarity: The EU and other developed countries will continue to support climate action to reduce emissions and build resilience to climate change impacts in developing countries. Other countries are encouraged to provide or continue to provide such support voluntarily. Continued and enhanced international support for adaptation will be provided to developing countries. Developed countries intend to continue their existing collective goal to mobilise USD 100 billion per year by 2020 and extend this until 2025. A new collective goal will be set for the period after 2025. The EU and its Member States are contributing their fair share to this goal. In 2014, they provided €14.5 billion in funding to help the poorest and most vulnerable countries reduce greenhouse gas emissions and adapt to the consequences of climate change. In the run-up to and during the Paris conference, the EU and 18 Member States made announcements of increased climate finance in the coming years, demonstrating their commitment to scaling up climate finance further.

Loss and damage

The Paris Agreement also features a standalone article dealing with the issue of loss and damage associated with the impacts of climate change. Countries also acknowledge the need to cooperate and enhance understanding, action and support in different areas such as early warning systems, emergency preparedness and risk insurance.

Lima-Paris Action Agenda

The Lima-Paris Action Agenda, an initiative of the Peruvian and French COP Presidencies aimed at catalysing multi-stakeholder action, brought an unprecedented number of countries, cities, businesses and civil society members together on a global stage to accelerate cooperative climate action in support of the new agreement.

The initiative demonstrated that the world is ready to catalyse efforts into climate action even before the Paris agreement enters into force in 2020.

Economy and efficiency measures:

1) The European Investment Bank (EIB) was entrusted with the delegation of the financial instruments PF4EE and NCFF with a view to ensure efficiency gains in areas such as the launching of the financial agreements and coordination with Financial Intermediaries managed by the EIB and reduced reporting requirements. The delegation of the management of both financial instruments to the EIB was an obvious simplification measure. DG CLIMA, a policy making DG, had never managed a financial programme before and therefore had no in-house experience in financial management of financial instruments, the latter requiring access to the financial market. It is premature to start assessing the efficiency gains resulting from the delegation of both financial instruments to the EIB. 2015 should be considered as a pioneering and pilot year. The savings will have to be confirmed in the mid-term evaluation of the LIFE programme that has been launched.

2) Several actions were planned in the domain of ICT to reduce costs and increase efficiency. Specific efforts include: reducing the number of IT equipment moves; progressively phasing out personal printers; the roll-out of remote monitoring of toner levels for all network printers; equipping mobile users with docked laptops; and the migration to the corporate LOMAS system for borrowing IT equipment; and reusing existing software components for the development of new information. The above efforts increased, as expected, the overall efficiency of ICT activities and have resulted in cost savings.

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 annual reports by AOD and AOSDs in which all financial actions are verified
- the reports from Authorising Officers in other DGs 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, and participation as observer in the management board meetings of the Executive Agency for Small and Medium-sized Enterprises (EASME);
- the contribution of the Internal Control Coordinator, including the results of internal control monitoring at the DG level;
- the reports of the ex-post audit function;
- the opinion of the internal auditor on the state of control, and the observations and recommendations reported by the Internal Audit Service (IAS);
- Periodic Validation of User Access Rights Granted in ABAC for DGs Climate Action and DG Environment of May 2015
- the observations and the recommendations reported by the European Court of Auditors (ECA);
- DG Climate Action and DG Environment's permanent Advisory Committee on public procurement (ENVAC) and its annual review reports;
- DG Climate Action's Risk Advisory Committee;
- Periodic reports and dashboards to management on resource issues;
- DG Budget's "Local Systems Audit"

Systematic analysis of the evidence provided in these reports provides a sufficient guarantee of the completeness and reliability of the information reported and results in a complete coverage of the budget delegated to the Director-General of DG Climate Action.

This section reports the control results and other relevant elements that support management's assurance. It is structured into (a) Control results, (b) Audit observations and recommendations, (c) Effectiveness of the internal control system, and resulting in (d) Conclusions as regards assurance.

2.1 Control results

The budget of DG Climate Action is implemented through direct management (including delegation of all grants to EASME) and also indirect management (i.e. through financial instruments entrusted to the EIB). The 2015 commitment appropriations amount to EUR 110.47 million (of which EUR 59.92 million were delegated to EASME and 30 million to the EIB). The table below gives an overview of the budget implementation at 31/12/2015.

The assessment by management is based on the results of key controls performed in 2015, notably ex-ante controls and controls during project implementation. The table below shows the most relevant quantitative control indicators for 2015 compared to 2014:

Key control indicators for 2015 and 2014:

1. Input indicators (resources devoted)	2015	2014
Ex-ante financial initiation (FTE)	1.5	2
Ex-ante financial verification (FTE)	1.25	1
Controls at ENVAC meetings and programming	0.5	0.5
SIAC (till 02/2015)/ IAS (FTE)	0	1
2. Output indicators (controls during project implementation)	2015	2014
Procurement ex-ante: number of rejected/adjusted commitments	5.76%	7.1%
Procurement: number of procurement files reviewed by ENVAC	6	8
Procurement: number of negative opinions by ENVAC	0	0
Number of exceptions registered (ICS 8)	4	1
3. Other indicators	2015	2014
Number of payments exceeding legal delays	12/369=3.25%	19/358 = 5.3%
Number of European Ombudsman cases	0	0
Number of OLAF cases	0	0

Detected error rate	1.24%	1.45%
Residual error rate	0.089%	0.144%
Average error rate	0.087%	0.152%

Notes to the control indicators:

- *Ex-ante controls (procurement)*: The resources allocated to control have remained relatively stable in 2015 (a small decline in the FTE allocated to initiation). The number of rejected/adjusted commitments following the ex-ante verification decreased compared to 2014. The reviews performed by the ENVAC are highly important. The number of files reviewed was reduced to 6 in 2015 compared to 8 in 2014 and 9 in 2013, as there have been some cancellations of planned actions and DG CLIMA made more use of its own Framework Contracts concluded in 2011, 2012 and 2013, but also Framework contracts from other DGs notably DIGIT, RTD, ENV and MOVE, so that a significant number of commitments were made as specific contracts under a framework contract. No negative ENVAC opinions were issued on CLIMA files. However, a number of procurement files were fine-tuned following on ENVAC's recommendations, while verification controls contributed to other, non-significant adjustments, for a number of files concerning both procurement and administrative budget expenditure (conferences, meetings, etc.).

- *Exception reporting:* The number of recorded exceptions (4 cases) remains low. The analysis of the reported cases does not point to any material weaknesses in the internal control system and all cases have been addressed promptly by mitigating actions.
- *Payment delays:* The number of DG CLIMA payments in 2015 remained at a level similar to previous years. In 2015, just 3.25% of all DG CLIMA's payments were paid late as compared to the legal deadlines, which is a further decrease compared to 2014 (5.3%). However in monetary terms, late payments in 2015 accounted for 9% compared to 6.1% of all payments in 014. The main reason for the increase in the amount of late payments in DG CLIMA in 2015 was that several large payments on grants to international organisations under the GPGC programme of DG DEVCO were held up because of the lack of payment appropriations available on the DEVCO lines from July 2015 onwards. Therefore, despite the fact that the amount paid late shows an increase, there is an underlying improving trend in payment delays.

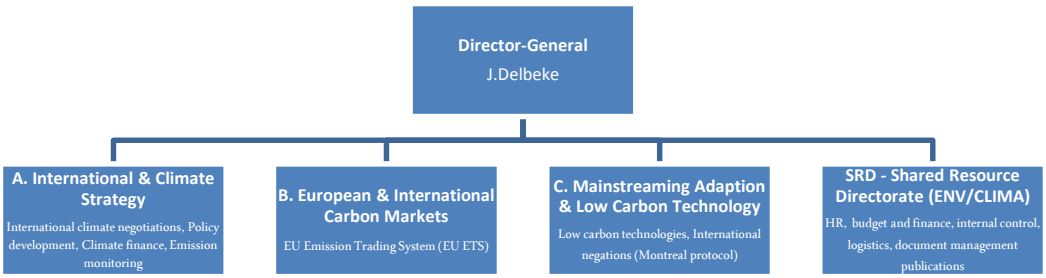
Financial overview DG CLIMA (see annexe 3):

Expenditure (M EUR)	**2015 Commitment Appropriations**	**Committed 31/12/2015**	**2015 Payments Appropriations**	**2015 Payments authorised**
Administrative expenditure (34 01 02)	1.86	1.86	2.23	1.88
LIFE & Completion LIFE (34 02-01, -02, -03, -51)	44.46	44.46	26.41	25.04
LIFE support expenditure (34 01 04 01)	3.38	3.30	4.82	2.26
Multilateral Env. Agreements (34 02 04)	0.85	0.83	0.83	0.83
Preparatory Actions	0.00	0.00	2.35	2.35
GRAND TOTAL	**50.55**	**50.44**	**36.64**	**32.36**

The consumption of commitment and payment appropriations is satisfactory with implementation rates of 99,78% and 88,32%. (before automatic carry-over of non-differentiated appropriations) respectively at year end. Assuming that all carried over appropriations will be used, implementation of payment appropriations will go up to an excellent 96,26% by the end of 2016.

At 31/12/2015, DG CLIMA had 187 staff members including external personnel[13]. The DG is structured around three Directorates, which receive various administrative and financial support services from the Shared Resource Directorate:

High-level organisation chart of DG CLIMA at the very end of 2015 (reorganisation 1 January 2016)[22]:



[13] Including SRD staff attributed to DG CLIMA and to DG Environment

Overview financial circuits for payments authorised in 2015 (including sub delegations):

Financial circuit	Expenditure	EUR million
Centralised	Administrative expenditure	1.88
Partly centralised	LIFE+, Preparatory Actions, MEA (mainly procurement)	23.93
Partly centralised /Co and cross sub-delegations received from other DGs	Cross sub-delegations from DG DEVCO, DG TRADE	12.15
Cross sub-delegations given to other DGs	Cross sub-delegations to DG EMPL, ENV, ESTAT, DIGIT	6.54
Externalisation to EASME	EASME	14.16
	Total	**58.67**

MANAGEMENT PARTNERS: AGENCIES AND SUB-DELEGATIONS

DG CLIMA is managing a small number of actions under cross sub-delegation agreements with DG DEVCO (GPGC- Global Public and Goods Challenge). The GPGC is part of the EU's response to helping developing countries tackle increasing environmental and climate challenges and contribute to the achievement of the Millennium Development Goals. Through the GPGC, the EU has dedicated resources to help developing countries and partner organisations address environmental and natural resource and climate management issues.

Cross-sub-delegations

DG CLIMA has entrusted parts of its budget to other DGs through cross-delegations (DGs ESTAT, ENV, EMPL, DIGIT). In all these cases, the DG's supervision arrangements are based on a memorandum of understanding with delegated DGs and defined reporting obligations. All delegated AODs have given assurance in their reports on the correct use of funds.

Cross-sub-delegations 2015:

DG	Commitments	Payments
PMO	222,890.93	149,649.82
OP	60,000	72,596.58
ESTAT	1, 100,000	1, 602,215.25
DIGIT	1, 079,198.02	205,473
ENV	10, 000,000	4, 709,319.25
EMPL	14,000.52	23,935.68
Total:	**12, 476,089.47**	**6, 763,189.58**

MANAGEMENT PARTNERS: AGENCIES

***European Agency for Small and Medium-sized Enterprises in Brussels (EASME)**:* As from 2014 DG CLIMA became responsible for the management of the Climate Action sub-programme[14] that established a new "Programme for the Environment and Climate Action (LIFE)" for 2014-2020. In 2014, DG Climate Action, in accordance with the Commission's commitment to simplify the management of future financial programmes 2014-2020 (including LIFE), agreed to externalise management of implementation to an existing Executive Agency. As a result thereof, around two-thirds of the Climate Action part of LIFE has been allocated to action grants (projects) to be managed by EASME, the Executive Agency for Small and Medium-Sized Enterprises. The remaining part of the budget is used for the two financial instruments managed by the European Investment Bank, EIB.

In order to ensure close cooperation between the DG and EASME in the transition phase of the LIFE programmes, a memorandum of understanding was signed by both parties. Prior to the signature of the memorandum, the SRD of DG Clima Action and DG Environment carried out an assessment of systems and procedures for internal control and risk management in the Agency, which confirmed their adequacy. Transition to the new arrangements has gone well.

DG Climate Action supervises the work externalised through the regular reports received and ad hoc contacts with the Agency. Furthermore, DG Climate Action also plays a direct role in processes such as the definition of the annual work programme of the agency, in collaboration with other parent DGs or in the evaluation of some projects. The DG participates as observer in the Agency's Steering Committee meetings and as member to the Task-Force-Meetings that are held regularly. Furthermore the Agency produces and disseminates quarterly reports as foreseen in the Memorandum of Understanding.

***European Investment Bank (EIB) in Luxembourg**:* In December 2014, two new financial instruments with the EIB were launched: the Natural Capital Financing Facility (NCFF), aimed at financing projects promoting the preservation of natural capital, including adaptation to climate change, and the Private Finance for Energy Efficiency (PF4EE) financial instrument which aims to increase private financing for investments in energy efficiency projects.

For NCFF, the EIB will contribute a total budget for the Investment Facility of €100 – 125 million for 2014-2017. The European Commission will contribute €50 million as a guarantee for the investments, and €10 million for a support facility. Beneficiary companies and financial intermediaries will provide significant additional financing. The main aim of the NCFF is to demonstrate that natural capital projects can generate revenues or save costs, whilst delivering on biodiversity and climate adaptation objectives. A first payment to EIB amounting to EUR 3,250 M was made in December 2014. In 2015, there were two payments (January and May) amounting to a total of EUR 8,500 M.

The Private Finance for Energy Efficiency (PF4EE) financial instrument under the LIFE programme aims to increase private financing for investments in energy efficiency projects. The Commission has committed €80 million for 2014-17 anticipating an 8-fold leverage effect. The target final recipients for the PF4EE could include Small and Medium-sized Enterprises and private individuals (e.g. house or hotel owners), small municipalities or other public sector bodies undertaking small energy efficiency investments, capable of using energy savings to repay up-front borrowing. In terms of

[14] LIFE programme Regulation 1293/2013

payments made, a first payment to EIB amounting to EUR 6,000 M was made in December 2014. An additional payment amounting to EUR 6,13 M was done in July 2015.

The Commission has put in place control and monitoring processes in order for the Commission to verify whether the internal control system set up by the EIB is efficient and effective. For instance, Commission management (Directors and HoU level of both DGs) participate in the Steering Committees, and financial statements and operational reports are provided twice a year by the EIB and scrutinized by the financial unit in the SRD and by operational unit in DG CLIMA. In addition, where appropriate, the Commission may perform on-the-spot checks of the Financial Intermediaries or Final Recipients on representative and/or risk-based samples of transactions.

CONCLUSION ON INDIRECT MANAGEMENT

Indirect management in DG CLIMA concerns the executive agency (EASME) and the EIB for the financial instruments Natural Capital Financing Facility (NCFF) and Private Finance for Energy efficiency (PF4EE). For the 2015 reporting year, the cross-delegated Authorising Officers by Delegation have reported reasonable assurance on the delegated budget managed by them. They have not signalled any serious control issues.

EASME has launched its first call for proposals in 2014 and the first list of projects has been selected in 2015 and will be implemented from 2016. The agency also submitted its draft internal control strategy for opinion in March 2015. DG CLIMA made some comments on this draft which were accepted by the Agency and then approved by the Steering Committee of EASME. EASME also submitted its draft ex post control strategy in November 2015. DG CLIMA made also several comments and finally approved this strategy in February 2016 once all comments were taken on board. EASME was also subject of an audit of IAS covering the preparedness of the management and control system for LIFE 2014-2020. In January 2016, the Agency received the Final Audit Report, which concluded that the Agency has successfully implemented LIFE in 2014 and proposed 3 very important recommendations. EASME accepted all the recommendations included in the audit report. According to the IAS opinion, the revised action plan for LIFE audit is satisfactory[15]. The Agency has already started working on the mitigating controls to tackle the risks identified by the IAS. This report was sent to DG CLIMA which considers it reinforces the assurance given by the agency.

EIB sent its anti-fraud strategy to CLIMA in 2015. However for the NCFF no projects have been signed in 2015 and so the risk of irregularity or loose of assets is equal to zero for this year. For the PF4EE, three agreements were signed with financial intermediaries but no final recipient has been selected so far.

Management's conclusions on the actual results of controls and their completeness and reliability, and thus the assurance about the achievement of each of the relevant internal control objectives are satisfactory. The decision to maintain the reputational reservation related to the security of the EU ETS Registry systems in the 2015 AAR is further elaborated in part 2.4.
However, despite the reservation noted above, the DG's internal control system is considered to be effective overall, so that the Director-General remains able to provide reasonable assurance in his declaration.

[15] Final IAS audit report on the management and control systems for the implementation of LIFE 2014-2020 in EASME.

Coverage of the Internal Control Objectives and their related main indicators

- ***Control effectiveness as regards legality and regularity***

DG Climate Action 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 control objective is to ensure that the final amount at risk related to payments authorised in 2015 does not exceed 2% of the amount in ABB activity 34 02. As DG CLIMA was managing a very small number of grants under the former ENRTP and the new GPGC programmes of DG DEVCO in 2015, ex-post audits aiming at detection and correction of potential fraud, errors and irregularities are carried out only on request, in cases where there is suspicion of fraud or irregularity. No such cases were indicated in 2015. Hence, we have used an error rate based on ex-post audits of LIFE+ grants managed by DG Environment (see analysis below).

The Standing Instructions[16] provide that the assessment by management should cover the DG's significant budget areas. 72% of payments authorised in 2015 relate to ABB activity 3402 (Climate action at union and international level) and 7% relates to the budget chapter 3401 (Administrative expenditure). The remaining 21% of operational funds are grants channelled through the cross sub delegation with DG DEVCO. As shown in the table below, the payments authorised and made in 2015 amount to EUR 58.67 million. Apart from the action grants of € 8.02 million sub-delegated by DEVCO, € 2.04 million of operating grants to NGOs, as well as the € 14.16 million delegated to EASME, all payments were implemented through procurement. The control strategies for procurement under ABB activity 34 02 are further explained in the Internal Control Templates in Annex 5.

Overview of payments authorised in 2015:

Expenditure (in M €)	**Grants**	**Procurement**	**Total Payments made in 2015**	**%**
Administrative expenditure (34 01 02)	0.00	1.88	1.88	3%
LIFE & Completion LIFE (34 02-01, -02, -03, -51)	2.04	22.99*	25.04	43%
LIFE support expenditure (34 01 04 01)	0.00	2.26	2.26	4%
Multilateral Climate Agreements (34 02 04)	0.00	0.83	0.83	1%
Preparatory Actions (34 02 77 01)	0.00	2.35	2.35	4%
Sub-total	**2.04**	**30.31**	**32.36**	**55%**
Cross-delegation DEVCO	8.02	4.12	12.14	21%
Cross-delegation TRADE	0.00	0.01	0.01	0%
Sub-total sub-delegations received	**8.02**	**4.13**	**12.15**	**21%**
Delegated to Agency EASME (3402-01, -02, -03)	14.16	0.00	14.16	24%
GRAND TOTAL	**24.23**	**34.44**	**58.67**	**100%**

* €10.377 million out of the €22.99 million is related to financial instruments

[16] ARES(2012)1240233

ESTIMATION OF THE DETECTED ERROR RATE (DER), THE AMOUNT AT RISK, AND THE RESIDUAL ERROR RATE (RER)

The ex-post audit team sampled 29 of the 165 LIFE+ grants for which final payment was made throughout 2014. 29 grants were audited, which represents an audit coverage of about 17% of the number of projects closed in 2014 and 30 % of the total value of those grants. The sample is based on a random selection through the MUS methodology. The 2014 detected error rate of 1.24% is therefore a reliable estimate.

In line with the AAR Standing Instructions, the detected error rate (DER), the amount at risk, and the residual error rate (RER) have been calculated as follows for the operational ABB Activity 3402 "Climate action at Union and international level":

Calculation step	Result	Explanation
1. Detected error rate (DER): LIFE grants	1.24%	Error rate based on ex-post audits of grants of the former LIFE+ programme
2. Apply DER to amount paid to LIFE Grants in 2015- Amount at risk LIFE grants ABB 3402	€ 0.025m	Detected error rate of 1.24% applied to the total amount of LIFE grant payments authorised in 2015 for DG CLIMA (EUR 2.04 million)
3. Amount at risk related to other payments under ABB Activity 3402	€0.00m	a) Preparatory actions and pilot projects paid through grants (EUR 0 paid). Amount at risk calculated using the same error rate as for LIFE grants (1.24%). b) Procurement: LIFE (EUR 12.61 million), MEAs (EUR 0.83 million), and preparatory actions and pilot projects (EUR 2.35 million). The risk of payment-related errors is considered insignificant (below) c) Financial Instruments (EUR 10.38 million): Agreements signed with 3 financial intermediaries and no final recipients at the time of payment. The risk of payment-related errors is considered insignificant.
4. Final amount at risk for operational ABB Activity 3402	€0.025m	The final (net) amount at risk is EUR 0.025 million.
5. Corrections in 2015	€ 0.00m	No recoveries issued in 2015 to be deducted from the amount at risk
6.Residual error rate (RER)	0,089%	The final (net) amount at risk (EUR 0.025 million) minus corrections (zero in 2015) divided by the total payments under ABB activity 3402 in 2015 (EUR 28,22 million –see annexe 3 table 2) results in a residual error rate of 0.089 % which is under the materiality level of 2%

Notes to the calculation table:

1. The amount at risk for LIFE grants has been calculated by using the same detected error rate of 1.24% as the one derived by DG ENV from the results of the ex-post audit programme on a randomly selected sample of 29 LIFE+ grants. This is justified because the control environment for LIFE grants managed by DG ENV and DG CLIMA is largely similar.
2. It should be noted that at DG CLIMA, the amount of LIFE grant payments authorised in 2015 is quite small (EUR 2.04 million).
3. a) For procurement, the risk of payment-related errors is considered insignificant as: 1) there is a limited number of pre-financings, and 2) technical reports and deliverables required for the payments have been approved; only some redrafting was sometimes required. The risk of errors related to the selection and award process is deemed to be low in the light of the existing ex-ante control systems:
    1. There are thorough ex-ante controls of procurement-related transactions in DG CLIMA. In addition to the mandatory initiator/verifier controls of all commitments and payments, procurement specialists in the central financial unit systematically provide advice and support to the operating units in DG CLIMA.
    2. Also, a specific procurement advisory committee (ENVAC) performs verifications of all contracts above EUR 500.000, plus on a sample of contracts of lower value.

    Therefore, reasonable assurance can be provided given: robust ex-ante controls performed at various stages in the financial circuit; quality advice by procurement experts to the desk officers and authorising officers in the operating units; independent and positive ENVAC verifications; no significant errors and weaknesses detected by the internal and external auditors; and no fraud cases or Ombudsman cases flagged.

    b) For financial instruments, the risk of payment-related errors is considered insignificant in 2015, as the European Investment Bank (EIB) only signed agreements with 3 financial intermediaries and with no final recipient. The instrument is still in the preparatory phase and the beginning of more significant operations is expected in 2016.
4. Based on the above, the **final amount at risk** in relation to payments authorised in 2015 under the operational ABB activity 3402 is **€ 0.025 million**.
5. The **residual error rate (RER)**, calculated by dividing the final amount at risk of €0.025 million minus corrections in 2015 (=0) by the total payments under ABB Activity 3402 in 2015 of € 28.22 million, is **0.089%** which is under the materiality level of 2%. Therefore no reservation is necessary.

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 Climate Action, the estimated **overall amount at risk**[17] for the 2015 payments made is 0.028 M€. This is the AOD's best, conservative estimation of the overall amount of payment expenditure authorised during the year including administrative expenditure (32.36M € in total) being not in conformity with the applicable contractual and regulatory provisions at the time the payment is made.

Corrective capacity. 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[18] for those 2015 payments made are 0.063 M€. This is the amount of errors that the DG conservatively estimates to identify and correct from controls that it will implement in successive years.

ABB 3402, 3401	Payments made (2015, €M)	Error rate %	Amount at risk (2015, €M)	Estimated future corrections 1.6%
1. LIFE & LIFE completion, LIFE NGOs, other grants	2.04	1.24%	0.025	0.033
2. Procurement (LIFE , pilot projects, preparatory actions)	25.35	0	0	0
3. Procurement (LIFE support on ABB 34 01)	2.26	0	0	0
3. Contributions (MEA)	0.83	0	0	0
4. Administrative (ABB 34 01)	1.88	0.15%	0.003	0.030
Overall:	**32.36**	**0.087%**	**0.028**	**0.063**

Total Amount at risk - Average Error Rate (AER):

The total amount at risk compared to the overall budget, calculated as explained in the table above, is €0.028 million compared to a total amount of payments for the whole budget of € 32.36 million as per Annex 3, Table 2.

Average recoveries and corrections:

The average of recoveries and corrections at the time of payment is €0.063 million. This number is calculated by multiplying the average rate of recoveries and corrections (1.6%) with the total amount of payments subject to recoveries and corrections (LIFE grants plus administrative expenditure- €3.92 million).

Amount at risk for the operational lines (3402) is €0.025 million and €0.028 million if the total budget managed by DG Climate Action including administrative appropriations is

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

[18] This estimate is based on past performance, namely on the average recoveries and financial corrections (ARC) implemented since 2009 and applied to the payments of the year. The DG has adjusted this in view of the specificities of the DG's control system, [reason/argument: e.g. data includes ex-ante control elements, data includes exceptional corrections, past years data less relevant for current MMF, etc], with a view to maintaining the conservative character of the estimation.

accounted for (excl. cross sub-delegations received). The residual error rate for the operational budget has been calculated at 0.089%, which remains for 2015 below the 2% materiality error rate. Furthermore, the average error rate for the whole budget managed by DG Climate Action as per Annex 3, Table 2 is 0.087%.

The internal control systems implemented by DG CLIMA provide sufficient assurance that risks relating to the legality and regularity of the underlying transactions are adequately managed and also provide sufficient assurance with regard to the achievement of the other internal control objectives.

- ***Control efficiency and Cost-effectiveness***

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

The principle of efficiency concerns the best relationship between resources employed and results achieved. The principle of economy requires that the resources used by the institution in the pursuit of its activities are made available in due time, in appropriate quantity and quality, and at the best price. This section outlines the indicators used to monitor the efficiency of the control systems, including an overall assessment of the costs and benefits of controls.

Procurement – Cost of Controls

	Cost of controls		
	FTE Officials		Total
	N	€	€
Procurement procedures/launch of Calls	0.5	67,000	
Financial operations (ex-ante)	1.5	201,000	
Supervisory checks (ex-post)	1	134,000	
Subtotal before allocations	**3**		**402,000**
Overhead cost allocation (8.3%)		33,366	
Overall cost of controls	**3**		**435,366**

The number of FTEs associated with exercising controls has been established. The overall cost of controls consists of direct costs and an allocation for overhead costs obtained from the annual screening exercise of DG HR (8.3%). There are no units indirectly involved in the system of controls. The overall cost of controls for procurement amounts to € 435,366.

The efforts identified above to control procurement procedures over their whole lifecycle justify the estimated zero error rate in the procurement cycle in 2015. None of the DG CLIMA calls for tender were cancelled, nor was there any need for corrections to CLIMA calls. One action has been temporarily postponed, but an alternative has been found by resorting to a Framework contract of another DG.

Procurement – Direct management (Benefits of controls)

	Benefits of controls			
	Prevented	**Detected**	**Corrected**	**Total**
	€	€	€	€
Procurement procedures/launch of calls				-
Financial operations (ex-ante)	471,276		361,292	832,568
Supervisory checks (ex-post)		209,974	202,160	412,134
Overall benefits of controls	471,276	209,974	563,452	**1,244,702**

The costs of controls performed are matched against benefits derived from:

- savings during the ex-ante phase (where the full amount dedicated to a planned 2015 call or other financial action has not been consumed, the balance becomes available for re-use within the year), and
- the supervisory/ex-post checks performed during the running life of the contract on execution of tasks and payments (resulting in reductions of the amount to be paid)

Apart from these quantifiable benefits, the control of procurement procedures means that in 2015 the DG has avoided reputational costs and damages, and has not faced any legal action, fraud, or complaints to the Ombudsman, while the controllers have made every effort to implement actions identified in the anti-fraud strategy of the DG.

Concepts. The *prevented* errors are those identified during the ex-ante phase and represent funds that have been saved after the conclusion of procurement procedures and so could be re-allocated to other actions within 2015 and in early 2016. The *detected* errors relate to supervisory/ex-post checks performed on payments during the running life of the contracts, which resulted in credit notes issued in favour of DG CLIMA related to irregularities. The *corrected* errors relate to non-eligible expenditure corrected ex-ante prior to final payments through credit notes (due to wrong calculations mainly) and also unused/unclaimed amounts which lead to de-commitment of these unused resources.

Grants - Direct Management (Costs of controls)

In order to estimate the cost of controls regarding grants under direct management, we have identified the costs associated with the exercise of controls in the central financial unit.

	Cost of controls					
	FTE Officials		FTE CA		Other (external) inputs	Total
	n	€	n	€	€	€
Stages 1 and 2 - Evaluation, selection						
Stage 3 - Monitoring and execution (fin circuits)	0.75	100,500				
Total ex-ante =	**0.75**	**100,500**			**-**	**-**

Stage 4 - Ex-post controls and recoveries						
Total ex-post	**-**	**-**			**-**	**-**
Subtotal before allocations		**100,500**				
Overhead cost allocation (8.3%)		8,341.5				
Total costs		**108,841.5**				**-**

Grants - Direct Management (Benefits of controls)

Both cost pools per above are matched against the benefits of controls which would normally be derived from recovery orders due to irregularities. However, given there were no recoveries for 2015, there is no quantitative benefit of controls for grants in CLIMA in 2015 but a qualitative benefit of prevention. In addition, the controls put in place for grants resulted in avoiding any reputational cost or damage, and no claims from grants beneficiaries were put forward. Moreover, most of DG CLIMA grants were financed through sub-delegation from DG DEVCO.

The cost of control represents about 1% of the total amount of grants, which is justifiable considering the complicated nature of the DEVCO grants and the fact that these refer to international partners, with whom Commission would like to avoid reputational damages.

Following a complaint lodged in August 2012 regarding theft of emission allowances, a contingent liability valued at 16.2 million was recorded in the final 2012 accounts. In the course of 2014, the Court ruled in favour of the Commission. Hover, since the complainant lodged an appeal, the contingent liability is maintained in the 2015 accounts.

OVERALL CONCLUSION ON THE COSTS AND BENEFITS OF CONTROLS:

DG CLIMA quantified the costs of the resources and inputs required for carrying out the controls described in annex 5 and estimated so far as possible their benefits in terms of the amount of errors and irregularities prevented, detected and corrected by these controls.

Overall, during the reporting year, the controls carried out by DG CLIMA for the management of the budget appropriations allocated for procurement were cost effective, as the estimated quantifiable benefits exceeded the cost by a ratio of 3 to 1 (€ 1,245 M benefits divided by € 0,44 M costs in total). Considering grants, the benefits are qualitative rather than quantitative and are proven effective by lack of any reputational, financial or other damage.

In addition, there are a number of non-quantifiable benefits resulting from the controls operated during the programming phase, which aimed to ensure that the financed projects contributed to the achievement of the policy objectives, and from the deterrent effect of ex-post controls. Furthermore, DG CLIMA considers that the necessity of these controls is undeniable, as the totality of the appropriations would be at risk if they were not in place.

DG CLIMA started to reflect in 2015 on the possibility foreseen in Article 66.2 of the financial regulation to differentiate the frequency and intensity of controls, in view of the different risks profiles and the cost-effectiveness of controls. Those reflections will be concluded in 2016.

Indirect Management (Cost of controls)

The cost of supervision of indirect management is shared between several entities and it represents a minor part of the tasks of their staff. No specific posts have been created to this purpose and any additional costs in 2015 in SRD are considered to be counterbalanced by the transfer of the NGOs operating grants management to the Executive Agency.

- **Fraud prevention and detection**

DG Climate Action has developed and implemented its own anti-fraud strategy since 2013, elaborated on the basis of the methodology provided by OLAF. This anti-fraud strategy was audited by the Shared Internal Audit Service in 2014. Their final report, which was published at the beginning of 2015, contained no critical or very important recommendations. However it recommended a revision of the anti-fraud strategy. This was prepared in 2015 in the following process:

- In line with OLAF's Methodology and guidance for DG's anti-fraud strategies[19], SRD conducted together with DGs CLIMA and ENV a fraud risk assessment of the main 1) Financial Management, and 2) Non-financial management activities, based on the identified risk areas, potential issues to be addressed, existing controls in place, and implications for the AFS (in terms of the estimated likelihood and possible impact of fraud). These fraud assessments were performed in June – August 2015.
- The risk assessment also took in consideration the findings of the special report 06/2015 of the Court of Auditors on "The Integrity and Implementation of the EU ETS".
- A revised Anti-Fraud strategy and action plan was then drawn up in December 2015. This took into account the findings of the fraud risk assessment, as well as all the important recommendations of SIAC in its original audit and of IAS in the follow up audit.
- The Anti-Fraud Strategy is built around the following anti-fraud objectives: (1) Fraud risk assessment "prevention"; (2) Dissemination of anti-fraud measures and raising fraud awareness within DG CLIMA; (3) Developing and communicating Fraud Indicators / "Red Flags"; (4) Developing Early Detection and Exclusion System (EDES) guidelines and internal guidance on EDES-flagging; and (5) Following up on Fraud Cases. Each objective has a clearly structured roadmap, with indicators to monitor implementation, clear identification of units responsible, and target dates when the objectives need to be carried out.

The original fraud risk assessments had in no cases identified a risk of fraud at a higher level than medium. The measures provided in the anti-fraud strategy and action plan aim to reduce the residual risk of fraud to "low" (probability and impact).

The action plan and revised AFS were adopted in March 2016, are valid for the period 2016-2018 and will be further updated in the course of its implementation.

During the reporting year, DG Climate Action transmitted no cases to OLAF/IDOC for investigation. Also, the anti-fraud measures already in place – notably the controls performed through ex-ante and ex-post controls – did not identify any cases of fraud or potential fraud in 2015.

19 Ares(2012)859571

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

DG CLIMA, being the business owner and manager of the EU ETS policy tool, is responsible for safeguarding the accuracy, integrity and reliability of relevant market sensitive data managed by the system.

The DG has adopted a classification policy of ETS-related 'sensitive but non classified' information, has organised training sessions on handling of ETS information, implemented IT measures and action plans to secure and protect data and has established an EU Registry Steering committee

No leaks/breaches of confidential data or violation of data integrity were reported in 2015.

As regards the delegation of the implementation of the 2 financial instruments to the European Investment Bank ("indirect management"), DG CLIMA has received from the EIB reasonable assurance that in all material respects the information set out in the Financial Statements is in accordance with the accounting, complete and accurate and that it applies a professional degree of care and diligence to the execution of the tasks entrusted to it in the Delegation Agreement.

2.2 Audit observations and recommendations

This section reports and assesses the observations, opinions and conclusions reported by auditors in their reports as well as the opinion of the Internal Auditor on the state of control, 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. Court of Auditors.

There was no reference to CLIMA and no finding addressed to CLIMA in the 2014 DAS report from the Court of Auditors.

2.2.2 Internal Audit Service (IAS)

The Internal Audit Service's (IAS) conclusion on the state of internal control draws on the audit work of previous years and covers all open recommendations issued by the IAS and the former Shared Internal Audit Capability (SIAC). It draws particular attention to all open recommendations rated "critical" or "very important".

The IAS concluded that for DG Climate Action the internal control systems that have been audited are overall working satisfactorily although a number of very important findings remain to be addressed in the line with the agreed action plans. "Particular attention should be given to the combined effect of the two very important IT security related recommendations (one on the management of the security of the EU ETS IT system and one on IT Governance and Management in DG CLIMA in general), which exposes the DG to the risk of security breaches".

The IAS bases its conclusion on the following accepted and open audit recommendations that are rated 'very important' and not reported as implemented by management and/or closed by the IAS:

1. **IAS AUDIT ON OBJECTIVE SETTING PROCESS IN THE CONTEXT OF PREPARATION OF THE MANAGEMENT PLANS (MULTI-DG AUDIT) (2015)**

- Recommendation N°3: "Monitoring of DG's objectives / Reporting arrangements" (rated Very Important). Expected completion date: 30 June 2016.

The IAS recommended to ensure that key information on the indicators included in the Management Plan (MP) is gathered and updated when significant changes occur; to prepare an overview report for management (at least twice a year); to analyse whether a mid-term review should be performed to identify the state of play of the indicators; and ensure that the monitoring decisions taken at the Directors' meetings are documented.

- Recommendation N°4: "Monitoring and reporting of DG CLIMA's objectives implemented by EASME" (rated Very Important). Expected completion date: 31 March 2016.

The IAS recommended DG CLIMA to define, in cooperation with EASME, a reporting system which sets the data to be monitored/reported on by EASME and the frequency of this monitoring/reporting. This would also enable EASME to report on the indicators accompanying the specific objectives in DG Climate Action's Management Plan.

2. **IAS AUDIT ON THE MANAGEMENT OF THE SECURITY OF EU ETS IT SYSTEM (2013)**

- Recommendation N°1: "Implementation of the ETS' security controls" (rated Very Important). Expected completion date: 31/12/2016.

  The 2013 audit found that the IT security measures defined as from 2010 for the Emissions Trading System had not yet been fully implemented. The IAS recommended that DG Climate Action, in cooperation with DG DIGIT (service provider) and DG HR Security Directorate, should ensure that the necessary security measures for ETS are duly implemented and within a reasonable time frame. The implementation of the security measures for the ETS system should be managed as a specific project, with clearly assigned responsibilities, including the ownership of the process.

  A first follow-up was performed in the first quarter of 2015. The IAS acknowledged the progress made in identifying the risks and prioritising the missing key controls. However, without their full implementation, the ETS system is still vulnerable to high risks. The IAS therefore invited DG Climate Action and DG DIGIT to make an additional effort to agree on an implementation plan and work together on its execution. It also recommended DG Climate Action, together with DG DIGIT and DG HR.DS, to re-assess the significance of the security controls that would still be missing at the end of 2015 in order to decide whether it could lift the EU ETS related reservation. As described further below, the DG, having made this assessment, is of the opinion that the EU-ETS related reservation must be maintained in the 2015 AAR.

3. SIAC AUDIT ON IT GOVERNANCE AND MANAGEMENT IN DG CLIMA (2014)

- Recommendation N°6: IT Security Plan (rated Very Important). Original expected completion date: 31/12/2015

  The IAC recommended that the existing Security Plan should be reviewed and approved by the Director General and the IT Steering Committee and that an implementation plan should be drafted and implemented. It also recommended regularly update of the Security Plan and monitoring of its effectiveness.

  In a recent follow-up, the IAS has acknowledged the progress made and that some of the actions have already been carried out, but has maintained the rating of the recommendation as "very important" In the first weeks of 2016 the IT Security Plan has been formally adopted by the DG and work is on-going to fully implement the recommendation. The original completion date, 31/12/2015, is revised.

Consequently, given the conclusion from the IAS on the state of internal control in the DG, and in view of all the actions taken in the 1st quarter of 2016, management of DG CLIMA and the Internal Control Coordinator consider that the current state-of-play does not lead to any assurance-related concerns, except from the reputational reservation related to the security of the EU ETS Registry systems that is maintained in the 2015 AAR.

Furthermore, DG Climate Action is working constructively to implement all audit recommendations.

2.2.3. DG BUDG audit on validation of local accounting system

DG BUDG accounting officer made an in depth audit of the local accounting systems of DG CLIMA. Although the auditors detected some weaknesses in relation to the monitoring of the recovery orders related to fines, there is currently only one infringement procedure in DG CLIMA that could lead to financial sanctions.

If this case ends up in a ruling of the Court imposing financial sanctions to the Member State concerned, then measures similar to the ones put in place by DG ENV can be introduced in DG CLIMA. The other findings related to the financial instruments, the internally developed intangible assets, the data quality in ABAC contracts, the control environment of the pre-financing process, the controls regarding invoices and the alignment of the sub delegation acts with the authorisation given in ABAC. The findings concern mainly the lack of documentation of already applied procedures and do not put in question the validation of the system itself. An action plan was drafted and presented to DG BUDG on 26 June 2015. All actions were implemented before end of 2015 and DG Budget will perform a follow-up audit in 2016.

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 to ensure the achievement of policy and operational objectives. In addition, as regards financial management, compliance with these standards is a compulsory requirement.

DG Climate Action 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.

ANNUAL ASSESSMENT OF THE INTERNAL CONTROL STANDARDS

The assessment of the 15 standards did not identify any significant control weaknesses. While there is scope for improvement in some areas, DG Climate Action is confident that its internal control system as a whole- covering both financial and non-financial activities – is effective. It has the necessary procedures, staff skills and experience to identify and manage the main operational, financial and legal/regulatory risks.

This conclusion is based on a thorough review of all available information, in particular:

1. **Inventory of the 15 internal control standards:** The Internal Control Coordinator (ICC) carried out his own review of the 15 internal control standards. Some areas of improvement were identified, but they are largely identical with the issues raised in DG Climate Action's annual assessment of the Internal Control Standards by management. See further below.

2. The **annual management survey of the Internal Control Standards**: The questions in the annual survey were updated in 2015 so as to better fit the specific characteristics of DG Climate Action. The survey paid particular attention to the standards that were prioritized in 2015, namely **ICS 5** "Objectives and Indicators", **ICS 8** "Processes and Procedures", **ICS 11** "Document Management", and **ICS 14** "Evaluation of Activities". The assessment of the fifteen standards did not identify any significant control weaknesses but pointed out some areas where improvements can be made.

   As regards staff allocation and mobility (**ICS 3**) some managers express only partial satisfaction in this area. This is to be expected at a time when staff reductions are placing pressure on the services and are also reducing opportunities for mobility. Nevertheless the replies points to the need for actions to promote flexible and collaborative working, cut out any overlaps, keep overheads to a minimum, and promote mobility and job exchanges. Most of these issues have been addressed early 2016 by means of a reorganisation so as to better fit DG Climate Action's resources to priorities. Further efforts to fine-tune allocations may be necessary in 2016.

   As regards **ICS 4** "Staff Appraisal and Development", the survey also revealed the need for continuous development, and identification of targeted learning programmes specific to the needs of DG Climate Action. Several programs (e.g. drafting, problem solving, and systems thinking) are in fact already available to the DG and they will be refined and continued in future. Managers will be encouraged to use the annual appraisal as a means to identify new leaning and development needs.

   With regard to **ICS 5** and **ICS 14** "Objectives and Indicators" and Evaluation of

Activities", the survey indicates that DG Climate Action could further improve the use of the objectives to monitor performance. This is in hand following a recent audit on objective setting in the management plan process. Specific measures, in line with the new corporate requirements for more concrete objectives in the strategic and annual management plans, have been taken.

Extensive work has been done to improve document management practice (**ICS 11**) in the DG in 2015, e.g. to train AD staff, to introduce Ares Look and to prepare the move to electronic signatures. While the survey did not reveal any significant weaknesses, efforts to improve document management within DG Climate Action will continue in 2016, in particular in the context of the move to electronic workflows.

3. The annual declarations by the **Authorising Officers by Sub-delegation**: In this declaration, each AOS confirms that the commitments and payments authorised by them in 2015 are legal and regular and that the corresponding funds have been used for their intended purpose and in accordance with the principle of sound financial management. The AOS declarations do not indicate any significant weaknesses in the control system.

4. **Exceptions and non-compliance events** (ICS 8): DG Climate Action's tracking of exceptions and derogations from existing rules and procedures is aligned with the instructions received from DG Budget. The objectives are to reinforce the consistent application of the reporting requirements, to adequately assess serious cases and to keep the number of exceptions and derogations at the lowest possible level. The analysis of the four cases reported in 2015 does not show any material weaknesses in the internal control system.

5. Information obtained from the **SRD monitoring dashboards**: This tool was implemented in 2012 and has become an effective means of reinforcing senior management supervision (ICS 5 and 9). It is based on a set of control indicators covering, for example, HR, budget implementation, payment delays, recovery orders, etc. The monitoring results, which are discussed at senior management level on a regular basis, do not indicate any significant weaknesses in the internal control system. Particular efforts have been made to improve payment delays and in fact the figures show a clear improving trend over 2015. The twice monthly "**Financial Priorities Report**", which was developed in 2014, gives to each manager a listing of open invoices under his/her responsibility, with indication of those that are nearing the payment deadline.

6. DG Climate Action's **risk register** (ICS 6): A Risk Advisory Committee (RAC) is established. It examined the "critical" and "very important" risks reported by the Directorates as part of the internal Management Plan process in June-July 2015. Furthermore, DG Climate Action's management of risk is periodically discussed at the weekly directors meetings. This facilitates the need for any corrective actions or initiatives aimed at addressing specific problems.

7. **OLAF fraud cases**: During the reporting year, no cases have been transmitted to OLAF by the DG or initiated by OLAF

8. **The European Ombudsman.** No individual cases were brought to the Ombudsman in 2015

Review of sensitive functions: The process in place in DG Climate Action to identify and manage sensitive functions is effective. A review was carried out in December 2015. Some sensitive functions related to ETS could be desensitised following the evaluation of the system in place and the successful implementation of several mitigating measures. However, certain functions are still to be

considered as sensitive. In cases where changes to the responsibilities occur to the functions, or new functions are identified, the Resources Director will carry out a risk assessment in collaboration with the Directorate/Unit concerned.

9. **Document management:** Measures taken in 2015 aimed to increase implementation of existing practices and prepare for future developments.

Training:

Awareness actions and specialised training were given in the course of the year with the following objectives:

- Document management staff in the units – refresher courses and coaching were provided to ensure knowledge of latest developments and of best practices;
- Managers – an information session and written material were provided to remind managers of the benefits of an efficient document management system;
- All staff – hands-on training was available to AD staff to get them to become more proficient users of ARES. Information sessions were organised and open to all on the new 'ARESLook' application for registering email.

In total for DG Environment and DG Climate Action, 75 training sessions and an awareness rising campaign have been organised in 2015 and 576 staff attended the sessions.

Pilot project e-signataire

- As a first step to moving towards electronic transmission and signature of non-financial documents, two pilots were set-up, one at Directorate level and one at DG level on a specific application (communications to parliamentary petitions).
- A thorough and clear guidance document was written and circulated. Training was provided to all staff concerned.

First results were positive therefore an implementation plan for electronic circulation of documents (e-signatory) in early 2016 was adopted by the DG.

Reminders and reporting:

- ARES provides limited reporting facilities, but units received regular reminders in relation to registration and filing of documents.

Improved archiving procedures:

- Additional attention was given to archiving following the introduction of a new electronic archiving system. Guidance on e-archiving was issued to units and will be implemented in 2016. In some cases, units' filing systems were inspected and improvements made as a result.

10. **Staff Allocation and Mobility**: given the on-going reduction in resources, DG Climate Action has paid particular attention to staff allocation and mobility during the course of 2015. Specific actions were as follows:

- In 2015, staff allocation was optimised to meet the policy objectives relating to the implementation of the ETS and the achievement of the goals related to the Paris COP. Following the successful outcome in Paris, the Director General rapidly made an assessment of the consequences for staffing and reorganised the DG accordingly. This involved shifting resources and re-orienting units towards implementation of the Paris agreement as well as the continued implementation of ETS.
- Continuous assessment of vacant posts in order to meet the DG's responsibilities in terms of reductions whilst at the same time taking action to fill the remaining vacancies as quickly as possible. In this respect, the DG fully met its obligations for reductions in 2015.

11. **European Court of Auditors reports**: In the 2014 DAS report the Court had no comments related to DG CLIMA

In conclusion, the internal control standards are effectively implemented and functioning though some significant weaknesses persist in the area of IT security and governance (ICS 12). In addition, DG Climate Action has taken measures to further improve the effectiveness of its internal control systems in the area of staff allocation and mobility, document management, and development of tools to monitor payment delays.

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.

Concerning financial management (mainly procurement), the AOD's assurance relies - to a large extent - on the ex-ante verifications performed in 2015: namely the mandatory controls of all commitments and payments, the advice by procurement experts in the financial unit, and the reviews performed by the Environment and Climate Advisory Committee on procurement procedures (ENVAC). These controls effectively reduce to an acceptable level the risk of significant errors being undetected.

The number of "exceptions" and "non-compliance events" reported in 2015 remains low.

In order to ensure close cooperation between the DG and EASME in the transition phase of the LIFE programmes, a memorandum of understanding was signed by both parties. Prior to the signature of the memorandum, the DG carried out an assessment of systems and procedures for internal control and risk management in the Agency, which confirmed their adequacy.

DG CLIMA supervises the work externalised through regular reports and ad hoc contacts with the Agency. In addition, in collaboration with other parent DGs, DG CLIMA plays a direct role in the definition of the annual work programme of the agency and/or evaluation of certain projects. Furthermore, DG CLIMA and the Agency have established permanent organisational links: the DG participates, as observer, in the Agency's Steering Committee meetings, and Task-Force-Meetings are held regularly at unit level. Furthermore the Agency produces and disseminates quarterly reports as foreseen in the Memorandum of Understanding. In its own AAR, EASME has given assurance on the use of the corresponding resources.

Additional assurance is obtained from the annual declarations by the Authorising Officers by Sub-delegation, whereby they confirm that all financial transactions authorised by them in 2015 are legal and regular and in compliance with the principle of sound financial management.

Further assurance is received from the Authorising Officers in DG ESTAT, DG EMPL, DG ENV and DG DIGIT regarding the crossed sub-delegations granted to them.

The audit work performed in 2015 did not identify any significant weaknesses in DG CLIMA's internal control system. Concerning the true and fair view of the accounting records and reporting, it should be noted that the audits performed in 2015 in this field did not identify any material issues.

According to management's self-assessment, all 15 Internal Control Standards have been implemented effectively.

The Director General can provide the **reasonable assurance** in his Declaration.

The reservation on reputational grounds related to remaining significant security weakness identified in the Union Registry for the Emissions trading System (EU ETS) issued in the AARs of DG CLIMA since 2010, is repeated in the AAR 2015. Though considerable progress has been made in rolling out mitigating measures, assurance that the current security measures could successfully prevent a future attack cannot reasonably be provided, and lifting of the reservation would be conditional on such assurance

Overall Conclusion

In conclusion, management has reasonable assurance that, overall, suitable controls are in place and working as intended; risks (like those relating to the legality and regularity of the underlying transactions) 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 a reputational reservation concerning the security of the Union Registry for the Emissions Trading System (EU ETS).

3. DECLARATION OF ASSURANCE AND RESERVATIONS

DECLARATION OF ASSURANCE

I, the undersigned,

Director-General of DG Climate Action

In my capacity as authorising officer by delegation Declare that the information contained in this report gives a true and fair view[20].

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, the observations of the Internal Audit Service and the lessons learnt from the reports of the Court of Auditors 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: Reservation on the reputational/legal/financial grounds related to remaining significant security weakness identified in the Union Registry of the EU Emissions Trading System (EU ETS)

Brussels, 31 March 2016

'signed'

Jos DELBEKE

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

Reservation

DG	Climate Action
Title of the reservation, including its scope	Reservation on reputational/legal/financial grounds related to remaining significant security weakness identified in the Union Registry of the EU Emissions Trading System (EU ETS)
Domain	Central direct management in collaboration with national authorities- Administration of the Union Registry and Union Transaction Log by the Commission
ABB activity and amount affected (="scope")	ABB Activity 34 02 : Climate Action at Union and international level
Reason for the reservation	Operational since January 2005, the registries system ensures the accurate accounting of allowances issued under the European Emissions Trading System (EU ETS). In 2010/11 several successful cyber-attacks were launched against national registries and theft of allowances reported. Since the migration in June 2012 of the national registries to a single Union Registry operated by the Commission, the Commission is now clearly more exposed to a reputational risk and legal/financial liabilities if new cyber-attacks would succeed. The absence of any security incidents occurring since 2012 does not mean that the current security protection is sufficient. No 'reasonable' assurance can be provided that the current security measures could successfully prevent a future attack. The IAS audit report on the governance and security of the EU ETS system of 2013 confirmed the presence of a number of weaknesses currently being addressed by the dedicated action plan. The remaining key action (roadmap) faces a minor delay because of the complexity but implementation is progressing. The EU ETS was identified as a critical system in all the Management Plans of DG CLIMA from 2011 till 2016 in case of dysfunction of the system or security flaws. In the AARs of the DG CLIMA since 2010 the DG has issued a reservation on reputational, financial and legal grounds related to security weaknesses identified in the Union Registry for the Emissions Trading System (EU ETS). Though the inherent critical reputational risk did not materialise and turn into a reputational event in 2015, this reservation is repeated in the AAR 2015 because of some remaining significant weaknesses, though significant progress in implementing the mitigating actions was made again in 2015. But the financial and reputational risks are still material so DG CLIMA does NOT lift the reservation on the EU ETS security in the AAR 2015
Materiality criterion/criteria	The significance of the events of 2010/11 was assessed against the following 3 criteria: - nature of the impact on reputation of the Commission vis-à-vis stakeholders to manage a market based instrument (=medium-term negative stakeholder perception with limited impact on ability of the Commission (DG CLIMA) to meet key objectives), - breadth of awareness of the events (=international and national press coverage, pro-active communication with the MS in full transparency by the Commission via the dedicated website 'EU Climate Action' , via a dedicated

	webpage to ETS on the Europa server and in the Climate Change Committee) - duration: a series of incidents started in November 2010 and continued in January 2011 led to a suspension of trading of allowances on the 'spot' market that accounts for less than 20% of the ETS. Another incident occurred in a national registry in October 2011.
Quantification of the impact (= actual exposure")	Reputational/legal/financial risk A Swiss cement company lodged a complaint against the Commission about (alleged) theft of allowances. This led to the recording of a contingent liability amounting to € 16,2 mio in the accounts of DG CLIMA (annexes of this AAR). The General Court dismissed the complaint. Meanwhile, the complainant has lodged an appeal which is still being examined.
Impact on the assurance	The event falls within the scope of the declaration as it is a core activity managed by CLIMA with high visibility and media coverage to which considerable human and financial resources have been allocated in the past and will be in the future. The EU ETS is a flagship instrument for achieving one of the headline targets of 2020: reduction of greenhouse gas emissions 20% compared to 1990. The IT tool is managed in-house by the Commission. However, the weakness has no negative bearing on the statement of reasonable assurance and as such it does not invalidate the declaration of reasonable assurance by the Director General
Responsibility for the weakness	The Commission as central administrator has a key role in the functioning of the EU ETS in managing the Union registry and EU transaction log.
Responsibility for the corrective action	The responsibility for all these corrective actions is shared between DGs CLIMA, DIGIT and HR/DS 1) The mitigating actions in the initial CLIMA/DIGIT security action plan adopted in 2011 and further elaborated in 2014 by a comprehensive risk assessment are not yet fully implemented, more measures will continue to be rolled out in 2016. 2) Moreover, a lot of progress has been made in implementing the action plan with DIGIT and HR/DS following the 2014 IAS audit on the IT security and governance of the EU ETS Registry. However, for one 'very important' recommendation, due to the complexity of the issue, the roadmap is still to be agreed to be agreed between CLIMA and DIGIT. The successful rolling out of all these measures would provide reasonable assurance that the residual risk of any successful cyber-attack would be under control and reduced to a low and acceptable level

ANNEX 1: Statement of the Resources Director

I declare that in accordance with the Commission's communication on clarification of the responsibilities of the key actors in the domain of internal audit and internal control in the Commission[21], I have reported my advice and recommendations to the Director-General on the overall state of internal control in the DG.

I hereby certify that the information provided in Section 2 of the present AAR and in its annexes is, to the best of my knowledge, accurate and exhaustive.

Brussels, 31 March 2016

'signed'

Bruno PRAGNELL

[21] Communication to the Commission: Clarification of the responsibilities of the key actors in the domain of internal audit and internal control in the Commission; SEC(2003)59 of 21.01.2003.

ANNEX 2: Human and financial resources

Human Resources by ABB activity				
Code ABB Activity	**ABB Activity**	**Establishment Plan posts**	**External Personnel**	**Total**
34 02	Climate action at Union and international level	128	40	168
34 AWBL 02	Policy strategy and coordination for the Directorate-General for Climate Action	16	3	19
	Total	**144**	**43**	**187**

Human Resources by ABB activity				
Code ABB Activity	**ABB Activity**	**Establishment Plan posts**	**External Personnel**	**Total**
34 AWBL 01	Shared management for Environment and Climate Action[22]	72	12	84
	Total	**72**	**12**	**84**

Financial resources – implementation of decentralised administrative credits						
	Budget line	**FMC**	**Credits**	**Commitment**	**Payment**	**% EXECUTION**
34	**34.010211.00**	**CLIMA**	**1,845,559**			
34	34.010211.00.01.10	CLIMA		1,189,456	1,098,811	
34	34.010211.00.01.30	CLIMA		11,000	9,731	
34	34.010211.00.02.20	CLIMA		39,000	26,466	
34	34.010211.00.02.40	CLIMA		495,388	392,597	
34	34.010211.00.03	CLIMA		60,000	38,342	
34	34.010211.00.05	CLIMA		0	0	
34	34.010211.00.06	CLIMA		50,281	36,427	
34 Total			**1,845,559**	**1,845,124**	**1,602,373**	**99.98%**

[22] Including SRD staff allocated between CLIMA and ENV

ANNEX 3: Draft annual accounts and financial reports

Adobe Acrobat Document

ANNEX 4: Materiality criteria

Section 2.1 of this report sets out the main elements used to identify possible weaknesses in the internal control system. The significance/materiality of any weaknesses identified is assessed according to the following criteria:

1. Qualitative criteria

The qualitative criteria for assessing the significance of any weaknesses identified are:

- the nature and scope of the weakness
- the duration of the weakness
- the existence of compensatory measures
- the existence of effective corrective actions to correct the weaknesses
- the residual reputational, financial, operational and legal/regulatory risk

2. Quantitative criteria

Concerning legality and regularity, a weakness is considered material if the value of the errors in the transactions affected by the weakness is estimated to represent more than 2% of the authorised payments of the reporting year of ABB activity 34 02.

ANNEX 5: Internal Control Template(s) for budget implementation (ICTs)

Name the type of expenditure to which the ICT applies[23] (grants direct management / procurement direct management / shared management / indirect entrusted management / Financial Instruments / Non-Expenditure Items [24]). The generic ICTs for the above expenditure types are published on BUDGweb.

Procurement – direct management

Stage 1: Procurement
A: Planning

Main control objectives: Effectiveness, efficiency and economy. Compliance (legality and regularity)

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators
• **Needs not well defined**	• Individual standardised fiche to be drafted for the Man Plan process.	• Once per year for every envisaged action. Fiche includes objectives and purpose of the action, as well as a short budget estimate.	• **Costs**: estimation of costs involved (staff involved on the process) • **Benefits**: Prioritization and proper usage of DGs' budget	**Effectiveness:** • Low number of changes done to the Management Plan; • Procured study/service highly contributes to policy priorities. • High percentage of

[23] One ICT is required per type of expenditure managed by the DG. As regards cost benefits indicators for the external aid policy area, the aid delivery methods (procurement and grants, contribution agreements, budget support etc.), the management modes or distinct internal control systems or alternatively the different cooperation instruments could be used, as long as the relevant indicators are reported accordingly in the AAR under sections 2.1 and 2.2.

[24] For specific types of expenditure that do not fit in the categories mentioned (e.g. Budget support) use the same template and name it accordingly.

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators
				executed Management Plan at the end of the year. **Efficiency:** • Cost of preparing Man Plan fiches compared to cost of insufficient prioritization and poor definition of needs.
• **Poor budget planning (over/ under estimating)**	• Revision of each fiche by the finance Unit (FU); • Briefing to the AOD done by the FU before the bilateral meeting with the Directorate.	• Once per year for every envisaged action; its validity, choice of procedure and budget line, budget estimate; • Once per year for every Directorate.	• **Costs**: estimation of costs involved (staff involved on the process) • **Benefits:** assuring compliance with Financial Regulation, efficient budget estimate and selection of proper procedure	**Effectiveness:** • Low percentage of cancelled procedures and offers of poor quality. **Efficiency:** • Cost of reviewing Man Plan fiches compared to costs from not assuring compliance with Financial Regulation, inefficient budget estimate and selection of wrong procedure.
• **Lack of competition**	• Prior information notice (PIN)published; • Desk officers consider possible market	• Once per year- 1st quarter of the year. PIN provides an overview of foreseen contracts;	• **Costs**: estimation of costs involved (staff involved on the process)	**Effectiveness:** • Higher average number of offers received per procedure.

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators
	response before publishing tenders (market research).	its subject and approximate value.	• **Benefits:** steady decrease of cancelled procedures and insufficient number of offers; receipt of better offers and new market players.	**Efficiency:** • Cost of publishing PIN and performing market research compared to cost of cancelling or repeating a procedure.
• **Insufficient time allocation**	• Management plan launch dates; • Financial dashboard; • Individual follow-up by FU of procedures which are late; • Planning tool provided on the Intranet pages of SRD2.	• All items in management plan have a target date for launch; • Financial dashboards monitor compliance with target launch dates set in Management Plan. Produced 6 times per year; • Monitoring covers all items in the management plan; • Establishing a time table for every procedure.	• **Costs**: estimation of costs involved (staff involved on the process) • **Benefits:** avoidance of bottlenecks at the end of the year; decrease risks of contracts not signed before end of the year.	**Effectiveness:** • Low number of global commitments; • High level of budgetary execution; • Evenly distributed budgetary execution. **Efficiency:** • Cost of proper planning and time allocation compared to cost of poor budget/ Man Plan implementation.

B: Needs assessment & definition of needs

Main control objectives: Effectiveness, efficiency and economy. Compliance (legality and regularity)

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators
• **Poor quality of tender specifications and selection of wrong procedure**	• Consultation with the FU during preparatory stage and agreement on the final version of the tender specifications; • Additional verification and AOSD supervision (upstream control); • Training organized by the FU on drafting the tender specifications.	• 100% of tender specifications above financial threshold of 60.000 euro, restricted calls and negotiated procedures are reviewed and scrutinised; • Files above 500.000€ and sensitive files; • Training organised at list twice per year.	• **Costs**: estimation of costs involved • **Benefits**: better quality tender specifications, limit the risk of litigation, limit the risk of cancellation of tender, better informed desk officers.	**Effectiveness:** • Very low number of procedures where only one or no offers were received; • Average number of requests for clarification per tender. **Efficiency:** • Cost of financial verification and organization of trainings compared to cost of cancelling or repeating a procedure.

C: Selection of the offer and evaluation

Main control objectives: Effectiveness, efficiency and economy. Compliance (legality and regularity). Fraud prevention and detection

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators
• **Biased, inaccurate, unfair evaluation procedure**	• Opening Committee and Evaluation Committee; • Opinion by consultative committee ENVAC; • Standstill period,	• Formal evaluation process; nomination of the Committees by the AOS for every file above 60.000, 00€. Minimum of three members (one from another	• **Costs:** Estimation of costs involved. • **Benefits**: Compliance with FR, prevention of fraud, limit the risk of litigation, better quality PVs,	**Effectiveness:** • Low number of files rejected or suspended for comments by ENVAC. **Efficiency:**

	opportunity for unsuccessful tenderers to put forward their concerns on the decision; • Training organized by the FU on evaluation of tenders; • Model evaluation report and guidelines; • Tenderers able to attend openings; • Award decision communicated to tenderers.	Directorate); • ENVAC assesses full procurement and evaluation process and the draft award decision for all files above 500.000, 00€ and number of files below the amount by a random selection (all documents related to the procurement procedure publications, committee reports, winning offer, draft contract); • 100% when conditions are fulfilled; Templates and guidelines up-to-date following DG BUDG updates; • For open calls tenderers are able to attend the opening of offers; • Successful and unsuccessful tenderers always informed on the evaluation outcome.	composition of the evaluation team ensures neutrality and objectivity, transparency	• Cost of staff involved (opening, evaluation committee members, ENVAC members, FU) compared to cost of possible litigation.
• **Confidentiality issues/ conflict of interest**	• Opening and Evaluation Committee members' signed	• 100% of the members of the opening committee and the evaluation	• **Costs:** Estimation of costs involved. • **Benefits**: Potential	**Effectiveness:** • No or very low amount of indemnities.

	declaration of absence of conflict of interests; • Checks by the FU.	committee; • Red flags checked by the FU for every file.	irregularities/inefficiencies prevented.	**Efficiency:** • Cost of FU staff involved compared to cost of possible litigation.
• **Inadequate number of offers/ poor quality offers**	• Award criteria announced in advance; • FR followed in terms of minimum time granted for preparation of tenders.	• Award criteria in every tender specifications published with the call; • 100% FR respected.	• **Costs:** Estimation of costs involved. • **Benefits:** Ensure better quality offers.	**Effectiveness:** • Low number of cancelled procedures. **Efficiency:** • Cost of financial unit staff involved compared to cost of possible procedure cancellation or repetition.
• **Unreliable contractor/ False declarations**	• Exclusion criteria determined; • Early warning system (EWS); • Satisfaction certificates.	• 100% checked. The required documents provided by the tenderers are consistent with the specifications and appropriate for evaluation purposes (as required by the FR); Financial turnover and declaration on honour; • 100% of successful contractors checked in the EWS; • Satisfaction certificates are an	• **Costs:** Estimation of costs involved. • **Benefits**: Avoid contracting with excluded economic operators.	**Effectiveness:** • Low number of discontinued contracts. **Efficiency:** • Cost of staff involved compared to cost of contract discontinuation.

		increasing requirement in tender specifications, especially for high value or sensitive files.		

Stage 2: Contract implementation and Financial transactions

Main control objectives: Ensuring that the implementation of the contract is in compliance with the signed contract

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators
• **Contractor fails to deliver all that was contracted in accordance with technical description and terms and conditions of the contracts** • **Business discontinues because contractor fails to deliver.**	• Operational and financial checks in accordance with the financial circuits; • Operation authorisation by the AO; • Request of bank guarantee; • Non-performance clauses in contract.	• 100% of the contracts are controlled; • Riskier operations subject to in-depth controls. High-risk operations identified by risk criteria. Amount and potential impact on the DG operations of late or no delivery (bank guarantees); • Clauses on liquidated damages/ termination of contract are integral part of every contract (general conditions).	• **Costs:** Estimation of costs involved. • **Benefits**: Irregularities, errors and overpayments prevented	**Effectiveness:** • High % of errors prevented (amount of errors/irregularities averted over total payments). • Low amount of liquidated damages. **Efficiency:** • Cost of financial checks in place compared to cost of non-performance and discontinuation of contract.

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators
• **Not structured financial and contract monitoring**	• Payment made on the basis of a deliverable; • FU monitoring tables; • Trainings on contract management organized by the FU.	• 100% payments made on the basis of an accepted deliverable; • Tables monitored and updated on a regular basis (after each payment, amendment, etc.);	• **Costs:** Estimation of costs involved. • **Benefits:** Irregularities, errors and overpayments prevented, better informed desk officers	**Effectiveness:** • Low number of errors; overpayments. **Efficiency:** • Cost of financial unit monitoring compared to cost of possible errors and overpayments.
• **Fraud not detected**	• Four eyes principle and written procedures and checklists for initiators and verifiers; • Fraud awareness trainings.	• Four eyes principle applied to 100% of files; • All FU staff and financial correspondents.	• **Costs:** Estimation of costs involved. • **Benefits:** detection of red flags and issues of non-compliance	**Effectiveness:** • Low number of court litigations. **Efficiency:** • Cost of financial unit staff detecting red flags and issues of non-compliance compared to cost of possible litigation.
• **Payment delays**	• FU monitoring tables with special filters signalling latent invoices; • Financial reporting tool; • Optimization of available appropriations; • Global transfer.	• Tables monitored and updated on a regular basis (filters signal invoices inactive for 7 days); • Twice a month identifying Units' current and outstanding invoices; • Monitoring of payment	• **Costs:** Estimation of costs involved. • **Benefits:** detection of dormant invoices, maximization of budget execution	**Effectiveness:** • Low rate of payment delays; • Low amount of late interest payment and damages paid (by the Commission); • High rate of implementation of the payment appropriations.

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators
		appropriations on a weekly basis.		**Efficiency:** • Cost of improving financial monitoring tools compared to cost of late interest and damages paid by the Commission.

Stage 3: Supervisory measures and ex post control

Main control objectives: Ensuring that any weakness in the procedures (tender and financial transactions) is detected and corrected

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators
• **An error or non-compliance with regulatory and contractual provisions, or an attempt to fraud is not prevented, detected or**	• Internal audit and Court of Auditors; • Ex-post publication (possible reaction from unsuccessful tenderers); • Review of ex post results and implementation of recommendations; • Training for staff assigned to sign "Certified correct" (compulsory as of 2014); • Review of exceptions reported; • Yearly review of procedures; • Yearly review and "lessons	• Representative sample, review of the procedures implemented (procurement and financial transactions); • Potentially 100%; • 100% results reviewed, implementation of recommendations on a yearly basis; • Ad hoc/ hands-on trainings; • 100% once a year; look for any systematic problems in the procurement procedure, in the financial transaction procedure and for	• **Costs:** estimation of costs involved. • **Benefits:** detection of possible fraud and errors. Deterrents and systematic weaknesses corrected.	**Effectiveness:** • Low number of errors detected (related to fraud, irregularities and error); • Increased number of system improvements made. Efficiency: • Cost of staff involved compared to cost of not detecting fraud,

Main risks	Mitigating controls	Coverage, frequency and depth	Costs and benefits of controls	Control indicators
corrected by ex-ante control.	learnt" based on ENVAC conclusions; • Statistics on payment delays at the Directors' meetings.	weaknesses in the selection process of the ex-post controls (exceptions reported, review of procedures, ENVAC conclusions); • Statistic on payment delays on Directors' meeting (six times a year)		irregularities and inadequate systems in place.

Financial Instruments - Indirect management

IFI *= (entrusted) International Financial Institution (eg EIB/EIF, etc);* ***FI*** *= (further entrusted) Financial Intermediaries;* ***"sub"-FI*** *= (further) sub-delegated FI;* ***FR*** *= Final Recipient*

DS = Designated service (competent DGs)

Main risks *It may happen (again) that…*	Mitigating controls	How to determine coverage frequency and depth	How to estimate the costs and benefits of controls	Possible control indicators

a) The actions supported through the Financial Instrument do not adequately reflect the policy objectives (no compliance with Fin. Reg. art. 140 and instrument specific objectives)	• *Guidance provided to the IFI for the assessment of projects by the DS;* • *Prior eligibility confirmation of the DS for every project Technical assistance;* • *Regular reporting by the IFI to the DS on the operational performance, including the management declaration, and the summary of audits and controls carried out during the reporting year;* • *Independent audit opinion;* • *In case of weak reporting, negative audit opinion, high risk operations, etc: reinforced monitoring/supervision controls, random and/or case/risk-based audits at the IFI and (sub) FI levels;*	If risk materialises, the Financial Instrument would be irregular. Possible impact 100% of funds involved and significant reputational consequences. **Coverage / Frequency**: 100% **Depth**: Checklist on operational reporting includes a list of checks to be done.	**Costs**: estimation of cost of staff involved in the preparation and validation of the operational reporting Cost of the technical assistance. **Benefits**: the (average annual) total value of the Financial Instrument.	**Effectiveness**: evolution of the specific indicators in the operational reporting compared with benchmarks and evolution over time. Where applicable, opinion by technical assistance (recommendations, actions taken).
b) The IFI (and the (sub)FI) does not have the experience to ensure effective implementation of this type of Financial Instrument	• *Eligibility standards for IFI established and verified according to the Delegation Agreement and FAFA.* • Guidance provided to the IFI for the assessment of projects by the DS;	**Coverage / Frequency**: 100% **Depth**: In accordance with the Delegation Agreement.	**Costs**: estimation of technical assistance cost. **Benefits**: reduced risk related to the disbursement of the total amount by selecting the IFI on the basis of the ability to use the funding in the most efficient and effective way	

Main risks ***It may happen (again) that…***	**Mitigating controls**	**How to determine coverage frequency and depth**	**How to estimate the costs and benefits of controls**	**Possible control indicators**
c) FIs and FRs are not selected on the basis of an open, transparent, justified on objective grounds procedure or there are conflicts of interests in the selection process.	• *Responsibility for selecting FI and FR, lies with the IFI and FI, respectively;* • *Prior eligibility confirmation of the DS for every FI.*	**Coverage / Frequency:** determined by the IFI/FI in accordance with the delegation agreement (max twice per year for the next 5 years) **Depth**: determined by the IFI/FI in accordance with the Delegation Agreement	**Costs**: estimation of the cost of staff involved in the monitoring of the Financial Instrument. Cost of contracted services (Audit costs). **Benefits**: reduced risk related to possible conflict of interest and questionable selection procedure.	**Effectiveness:** the selection of FI and FR would (not) be (successfully) challenged **Cost-effectiveness:** Average cost of preparation, adoption and selection work done (compared with similar cases as benchmark)
d) The design of the accounting and reporting arrangements would not provide sufficient transparency (True & Fair View)	• *Separate records per Financial Instrument are to be kept by the IFI; and harmonised reporting has been required by the Commission (cf. FAFA & Das).*	**Coverage / Frequency:** 100% **Depth**: In depth assessment of the statement of expenses	**Costs**: estimation of the cost of staff involved in the monitoring of the Financial Instrument. Cost of contracted services, if any Training of the concerned staff.	

e) the remuneration of the IFI[25], the reimbursement of any exceptional costs and costs for technical assistance or additional tasks would not be in line with the objective	• *Fees, any incentives and any exceptional costs are defined in the FAFA and the Delegation Agreements, including an overall cap;* • *Reimbursement of cost for technical assistance and additional tasks to be defined in the FAFA and the delegation agreement;* • *Review by the designated service of the statement of expenses together with evidence provided by the IFI;* • *Ex-ante and ex-post controls, On-the-spot verifications (risk-based or representative samples).*	**Coverage / Frequency:** 100% **Depth**: In depth assessment of the statement of expenses Training of the concerned staff	**Costs**: estimation of the cost of staff involved in the monitoring of the Financial Instrument. Cost of contracted services, if any	Remuneration and costs for actually managed funds (compared to benchmark)

Main risks ***It may happen (again) that…***	**Mitigating controls**	**How to determine coverage, frequency and depth**	**How to estimate the costs and benefits of controls**	**Possible control indicators**

[25] Remuneration includes administrative and performance fees.

f) Internal control weaknesses, irregularities, errors and fraud are not detected and corrected by the entrusted entities, resulting in that the EU funds are not compliant with applicable regulations.	• *Monitoring or supervision ([26]) of entrusted entities;* • *Regular reporting by the IFI to the Commission "Designated Service" on the operational and financial performance, including the financial statements, management declaration, summary of audits and controls carried out during the reporting year;* • *Independent audit opinion;* • *In case of weak reporting, negative audit opinion, high risk operations, etc: reinforced monitoring/supervision controls, random and/or case/risk-based audits at the IFI and (sub)FI levels;* • *Regular submission of disbursement and*	**Coverage:** 100% of the funding payments to the entrusted entity are controlled, including value-adding checks. Riskier operations subject to more in-depth controls and/or audits. **Depth:** depends on risk criteria such as past experience of/with the IFI/FI, complexity or lack of experience on the area of financed actions or the management modalities If needed: suspension or interruption of payments, or even application of exit strategy (winding up)	**Costs**: estimation of the cost of staff involved in the monitoring of the Financial Instrument. Cost of contracted services, if any **Benefits**: value of the funding and disbursement forecast rejected. Exposure of the guarantees not provided. Budget value of the part of the Financial Instrument not paid out to FR. **Losses**: eg write-offs of equity/loans, loan guarantees called above expectations	**Effectiveness**: Success performance ratios (eg "leverage", "co-risk-taking", number of FR supported by the Financial Instrument, disbursement rate) Number of control failures detected; value of the issues concerned prevented/corrected. Number and value of internal control, auditing and monitoring "issues", number of interventions, number of issues under reinforced internal control, auditing and monitoring, number of critical IAS and ECA findings Number of cases submitted to OLAF **Efficiency**: e.g. Management (fees) and supervision costs (FTE) over assets under

[26] The nature of these measures is similar. We distinguish between those cases in which the Commission has a direct (legal/contractual) say in the management process, such as the right to block ex-ante a transaction (supervision), or can merely flag its disagreement (monitoring), and influence the fundamental options foreseen under the FR related to stopping/suspending/reconfiguring/winding-down the FEI.

	repayment (assigned revenue) forecasts; • *Reporting on financial risk & off-balance-sheets liabilities;* • *Reporting on treasury management.*			management ? **Cost-Effectiveness**: Average cost per Financial Instrument; % cost over value delegated Costs/Benefits ratio
g) the FI, which are pilot initiatives, are not resulting in a number of operations significant to give conclusive results	• *Regular reporting by the IFI to the Commission "Designated Service" (=accountable DG and AOD) on the operational and financial performance* • *Mid term evaluation*	**Coverage:** 100% of the operations are taken into account. If needed: revision of the reporting requirements	**Benefits**: the (average annual) total value of the Financial Instrument.	
h) the risk sharing mechanism is used in an instrumental way by the IFI	• *Check that the Portfolio First Loss Piece will be decreasing with the increase in the number of operations*	**Coverage:** 100% of the funding payments to the entrusted entity are controlled, including value-adding checks. Riskier operations subject to more in-depth controls and/or audits.	**Costs**: estimation of the cost of staff involved in the monitoring of the Financial Instrument. Cost of contracted services, if any **Benefits**: the (average annual) value of the Commission contribution to the Financial Instrument.	

Grants – direct management

Stage 1 – Programming, evaluation and selection of proposals

A - Preparation, adoption and publication of the Annual Work Programme and Calls for proposals

Main control objectives: Ensuring that the Commission selects the proposals that contribute the most towards the achievement of the policy or programme objectives (effectiveness); Compliance (legality & regularity); Prevention of fraud (anti-fraud strategy).

Main risks ***It may happen (again) that…***	**Mitigating controls**	**How to determine coverage frequency and depth**	**How to estimate the costs and benefits of controls**	**Possible control indicators**
The annual work programme and the subsequent calls for proposals do not adequately reflect the policy objectives, priorities set are not coherent and in line with the WP and/or the essential eligibility, selection and award criteria are not appropriate and adequate to ensure the evaluation of the proposals and award of the grant.	Hierarchical validation of the contribution to the annual working programme within the authorising department. Inter-service consultation, including all relevant DGs. Adoption by the Commission of a Financing Decision. Each individual call for proposals is prepared by the technical unit (assisted by the finance units) and then checked by the finance Units. Direct grants are checked by the finance and the technical Units and may subsequently be submitted to internal advisory Committee (ENVAC) by request of the Finance Unit if monopoly situation is not clear.	If risk materialises, all grants awarded during the year under this work programme or call would be irregular. Possible impact could be 100% of budget involved and furthermore significant reputational consequences. **Coverage / Frequency**: 100% **Depth**: The check is made for each individual call for proposals or direct grant.	**Costs**: estimation of cost of staff involved in the preparation and validation of the annual work programme and calls. **Benefits**: The (average annual) total budgetary amount of the annual work programmes or calls with prevented, detected and/or corrected errors.	**Effectiveness**: Budget amount of the work programmes concerned. Success ratios; % of number/value proposals received over number expected / budget available. **Efficiency**: Average cost of preparation, adoption and publishing an annual work programme, compared with benchmarks and evolution over time.

B - Selecting and awarding: Evaluation, ranking and selection of proposals

Main control objectives: Ensuring that the most promising projects for meeting the policy objectives are among (a good balance of) the proposals selected
(effectiveness); Compliance (legality & regularity); Prevention of fraud (anti-fraud strategy)

Main risks ***It may happen (again) that…***	**Mitigating controls**	**How to determine coverage frequency and depth**	**How to estimate the costs and benefits of controls**	**Possible control indicators**
The evaluation, ranking and selection of proposals is not carried out in accordance with the established procedures, the policy objectives, priorities and/or the essential eligibility, or with the selection and award criteria defined in the annual work programme and subsequent calls for proposals.	Assignment of staff (including technical unit desks) to evaluate the proposals.	100% vetting for technical expertise and independence (e.g. conflicts of interests, nationality bias, ex-employer bias, collusion) of evaluators.	**Costs**: estimation of cost of staff (costs of initiation and verification related to controls) involved in the evaluation and selection of proposals. **Benefits**: Amount of expenditures declared ineligible compared to total amount of proposals received. Benefit equals to value of deserving projects otherwise not selected plus value of non-deserving projects that would have been selected (=amount redirected to eligible and necessary projects).	**Effectiveness:** No litigation cases. Number of candidate expert evaluators barred. Rejected/corrected/suspended transactions compared to total number of transactions. Number of supervisory control failures. **Efficiency Indicators**: Average cost per call and/or per (selected) proposal. % cost over annual amount disbursed in grants. Time-to grant (inform applicants of the results within 6 months from the call deadline; additional 3 months to make a legal commitment).
	Assessment by staff (e.g. programme officers)	100% of proposals are evaluated. Depth may be determined by screening of outline proposals (two-step evaluation).		
	Review (e.g. by a mixed panel) and hierarchical validation by the AO of ranked list of proposals.; publication.	Coverage: 100% of ranked list of proposals. Supervision of work of evaluators. Depth depends on several risk factors: e.g. conflicts of interest, nationality bias,		

		ex-employer bias, collusion.		

Stage 2 - Contracting: Transformation of selected proposals into legally binding grant agreements

Main control objectives: Ensuring that the actions and funds allocation is optimal (best value for public money; effectiveness, economy, efficiency); Compliance (legality & regularity); Prevention of fraud (anti-fraud strategy)

Main risks ***It may happen (again) that…***	**Mitigating controls**	**How to determine coverage frequency and depth**	**How to estimate the costs and benefits of controls**	**Possible control indicators**

The description of the action in the grant agreement includes tasks which do not contribute to the achievement of the programme objectives and/or that the budget foreseen overestimates the costs necessary to carry out the action. The beneficiary lacks operational and/or financial capacity to carry out the actions. Procedures do not comply with the regulatory or financial framework.	Project Officers implement evaluators' recommendations in discussion with selected applicants. Hierarchical validation of proposed Adjustments / budget reviews. Validation of beneficiaries (operational and financial viability) and planning of (mid-term and final) evaluations. Signature of the grant agreement by the AO. In-depth financial checks and taking appropriate measures (e.g. guaranty, lack or deferral of pre-financing(s)) for high risk beneficiaries. Reinforce financial and contractual circuits. Financial viability checks	100% of the selected proposals and beneficiaries are scrutinised. Coverage: 100% of draft grant agreements. Depth/Risk may be determined after considering the type or nature of the beneficiary (e.g. SMEs, joint-ventures, start-up companies, long-term working relations) and/or of the modalities (e.g. substantial subcontracting) and/or the total value of the grant. Based on legal nature of the applicant/beneficiary	**Costs**: estimation of cost of staff involved in the contracting process (costs of initiation and verification related to controls). **Benefits**: Prevented, detected, corrected errors or irregularities during the evaluation and selection.	**Effectiveness**: % of selected proposals with recommendations implemented in grant agreement. Amount of proposed costs rejected. **Efficiency Indicators**: Value of grant agreements completed over budget requested in the corresponding proposals (%). Time-to-Grant.

Stage 3 - Monitoring the execution. This stage covers the monitoring the operational, financial and reporting aspects related to the project and grant agreement

Main control objectives: ensuring that the operational results (deliverables) from the projects are of good value and meet the objectives and conditions
(effectiveness & efficiency); ensuring that the related financial operations comply with regulatory and contractual provisions (legality & regularity); prevention of
fraud (anti-fraud strategy); ensuring appropriate accounting of the operations (reliability of reporting, safeguarding of assets and information)

Main risks ***It may happen (again) that…***	**Mitigating controls**	**How to determine coverage frequency and depth**	**How to estimate the costs and benefits of controls**	**Possible control indicators**
The actions foreseen are not, totally or partially, carried out in accordance with the technical description and requirements foreseen in the grant agreement and/or the amounts paid exceed that due in accordance with the applicable contractual and regulatory provisions.	Operational and financial checks in accordance with the financial circuits. Approval of technical reports by the operational Units. Operation authorisation by the AO. Audit certificates. For riskier operations, ex-ante in-depth and/or on-site verification. For LIFE projects: each project is visited every year by the monitoring team and once in its lifetime by the operational Unit.	100% of the projects are controlled, including only value-adding checks. Riskier operations subject to in-depth and/or on-site controls. The depth depends on the risk criteria.	**Costs**: Estimation of cost of staff involved in the actual management of running projects (costs of initiation and verification related to controls; allocated time of technical staff). Costs of audit certificates. **Benefits**: Prevented, detected, corrected errors or irregularities during the execution phase, through monitoring. Budget value of the costs claimed by the beneficiary, but rejected by the project officers. Budget value of the part of the grant not paid out as pre-financing for projects that have been terminated by the Commission. Budget value of penalties and liquidated damages.	**Effectiveness**: Number of control failures; budget amount of the errors concerned. Number of projects with cost claim errors; budget amount of the cost items rejected. Number of penalties damages; amount of the penalties damages. Success ratios; % of value of cost claims items adjusted over cost claims value. **Efficiency Indicators**: Cost/benefit ratio % cost over annual amount disbursed.
	For high risk operations, reinforced monitoring. LIFE projects:	High risk operations identified by risk criteria. Red flags: delayed interim deliverables, unstable consortium, requesting many amendments, EWS or anti-fraud flagging, etc.		

	If needed: application of suspension/interruption of payments, Penalties or liquidated damages. Referring grant beneficiaries to OLAF.	Depth: depends on results of ex-ante controls.		

Stage 4 - Ex-Post controls

A - Reviews, audits and monitoring

Main control objectives: Measuring the effectiveness of ex-ante controls by ex-post controls; detect and correct any error or fraud remaining undetected after the implementation ex-ante controls (legality & regularity; anti-fraud strategy); addressing systemic weaknesses in the ex-ante controls, based on the analysis of the findings (sound financial management); Ensuring appropriate accounting of the recoveries to be made (reliability of reporting, safeguarding of assets and information)

Main risks ***It may happen (again) that…***	**Mitigating controls**	**How to determine coverage frequency and depth**	**How to estimate the costs and benefits of controls**	**Possible control indicators**
The ex-ante controls as such fail to prevent, detect and correct erroneous payments or attempted fraud.	Ex-post control strategy: Carry out audits or desk reviews of a representative sample of closed projects to determine effectiveness of ex-ante controls (+ consider ex-post findings for improving the ex-ante-controls). This is complemented by risk based sample and check of time sheets by the monitoring team. If error rate over materiality level reservation in the AAR and action plan.	Representative sample: random sample sufficiently representative to draw valid management conclusions. Risk-based sample, determined in accordance with the selected risk criteria, aimed to maximise error correction (higher	**Costs**: estimation of cost of staff involved in the coordination and execution of the audit strategy. Cost of the appointment of audit firms for the outsourced audits. **Benefits**: Amount of expenditures declared ineligible by the	**Effectiveness**: Representative error rate. Residual error rate below materiality level. Number of supervisory control failures. Amount of budget of errors concerned. Number of projects with errors; budget amount of the errors detected. **Efficiency**: total (average) annual cost of audits

	Envisaged: multi-annual basis (programme's lifecycle) and coordination with other AOs concerned (to detect systemic errors) Validate results of audits requested by the operational units. Recommend recovery order(s) to the AOS. If needed: referring the beneficiary or grant to OLAF.	amounts, number of partners, recurrent beneficiaries, poor interim/final financial reporting, files signalled by operational Units).	auditors and subsequent issue / payment of recovery orders.	compared with benefits (ratio).

Main risks *It may happen (again) that…*	Mitigating controls	How to determine coverage frequency and depth	How to estimate the costs and benefits of controls	Possible control indicators
The ex-post controls focus on the detection of external errors (e.g. made by beneficiaries) and do not consider any internal errors made by staff or embedded systematically in the own organisation.	If needed management letter on findings of ex-post audits to operational Units. Audit reports included. "Management findings" related to internal errors. Draft audit reports are reviewed and approved by hierarchy. At this stage, hierarchy could be informed of any systematic errors.	Coverage: For each audited project, the random sample will be statistically representative to enable drawing valid management conclusions about the entire population during the programme's lifecycle.	**Costs**: estimation of cost of staff involved in the supervision strategy (which may include missions, if applicable). **Benefits**: budget value of the errors detected by the supervisors.	**Effectiveness**: Number of supervisory control failures. Amount of budget of errors concerned. Number of transactions with errors; budget amount of the errors detected by the supervisors. **Efficiency Indicators**: total (average) annual cost of supervisors compared with benefits (ratio). Average cost per programme, call and/or per (running) project. % cost over annual amount disbursed in grants.

B - Implementing results from ex-post audits/controls

Main control objectives: Ensuring that the (audit) results from the ex-post controls lead to effective recoveries (legality & regularity; anti-fraud strategy); Ensuring appropriate accounting of the recoveries made (reliability of reporting)

Main risks *It may happen (again) that…*	**Mitigating controls**	**How to determine coverage frequency and depth**	**How to estimate the costs and benefits of controls**	**Possible control indicators**
The errors, irregularities and cases of fraud detected are not addressed or not addressed timely	Systematic registration of audit / control results to be implemented in a database Financial and operational validation of recovery in accordance with financial circuits. Authorisation of recovery order by AO.	Coverage: 100% of final audit results with a financial impact.	**Costs**: estimation of cost of staff involved in the implementation of the audit results. **Benefits**: budget value of the errors, detected by ex-post controls, which have actually been corrected (offset or recovered).	**Effectiveness**: Number/value/% of audit results pending implementation. Number/value/% of audit results failed implementation. Success ratio; % of value of the ROs over detected errors by the auditors. **Efficiency Indicators**: total (average) annual cost of implementing audits compared with benefits (ratio). Time-to-recovery.

ANNEX 6: Implementation through national or international public-sector bodies and bodies governed by private law with a public sector mission

(not applicable)

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ANNEX 7: EAMR of the Union Delegations

(not applicable)

ANNEX 8: Decentralised agencies (if applicable)

(not applicable)

ANNEX 9: Evaluations and other studies finalised or cancelled in 2015


Microsoft Excel Worksheet

ANNEX 10: Specific annexes related to "Management of Resources"

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ANNEX 11: Specific annexes related to "Assessment of the effectiveness of the internal control systems"

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ANNEX 12: Performance tables

General objective 1: Stop global warming by aiming for an ambitious climate action agreement at international level while pursuing the shift towards a low carbon (mitigation) and promoting a climate-resilient (adaptation) economy in the EU in line with the 7th Environment Action Programme (see LIFE general objectives 1 and 4)	☒programme-based (LIFE 2014-2020) ☒ Non programme-based

Impact indicator 1: Global (land and ocean) average surface temperature increase compared to pre-industrial levels (Source: Fifth Assessment Synthesis Report published by the IPCC (Intergovernmental Panel on Climate Change) on 2 Nov 2014)

Baseline (1880)	Milestone		Target (2100 – see IPCC report –long-term target)
	(2014)	(2050)	
13,73 °C (average)	2014 was the warmest year so far with an increase of 0,88 °C compared to baseline	Temperature increase slowed down and at least below 2 °C	Temperature increase stabilised below 2 °C With no action there is a 62% chance that by 2081-2100 the temperature could be more than 4 °C higher

General objective 2: Recovery of the ozone layer to protect human life from harmful UV radiations	☐programme-based (please name the related spending programme) ☒ Non programme-based

Impact indicator 1: % Reduction in global Consumption and Production of ozone depleting substances (ODS) by 'non-art 5.1 parties' (= non-developing countries) using the cap as a baseline[27]
Source: UNEP, Ozone secretariat

Baseline (1989) (Montreal protocol) [28]	Milestone	Target (2020 – Montreal protocol)
	(2015)	
1.661.755 tons consumption	More than 90 % of ozone depleting chemicals phased out	100% phased out (2030 for servicing of refrigeration and air-conditioning equipment

[27] Formula: Consumption is calculated by the following formula: consumption = production plus imports minus exports. The cap for developed countries is set at 2.8% of that country's 1989 chlorofluorocarbon consumption + 100% of that country's 1989 HCFC consumption. The cap on production is set at the average of a) 1989 HCFC production + 2.8% of 1989 CFC production and b) 1989 HCFC consumption + 2.8% of 1989 CFC consumption

[28] The Montreal Protocol was agreed on 16 September 1987 and entered into force on 1 January 1989.

1.756.963 tons production		existing on 1 January 2020)

Planned evaluations: None at EU level. At global level, the next assessment of the 2014 situation by the 3 assessment panels (Technology and Economic Assessment Panel (TEAP), the Scientific Assessment Panel (SAP) and the Environmental Effects Assessment Panel (EEAP) is expected to be published in early 2015.

Relevant general objective 1: Stop global warming by aiming for an ambitious climate action agreement at international level while pursuing the shift towards a low carbon (mitigation) and promoting a climate-resilient (adaptation) economy in the EU in line with the 7th Environment Action Programme (general objectives 1 and 4 of the LIFE programme)

Seven (7) specific objectives contribute to this general objective of which the following five (5) reflect directly the 2 remaining general objectives and the 3 specific objectives (strands) of the LIFE programme

Specific objective 1: To improve development, implementation and enforcement of the climate acquis and catalyse & promote integration and mainstreaming of climate change mitigation (general objective 2 of LIFE)

☒programme-based (LIFE)
☒ Non programme-based

Result indicator 1: Level of reduction of EU-28 greenhouse gas emissions including international aviation but excluding emissions from Land Use, Land Use Change and Forestry (LULUCF compared to 1990 levels
Source of data: (EEA and Commission climate action Progress report– CSI 010/011[29])

Baseline (1990)	**Milestone** (No milestone - Situation end 2014)	**Target** (2020) (EU 2020 strategy and the 20/20/20 headline indicators)
5.626,26 Mt of CO2 eq emitted	estimated at -23 %	- 20%

Result indicator 2: Level of reduction of EU-28 greenhouse gas emissions in the EU ETS system
Source of data: EEA/Commission climate action progress report

Baseline (2005)	**Milestone** (No milestone -Situation end 2014)	**Target** (2020) (EU 2020 strategy)
2.678,27 Mt of CO2 eq emitted	estimated at -24 %	- 21%

Result indicator 3: Level of reduction of EU-28 greenhouse gas emissions from non-ETS sectors[30] (= effort sharing) based on national emission targets agreed for the years 2013-2020

[29] http://www.eea.europa.eu/publications/data-and-maps/data/data-viewers/greenhouse-gases-viewer

[30] Non-ETS sectors = transport (except aviation and international maritime shipping), buildings, agriculture and waste

Source: EEA/Commission Progress report[31]			
Baseline year (2005)	Milestone (No milestone - situation end 2014)		**Target** (2020) (Effort Sharing Decision)
2.947,990 Mt CO2 eq. emitted	Estimated at - 12,7 %		- 10 %
Result indicator 4: Average CO2 emissions/km from new cars Source: EEA report			
Baseline year (2009)	**Milestone**		**Target** (2021) (Cars & Vans Regulation)
	2014	2015	
145,7 g/km	123,4 g/km	130 g /km	95 g /km
Result indicator 5: Average CO2 emissions/km from new vans Source: EEA report			
Baseline year (2012)	**Milestone**		**Target** (2021) (Cars & Vans Regulation)
	2014	2017	
180,2 g/km	169,2 g/km	175 g /km	147 g /km
Result indicator 6: Reduction of production, sales and emissions of fluorinated gases in the EU (mainly Hydro fluorocarbons (HFC's) (substitute for ODS but powerful greenhouse gases in itself) and hydro chlorofluorocarbons (HCFCs) compared to 2005 Source of data: EEA report			
Baseline year (2014)	Milestone (2020)	Milestone (2025)	**Target** (2030) (newly adopted F-gases Regulation in 2014 entering into force 1 Jan 2015)
Emissions in 2014 were now confirmed 112.4 Mt compared to the indicative 115,095 Mt CO2eq.	- 15 %	- 45%	- 66% (minus 2/3) compared to baseline
Main policy outputs in 2015:			

[31] http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators

Description	Indicator
Proposal for revision of the EU Emissions Trading to incorporate strategic guidance given by leaders in the 2030 framework (CWP action)	Adoption by Commission 17 July 2015
Reporting on monitoring of fuel quality in Member States	Adoption/ Publication March 2015
Carbon Market Functioning Report 2013/15	Adoption/ Publication by COM 18 November 2015
State of the Energy Union Report (with DG ENER)	Publication by COM 18 November 2015
2015 Progress Report towards achieving Kyoto and EU 2020 greenhouse gas emissions objectives (Communication) [32]	Adoption/ Publication COM 20 October 2015

Specific objective 2: To secure investment for climate related issues (mitigation strand– specific objective nr 4 of LIFE)

☒programme-based (LIFE)
☐ Non programme-based

Result indicator 1: Leverage and mobilisation of private sector (= additional) investments compared to EU investment via the Financial Instrument 'Private Financing for Energy Efficiency (PF4EE)' of under the LIFE programme defined as the total amount of investments in the area of cutting energy consumption/renewables made by supported beneficiaries divided by financial contribution of the EU
Source of data: implementing report EIB

Baseline (2013)	**Milestone**		**Target** (2020: end of LIFE programme 2014-2020 – see programme statement)
	2015	(2017 - First multi-annual Work-programme 2014-17)	
new tool	No data yet	3-5 x	8 x

Output indicator 2: Number and coverage of climate change mitigation strategies or action plans developed or implemented through co-financing by the LIFE programme
Source of data: EASME implementation report

[32] Annual report to assess progress towards international (Kyoto) and EU GHG emissions targets (2020 Climate and Energy Package) while reporting on latest developments on EU climate policies

Baseline (2013)	Milestone		Target (2020: end of LIFE programme 2014-2020 – see programme statement)
	2015	(2017)	
In 2012 less than 10% of the climate mitigation project proposals submitted	No data yet(projects just started)	at least 1 climate change mitigation strategy or action plan in 13 different geographical regions	at least 1 climate change mitigation strategy or action plan per Member State

Result indicator 3: Reduction of tons of greenhouse gases following introduction of new by new technologies, systems, methods or instruments and/or other best practice approaches developed and replicated following pilot projects co-financed by the LIFE programme
Source of data: EASME implementation report

Baseline (2013)	Milestone		Target (2020: end LIFE programme 2014-2020 – see programme statement)
	(2015)	(2017)	
(New climate action sub-programme) -	no data yet (projects just started)	Relative reduction in tons of greenhouse gasses of at least 20% compared to project baseline 80% of the projects funded should promote innovative technologies and/or other best practice solutions for the reduction of greenhouse gas emissions	Relative reduction in tons of greenhouse gasses at least 20% compared to project baseline. At least 80% of the projects funded should promote innovative technologies and/or other best practice solutions for the reduction of greenhouse gas emissions

Result indicator 4: Number of interventions to improve the knowledge base for Union climate policy and legislation, and for assessing and monitoring factors, pressures and responses having an impact on the climate
Source of data: EASME implementation report

Baseline (2013)	Milestone		Target (2020: end of Multi-annual Work programme LIFE 2014-2020 – see programme statement)
	2015	(2017)	
Data not available	no data yet (projects just started)	80% of Integrated Projects (IP) and 30% of the traditional projects funded in climate	100% of IPs and 25% of the traditional projects funded in climate change mitigation priority area

		change mitigation priority area 2014-2017	
Result indicator 5: Off-budget (NER 300). Process of Implementation of the Off Budget Fund from the sales of 300 million (200 + 100) emission allowances from the new entrants' reserve (NER) set up for the third phase of the EU emissions trading system (EU ETS). Source of data: EIB implementation report			
Baseline (2010)	**Milestone**		**Target** (July 2018)
	2014/2015	(July 2016)	
Creation of the NER 300 Fund (COM Decision 2010/670)	Commission Decision: In total € 2.1 billion was granted to support 39 large-scale demonstration projects for renewable energy and low carbon technologies around Europe	Final investment decisions	Enter into operation
Main financial outputs in 2015:			
Description	Indicator		
Action grants for integrated projects following call for proposals	2 concept notes retained by end 2015		
Action grants following call for proposals	12 grant agreements signed by end 2015		
Action grants for technical assistance projects following call for proposals	1 grant agreement signed by end 2015		
Financial Instrument (PF4EE or Private Finance for Energy Efficiency instrument)	3 contracts with intermediary banks from Czech Republic (objective: €75million EE investments), Spain (objective: €50million EE investments) and France objective: €75million EE investments)		
Procurement contracts supporting climate mitigation activities	13 contracts signed by end 2015		

Specific objective 3: To improve development, implementation and enforcement of EU law and catalyse & promote integration and mainstreaming of climate action (adaptation) (general objective n°2 of LIFE)	☒programme-based (LIFE) ☒ Non programme-based

Result indicator 1: Number of Member States (MS) that have adopted an adaptation plan/strategy following LIFE co-funding and/or technical assistance by the Commission(Source of data: Commission & EEA: CLIMA-Adapt database, December 2014)

Baseline (2013 – Adoption of the EU Adaptation Strategy)	**Milestone** 2015	**Target** (2017: see Communication on Adaptation Strategy)
14 MS	21 MS	All 28 Member States (otherwise a legislative proposal could be considered at EU level if level of preparedness to climate change deemed inappropriate – evaluation in 2016)

Result indicator 2: Number of cities that have signed up to the Mayors adapt initiative committing to take action on adaptation to climate change in an urban environment (the Covenant of Mayors Initiative on Climate Change Adaptation)
Source: Secretariat of the 'Mayors Adapt' initiative/Supporting Consortium (contractor)

Baseline (2014)	**Milestone** 2015	**Target** N/A (Replaced by the new Integrated covenant of the mayors for adaptation and energy efficiency in Oct 2015)
At least 50	149	N/A

Main policy outputs in 2015

New integrated Covenant of the Mayors for adaptation and energy efficiency signed in October 2015

Specific objective 4: To secure investment for climate related issues - adaptation strand of the LIFE programme (specific objective 5 of LIFE)	☒programme-based (LIFE) ☐ Non programme-based

Result indicator 1: Leverage and mobilisation of private sector (= additional) investments compared to EU investment via the Financial Instrument Natural Capital Financing Facility (NCFF) under the LIFE programme defined as the total of investments in the area of climate adaptation made by supported beneficiaries divided by the financial contribution of the Union
Source of data: implementation report EIB

Baseline (2013)	**Milestone**		**Target** (2020: end of LIFE programme 2014-2020 - ex ante assessment NCFF)
	2015	(2017 - First multi-annual Workprogramme 2014-17)	
N/A	No data available yet	2,8 x	Up to 4,2 x

Result indicator 2: Attributable resilience and adaptation to climate change in MS, broken down by sector, due to the demonstrated new technologies, systems, instruments and/or other best practice approaches developed and replicated following LIFE pilot projects
Source of data: EASME implementation report

Baseline (2013)	**Milestone**		**Target** (2020: end of Multi-annual Work programme LIFE 2014-2020 – see programme statement)
	2015	(2017)	
Only 15% of climate project proposals submitted were on adaptation (LIFE+ call 2012)	No data available yet	Increased climate resilience in vulnerable areas as identified in the EU adaptation strategy. 80% of funded projects promoting innovative policy approaches and/or other best practice solutions for more climate resilience	Increase in attributable climate resilience per sector. More than 80% of funded projects promoting innovative policy approaches and/or other best practice solutions for more climate resilience.

Output indicator 3: Number of interventions to improve the knowledge base for Union climate policy and legislation, and for assessing and monitoring factors, pressures and responses having an impact on the climate resilience/adaptation via co-funding of traditional projects and integrated projects of a trans-regional or cross-border nature
Source of data: EASME implementation report

Baseline (2013)	**Milestone**		**Target** (2020: end LIFE programme 2014-2020 – see programme statement)
	2015	(2017)	
No data	No data available yet	80% of Integrated Projects and 25% of the traditional projects funded in climate change adaptation priority area 2014-2017	100% of IPs and 30 % of the traditional projects funded in climate change adaptation priority area

Main financial outputs in 2015:	
Description	Indicator
Action grants for integrated projects (IPs) following call for proposals	3 concept notes (adaption and urban) signed by end 2015
Action grants for traditional projects	10 grant agreements signed by end 2015
Action grants for technical assistance projects following call for proposals	1 grant agreement signed by end 2015
Financial Instrument (NCFF or Natural Capital Financing Facility)	One operation in Ireland (EIB contribution €13 million) and one multi-country operation including Italy, Spain and Romania (EIB contribution €5 million) are under due diligence check by the EIB by end 2015
Procurement contracts supporting climate adaptation and mainstreaming activities	8 contracts signed by end 2015

Specific objective 5 : Support better climate governance and information at all levels including better involvement of civil society, NGO's and local actors (LIFE climate governance and information strand) general objective 3 and specific objective 6 of LIFE)	☒programme-based (LIFE) ☐ Non programme-based

Result indicator 1: Level of awareness / knowledge of EU citizens about climate issues and the opportunities of moving to a low-carbon economy
Source of data: bi-annual Euro-barometer survey

Baseline (2013-14)	**Milestone**		**Target** (2020: end of LIFE programme 2014-20, see Programme Statement)
	2015	(2017)	
In 2013, 90 % of the citizens polled considered climate change a 'serious'	In 2015, 91 % considering it a very serious problem	status-quo or increase in of the share of citizens considering climate change as a	status-quo or increase in of the share of citizens considering climate change as a very serious problem

problem (up from 89 % in 2011)		very serious problem	

Output indicator 2: Number of interventions to support awareness raising at local, regional, national or cross-border levels, communication, management and dissemination of information in the field of climate change mitigation and adaptation and to facilitate knowledge sharing (award criterion to be applied during the evaluation of the incoming proposals)
Source of data: EASME implementation report

Baseline (2013)	**Milestone**		**Target** (2020: end of LIFE programme 2014-20, see Programme Statement)
	2015	(2017)	
In 2012, less than 5% of the traditional climate project proposals	No data yet (projects just started)	10% of climate projects are targeted All LIFE projects under the priority area climate governance and information achieve knowledge sharing	To be set in the second Multi-Annual Work Programme 2018-2020 of LIFE). All LIFE projects under the priority area climate governance and information achieve knowledge sharing

Output indicator 3: Share (%) of projects promoting and contributing to a more effective compliance with and enforcement of Union climate law (award criterion to be applied during the evaluation of the incoming proposals)
Source of data: EASME implementation report

Baseline (2013)	**Milestone**		**Target** (2020: end of LIFE programme 2014-20, see Programme Statement)
	2015	(2017)	
No data	No data yet (projects just started)	5% of governance and information projects	More than 5% of governance and information projects progress

Output indicator 4: Number of interventions (work programmes) emanating from NGOs with climate related work-programmes co-funded by LIFE with an impact on EU policy
Source of data: EASME implementation report

Baseline (2013)	**Milestone**		**Target** (2020: end of LIFE programme 2014-20, see Programme Statement)
	2015	(2017)	
Under the 2012 call of the LIFE + Regulation, 6 specific climate NGO's (plus a number of environmental NGO's that also have a climate	5 environmental/climate NGO's	Stable level of operating grants to climate NGO's	Stable level of operating grants to climate

focus) were co-funded			

Main financial outputs in 2015:	
Description	Indicator
Operating grants for co-financing of work programmes of non-profit entities (climate NGO's)	5 grant agreements signed by end 2015
Action grants for traditional projects	7 grant agreements signed by end 2015
Procurement contracts supporting communication activities	9 contracts signed by end 2015

Specific objective 6: Ambitious and agreed global climate action to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.	☐programme-based (LIFE) ☒ Non programme-based
Result indicator 1: Comprehensive global legally binding framework (protocol, another legal instrument or an agreed outcome), to reduce global greenhouse gas emissions, with legal force under UNFCCC[33] that is applicable to all Parties, agreed at the Conference of the Parties (COP 21) in Paris in December 2015 Source of data: UNFCCC Secretariat	
Baseline Doha 2012 Warschau 2013	Target Paris –December 2015
Commitment at the Doha summit in December 2012 to prepare a new global climate agreement to be adopted in 2015 and enabling a second period of the Kyoto Protocol to start on 1 January 2013.	Successful achievement: universal, ambitious comprehensive legally-binding framework agreement adopted end 2015 by all 197 UNFCCC Parties that will apply no later than 2020

[33] UNFCCC: United Nations Framework Convention on Climate Change

Result indicator 2: Global CO2 aggregate anthropogenic carbon dioxide equivalent emissions of the GHGs (CO_2, CH_4 and N_2O and F-gases) compared to 1990 Source: UNFCCC report[34], IPCC[35] 5 WG III report)		
Baseline (1990)[36]	Milestone (agreed at UNFCCC summit at Paris in 2015) 2050	Target (2100) IPCC[37] 5 WG III report
12.610,657 Mt CO2 eq. emitted	Lowering global emissions by 40-70 %	near-zero (- 100%) reduction of unabated fossil fuel emissions and wider de-carbonisation of the global economy
Result indicator 3: Leadership of the EU in terms of facilitating/assisting the increased up-take of robust market based measures in third countries. Source of data:		
Baseline (2013)	Milestones 2015	Target 2020
Cooperation with third countries on the development of domestic carbon markets, and the promotion of the links between EU ETS with other carbon trading systems.	Linking negotiations with Switzerland have been finalised, Agreement being initialled on both sides. Bilateral cooperation successful: the cooperation with China significantly intensified, including at political level. The ongoing project is being implemented successfully and a new one is under preparation, following the EU/China Summit. Two Ministerial side events on bilateral cooperation on carbon markets were jointly organised in Paris at the occasion of COP 21. In South Korea, the procurement process was finalised and the project will be officially launched at the beginning of 2016.- The World Bank, notably through the Partnership for Market readiness and the Carbon Pricing Leadership Coalition, injected further momentum on carbon markets in the run up to Paris, which should pave the way for further carbon market	Several domestic market systems set up with comparable standards. Readiness for possible linking arrangements in view of international carbon market.

[34] http://unfccc.int/ghg_data/kp_data_unfccc/base_year_data/items/4354.php

[35] IPCC: Intergovernmental Panel on climate change

[36] Annex I Parties to the Kyoto Protocol

[37] IPCC: Intergovernmental Panel on climate change

	developments at domestic level post Paris.	
Main policy outputs in 2015:		
Description	Indicator	
[38]The Communication, "The Paris Protocol - a blueprint for tackling global climate change beyond 2020	Adopted by COM 25 February 2015	
Proposal global phase-down of HFCs under Montreal Protocol	Adopted COM 30 April 2015	
Council Decision the European Union to formally ratify the second commitment period of the Kyoto Protocol	Adopted by Council 14 July 2015	
Agreement on EU position for Paris climate change conference	Adopted by Environmental Council on 18 September 2015	
2nd EU Biennial report on progress towards GHG emission targets and implementation of climate policies and measures (UNFCCC requirement)	Adopted COM 18 October 2015	
Main financial outputs in 2015:		
Description	Indicator	
Contributions to 5 multilateral and international climate agreements (UNFCCC, Kyoto, ITL Vienna, Montreal)	Payment of the 5 subscription(s): done by end 2015	

[38] To help articulate the EU vision and expectations in the context of the 2015 Agreement and partner ambition; to offer more detailed explanation of the contents of the EU Intended Nationally Determined Contribution, which was agreed in European Council conclusions of 24 October 2014

Specific objective 7: To increase the Union's effectiveness in addressing global climate challenges with neighbourhood and (pre) accession countries	☐Programme-based (please name the related spending programme) ☒ Non programme-based

Result indicator 1: : Status of negotiations on environment and climate chapter (chapter 27) in pre-accession countries
Source of data: Commission country progress reports

Baseline (2014)	**Milestone** 2015	**Target** 2017
Underway with 1 candidate country (Turkey) Not yet open with 4 candidate countries (Albania, Montenegro, Serbia and the former Yugoslav Republic of Macedonia) N/A for 2 potential candidates (Bosnia-Herzegovina and Kosovo)	Opening of Chapter 27 negotiations with Albania, Montenegro, Serbia and the former Yugoslav Republic of Macedonia Granting candidate status to Bosnia-Herzegovina and Kosovo, and opening of Chapter 27 negotiations INDCs submitted by all candidate countries, and also one potential candidate (Bosnia-Herzegovina). Montenegro adopted Climate Strategy, Kosovo endorsed Low Emissions and Adaptation to CC Strategy, Serbia prepared legislation on ETS and MRV, Kosovo on MMR. Stabilisation and Association Agreement (SAA) with Bosnia-Herzegovina came into force in June 2016, SAA with Kosovo signed. The countries are still at early stage of preparation, apart from Montenegro and Turkey which are considered moderately prepared.	Closing of Chapter 27 negotiations for all negotiating candidate countries Expected opening of Chapter 27 in 2016: Montenegro, Serbia.

Result indicator 2: Prioritisation of climate action in the bilateral and regional cooperation and development of national strategies addressing climate change in the European Neighbourhood (EN) countries
Source of data: Progress reports on the implementation of the European Neighbourhood Policy

Baseline (2014)	**Milestone** 2015	**Target** 2017
At regional level, the Eastern Partnership (EaP) is tackling 'environment and climate change' as a priority area. Under the Union for the	Progress on the development and implementation of strategies addressing climate change mitigation and adaptation at national level. INDCs submitted by all Eastern Partnership	Adopted national strategies addressing climate change mitigation and adaptation at national level.

Mediterranean, climate action has been introduced as a priority area and an UfMCCEG[39] has been established. Bilaterally, climate action is being increasingly introduced in the new generation of action plans and new association agreements.	countries and by all Southern Partnership countries except Libya, Syria and Palestine. For EaP countries in Association Agreement with EU (Georgia, Moldova, Ukraine): launch of activities for implementation of climate-related acquis identified in those agreements – early stage. Domestic climate strategies remain under development. For SP countries, the outline of national climate strategies was presented in all submitted INDCs. These strategies remain under development.	

Relevant general objective 2: Recovery of the ozone layer to protect human life from harmful UV radiations			
Specific objective 1: To successfully implement the EU legislation going beyond the Montreal protocol protecting the ozone layer			☐programme-based (please name the related spending programme) ☒ Non programme-based
Result indicator 1: EU consumption of controlled ODS or Ozone Depleting Substances (hydro chlorofluorocarbons or HCFCs + methyl bromide)[40] under the Montreal Protocol Source of data: EEA report			
Baseline (2010)	**Milestone**		**Target** (2040) Ozone Depleting Substances Regulation
	2014	2020	
Zero consumption achieved since 2010 - imports methyl-bromide: 2700 t, exports 2700 t -imports HCFC's 2012: 1100t, exports: 6059 t - HCFC's production for export: 7900	the consumption of controlled substances was negative (− 2 547 metric tonnes)	ban on all production of HCFC's	ban on all critical uses

[39] Union for the Mediterranean Climate Change Expert Group

[40] excludes a range of uses such as critical uses (in the EU only uses of halon for fire-fighting), feedstock uses, process agent uses and essential uses (in the EU only uses in laboratories