



Brussels, 23 November 2015  
(OR. en)

14381/15

CLIMA 138  
ENV 723  
ENER 401  
IND 187  
TRANS 378  
COMPET 536  
MI 745  
AGRI 612  
ECOFIN 913

**COVER NOTE**

---

From: Secretary-General of the European Commission,  
signed by Mr Jordi AYET PUIGARNAU, Director

date of receipt: 18 November 2015

To: Mr Jeppe TRANHOLM-MIKKELSEN, Secretary-General of the Council of  
the European Union

---

No. Cion doc.: COM(2015) 576 final

---

Subject: REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT  
AND THE COUNCIL  
  
Climate action progress report, including the report on the functioning of  
the European carbon market and the report on the review of Directive  
2009/31/EC on the geological storage of carbon dioxide (required under  
Article 21 of Regulation (EU) No 525/2013 of the European Parliament and  
of the Council of 21 May 2013 on a mechanism for monitoring and  
reporting greenhouse gas emissions and for reporting other information at  
national and Union level relevant to climate change and repealing Decision  
No 280/2004/EC, under Article 10(5) and Article 21(2) of the Directive  
2003/87/EC of the European Parliament and of the Council of 13 October  
2003 establishing a scheme for greenhouse gas emissions allowance  
trading within the Community and amending Council Directive 96/61/EC  
and under Article 38 of Directive 2009/31/EC of the European Parliament  
and of the Council on the geological storage of carbon dioxide)

---

Delegations will find attached document COM(2015) 576 final.

---

Encl.: COM(2015) 576 final

---

14381/15

SH/iw

DG E 1B

EN



Brussels, 18.11.2015  
COM(2015) 576 final

## **REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL**

**Climate action progress report, including the report on the functioning of the European carbon market and the report on the review of Directive 2009/31/EC on the geological storage of carbon dioxide**

**(required under Article 21 of Regulation (EU) No 525/2013 of the European Parliament and of the Council of 21 May 2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC, under Article 10(5) and Article 21(2) of the Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emissions allowance trading within the Community and amending Council Directive 96/61/EC and under Article 38 of Directive 2009/31/EC of the European Parliament and of the Council on the geological storage of carbon dioxide)**

{SWD(2015) 246 final}

**EN**

**EN**

## Contents

1.	Summary .....	4
2.	Progress towards meeting Europe 2020 and Kyoto targets .....	6
2.1.	Progress towards meeting the Europe 2020 targets .....	6
2.2.	Progress towards the Kyoto Protocol targets .....	8
3.	GHG emissions trends in the EU .....	8
3.1.	Greenhouse gas emissions trends in 2014 compared to 2013.....	8
3.2.	Decomposition analysis of emissions reduction .....	9
4.	EU Mitigation Policies: latest developments .....	10
4.1.	EU 2030 climate and energy framework .....	10
4.2.	EU ETS .....	10
4.2.1.	Implementation of phase 3 of the EU ETS (2013-2020) .....	10
4.2.2.	Market stability reserve.....	10
4.2.3.	Revision of the EU ETS - phase 4 (2021-2030) .....	11
4.3.	Other policies and measures.....	11
4.3.1.	The Effort Sharing Decision in the 2030 climate and energy framework .....	11
4.3.2.	Integration of land use, land-use change and forestry (LULUCF) in the 2030 climate and energy framework.....	11
4.3.3.	Energy efficiency .....	11
4.3.4.	Renewable energy .....	12
4.3.5.	Carbon capture storage.....	12
4.3.6.	Transport sector.....	12
4.3.7.	F-gases.....	13
5.	EU Adaptation Policies .....	13
6.	Climate Finance .....	13

6.1.	Revenue from the auctioning of EU ETS allowances.....	13
6.1.1.	Member States' use of auctioning revenue .....	13
6.1.2.	NER 300 and the proposed innovation fund.....	14
6.1.3.	Proposal for a modernisation fund .....	15
6.2.	Mainstreaming climate policies into the EU budget .....	15
6.3.	EU and Member States climate spending in support of developing countries .....	15

## Index of figures

Figure 1: Progress towards meeting Europe 2020 and Kyoto targets .....	3
Figure 2: Changes in GDP (in real terms), GHG emissions and emissions intensity of the economy. Index (1990 = 100) .....	4
Figure 3: Gap between emissions estimates and targets in 2014 and between projected emissions (with existing measures) and targets in 2020 in the non-ETS sectors. Negative and positive values respectively indicate overdelivery and shortfall.....	6
Figure 4: Decomposition analysis of the change in CO <sub>2</sub> emissions from fossil fuel combustion in the EU for the period 2005-2012 .....	8
Figure 5 Reported revenues or equivalent in financial value used or planned to be used for climate and energy-related purposes in 2014.....	13

## 1. SUMMARY

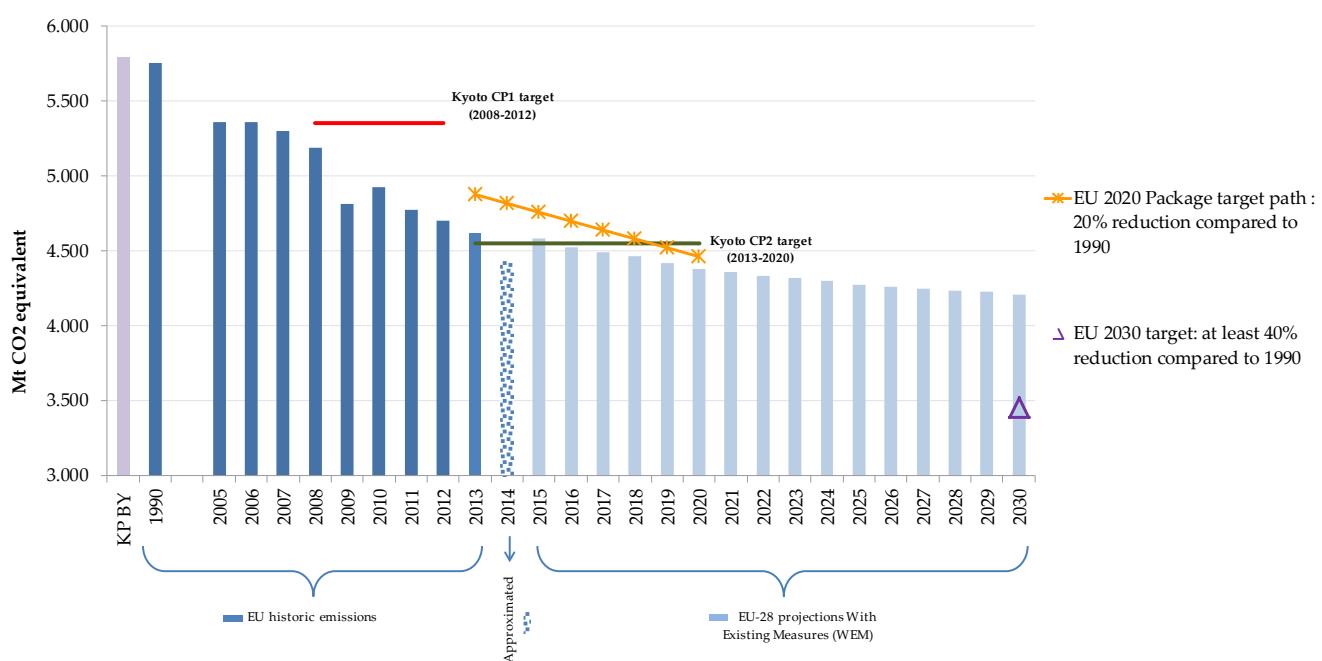
### ***On track to meet the Europe 2020 and Kyoto Protocol greenhouse gas reduction targets***

According to most recent estimates, in 2014 total EU greenhouse gas (GHG) emissions covered by the 2020 Climate and Energy Package were 23 % below the 1990 level and decreased by 4 % compared to 2013.

According to the projections with existing measures provided by Member States in 2015, emissions are estimated to be 24 % lower in 2020 than they were in 1990. These projections were made before the 2014 emissions figures became available.

The EU is therefore currently on track towards meeting its Europe 2020 greenhouse gas reduction target as well as its Kyoto Protocol targets.

**Figure 1: Progress towards meeting Europe 2020 and Kyoto targets**



Source: European Commission and European Environment Agency (EEA).

For all but four Member States (Luxembourg, Ireland, Belgium and Austria), projected emissions in 2020 are below the domestic targets set under the Effort Sharing Decision.

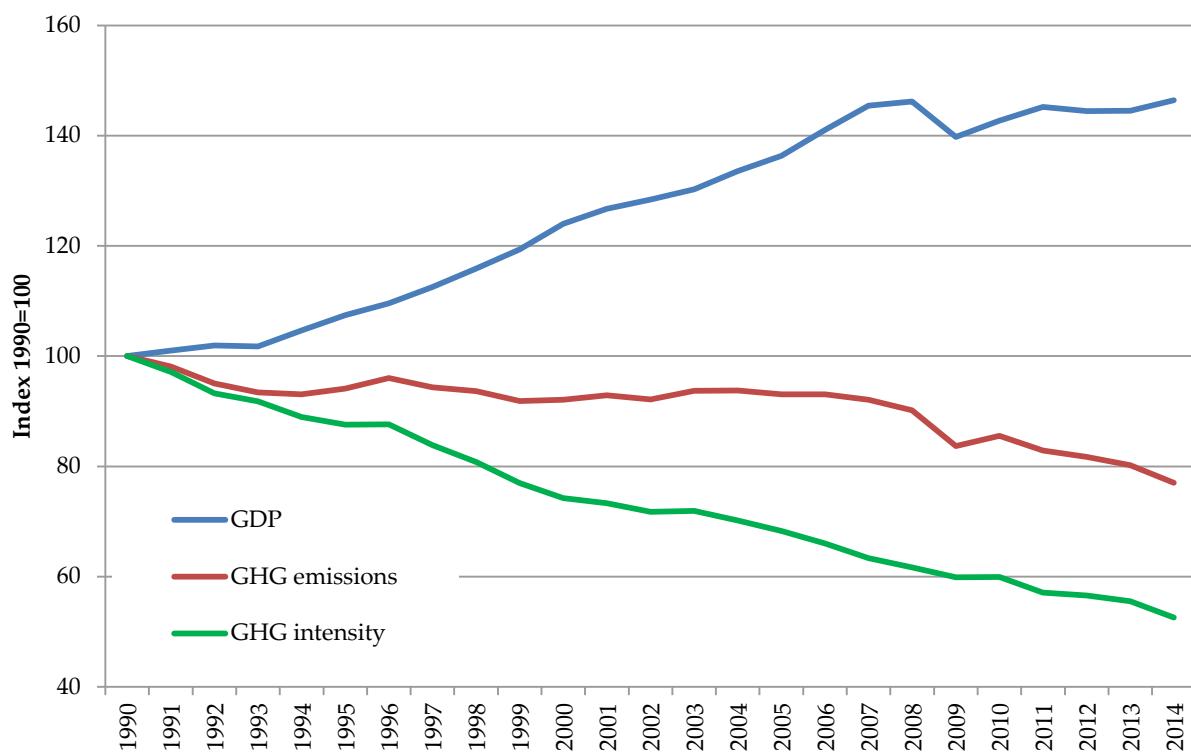
### ***Further measures needed to meet the 2030 GHG emission reduction target***

According to the projections with existing measures provided by Member States, total EU GHG emissions in 2030 are estimated to be 27 % below 1990 levels. Additional measures are needed for the EU to meet the target of a domestic reduction in greenhouse gas emissions of at least 40 % by 2030 compared to 1990. To address this, the Commission has proposed a revision of the EU Emissions Trading System (EU ETS) in July 2015. In the first half of 2016, the Commission will also make proposals on the implementation of the non-ETS emissions reduction target of 30% compared to 2005.

### ***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 LULUCF and including international aviation) decreased by 23 %. 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.

**Figure 2: Changes in GDP (in real terms), GHG emissions, and emissions intensity of the economy (ratio between emissions and GDP) Index (1990 = 100)**



Source: European Commission.

The implementation of structural policies in the field of climate and energy has significantly contributed to this successful decoupling. In particular, the implementation of the 2020 Climate and Energy Package has resulted in a significant increase in renewable energy and progress in energy

efficiency. Both of these are the key drivers behind the observed reduction in emissions, with the carbon price acting as driving force expected to be progressively stronger in the future.

## ***Scope of this report***

This report and its two annexes constitute the reports as required under Article 21 of Regulation (EU) No 525/2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change, under Article 10(5) and Article 21(2) of the Directive 2003/87/EC establishing a scheme for greenhouse gas emissions allowance trading within the Community and under Article 38 of Directive 2009/31/EC on the geological storage of carbon dioxide.

The accompanying staff working document includes additional technical information and data related to progress towards the Kyoto and EU 2020 objectives. It also provides the references for the main data and figures presented in this report.

## **2. PROGRESS TOWARDS MEETING EUROPE 2020 AND KYOTO TARGETS**

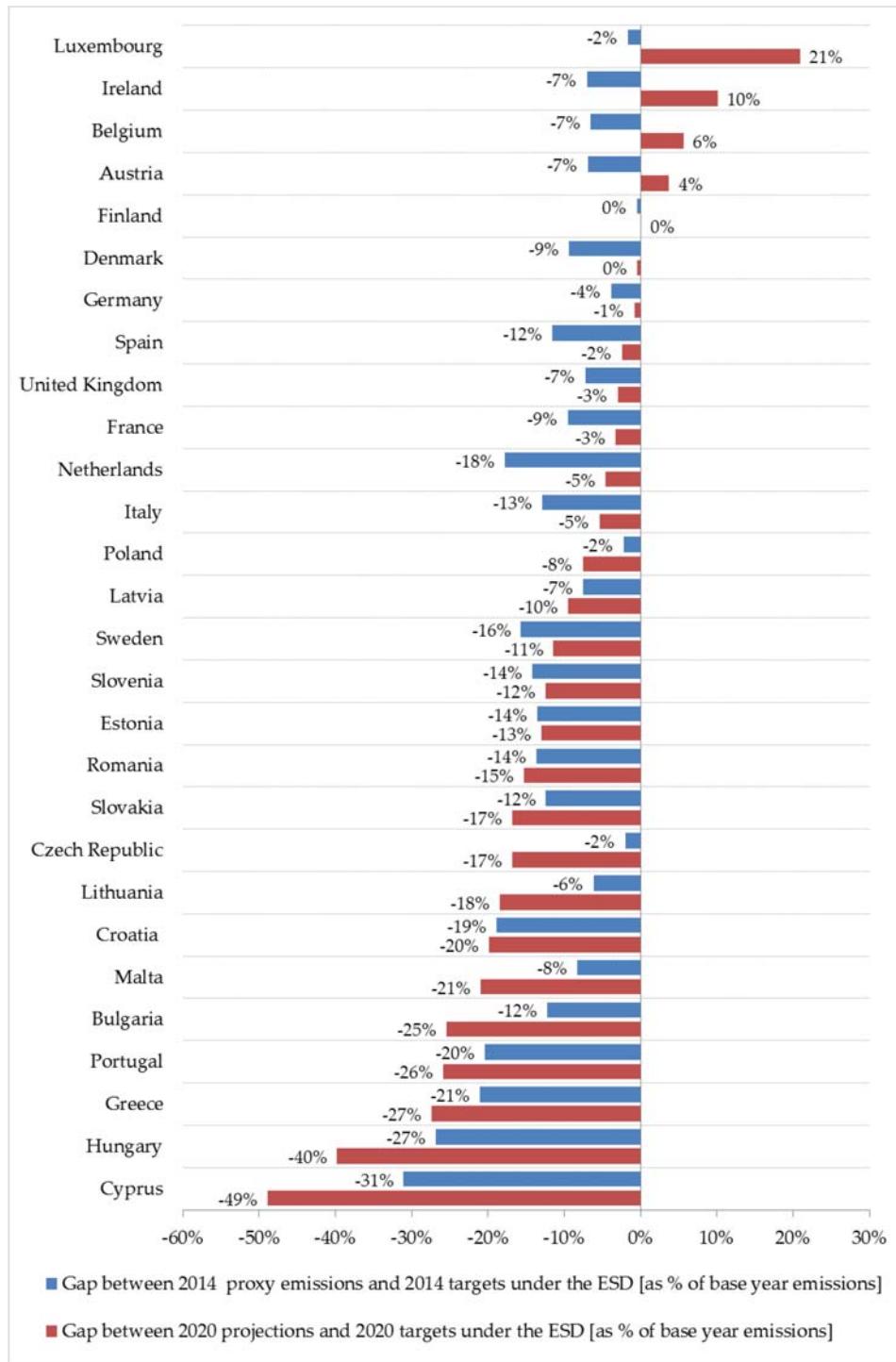
### **2.1. Progress towards meeting the Europe 2020 targets**

The Climate and Energy Package sets the EU a target of reducing GHG emissions by 20% by 2020 compared to 1990, which is a 14% decrease compared to 2005. This effort is in two parts: the sectors covered by the EU Emissions Trading System (ETS) and sectors under the Effort Sharing Decision (ESD). While the EU ETS provides an EU-wide cap, the ESD sets annual emissions allocations for non-ETS sectors in each Member State.

According to Member States' projections with existing measures, the EU is expected to meet its 2020 target, as total emissions (including ETS and non-ETS) are expected to be 24% lower in 2020 compared to 1990 levels. 24 Member States are projected to reach their 2020 targets in the non-ETS sectors through existing policies and measures. However, four Member States — Luxembourg, Ireland, Belgium and Austria — will need to either put in place additional measures to meet their 2020 targets for non-ETS sectors or make use of the flexible mechanisms provided for in the ESD. This includes transfers of unused emissions allocations from one year to another, the use of international project credits and transfers of unused emissions allocations between Member States.

For all Member States, 2013 emissions and estimates for 2014 are expected to be below their respective 2013 and 2014 targets under the ESD. In 2016, compliance will be checked under the ESD.

**Figure 3: Gap between emissions estimates and targets in 2014 and between projected emissions (with existing measures) and targets in 2020 in non-ETS sectors. Negative and positive values respectively indicate over delivery and shortfall.**



Source: European Commission and EEA.

Luxembourg is projected to fall short of its national target by 21 percentage points. Emissions from road transport represent more than two-thirds of total non-ETS emissions due to low excise duties on motor fuel as well as a large number of cross-border commuters. These projections do however not take into consideration new measures, such as the increase of the standard VAT rate which will narrow the price gap of fuel with neighbouring countries and the construction of a tramway in Luxembourg City. The impact of these measures on projected emissions remains to be quantified.

In Ireland, the latest national projections submitted in 2015 show that non-ETS emissions will increase until 2020 due to an anticipated 19% increase in transport emissions between 2013 and 2020. Ireland lacks public transport, in particular in Dublin, and electro-mobility infrastructure. Emissions from agriculture are expected to increase by 2% during this period of time. As a result, Ireland's total emissions are projected to fall short of the 2020 target by 10 percentage points.

In Belgium, GHG emissions are projected to fall short of the 2020 target by 6 percentage points. The federal and regional authorities have not yet reached an agreement on the distribution of the efforts needed to meet its 2020 target. In addition, certain features of the tax system are environmentally harmful, including the continued favourable tax treatment for company cars.

According to Austria's latest projections, road transport emissions will increase by 3% between 2013 and 2020 to represent 45% of non-ETS emissions. Consequently, it is expected that in 2020 non-ETS emissions will fall short of the target by 4 percentage points. Austrian authorities are planning additional measures to address this issue, in particular by further shifting transport to rail, improving vehicle efficiency, and fostering alternative fuels and electro-mobility. If these planned additional measures are successfully implemented, Austria is projected to meet its 2020 target.

## **2.2. Progress towards the Kyoto Protocol targets**

### *First commitment period (2008-2012)*

The final assessment of compliance of the EU and its Member States for the first commitment period of the Kyoto Protocol will follow the expiration of the "additional period for fulfilling commitments" (true-up period), in November 2015. Subsequently, the true-up period report will be reviewed internationally in 2016.

The EU-15 and eleven other Member States which have an individual target under the Kyoto Protocol's first commitment period have met their targets. The EU is estimated to have exceeded its target by 3.2 GtCO<sub>2</sub> eq, without taking into account carbon sinks from Land Use Land Use Changes and Forestry (LULUCF) and international credits from Kyoto mechanisms. If these flexibilities are taken into account, the EU is expected to exceed its targets by a total of 4.2 GtCO<sub>2</sub> eq.

Taking into account LULUCF and Kyoto mechanisms, the EU-15 reduced its emissions over the period by 18.5 % below base year levels. This is equivalent to a total reduction of 2.2 Gt CO<sub>2</sub> eq and means a reduction of more than twice the target of an 8% reduction on average in 2008-2012 compared to the base year level.

### *Second commitment period (2013-2020)*

According to Member States' most recent projections, the EU is on track to meet its Kyoto target under the second commitment period, of a 20% reduction on average in 2013-2020 compared to base year level.

## **3. GHG EMISSIONS TRENDS IN THE EU**

### **3.1. Greenhouse gas emissions trends in 2014 compared to 2013**

Total GHG emissions in the EU decreased by more than 4% in 2014 alongside an improved economic situation, with GDP increasing by 1.4% compared to 2013. Emissions from installations participating in the EU ETS are estimated to have decreased by about 4.5%.

Natural gas consumption fell in all Member States and consumption of solid and liquid fuels also decreased significantly for the EU as a whole. Lower heat demand by households due to a warmer winter and the continued increase in the share of renewable energy in 2014 contributed to these developments.

### **3.2. Decomposition analysis of emissions reduction**

A specific decomposition analysis was carried out to evaluate the impact that the evolution of the European economy has had on emissions over time. Details on the methodology used can be found in the accompanying staff working document.

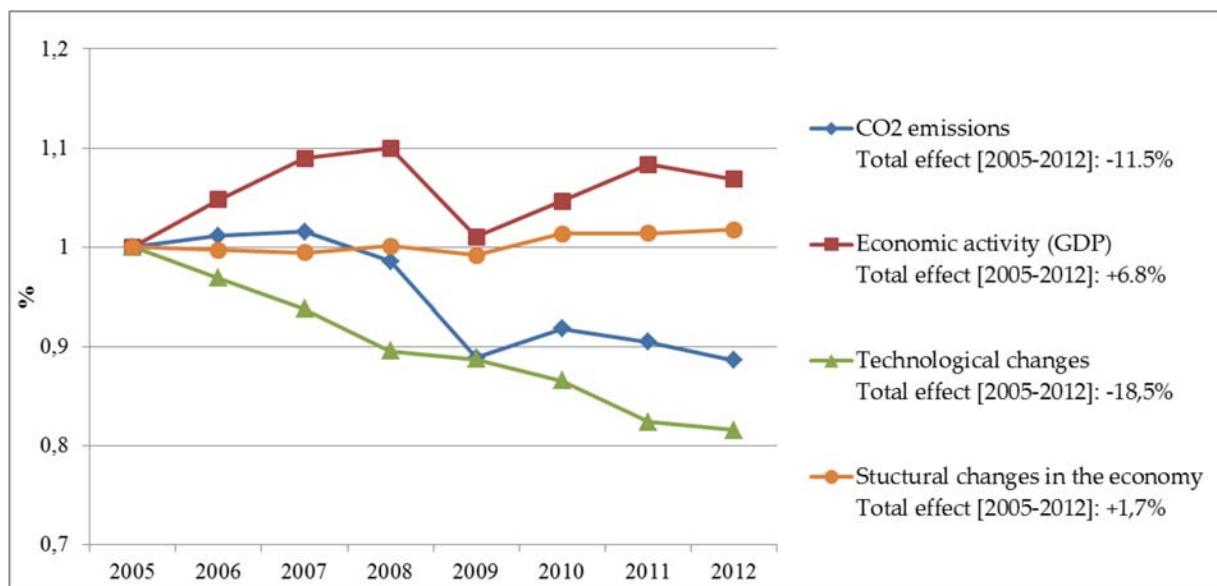
This analysis covers CO<sub>2</sub> emissions from fossil fuel combustion, which account for about 80 % of total GHG emissions. The structural factors considered are:

- economic activity (GDP);
- structural changes in the economy as measured by the impact that changes in the relative importance of economic sectors, for instance between industries and services, have had on emissions;
- technological changes as measured by the impact that the shift towards less carbon-intensive technologies has had on emissions, for instance higher energy efficiency or the increasing share of renewable energy.

Figure 4 shows that CO<sub>2</sub> emissions decreased by 11.5 % over the 2005-2012 period. Technological changes have had the most significant effect on emissions, leading to a 18.5 % decrease. Growth in economic activity (GDP) caused a 6.8 % increase in emissions. Structural changes in the economy caused a small increase in emissions, of 1.7 %. These effects can be explained by two factors. First, despite the growing share of services in certain Member States, like France and the UK, the manufacturing sector in some other Member States, in particular Germany, has expanded. Secondly, the share of the relatively more industrialised eastern Member States in the EU economy also increased.

The results therefore show that technological changes contributed most to drive down emissions, by far outweighing the contribution of the shift between economic sectors. The policies implemented in the field of climate and energy have contributed significantly to the take-up of clean technologies.

**Figure 4: Decomposition analysis of the change in CO<sub>2</sub> emissions from fossil fuel combustion in the EU for the 2005-2012 period**



Source: European Commission.

#### 4. EU MITIGATION POLICIES: LATEST DEVELOPMENTS

##### 4.1. EU 2030 climate and energy framework

In October 2014, the European Council reached an agreement on the main building blocks of the EU 2030 climate and energy framework:

- A binding target of a domestic reduction in greenhouse gas emissions of at least 40 % by 2030 compared to 1990. The target is to be met by reducing EU-ETS emissions to 43 % compared to 2005 and by reducing emissions in non-ETS sectors to 30% below 2005 level to be shared among Member States in the form of binding national targets.
- A target of at least 27 % renewable energy by 2030, binding at EU level.
- An indicative energy efficiency target at EU level of at least 27% in 2030, to be reviewed in 2020 having in mind an EU level of 30%.
- Electricity interconnection between Member States of at least 15 % of their installed electricity production capacity.
- A new reliable and transparent governance system to ensure that the EU meets its climate and energy goals.

According to latest projections with existing measures provided by Member States, total EU GHG emissions in 2030 will be 27% below 1990 levels.

The current policy framework is therefore insufficient to meet the agreed 2030 GHG target of an emissions reduction of at least 40%. The EU and Member States need to put further mitigation measures in place.

To address this, the Commission proposed a revised EU ETS Directive in July 2015 and will present legislative proposals for sectors outside the ETS in the first half of 2016.

The Commission is also rolling out the initiatives planned under the ‘Framework strategy for a resilient Energy Union with a forward-looking climate policy’. There are upcoming proposals on measures related to areas including renewable energy, energy efficiency, transport, and research and development. Furthermore, the Commission is working on the implementation the Energy Union, as highlighted in the State of the Energy Union 2015.

## **4.2. EU ETS**

### **4.2.1. Implementation of phase 3 of the EU ETS (2013-2020)**

Since 2013, the EU ETS has operated under the improved and more harmonised rules of phase 3. Article 10(5) of the EU ETS Directive requires the Commission to monitor the functioning of the European carbon market and to submit, each year, a report to the European Parliament and to the Council on the functioning of the carbon market including the implementation of the auctions, liquidity and the volumes traded. At the same time, according to Article 21 (2), the Commission shall publish a report on the application of the EU ETS Directive on the basis of the reports submitted by Member States. The Report on the functioning of the European carbon market covering the first two years of phase 3, 2013 and 2014 is included in the annex to this report. It confirms that the system is robust and that it has created a functioning market infrastructure and a liquid market.

### **4.2.2. Market stability reserve**

Decision (EU) 2015/1814 of the European Parliament and of the Council of 6 October 2015 creates a Market Stability Reserve which will start operating in January 2019. Its aim is two-fold: to neutralise the negative impacts of the existing allowance surplus and to improve the system’s resilience to future shocks. This will be achieved among other measures by an automatic rule-set adjusting the supply of allowances to be auctioned when the total number of allowances in circulation is outside a certain predefined range.

### **4.2.3. Revision of the EU ETS - phase 4 (2021-2030)**

On 15 July 2015, the Commission presented a legislative proposal on the revision of the EU ETS for phase 4, in line with the European Council conclusions of October 2014 on the 2030 climate and energy policy framework.

The proposal aims to achieve a 43 % reduction in EU ETS emissions compared to 2005 levels. To this end, the overall number of allowances will decrease at an annual rate of 2.2 % from 2021 onwards. Compared to the current 1.74 %, this leads to a significant additional emissions reduction, estimated at around 550 million tonnes between 2021 and 2030. The Commission proposed that the allocation of free allowances is better targeted and more dynamic, including through the updating of benchmarks to reflect technological progress, more targeted carbon leakage groups, and a better alignment of the amount of free allocation with production levels. The option for continued free allocation of allowances given to 10 lower-income Member States to help them modernise electricity generation is proposed with an enhanced level of transparency.

## **4.3. Other policies and measures**

### **4.3.1. The Effort Sharing Decision in the 2030 climate and energy framework**

In line with the October 2014 European Council conclusions, the Commission plans to adopt a legislative proposal on the Effort-Sharing Decision (ESD) in the first half of 2016, with a view to reducing non-ETS emissions by 30 % between 2005 and 2030.

As part of its preparatory work, the Commission launched an *ex-post* evaluation study of the ESD's implementation under Article 14 of the Decision. The evaluation will examine the ESD's implementation and achievements, both at Member State and EU level. It will determine the extent to which the ESD is contributing to the overall EU 2020 GHG emissions reduction target.

#### **4.3.2. Integration of land use, land-use change and forestry (LULUCF) in the 2030 climate and energy framework**

In the EU, the LULUCF sector currently absorbs emissions and is therefore a 'net sink'. However, it is estimated that, without new action, the effect of the sink will be reduced. The increased use of biomass for energy, if exploited unsustainably, could lead to an even more rapid weakening of this sink effect.

Since 2013, the LULUCF Decision ensures that EU accounting rules are standardised on how emissions and removals from the sector are included in the EU GHG inventories, improving overall transparency. Although there is no explicit LULUCF target set under EU legislation, the Kyoto Protocol obliges Member States to ensure that the net result of LULUCF accounts is not negative.

The Commission is working on the impact assessment to analyse how LULUCF can be integrated into the EU climate and energy framework for the post-2020 period, building on the existing LULUCF Decision. As part of this work, the Commission has been carrying out consultations with Member States and stakeholders since early 2015. A proposal on LULUCF inclusion is scheduled for the first half of 2016.

#### **4.3.3. Energy efficiency**

In 2014, the European Council agreed on an indicative target at EU level of at least 27% of energy efficiency improvements by 2030 compared to the baseline scenario. The target will be reviewed before 2020, having in mind the EU-level target of 30% proposed by the Commission. As announced in the Energy Union roadmap, the Commission will review the Energy Efficiency Directive and the Energy Performance of Buildings Directive in 2016. Furthermore, the dedicated Strategy for heating and cooling is planned for early 2016. A proposal for revised legislation on energy labelling has already been presented and is currently under consideration by the co-legislators. EU action also includes measures that encourage the use of financial instruments.

#### **4.3.4. Renewable energy**

In 2014, the European Council agreed a target, binding at EU level, of at least 27% of renewable energy in final energy consumption by 2030. To address this, the Energy Union roadmap includes a proposal for a new Renewable Energy Directive and a bioenergy sustainability policy. EU action also includes measures that encourage the use of financial instruments to support the development of renewable capacities as well as the promotion of cooperation between Member States.

#### **4.3.5. Carbon capture storage**

The Commission has carried out an evaluation on the Carbon Capture Storage (CCS) Directive and concluded that the Directive is fit-for-purpose and sets up the necessary regulatory framework to ensure the safe capture, transport and storage of carbon dioxide while allowing the Member States sufficient flexibility.

The report on the review of the CCS Directive, as required under its Article 38, is included in the annex to this report. It addresses the evaluation of the Directive's performance, effectiveness, efficiency, coherence, relevance and EU-added value under the Commission's REFIT programme.

#### **4.3.6. Transport sector**

##### The monitoring, reporting and verifying (MRV) system for EU shipping

The EU has been supporting a global approach to reducing emissions from international shipping, which is a large and growing source of emissions. In April 2015, it adopted a Regulation that set up an EU-wide monitoring, reporting and verification system for shipping as the first step in the EU strategy towards cutting emissions in this sector. This Regulation requires that large ships over 5 000 gross tons using EU ports after 1 January 2018 monitor and later report their annual verified CO<sub>2</sub> 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 at the International Maritime Organisation are ongoing. The EU-shipping MRV system will also provide new opportunities to agree on efficiency standards for existing ships.

##### Light- and heavy-duty vehicles

In the area of light-duty vehicles, EU legislation sets binding emissions targets for new car- and van fleets. The targets for cars (130gCO<sub>2</sub>/km in 2015) and vans (175gCO<sub>2</sub>/km in 2017) were already reached in 2013. Preliminary data for 2014 registration show that the fleet average for new cars was 123.4gCO<sub>2</sub>/km and 169.2gCO<sub>2</sub>/km for vans. As long as this progress rate is maintained, manufacturers are well on their way to reaching the 2021 target of 95gCO<sub>2</sub>/km for cars and the 2020 target of 147gCO<sub>2</sub>/km for vans.

The heavy-duty vehicle (HDV) strategy, adopted in May 2014, is the EU's first initiative to tackle the fuel consumption and CO<sub>2</sub> emissions of trucks, buses and coaches. The strategy states that the Commission's first step here will be to measure vehicle fuel consumption and CO<sub>2</sub> emissions using a computer simulation methodology (VECTO). This approach was confirmed in the 2015 Energy Union package.

##### Fuel quality

In April 2015, the European Parliament and the Council agreed to amend the Fuel Quality and Renewable Energy Directives to take account of the effects of indirect land-use change caused by growing certain crops for the production of biofuels until 2020. The new legislation:

- caps at 7 % the amount that certain, essentially food, crops can contribute to the 10 % renewable energy in transport target in 2020;
- introduces an indicative target of 0.5 % for advanced biofuels; and
- requires the Commission to account for the effects of indirect land-use change through the introduction of emission factors in its reporting.

#### **4.3.7. F-gases**

The 2014 F-gases Regulation applies from 1 January 2015. It strengthens existing measures (e.g. containment of gases through the detection of leaks, installation of equipment by trained personnel, recovery of used gases, etc.) and introduces a phasing-out of F-gases that will cut total EU F-gas emissions by two-thirds by 2030 compared to 2014 levels. It also prohibits the placing of F-gases on

the market in certain circumstances where alternatives are available (e.g. domestic refrigerators and freezers that contain HFCs with a global warming potential (GWP) in excess of 150).

## 5. EU ADAPTATION POLICIES

The 2013 EU strategy on adaptation to climate change aims to make Europe increasingly climate-resilient. It promotes adaptation action across the EU, ensuring that adaptation considerations are addressed in all relevant EU policies (mainstreaming) and promoting greater coordination, coherence and information sharing. In 2017, the Commission will report to the European Parliament and Council on the implementation of the adaptation strategy. The general trends include the following:

- Many Member States are addressing adaptation planning and the identification of climate-change-related risks and vulnerabilities. National adaptation strategies have been adopted by 20 Member States and are under preparation in most of the remaining ones.
- More than half of Member States have earmarked financing for adaptation, though fewer than half have a specific budget for implementing adaptation action in vulnerable sectors.
- Most Member States have yet to define and implement adaptation action plans.
- With some variation, the development and implementation of monitoring and evaluation systems remain an outstanding issue in most Member States.

## 6. CLIMATE FINANCE

This section provides an overview of the use of climate finance generated by the auctioning of EU ETS allowances and the EU budget. It also summarizes data on EU and Member States climate spending in support of developing countries.

### 6.1. Revenue from the auctioning of EU ETS allowances

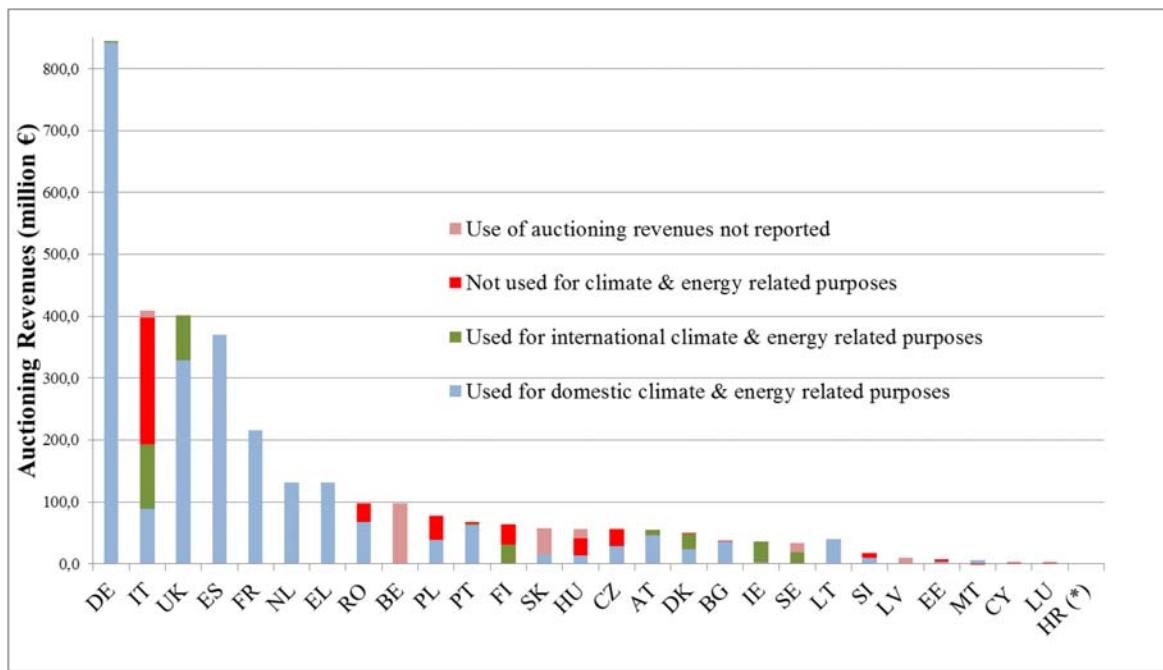
#### 6.1.1. Member States' use of auctioning revenue

In 2014, the total revenue from the auctioning of EU ETS allowances amounted to €3.2 billion.

According to the EU ETS Directive, Member States should use at least 50 % of auctioning revenues or the equivalent in financial value for climate and energy related purposes.

On average in 2014, Member States used or are planning to use around 87 % of these revenues or the equivalent in financial value for climate and energy related purposes, largely to support domestic investment in climate and energy. Nevertheless, a few Member States are still in the process of setting up the appropriate legal and financial instruments to make use of some of their revenues. Belgium has not provided details on the use of any of its revenues because no agreement has been reached on its allocation between authorities.

**Figure 5 Reported revenue or equivalent in financial value used or planned to be used for climate and energy related purposes in 2014**



Source: European Commission.

\*HR: auctioning starting in 2015 hence no revenues in 2014

Concerning the type of action supported, Denmark and the UK are using a significant proportion of their auctioning revenue or the equivalent in financial value to finance research projects on reducing emissions, including CCS technologies. France invests all the revenues in improving the energy efficiency of public buildings used for social housing. In 2014 and 2015, Sweden provided an equivalent amount of €32 million of its auctioning revenue to the UNFCCC Green Climate Fund.

More information on how Member States use auctioning revenue can be found in the accompanying staff working document.

### 6.1.2. NER 300 and the proposed innovation fund

Under the NER 300 programme, 38 renewable energy projects and one CCS 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 October 2014 European Council conclusions invited the Commission to renew and extend the NER 300 programme beyond 2020. The new innovation fund proposed as part of the revised EU ETS Directive would have 400 million allowances plus 50 million of unallocated allowances. It would build on the NER 300 programme while extending its scope to low carbon innovation in industrial sectors.

### 6.1.3. Proposal for a modernisation fund

In July 2015, the Commission has also proposed a new modernisation fund, designed for 10 Member States with a GDP per capita of less than 60% of the EU average in order to modernize their energy systems and improve energy efficiency and ultimately provide citizens with cleaner, secure and affordable energy. Between 2021 and 2030, 2% of the allowances, which means some 310 million allowances in total, will be used to establish the fund.

## 6.2. Mainstreaming climate policies into the EU budget

### Supporting the transition to low emissions and climate resilience in the EU through the multiannual financial framework

The current multiannual financial framework sets a target of allocating at least 20% of the EU budget to climate-related objectives. This represents around €180 billion and is a threefold increase from the 6-8% share in the 2007-2013 EU budget. This climate-related expenditure is tracked on an annual basis in accordance with a methodology developed by the Commission.

There has been significant progress. The overall contribution in 2015 represents around 16.8%. In 2016, 20.6% of the EU budget is expected to contribute to achieving the EU's climate goals:

- The European structural and investments funds (ESIFs) constitute more than 43% of the multiannual financial framework. Climate action is taken into account in the ESIF Regulations, the 28 partnership agreements and in more than 530 fund-specific programmes. A common methodology has been set up to determine the level of support for climate change objectives. More than €110 billion will support climate action objectives, corresponding to about 23-25% of the total funds. The precise amount will be known at the end of the ongoing programming exercise, when all programmes are adopted. Member States will then use it for planned climate-related projects.
- At least 35% of the Horizon 2020 budget of €79 billion is expected to be invested in climate-related projects. At the time of writing, 80% of the 2014 budget has been tracked and 22% of climate-related expenditure has been recorded. The programming for thematic areas is close to delivering the climate target of 35%. However, the bottom-up actions do not present a high number of climate-related projects, and they alone constitute 25% of the total Horizon 2020 budget. Therefore, there is a need for urgent corrective action to reach the 35% mainstreaming target and to avoid a further underperformance in 2015 and beyond. Moreover, the Integrated Strategic Energy Technology (SET) Plan is the very first research & innovation deliverable under the Energy Union, giving a new impetus to the development and deployment of low-carbon technologies by better coordinating and prioritising efforts. It focuses on ten key action lines aimed at delivering the Energy Union research & innovation priorities. It also proposes a new financial product, the "Energy Demo Projects facility" developed with the EIB, targeting first-of-a-kind large-scale commercial demonstration projects.
- For the common agricultural policy (CAP), 2014-2015 are transitional years. The new CAP will start to be effective as of 2015 and will include the disbursement of about €4 billion from the greening measures alone. Rural development programmes are mainly approved over the course of 2015, with projects being implemented thereafter, which implies a significant increase of rural development expenditure for climate action.

## 6.3. EU and Member States climate spending in support of developing countries

Support to developing countries plays a key role in reaching the agreed goal of limiting the global average temperature increase to below 2 °C above pre-industrial levels, achieving the transformation to low GHG emissions economies, and supporting climate-resilient sustainable development. At the 2009 Climate Change Conference in Copenhagen, developed countries committed to a short-term goal of jointly mobilising US\$ 30 billion of extra public climate finance for 2010-2012 ('fast-start finance'). They also committed to a long-term goal of jointly mobilising US\$ 100 billion per year by 2020 ('long-

term finance') in the context of meaningful mitigation actions and transparency of implementation. This financing will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance.

This US\$ 100 billion pledge has helped to significantly scale up climate finance in the context of development cooperation and through multilateral and development banks. The EU and its Member States are the biggest providers of official development assistance to developing countries, accounting for over US\$ 70 billion per annum (around €58 billion in 2014). They allocated €7.34 billion to 'fast-start finance' over the 2010-2012 period.

Furthermore, in 2014 the EU and its Member States collectively committed € 14.5 billion to help developing countries in tackling climate change. This figure includes climate finance sources from public budgets and other development financial institutions. Since 2014, it includes climate finance from the EIB, which amounted to €2.1 billion. Compared to previous years, a more complete set of figures based on OECD data on imputed multilateral contributions was taken into consideration in this calculation.