

*These reports have been prepared by an external contractor and do not necessarily represent the Commission's view. They are based on the contractor's own research on information publicly available as of November 2013.*

# Assessment of climate change policies in the context of the European Semester

## Country Report: France



**Ecologic Institute**

Authors team: Lena Donat, Eike Karola Velten, Andreas PrahI

**eclareon**

Author: Céline Najdawi

Client: DG Climate Action

Service Contract: 071201/2012/635684/SER/CLIMA.A.3

**Ecologic Institute**

**eclareon**

**Ecologic Institute, Berlin:**

PfalzburgerStrasse 43/44  
10717 Berlin  
Germany  
www.ecologic.eu

**eclareon GmbH**

Giesebrechtstraße 20  
10629 Berlin  
Germany  
www.eclareon.eu

**Contact:**

Eike Karola Velten,  
Fellow Climate and Energy  
Tel. +49 (30) 86880-165  
Fax +49 (30) 86880-100  
eike.velten(at)ecologic.eu

**Contact:**

Céline Najdawi  
Consultant, Policy Department  
Tel. +49 (30) 88 66 74 000  
Fax +49 (30) 88 66 74 010  
cn(at)eclareon.com

This country report has been produced as a joint output by Ecologic Institute and eclareon to support the Directorate General for Climate Action (DG CLIMA) at the European Commission in its work on the European Semester (Service Contract: 071201/2012/635684/SER/CLIMA.A.3).

The report provides an overview of current emission trends and progress towards targets as well as policy developments that took place over the period from February 2013 to November 2013.

Please feel free to provide any comments or suggestions to the authors through the contacts listed above.

## Short summary

**Background:** France's emissions are low when compared to other MS mainly due to its high reliance on nuclear energy. France is currently developing its national strategy for energy transition, which particularly focuses on energy efficiency, the diversification of the energy mix and the introduction of green taxation. Regular environmental conferences are an important driving force for improvements.

**Non-ETS emission reduction target:** The 2020 target is -14% (compared to 2005 emissions). A change in non-ETS GHG emissions between 2005 and 2011 of -10% has been reported. According to the latest national projections submitted to the Commission and when existing measures are taken into account, the target is expected to be achieved: -16% in 2020 compared to 2005 (with a margin of 2 percentage points).

### Key indicators 2011:

GHG emissions	FR	EU
ESD EU 2020 GHG target (comp. 2005)	-14%	
ESD GHG emissions in 2011 (comp.2005)	-10%	-9%
Total GHG emissions 2012 (comp.2005)	-13%	-12%
GHG emissions/capita (tCO <sub>2</sub> eq)	7.5	9.0

→ 17% **lower** per capita emissions than EU average

GHG emissions per sector	FR	EU
Energy/power industry sector	12%	33%
Transport	27%	20%
Industry (incl. industrial processes)	21%	20%
Agriculture (incl. forestry & fishery)	21%	12%
Residential & Commercial	16%	12%
Waste & others	3%	3%

→ **Transport** followed by Industry and Agriculture

Energy	FR	EU
EU 2020 RES target	+23%	
Primary energy consumption/capita (toe)	4.0	3.4
Energy intensity (kgoe/1000 €)	143	144
Energy to trade balance (% of GDP)	-3.1%	-3.2%

→ Around **18% higher** per capita consumption, around **same level** of energy intensity and contribution of energy to trade balance close to EU average.

Taxes	FR	EU
Share of environmental taxes (% of GDP)	1.8%	2.4%
Implicit tax rate on energy (€/toe)	165	184

→ **Lower** share of environmental taxes and 10% lower implicit tax rate on energy than EU average.

**Key policy development in 2013:** Based on a proposal of its Committee for Green Taxation, France adopted in 2013 a climate tax that will be added to fossil fuel taxes as of 2014 and will be increased annually. However, the “ecotax” on heavy goods vehicles was suspended. and the financial support granted upon acquisition of low emission cars will be significantly reduced and will mostly promote hybrid or electric vehicles. France also introduced a new Energy Refurbishment Plan for Housing in 2013.

**Key challenges:** The introduction of a carbon tax is a very positive development but important sectors (agricultural, fishing and transport businesses) will be exempt. Other proposals of the Committee for Green Taxation were not taken into account at all, namely on tax discrepancy between diesel and petrol and on the taxation of refrigerants. The suspension of the ecotax for HGVs is rather contradicting the reduction of GHG emissions from the transport sector.

France already has a quite comprehensive set of measures in place for energy efficiency but energy intensity is declining at slower pace than the EU average. For the industrial sector only voluntary agreements are in place and certain industries make only slow progress. In the residential sector, existing instruments do not sufficiently spur deep renovation.

## Index

<b>Short summary.....</b>	<b>1</b>
<b>1 Background on climate and energy policies.....</b>	<b>4</b>
<b>2 GHG projections.....</b>	<b>5</b>
Background information .....	5
Progress on GHG target .....	5
<b>3 Evaluation of National Reform Programme 2013 (NRP) .....</b>	<b>10</b>
<b>4 Policy development.....</b>	<b>13</b>
Environmental Taxation .....	13
Energy Efficiency .....	15
Renewable Energy.....	16
Energy Networks.....	17
Transport .....	18
Land Use, Land Use Change and Forestry .....	20
<b>5 Policy progress on past CSRs.....</b>	<b>21</b>
<b>6 References.....</b>	<b>22</b>

## I Background on climate and energy policies

In the period from February to November 2013, several policy developments in relation to climate change and energy transition have been pushed forward, especially regarding environmental taxation, energy efficiency and renewable energy. Historically, France's climate policy has been influenced by the underlying structure of its energy system. French energy policy is based largely on its use of nuclear power for electricity. Power production was strongly regulated by the state, which controlled the company operating nuclear plants (Electricité de France - EDF). Even after liberalisation of the energy markets, the French government continued to protect its national energy provider from outside competition. The reliance on nuclear power, which is essentially free of direct carbon emissions, has also led to a French GHG emissions profile that is much lower than the EU average – per capita and per unit of GDP. France's emission targets have thus been lower than those of similarly industrialised economies. Recently, the potential to obtain natural gas via hydraulic fracturing has spurred debate in France, as the practice is prohibited there since July 2011 due to its negative impact on the environment. In 2012, President Hollande rejected several applications for oil shale exploration licences (Challenges 2012). In October 2013, the Constitutional Council validated without reserve the law of 13 July 2011 prohibiting the use of hydraulic fracturing for the exploration and exploitation of hydrocarbons. This decision followed the appeal raised by the Texas oil company Schuepbach. After the repeal of two exploration permits granted in 2010, in January 2013 the company had submitted an application for a preliminary ruling on the issue of constitutionality regarding the law of 13 July 2011. According to the Energy Minister Philippe Martin, the decision of the Constitutional Council reinforces the energy transition objectives of the French government, including a 30% reduction of consumption of fossil fuels by 2030 (MEDDE 2013).

The "Grenelle Environment Round Table" initiated under the presidency of Nicolas Sarkozy <sup>(1)</sup>, and the two Environmental Conferences introduced in September 2012 and September 2013 by the government of Francois Hollande, reflect France's engagement in green growth measures and climate mitigation. The goal of these processes is to develop a governmental work programme through the formulation of a national roadmap identifying the path forward on sustainable development and particularly on energy transition in close consultation with industry, government, and non-governmental organisations. The French government finances this process through e.g. its "Investment for the Future" Programme (Programme d'investissements d'avenir). Within this framework, France has set itself the target of reducing its greenhouse gas emissions by 2050 by at least 75% (Legifrance 2012).

President Hollande pledged to cut the share of nuclear energy in the country's electricity mix to 50% from 75% by 2025. In September 2012 he reinforced this plan and initiated an "energy transition" debate, which officially ended on 18 July 2013. The outcome resulted in the adoption by the National Council of a document summarising the national debate

---

<sup>1</sup> The "Grenelle Environment" characterises a series of round tables aiming at developing long-term policies regarding sustainable development and climate change in France. It was initiated in September 2007 by the government of Nicolas Sarkozy.

on energy transition, which was handed over to the Government in view of the second Environmental Conference of 20 and 21 September 2013.

The most important announcements of the Environmental Conference 2013 affect national energy policy, the first priority of energy transition being the improvement of energy efficiency. In this regard, president Hollande announced the objective of a 30% reduction of national fossil energy consumption by 2030, as well as the halving of energy consumption by 2050. The second priority of energy transition is the diversification of France's energy mix. To this end, renewable energies shall represent at least a quarter of the country's energy consumption by 2020 (MEDDE 2013h).

## 2 GHG projections

### Background information

France is the fourth biggest emitter of greenhouse gases in the European Union. In 2011, the country emitted 485.5 Mt CO<sub>2</sub>eq (UNFCCC inventory 2011), 13% less than in 1990. Energy use, transport and agriculture were the sectors with highest emissions. Emissions from energy use decreased by 17% between 1990 and 2011, reflecting improvements in energy efficiency in the building sector. There was an especially sharp decrease between 2010 and 2011. Emissions from agriculture fell by almost 10% in the between 1990 and 2010, due to decrease in livestock and declining use of nitrogen fertilizer, but showed a slight increase between 2010 and 2011. Energy supply emissions also fell between 1990 and 2011 by 8%. The most makeable emission reductions occurred in industrial processes, where emissions decreased by 39% in this timeframe, reflecting reduced mineral production and increased energy efficiency. In contrast, emissions from transport increased nearly 9% between 1990 and 2010. This is primarily related to growing emissions from freight vehicles; emissions from passenger cars have been decreasing due to the dieselization of the car fleet (UNFCCC inventory 2011, EEA 2012, UNFCCC 2012). EEA estimates (EEA 2013c) show that GHG emissions will increase slightly again from 2011 to 2012 (see Table 1).

### Progress on GHG target

There are two sets of targets to evaluate: 1) the Kyoto Protocol targets for the period 2008-12 (which has just ended) and 2) the 2020 targets for emissions not covered by the EU ETS.

Under the Kyoto-Protocol the emission reduction target for France for the period 2008-2012 has been set to 0 % based on 1990 levels. An evaluation of the latest complete set of greenhouse gas data (for the year 2011; there is only preliminary data for 2012) shows that France's emissions have decreased on average by 13.9% compared to the Kyoto base year (EEA 2013a).

By 2020, France needs to decrease its emissions not covered by the EU ETS by 14% compared to 2005 in accordance with the Effort Sharing Decision (ESD) <sup>(2)</sup>. The latest data for 2012 suggests that France is on track at present to meet the Annual Emissions Allocation <sup>(3)</sup> for the year 2013. By 2020, national projections show that France is expected to reduce its non-ETS emissions by 16% (from the 2005 base year) in a scenario with existing measures, and by 23% in a scenario with additional measures. France is thus expected to overachieve its target (EEA 2013b) (see **Fehler! Verweisquelle konnte nicht gefunden werden.**).

**Table I: GHG emission developments, ESD-targets and projections (in Mt CO<sub>2</sub>eq)**

	1990	2005	2010	2011	2012*	ESD target**		2020 Projections***	
						2013	2020	WEM	WAM
Total	556.4	558.3	514.2	485.5					
Non-ETS (% from 2005)		422.2	398.5	379.9	376.9 -11%	397.9 -6%	350.1 -14%	342 -16%	312 -23%
Energy supply (% share of total)	64.3 12%	67.6 12%	61.5 12%	53.0 11%					
Energy use (w/o transport) (% share of total)	188.1 34%	193.6 35%	174.4 34%	155.3 32%					
Transport (% share of total)	121.2 22%	141.7 25%	132.2 26%	132.0 27%					
Industrial processes (% share of total)	58.9 11%	42.4 8%	37.5 7%	36.1 7%					
Agriculture (% share of total)	99.6 18%	92.3 17%	89.9 17%	91.2 19%					

Source: UNFCCC inventories; EEA (2013b); Calculations provided by the EEA and own calculations.

\* national proxies for 2012 emissions summarised by EEA (2013b)

\*\* The ESD target for 2013 and for 2020 refer to different scopes of the ETS: the 2013 target is compared with 2012 data and is therefore consistent with the scope of the ETS from 2008-2012; the 2020 target is compared to 2020 projections and is therefore consistent with the adjusted scope of the ETS from 2013-2020. 2005 non-ETS emissions for the scope of the ETS from 2013-2020 amounted to 407Mt CO<sub>2</sub>eq.

\*\*\*Projections with existing measures (WEM) or with additional measures (WAM).

Legend for colour coding: green = target is being (over)achieved; orange = not on track to meet the target

Total greenhouse gas emissions (GHG) and shares of GHG do not include emissions and removals from LULUCF (carbon sinks) and emissions from international aviation and international maritime transport.

National projections of GHG emissions up to 2020, summarised by the EEA, need to be prepared by the Member States in accordance with the EU Monitoring Mechanism <sup>(4)</sup>

<sup>2</sup>Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020.

<sup>3</sup>Commission decision of 26 March 2013 on determining Member States' annual emission allocations for the period from 2013 to 2020 pursuant to Decision No 406/2009/EC of the European Parliament and of the Council. Online available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:090:0106:0110:EN:PDF>

<sup>4</sup> Decision No 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol.



every two years, and the latest submission was in 2013. The projections need to be prepared reflecting a scenario that estimates emissions reductions in line with policies and measures that have already been implemented (with existing measures, WEM), and an additional scenario that reflects developments with measures and policies that are in the planning phase (with additional measures, WAM) may also be submitted.

In the following two tables, these measures - as outlined by France as basis for the projections as of May 2013 - have been summarised with a focus on national measures and those EU instruments expected to reduce emissions the most <sup>(5)</sup>. An update on the status of the policies and measures is included in order to assess the validity of the scenarios.

**Table 2: Existing and additional measures as stated in the 2013GHG projections**

Existing Measures (only important national measures)		Status of policy in November 2013
Energy	Multiannual programming investments for renewable electricity	The current multiannual programming investments for electricity were implemented in 2009 via a decree that also set electricity development targets for the period 2009-2020 and is still in force (Legifrance 2009a). During the Environmental Conference 2013 which took place on 20 and 21 September, president Hollande spoke in favour of a final adoption of the programming law on energy transition by the end of 2014, which shall include renewable energy targets until 2025 (MEDDE 2013h).
	Multiannual programming investments for renewable heat production	The current programme was implemented in 2009 via a decree that also set heat production targets for the period 2009-2020 and is still in force (Legifrance 2009b). During the Environmental Conference 2013 which took place on 20 and 21 September, president Hollande spoke in favour of a final adoption of the programming law on energy transition by the end of 2014, which shall include renewable energy targets until 2025 (MEDDE 2013h).
	Heat fund	Ongoing: € 1.2 billion are foreseen for the period until the end of 2013. A call for tender was launched in September 2012.
Energy Efficiency	2012 thermal regulation (RT 2012)	Implemented: The RT 2012 applies for all building permits submitted for new buildings from 1 January 2013 onwards.
	Tax credit for sustainable development (icsd) improving the energy performance of existing buildings	Modified: From 1 January 2013, the tax credit for sustainable development is only applicable for existing buildings completed more than 2 years ago. (Art. 200 quarter of the General Tax Code).

<sup>5</sup> The implementation of the EU-ETS has not been included. Other EU Directives have only been considered if they have been outlined in the projections as one of the main instruments to reduce GHG emissions.

	Energy saving certificates (1 <sup>st</sup> and 2 <sup>nd</sup> period)	Ongoing. The current measures cover the period 2011-2013, for which a target of 345 TWh energy saving has been set. In May 2013, the Minister of Ecology, Sustainable Development and Energy Delphine Batho announced the introduction of a transitional period from 1 January 2014, pending the launch of the third period of energy saving certificates (Actu-Environnement 2013e).
Transport	Tax (TGAP) on fuels depending on share of biofuels in the fuel	In force.
	Eco-heavy vehicle fee (art 11 grenelle 1)	Not implemented yet. On 29 October 2013, Prime Minister Jean-Marc Ayrault declared the suspension of the environmental tax on heavy goods vehicles. In September 2013, the government had already announced the postponement of the entry into force of the environmental tax from October 2013 to 1 January 2014, due to persistent shortcomings in the collection system. As of November 2013, there is no information available as to the future of the environmental tax (Les Echos 2013a).
	Bonus-malus system for new cars and superbonus for scrapping of the old car	Implemented. A decree published in October 2013 amended the amount of the bonus scheme for car purchases from 1 November 2013 onwards. The financial support granted upon acquisition of a car with low fuel consumption will be significantly reduced and will mostly promote hybrid or electric vehicles. Only traditional vehicles emitting between 60 and 90g of CO <sub>2</sub> per km will receive a premium amounting to € 150 against € 550 so far. Vehicles emitting between 90 and 105 g of CO <sub>2</sub> , which benefited from a bonus of € 200 in 2013, will not be eligible to a bonus anymore from 1 November 2013. As far as electric and hybrid cars are concerned, their bonus will be reduced respectively from € 7,000 to € 6,300 for electric cars and from € 4,000 to € 3,300 for hybrid cars (MEDDE 2013n).
	Plans for electric and hybrid vehicles	Ongoing. The Hollande government's "Plan automobile" was presented in July 2012 and replaces the previous government's "plan véhicules électriques et hybrides". In March 2013, the Ministry for Industrial Renewal published an interim report on the "Plan automobile", reviewing the implementation measures undertaken since July 2012. These measures include the rollout of loading stations for electric and hybrid vehicles at the national level as well as the order of electric and hybrid cars to fulfil the 25% objective of the Government (MRP 2013).

Other non-ETS sectors	Limitation of emissions of fluorinated gases used as a refrigerant	Implemented since 2007. In France, the sector of refrigerants is regulated by articles R. 543-75 to R. 543-123 of the Environmental Code, supplemented by several implementing decrees published in 2007 and 2008. These articles regulate the conditions under which CFCs, HCFCs and HFCs may be launched, used and destroyed, when used as refrigerants in refrigeration or air conditioning equipment. In April 2013, the French Committee for Green Taxation (Comité pour la fiscalité écologique) published a note on the taxation possibilities of refrigerants. However, the Draft Finance Act for 2014 does not mention the introduction of taxation measures on refrigerants (Assemblée Nationale 2013).
-----------------------	--------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Source: Reporting of MS in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, May 2013.

Additional Measures (only important national measures)	Status of policy in November 2013	
Energy	Changes in regulations for geothermal facilities	Since 1 January 2012, installation of geothermal heat pumps can earn a 26% income tax credit.
	38% reduction of primary energy consumption in existing buildings between 2008 and 2020	Ongoing. This objective was first set by the previous government through the Grenelle Environnement and was confirmed by the current government within the framework of the Energy Refurbishment Plan for Housing. To this end, the plan foresees the refurbishment of 500,000 housing units per year by 2017 (see energy efficiency measures below).
	Energy saving certificates (3 <sup>rd</sup> period)	To be implemented. In May 2013, the Minister of Ecology, Sustainable Development and Energy Delphine Batho announced the introduction of a transitional period from 1 January 2014, pending the launch of the third period of energy saving certificates, which is expected to be very challenging in terms of targeted energy saving (Actu-Environnement 2013g)
Energy Efficiency	Requirement for completion of work to improve energy efficiency in existing buildings, which are used for tertiary use or an activity of public service by 2020	Implemented. From 1 January 2012, existing tertiary and public sector buildings required to carry out energy efficiency upgrades within 8 years (Art. 111-10-3, Code de la construction et de l'habitation).
	Promoting the individualisation of heating costs	Planned: Appliances that individualise collective heating costs are to be commissioned by 31 March 2017 at the latest (Décret du 23 avril 2012 et arrêté du 27 août 2012).
	Renovation of 800 000 houses by 2020	Ongoing: In March 2013, the President Hollande launched the Energy Refurbishment Plan for Housing ("Plan de rénovation énergétique de l'habitat"), which foresees the refurbishment of 500,000 housing units per year by 2017 in order to achieve a 38% reduction in energy consumption by 2020.

Transport	SNIT (national scheme of transport infrastructure) to encourage modes of transport to emit less	Ongoing. The Parliamentary committee commissioned to establish a new sustainable transport infrastructure plan on the basis of the previous one proposed by the Grenelle Environnement, submitted its report in June 2013. The new plan, called "Mobility 21", formulates 20 recommendations for the development of a sustainable transport infrastructure. On the basis of this plan, the government announced in July 2013 its investments decisions for the transport sector until 2025. These include public investments amounting to €5 billion per year for the modernisation and the development of transport infrastructures by 2030. Two-thirds of the investments will be devoted to the improvement of existing networks (Gov 2013b).
	Act 1 grenelle art 11: modal share of non-road and non-air transport for goods by 25% in 2022	Ongoing. The provisions of article 11 of the Grenelle Environnement Act regarding the transport of goods are still in force. In this regard, the government announced in July 2013 public investments amounting to €5 billion per year for the modernisation and the development of transport infrastructures by 2030 (Gov 2013b).

Source: Reporting of MS in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, May2013.

As of November 2013, most of the policies contained in the WEM scenario are implemented. However, important legislative changes originally planned for 2013 are still expected, particularly regarding the adoption of the law on energy transition, now planned for 2014. Also, the entry into force of the heavy vehicle fee, which was expected to yield €1.2 billion per year, was suspended in October 2013. It is thus still possible that due to these delays France may not achieve the full reductions assumed for the WEM scenario.

Most of the measures listed under the WAM scenario are still being developed. The third period of energy saving certificates, which is expected to be very challenging in terms of targeted energy saving, is not implemented yet.

### 3 Evaluation of National Reform Programme 2013 (NRP)

In April of each year, Member States are required to prepare their National Reform Programmes (NRPs), which outline the country's progress regarding the targets of the EU 2020 Strategy. The NRPs describe the country's national targets under the Strategy and contain a description of how the country intends to meet these targets. For climate change and energy, three headline targets exist: 1) the reduction of GHG emissions, 2) the increase of renewable energy generation, and 3) an increase in energy efficiency<sup>6</sup>.

The NRP of April 2013 mostly focuses on the development of green taxation measures as well as on measures shifting the tax burden from labour to other forms of taxation which weigh less on growth and external competitiveness. Thus, the tax credit for

<sup>6</sup> There are specific targets for all MS by 2020 for non-ETS GHG emission reductions (see section 2) as well as for the renewable energy share in the energy mix by 2020 (see section 4, renewable energies). Specific energy efficiency targets will be defined (or revised) by the MS until the end of April 2013 in line with the methodology laid out in Article 3 (3) of the Energy Efficiency Directive (Directive 2012/27/EU).

competitiveness and jobs shall be partly financed by green taxes. First measures on green taxation will be included in the Finance Act 2014. As far as other policies are concerned, the NRP also addresses the topics of regulation of electricity tariffs as well as the interconnection capacities with Spain and Italy. No measures were mentioned neither regarding green taxes in the transport sector, nor regarding energy efficiency policies.

In the following table, the main policies and measures as outlined in the NRP of April 2013 <sup>(7)</sup> have been summarised, and their current status (implemented, amended, abolished, or expired) is given, with specifics on latest developments.

**Table 3: Main policies and measures as outlined in the NRP, April 2013**

<b>Implementation of the tax credit encouraging competitiveness and jobs</b>	
Status as stated in the NRP	In force since 1 January 2013.
Status as per Nov 2013	Still in place
Description of policy or measure	The tax credit encouraging competitiveness and jobs is a tax credit on benefits which allows to lower labour costs. According to the NRP, the budget cost of the tax credit, evaluated at roughly €20 billion by 2017, shall be partly financed by green taxes to the amount of €3 billion. These green taxes will be included in the Finance Act 2014, whose adoption is expected by the end of 2013.
<b>Implementation of green taxation</b>	
Status as stated in the NRP	To be implemented in 2014 through the Finance Act 2014.
Status as per Nov 2013	The Draft Finance Act 2014 including green taxation measures was presented on 25 September 2013 to the Council of Ministers and shall be examined by the Parliament before a final adoption by the end of 2013 (MEF 2013).
Description of policy or measure	The Environmental Conference in September 2012 led to the publication of a roadmap, of which the part on green taxation was entrusted to a special committee (Comité pour la fiscalitéécologique). In October 2013, the National Assembly passed on a first reading the proposed "climate energy contribution", also called carbon tax, as defined in the draft finance act for 2014 (article 20). The measure foresees a gradual increase of the rate of the domestic consumption tax on energy products based on their CO2 emissions (Actu-Environnement 2013f). In April 2013, the committee published a notice recommending the reduction of the tax discrepancy between diesel and petrol (MEDDE 2013j). However, only the carbon tax is being pushed forward by the government.

<sup>7</sup> All NRPs are available at: [http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index\\_en.htm](http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index_en.htm)

### Regulation of electricity tariffs

Status as stated in the NRP	Removal of regulated electricity rates by the end of 2015, except for small consumers
Status as per Nov 2013	Not implemented yet.
Description of policy or measure	The law of 7 December 2010 on the electricity market is still in force and provides for the phase out of regulated electricity tariffs from 1 January 2016 for residential and business consumers with a power subscription greater than 36 kVA <sup>(8)</sup> . In July 2013, a decree was issued introducing an increase of electricity prices from 1 August 2013. The electricity rates were raised by 2.7% to 5% depending on the voltage amplitude of the electricity subscription, except for companies subscribing to an electricity supply over 240 kVA. This increase aims to cover the costs of the French Utility Company EDF (Actu-Environnement 2013d).

### Development of interconnection capacities with Spain and Italy

Status as stated in the NRP	Interconnection with Spain: Started in 2012; Interconnection with Italy: To be implemented
Status as per Nov 2013	Interconnection with Spain: Implementation started as planned; Interconnection with Italy: Under implementation since July 2013
Description of policy or measure	The construction of the new line between Spain and France began in 2012 to be commissioned in 2015. The connection between Italy (Piedmont) and France (Savoie) was declared to be of public interest in April 2012. After the authorisation process was finalised, the Italian construction site was inaugurated in July 2013. The beginning of construction works on the French side is planned for 2014. The new line shall be commissioned in 2019 (RTE 2013).

<sup>8</sup> Loi n° 2010-1488 du 7 décembre 2010 portant nouvelle organisation du marché de l'électricité

## Drafting of a National Transportation Infrastructure Plan (SNIT)

Status as stated in the NRP To be submitted to the Government in the first half of 2013

Status as per Nov 2013

The current government had decided not to implement the SNIT as defined by the previous government, largely due to the associated costs. The Parliamentary committee commissioned to establish a new sustainable transportation infrastructure plan on the basis of the previous one, submitted its report in June 2013.

Description of policy or measure

The National Transportation Infrastructure Plan (SNIT – Schema National d’Infrastructure de Transport) was part of the Grenelle engagements. It proposed town and country planning projects aiming at developing the French railway and road network as well as at enhancing river and airport traffic. The new plan, called “Mobility 21”, formulates 20 recommendations based on the identification of four main themes:

- Ensure a quality transport infrastructure
- Enhance the service quality of the transport system
- Improve the overall performance of the rail system
- Restore the funding and governance mechanisms of the transport system.

On the basis of this plan, the government announced in July 2013 its investments decisions for the transport sector until 2025. These include public investments amounting to €5 billion per year for the modernisation and the development of transport infrastructures by 2030. Two-thirds of the investments will be devoted to the improvement of existing networks and the rest will be devoted to the implementation of major projects (Gov 2013b).

## 4 Policy development

This section covers significant developments made in key policy areas between February 2013 and November 2013. It does not attempt to describe every instrument in the given thematic area.

### Environmental Taxation

In 2011, the share of environmental tax revenues in overall tax revenues was with 4.15% the lowest in the EU. Compared with France’s GDP the revenues only amount to 1.82%, which is the 4th lowest value (Eurostat 2013a). After a first attempt to introduce a CO<sub>2</sub> levy had failed in 2009, discussions about the introduction of such a tax intensified in 2013. In August 2013 France’s Prime Minister Jean-Marc Ayrault approved a proposal for a carbon tax, which would be levied on the consumption of coal, lignite and coke and a number of energy products used as fuel as well as on the consumption of uranium used to produce electricity. Information on further details, such as the extension and amount of levy, has not been released yet. France has an implicit tax rate that was approximately 165 € per tonne of oil equivalent (toe) in 2011. France economy was in 2010 only slightly less energy intensive than the EU average. Also, the share of energy tax revenues in total tax revenues has been the second lowest in comparison with the other MS (Eurostat 2013a).

As stipulated in the roadmap for energy transition issued during the Environmental Conference in September 2012, a Standing Committee for Green Taxation was



established on 18 December 2012. The committee is chaired by economist Christian de Perthuis, and is composed of stakeholders such as representatives of employers, trade unions, environmental NGOs and MPs. The Committee is responsible for advising on environmental tax measures planned by the government and for making proposals. On 28 March 2013, the committee adopted an opinion regarding the introduction of a carbon tax base in the French taxation system ("introduction d'une assiette carbone dans la fiscalité française"). However in June 2013, the members of the Committee failed to reach an agreement on the implementation of the carbon tax for the period 2014-2020, which should serve for the preparation of the draft Finance Act 2014. In the absence of consensus, the president of the Committee delivered a report to the Minister of Ecology containing his own proposals as well as an alternative scenario presented by the Nicolas Hulot Foundation (NHF). The report of Christian de Perthuis included an introduction scenario of the carbon tax over the period 2014-2020 as well as recommendations to effectively carry out the transition to green taxation (Le Monde 2013c). In its opinion, the Committee called on France to consider the gradual introduction of a carbon tax base, which would be complementary to the EU ETS (MEDDE 2013j).

On 21 October 2013, the National Assembly passed the proposed "climate energy contribution" as defined in the draft finance act for 2014 (article 20) on a first reading. The measure foresees a gradual increase of the rate of the domestic consumption tax on energy products based on their CO<sub>2</sub> emissions. The value of the "climate-energy contribution", also called carbon tax will be set at €7 per ton of CO<sub>2</sub> in 2014, €14.5 in 2015 and €22 in 2016. The carbon tax would correspond to an increase of the price of gasoline of ct€ 3.4 per litre within 2 years. For diesel as well as for fuel oil, the carbon tax amounts to ct€ 4 per litre (La Tribune 2013). It is expected to yield €340 million in 2014, €2.5 billion in 2015 and €4 billion in 2016. Three of the €4 billion will be distributed to companies in the form of a tax credit for competitiveness and employment ("crédit d'impôt pour la compétitivité et l'emploi") and €1 billion will fund a reduced VAT rate for energy refurbishment in residential buildings and social housing (Actu-Environnement 2013f). No further details were communicated neither regarding the impact of the carbon tax on GDP nor concerning the expected effect on greenhouse gas emission reductions (as of November 2013). The application of the carbon tax as proposed by the government goes beyond the recommendations formulated in the opinion of the Committee. While the latter suggested the introduction of a carbon tax only within the domestic consumption tax (Taxe intérieure de consommation - TIC), the government plans on introducing a carbon tax also within the general tax on polluting activities (taxe générale sur les activités polluantes - TGAP) and within the corporate vehicle tax (taxe sur les véhicules de sociétés - TVS). Compensation measures, such as the "energy check" for modest households, are also foreseen (Les Échos 2013).

This is the third time France considers a carbon tax. Earlier attempts to introduce a carbon tax in France in 2000 and 2009 were abandoned after rejection by the Constitutional Council. Moreover, the Committee for Green Taxation also published on in April 2013 a notice on the taxation of refrigerants. On the basis of simulation results based on two CO<sub>2</sub> price assumptions, it concludes that ecological taxation could play a beneficial incentive role provided that the tax base and rate are carefully adjusted (Actu-Environnement 2013a, for the Committees notice with respect to tax rates for diesel and petrol, see "Transport" below). As of October 2013, the government did not publish any reaction on a possible introduction of a tax on refrigerants within the Finance Act 2014.



## Energy Efficiency

The energy intensity of the French economy declined between 2005 and 2011, only a bit slower than the EU average (11% versus 12%). Meanwhile, final energy consumption was also 9% lower in 2011 than in 2005, mainly reflecting decreased energy use in the industrial sector, especially in iron and steel production. From 2010 to 2011 the trend slowed down a bit to 7%, but remains over the EU average of 4% (Eurostat 2013a).

The energy efficiency of the French industrial sector increased approximately by 21% between 1990 and 2010. While efficiency increased strongly in the chemical industry, other branches such as the cement, the food and especially the textile industry showed poor performances. Energy efficiency in the household sector increased from 1990 to 2010 by 26%, mostly due to improvements in space and water heating (Odyssee 2012).

Since 2006, France is promoting energy-efficiency measures with a white certificate scheme. The system imposes energy-saving obligations on suppliers of all types of final energy. The framework and conditions for energy saving certificates are defined for a three year period. The first two periods covered 2006-2009 and 2011-2013. The target for the second period 2011-2013 is savings of 345 TWh. The system covers all sectors, excluding those covered by the EU ETS, and grants certificates for a catalogue of 170 standardised actions. In May 2013, the Minister of Ecology, Sustainable Development and Energy Delphine Batho announced the introduction of a transitional period from 1 January 2014, pending the launch of the third period of energy saving certificates, which is expected to be very challenging in terms of targeted energy savings. The terms of this transitional period will remain the same as those of the second period of energy saving certificates (Actu-Environnement 2013b).

An Energy Refurbishment Plan for Housing ("Plan de renovation énergétique de l'habitat") was developed and announced by the government in March 2013. It foresees the refurbishment of 500,000 housing units per year by 2017 in order to achieve a 38% reduction in energy consumption by 2020. The Plan provides for enhanced financial support for major renovation works of modest and middle-class households through the allocation of a tax credit for sustainable development and a zero-interest loan. In addition, a special bonus of at least €1,350 will be allocated in 2013 and 2014. Starting in 2015, third-party device-funding will supplement state subsidies (MEDDE 2013d).

As far as commercial buildings are concerned, a charter for voluntary commitments promoting energy efficiency in public and private commercial buildings was signed by the Ministers for Environment and Housing together with thirty stakeholders, including shopping centers, real estate companies, banks and universities in October 2013. Although the charter sets no energy-saving targets, it commits the signatory parties to declare a self-determined target for energy saving and to communicate their progress regularly. This charter anticipates the implementation of the obligation to improve energy efficiency in existing public service buildings and buildings for tertiary use by 2020, as stipulated in article 3 of the so-called "Grenelle 2 law" (loi Grenelle2). The enforcement decree of the Grenelle 2 law is expected to be published in 2014 (PBD 2013).

Moreover, in October 2013, the government announced the launch of a research programme on the Energy Performance of Cities called "Efficacity". The program will be funded under the "Investments for the future" program to the amount of € 15 million. The research programme aims at developing tools to improve the energy efficiency and carbon footprint of cities. "Efficacity" gathers six industrial companies (EDF R&D, GDF

Suez, RATP, Veolia Environnement, Vinci Construction France and Compagnie IBM France), 7 engineering companies and 15 academic structures (MEDDE 2013m).

Furthermore, in July 2013 a new light pollution decree entered into force which obliges business premises to switch off their interior lights one hour after closing time. Lighting of shop windows must be suspended between 1am and 7am.<sup>9</sup>In case of non-compliance with these measures, the storekeeper or owner of a non-residential building shall be fined up to €750. According to the Ministry of Ecology, this measure is expected to save the equivalent of the annual electricity consumption of 750,000 households, avoiding the emission of 250,000 tons of CO<sub>2</sub> and savings of €200 million (MEDDE 2013e).

### **Renewable Energy**

Between 2005 and 2010, the share of renewable sources in total final energy consumption in France rose continually from 9.5 to 12.8%, but decreased in 2011 to 11.5%. Thus, France still has a long way ahead to meet its 2020 goal of 23%. Electricity production from renewable sources as a percentage of total electricity consumption also increased over this time period by 20%, clocking in at 16.5% in 2011 (Eurostat 2013b).

France promotes renewables via a feed-in tariff, parts of which were recently modified. The tariff rates for small photovoltaic installations under 100 kWp has been increased for instance, by up to 10% depending on the production origin of the solar panels. Regarding wind energy, a new model of power purchase contract for onshore wind installations is effective since March 2013. This new model allows the signing of a purchase contract with the French electric utility company EDF at the guaranteed purchase price of €ct 82 per kWh, upon signature of the grid connection agreement. Before, operators had to wait until the wind turbine was actually connected to the electricity grid. Moreover, the meters had to be installed and the grid access contracts signed (Actu-Environnement 2013c). Calls for tenders are a primary renewable energy support mechanism. As far as wind energy is concerned, the French government published in March 2013 a call for tender for the development of two offshore wind parks, with a total installed capacity of 1000 MW. This call for tender aims to generate investments amounting to €3.5 billion and to allow the creation or preservation of 10,000 wind industry jobs (MEDDE 2013a). With regard to solar energy, the government recently announced its intention to double the target volume of photovoltaic installations compared to the target set by the previous government's Grenelle de l'Environnement Forum – this makes for 1,000 MW of photovoltaic capacity installed in 2013. In order to achieve this target, two calls for tender were published in March 2013. The first call for tender promotes the development of photovoltaic rooftop installations with a capacity between 100 and 250 kW. It plans the construction of PV projects on non-residential buildings for a total volume of 120 MW and shall generate cumulative investments of around €250 million by 2015. The second call for tenders supports the deployment of 400 MW photovoltaic installations with a capacity over 250 kWp (MEDDE 2013f). Tender applications must take into consideration the amount of carbon dioxide emitted during the manufacturing process of the PV modules. In addition, a call for expression of interest (CEI) for the installation of pilot farms of hydrokinetic turbines on the French coast was published in the Official Journal in October

---

<sup>9</sup> Arrêté du 25 janvier 2013 relatif à l'éclairage nocturne des bâtiments non résidentiels afin de limiter les nuisances lumineuses et les consommations d'énergie

2013. The aim of this CEI is to test a significant sample of installations under operational conditions in order to remove technical obstacles regarding their installation, operation and maintenance (Ademe 2013). According to president Hollande, the funding for each farm will be subsidized by the state to the amount of € 30 million. The purchase price of electricity produced will be set at € 173 per MWh (Actu-Environnement 2013g).

Furthermore, a decree was published in February 2013 introducing a new legal framework on the double promotion of biogas, thus allowing producers to benefit from the existing support schemes both for electricity production from biogas and for the injection of biomethane into the natural gas networks. So far, biogas producers had to choose the end use of their biogas production and the corresponding support scheme. By allowing the support of both biogas uses, the new legal framework is expected to encourage the development of new biogas projects. The double promotion of biogas is part of the measures announced within the framework of the Environmental Conference in order to support the biogas sector (MEDDE 2013g).

### **Energy Networks**

Upon the presentation of the Investment Plan for France (Plan "Investir pour la France") in July 2013, Prime Minister Jean-Marc Ayrault announced that the French distribution system operator ERDF would launch shortly a tender for the development and the installation of three million "Linky" smart meters by 2016. As of November 2013, no information was available yet regarding the state of progress of the call for tender. Eventually, all 35 million electricity meters currently installed in France shall be replaced by 2020, for a total investment amount of €5 billion. According to the government, "between 62 and 80% of a single meter is likely to be made in France (from design to manufacture). This could lead to the creation of up to 10,000 jobs, including 5,000 for installation" (Gov 2013a).

Developments were also recorded regarding interconnections between France and neighbouring countries. Aside from the construction of a new line between Spain and France which began in 2012 and shall be commissioned in 2015, the construction of an interconnection with Italy was inaugurated in July 2013 in the Piedmont region (Italy). The beginning of construction works on the French side is planned for 2014. The new line shall be commissioned in 2019 (RTE 2013).

From August 2013, electricity prices were increased in France. This increase aims to cover the costs of the French Utility Company EDF. The electricity rates were raised by 2.7% to 5% depending on the voltage amplitude of the electricity subscription. Only industrial companies (electricity supply over 240 kVA) were not subjected to an increase of electricity prices. However, these rates remain below those recommended by the French Regulatory Commission (Commission de Régulation de l'énergie - CRE). In a report released in early June, the CRE namely estimated that for the year 2013, the required increase of electricity rates should lie between 8.6% and 9.6% (Actu-Environnement 2013d). In November 2013, the CRE issued a proposal suggesting again an increase of the electricity rates through the increase of the contribution to the public electricity service (Contribution au service public de l'électricité - CSPE). According to the Energy Code, the Minister for Energy shall define the amount of the CSPE annually, upon proposal from CRE. The CSPE, currently set at €13.5 per MWh, does not cover the costs incurred by the French electric utility company EDF. Accordingly, the CRE believes that "the lack of compensation supported by EDF amounted to € 3,532 million at the end of

2012 and should be the same at the end of 2014." In order to cover this gap, the CRE considers that the contribution should be set to €22.5 per MWh. The costs of the CSPE are borne by the final consumers of electricity. In 2012, two thirds of the costs financed by the CSPE, i.e. € 3.228 million, were spent for the support of renewable energy. In 2014, the amount of costs incurred by the use of renewable energies to be covered by the CSPE should amount to € 3.722 million (CRE 2013). The structural increase in electricity costs confirms the need to hasten the implementation of energy efficiency measures to reduce energy expenditure.

## Transport

Emissions from transport have in general increased between 1990 and 2011 but dropped after 2005. However, this positive trend came to an almost stop since 2010. Also, the proportion of these emissions among France's total emissions has increased to 27% in 2011. This shows the need to consider these emissions in further measures (Table 1).

Average emissions for newly registered cars are low in France with a level of 124.4 CO<sub>2</sub>/km. The level is the 6th lowest in the EU but has decreased at a lower rate than the EU average between 2005 and 2012 (Eurostat 2013a). In France, a registration tax is applied, but varies according to the regions. Also, second hand cars with emissions above 200g/km have to pay an additional tax to the French energy efficiency agency. For passenger cars, emitting more than 190Kg CO<sub>2</sub>/Km, an annual ownership tax has to be paid. Passenger cars are taxed according to their CO<sub>2</sub> levels and for heavy vehicles a tax needs to be paid based on weight, axles and the suspension system (ACEA 2012). France also applies a distance-based road toll for certain parts of the road network (CE Delft 2012).

Initially, France planned to introduce an environmental tax on road transport from October 2013. However, following a meeting held on 29 October 2013 between the government and elected representatives of Brittany, Prime Minister Jean-Marc Ayrault declared the suspension of the environmental tax on heavy goods vehicles. In September 2013, the government had already announced the postponement of the entry into force of the environmental tax from October 2013 to 1 January 2014, due to persistent shortcomings in the collection system (Les Échos 2013a). In addition, the environmental tax had been subject to a growing opposition in Brittany, whereas the Parliament had voted almost unanimously for it. In the original version of the environmental tax, the collection of the environmental tax would not depend on the nationality of the vehicle, but on the amount of kilometres travelled on the French road network. For 2014, the rate of the environmental tax was supposed to range from €0.88 to €0.154 depending on the number of axles and the total weight of the vehicle. Moreover, the rate was supposed to be adjusted depending on the EURO emission standard of the vehicle (Service Public 2013). This ecological tax would apply to all French and foreign vehicles over 3.5 tonnes carrying goods and circulating on the free national network, representing 15,000 km of roads. The objective of such a tax was to finance the maintenance of road infrastructure and to encourage shippers to favour more environmentally-friendly means of transport, such as railways, canals or sea routes. Once introduced, the environmental tax on road transport was expected to yield €1.15 billion per year (MEDDE 2013k). According to the newspaper *Le Monde*, the postponement of the environmental tax to a non-determined date could cost up to €1 billion (Le Monde 2013b).

The tax rates applied to petrol and diesel in France are near EU average. As most other EU MS, France levies much lower rates for diesel than for petrol, with a difference of around €175/1000 litres (European Commission 2013). In April 2013, the Committee for Green Taxation published a notice on this tax difference between diesel and petrol. Accordingly, the reduced rates of diesel tax compared to petrol represented a loss of revenue amounting to €6.9 billion in 2013. The current tax system namely dates back to the Finance Act of 1928, which was based on a performance target and did not consider environmental objectives (MEDDE 2013b). Despite the recommendations of the Committee to reduce the tax discrepancy between diesel oil and petrol, the government announced at the National Assembly in May that the tax on diesel oil would not be increased in 2014, in order not to worsen the tax burden and impact the purchasing power of households (Le Monde 2013d).

Several additional policies aim at encouraging low CO<sub>2</sub> emission vehicles. One of these measures is the bonus scheme for the purchase of low consumption cars, whose conditions recently became stricter. A decree published in October 2013 and amending the amount of the bonus scheme for car purchases will namely take effect from 1 November 2013. The financial support granted upon acquisition of a car with low fuel consumption will be significantly reduced and will mostly promote hybrid or electric vehicles. Only traditional vehicles emitting between 60 and 90g of CO<sub>2</sub> per km will receive a premium amounting to €150 against €550 so far. Vehicles emitting between 90 and 105 g of CO<sub>2</sub>, which benefited from a bonus of €200 in 2013, will not be eligible to a bonus anymore from 1 November. As far as electric and hybrid cars are concerned, their bonus will be reduced respectively from €7,000 to €6,300 for electric cars and from € 4,000 to € 3,300 for hybrid cars (MEDDE 2013n). A further measure is the mandatory display of CO<sub>2</sub> emissions for transport services. Since 1 October 2013, public transport companies as well as companies transporting goods and removal companies are obliged to inform their clients of the amount of CO<sub>2</sub> emissions produced by their service. This measure is the result of extensive consultations with various professionals of the transport sector within the Observatory for Energy ,Environment and Transport (“Observatoire énergie environnement transports”). The decree of 24 October 2011 introduces the methodology for the calculation of the amount of energy consumed per transport section. The calculation takes into account the amount of carbon dioxide emitted during the transport and those resulting from the production phase of the energy sources (MEDDE 2013o).

A number of policies aim to foster electro-mobility. Within the framework of the “Plan automobile” introduced in July 2012, the Ministry of Productive Recovery, together with the Ministry of Ecology, Sustainable Development and Energy, announced in October 2012 the launch of a mission <sup>(10)</sup> to foster electro-mobility through the rollout of loading stations for electric and hybrid vehicles at the national level. Financing of the loading stations (€50 million) is to come from the government’s “Investment for the Future” Program (Portail du Gouvernement 2012). As a result of the tender launched in October 2012, the French public procurement agency UGAP announced on 20 February 2013 the order of 2,600 electric cars from RENAULT and MIA ELECTRIC to RENAULT over a period of three years. The Government had announced that 25% of the vehicles

---

<sup>10</sup> The mission was named after Philippe Hirtzman, the chief mining engineer who was given the responsibility of carrying out the mission.



purchased by the State would be electric and hybrid vehicles (MEDDE 2013i). In addition, the government supports seven projects implementing new loading solutions for electric and hybrid vehicles and in January 2013 published a call for expressions of interest for projects initiated by local authorities developing loading infrastructures for a total budget over €400,000 (MEDDE 2013c).

### **Land Use, Land Use Change and Forestry**

On 13 November 2013, the Minister for Agriculture, Food and Forestry Stéphane Le Foll presented the draft law for agriculture, food and forestry to the Council of Ministers. The law for agriculture, food and forestry shall allow the French agriculture and forestry sectors to meet the challenge of competitiveness in order to contribute to the productive development of the country. Aside from the competitiveness objective, the draft law also underlines the importance of ecological transition for the agricultural and forestry sectors. Therefore, the draft law pleads for the achievement of both economic and environmental performance within sustainable and innovative farming practices.

Among the proposed measures for ecological transition, the draft law provides for the promotion of wood use in new buildings. In this regard, the general interest of the capture and storage of carbon in wood should be acknowledged. In order to achieve both economic and environmental performance, the draft law proposes the implementation of a strategic fund to support investment and innovation in the forest-based sector. In parallel, training programmes will be provided for new agro-ecological practices.

The revision of the draft law by the National Assembly will begin from 7 January 2014 (MAAF 2013).

## 5 Policy progress on past CSRs

As part of the European Semester, Country Specific Recommendations (CSRs) for each MS are provided by the EU Commission in June of each year for consideration and endorsement by the European Council). The recommendations are designed to address the major challenges facing each country in relation to the targets outlined in the EU 2020 Strategy. In the following table, those CSRs that are relevant for climate change and energy that were adopted in 2013 are listed, and their progress towards their implementation is assessed.

Existing Country Specific Recommendations	Progress
Remove regulated gas and electricity tariffs for non-household customers	No progress identified as of November 2013. The law of 7 December 2010 on the electricity market is still in force and provides for the phase out of regulated electricity tariffs from 1 January 2016 for residential and business consumers with a power subscription greater than 36 kW.
Take further measures shifting the tax burden from labour to environmental taxation or consumption	Specific progress is small, but developments are underway. The tax credit encouraging competitiveness and jobs, in force since January 2013, is a tax credit on benefits which allows to lower labour costs. The budget cost of the tax credit shall be partly financed by green taxes to be introduced by the Finance Act 2014. In October 2013, the National Assembly passed the proposed "climate energy contribution", also called carbon tax, as defined in the draft finance act for 2014 (article 20). The measure foresees a gradual increase of the rate of the domestic consumption tax on energy products based on their CO2 emissions (Actu-Environnement 2013f). This tax will be included within the domestic consumption tax, the general tax on polluting activities as well as the corporate vehicle tax. The rules of implementations and the entry into force of the carbon tax remain to be defined. The adoption of the Draft Finance Act 2014 is expected by the end of 2013 (MEF 2013).
Strengthen interconnection capacity with neighbouring countries	Some progress is being made. Aside from the construction of a new line between Spain and France which began in 2012 and should be commissioned in 2015, the construction of an interconnection with Italy was inaugurated in July 2013 in the Piedmont region (Italy). The beginning of construction works on the French side is planned for 2014. The new line should be commissioned in 2019 (RTE 2013).

## 6 References

- ACEA (2012): Tax Guide 2012: European Automobile Manufacturer's Association.
- Actu-Environnement (2013a): Le Comité pour la fiscalité écologique en faveur d'une taxation des fuites de gaz fluorés. Online available at: <http://www.actu-environnement.com/ae/news/gaz-fluores-fuites-taxation-avis-comite-fiscalite-ecologique-18361.php4> (last visited on 16.09.2013).
- Actu-Environnement (2013b): CEE : les conditions actuelles prolongées en attendant une troisième période "ambitieuse". Online available at: <http://www.actu-environnement.com/ae/news/cee-periode-transtoire-batho-objectif-troisieme-periode-18536.php4#> (last visited on 20.09.2013).
- Actu-Environnement (2013c): Lancement d'un nouveau modèle de contrat d'achat Eolien. Online available at: <http://www.actu-environnement.com/ae/news/lancement-nouveau-modele-contrat-achat-eolien-18170.php4> (last visited on 20.09.2013).
- Actu-Environnement (2013d) : Electricité : hausse de 5% des tarifs EDF le 1er août. Online available at: <http://www.actu-environnement.com/ae/news/hausse-tarifs-electricite-EDF-aout-2013-2014-19198.php4> (last visited on 20.09.2013).
- Actu-Environnement (2013e): EE : les conditions actuelles prolongées en attendant une troisième période "ambitieuse". Online available at: <http://www.actu-environnement.com/ae/news/cee-periode-transtoire-batho-objectif-troisieme-periode-18536.php4> (last visited on 04.10.2013).
- Actu-Environnement (2013f): La contribution climat énergie adoptée par l'Assemblée. Online available at: <http://www.actu-environnement.com/ae/news/taxe-carbone-contribution-climat-energie-PLF-2014-19757.php4> (last visited on 20.12.2013).
- Actu-Environnement (2013g): Hydroliennes : François Hollande annonce et détaille l'appel à projet pour les fermes pilotes. Online available at: <http://www.actu-environnement.com/ae/news/emr-fermes-pilotes-hydroliennes-annoe-19575.php4> (last visited on 20.12.2013).
- Ademe (2013): Appel à Manifestations d'Intérêt - Fermes pilote hydroliennes. Online available at: <http://www2.ademe.fr/servlet/getDoc?id=89394&cid=96&m=3&p1=1> (last visited on 20.12.2013).
- Assemblée Nationale (2013): Projet de loi de finances pour 2014. Online available: [http://www.assemblee-nationale.fr/14/dossiers/loi\\_finances\\_2014.asp](http://www.assemblee-nationale.fr/14/dossiers/loi_finances_2014.asp) (last visited on 20.12.2013).
- CE Delft 2012: An inventory of measures for internalising external costs in transport. Final report. European Commission, Directorate-General for Mobility and Transport
- Challenges (2012): Pourquoi l'exploitation du gaz de schiste en France mérite un débat. Online available: <http://www.challenges.fr/entreprise/20120913.CHA0687/pourquoi-l-exploitation-du-gaz-de-schiste-en-france-merite-un-vrai-debat.html> (last visited on 31.01.2013).
- Commission de Régulation de l'Énergie (CRE) (2013) : La CRE publie sa délibération sur les charges et la contribution au service public de l'électricité pour 2014. Online available: <http://www.cre.fr/documents/presse/communiqués-de-presse/la-cre-publie-sa-deliberation-sur-les-charges-et-la-contribution-au-service-public-de-l-electricite-pour-2014> (last visited on 20.12.2013).
- EEA (2012): Greenhouse gas emission trends and projections in Europe 2012 - Tracking progress towards Kyoto and 2020 targets. EEA Report No 6/2012. Online available at: <http://www.eea.europa.eu/publications/ghg-trends-and-projections-2012>
- EEA (2013a): EEA greenhouse gas - data viewer: Change in emissions by country (%), Kyoto base year - 2011. Online available at: <http://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer>



- EEA (2013b): Trends and projections in Europe 2013. Tracking progress towards Europe's climate and energy targets until 2020. EEA Report No 10/2013. Online available at: <http://www.eea.europa.eu/publications/trends-and-projections-2013>
- EEA (2013c): Approximated EU GHG inventory: Proxy GHG estimates for 2012. EEA Technical report No 14/2013. 30.09.2013. Online available at: <http://www.eea.europa.eu/publications/approximated-eu-ghg-inventory-2012>
- European Commission (2013): Excise duty tables. Part II – Energy products and Electricity. RED 1036. January 2013. DG Taxation
- Eurostat (2012): Source of data is Eurostat “Taxation trends in the European Union 2012”. Collection: Statistical books. 2012. Brussels.
- Eurostat (2013a): Source of data is Eurostat using the following tables: Implicit tax rate on energy (tsdcc360). Energy intensity of the economy (tsdec360). Final energy consumption (ten00095). Share of renewable energy in gross final energy consumption (t2020\_31). Average carbon dioxide emissions per km from new passenger cars (tsdtr450). Final energy consumption by sector (tsdpc320). Greenhouse gas emissions by sector (tsdcc210). Environmental tax revenues - % of total revenues from taxes and social contributions (ten00064). Total environmental tax revenues as a share of GDP (ten00065).
- Eurostat (2013b): Shares 2011 – Short assessment of renewable energy sources. Last update: 11 June 2013 including the latest data on renewable energy generation. Online available at: [http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/other\\_documents](http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/other_documents)
- Gouvernement Francais (Gov) (2013a): "Investir pour la France": les détails du plan de Jean-Marc Ayrault. Online available: [http://www.gouvernement.fr/sites/default/files/fichiers\\_joints/dp\\_investir\\_pour\\_la\\_france\\_0.pdf](http://www.gouvernement.fr/sites/default/files/fichiers_joints/dp_investir_pour_la_france_0.pdf) (last visited on 20.09.2013).
- Gouvernement francais (Gov) (2013b): Investir pour la France. Online available: [http://www.gouvernement.fr/sites/default/files/fichiers\\_joints/dp\\_investir\\_pour\\_la\\_france\\_0.pdf](http://www.gouvernement.fr/sites/default/files/fichiers_joints/dp_investir_pour_la_france_0.pdf) (last visited on 04.10.2013)
- La Tribune (2013): Taxe carbone : comment ça va marcher. Online available: <http://www.latribune.fr/journal/edition-du-2309/economie/786332/taxe-carbone-comment-ca-va-marcher.html> (last visited on 20.12.2013)
- Le Monde (2013a): Barrages hydroélectriques : l'ouverture à la concurrence contestée. Online available: [http://www.lemonde.fr/planete/article/2013/09/18/barrages-l-ouverture-a-la-concurrence-contestee\\_3479530\\_3244.html](http://www.lemonde.fr/planete/article/2013/09/18/barrages-l-ouverture-a-la-concurrence-contestee_3479530_3244.html) (last visited on 25.09.2013).
- Le Monde (2013b): L'écotaxe, un report flou qui pourrait coûter jusqu'à un milliard d'euros. Online available: [http://www.lemonde.fr/politique/article/2013/11/19/l-ecotaxe-un-report-a-un-milliard-d-euros\\_3516205\\_823448.html](http://www.lemonde.fr/politique/article/2013/11/19/l-ecotaxe-un-report-a-un-milliard-d-euros_3516205_823448.html) (last visited on 20.12.2013).
- Le Monde (2013c): Désaccords autour de la fiscalité verte. Online available: [http://www.lemonde.fr/politique/article/2013/06/14/desaccords-autour-de-la-fiscalite-verte\\_3430268\\_823448.html](http://www.lemonde.fr/politique/article/2013/06/14/desaccords-autour-de-la-fiscalite-verte_3430268_823448.html) (last visited on 04.10.2013).
- Le Monde (2013d): Pas de hausse de la fiscalité sur le diesel en 2014. Online available: [http://www.lemonde.fr/planete/article/2013/05/14/pas-de-hausse-de-la-fiscalite-sur-le-diesel-en-2014\\_3206417\\_3244.html](http://www.lemonde.fr/planete/article/2013/05/14/pas-de-hausse-de-la-fiscalite-sur-le-diesel-en-2014_3206417_3244.html) (last visited on 06.10.2013).
- Legifrance (2009a): Arrêté du 15 décembre 2009 relatif à la programmation pluriannuelle des investissements de production d'électricité. Online available: <http://tinyurl.com/c5phk66> (last visited on 12.02.2013).

- Legifrance (2009b): Arrêté du 15 décembre 2009 relatif à la programmation pluriannuelle des investissements de production de chaleur. Online available: <http://tinyurl.com/dx4bbz2> (last visited on 12.02.2013).
- Legifrance (2012): Loi du 13 juillet 2005 de programme fixant les orientations de la politique énergétique. Online available: <http://tinyurl.com/loidu13juillet2005> (last visited on 31.01.2013).
- Les Échos (2013) : La future taxe carbone sera progressivement alourdie pour calmer les écologistes. Online available: <http://www.lesechos.fr/economie-politique/politique/actu/0203005932176-la-future-taxe-carbone-va-etre-alourdie-pour-rassurer-les-ecologistes-605252.php> (last visited on 16.09.2013)
- Les Echos (2013a): L'écotaxe suspendue, mais jusqu'à quand? Online available: <http://www.lesechos.fr/economie-politique/france/actu/0203135260794-l-ecotaxe-suspendue-jusqu-a-la-remise-a-plat-de-la-fiscalite-annonce-martin-630609.php>
- Ministère de l'Agriculture, de l'Agroalimentaire et de la Forêt (MAAF) (2013): Stéphane Le Foll présente la loi d'avenir pour l'agriculture, l'alimentation et la forêt. Online available: <http://agriculture.gouv.fr/Presentation-de-la-loi-d-avenir> (last visited on 07.01.2014)
- Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013a): 2ème appel d'offres éolien en mer : publication de l'avis d'appel d'offre et du cahier des charges. Online available: <http://www.developpement-durable.gouv.fr/2eme-appel-d-offres-eolien-en-mer.html> (last visited on 20.09.2013).
- Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013b) : Avis n°3 du Comité pour la fiscalité écologique. 18 avril 2013. L'écart de taxation entre le gazole et l'essence. Online available : [http://www.developpement-durable.gouv.fr/IMG/pdf/Avis\\_essence-gazole.pdf](http://www.developpement-durable.gouv.fr/IMG/pdf/Avis_essence-gazole.pdf) (last visited on 06.10.2013).
- Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013c): Investissements d'avenir. Online available: <http://www.developpement-durable.gouv.fr/Investissements-d-avenir-Lancement,30981.html> (last visited on 31.01.2013).
- Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013d): Le Plan de rénovation énergétique de l'habitat est engagé. Online available: <http://www.developpement-durable.gouv.fr/Le-Plan-de-renovation-energetique.html> (last visited on 20.09.2013).
- Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013e): Éteindre la nuit, c'est faire des économies. Online available: <http://www.developpement-durable.gouv.fr/Eteindre-la-nuit-c-est-faire-des,32957.html> (last visited on 20.09.2013).
- Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013f): Grandes Installations (>250 kWc). Online available: <http://www.developpement-durable.gouv.fr/Grandes-Installations.html> (last visited on 20.09.2013).
- Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013g): Dispositif "Double valorisation biogaz". Online available: <http://www.developpement-durable.gouv.fr/Dispositif-Double-valorisation.html> (last visited on 20.09.2013).
- Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013h) : La conférence environnementale 2013. Online available: <http://www.developpement-durable.gouv.fr/Conference-environnementale-2013,34144.html> (last visited on 25.09.2013).
- Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013i): L'UGAP confirme la commande de 2600 voitures électriques auprès de RENAULT et MIA ELECTRIC. Online available: <http://www.developpement-durable.gouv.fr/L-UGAP-confirme-la-commande.html> (last visited on 27.09.2013). Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013j): Réunions et avis du comité pour la fiscalité écologique. Online

available: <http://www.developpement-durable.gouv.fr/Reunions-et-avis-du-comite-pour-la.html> (last visited on 04.10.2013).

Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013k): Questions réponses sur l'écotaxe poids lourds. Online available: <http://www.developpement-durable.gouv.fr/Combien-va-rapporter-l-ecotaxe.html> (last visited on 06.10.2013).

Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013l) : Gaz de schiste : l'exploitation et l'exploration définitivement interdites. Online available: <http://www.developpement-durable.gouv.fr/Gaz-de-schiste-l-exploitation-et-l.html>

Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013m) : Le plan de rénovation énergétique de l'habitat est lancé. Online available: <http://www.developpement-durable.gouv.fr/Le-plan-de-renovation-energetique,34265.html> (last visited 20.12.2013).

Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013n) : Bonus-Malus 2013. Online available: <http://www.developpement-durable.gouv.fr/Bonus-Malus-2013.html>(last visited 20.12.2013).

Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) (2013o) : Transports : l'affichage CO2 entre en vigueur. Online available: <http://www.developpement-durable.gouv.fr/Transports-l-affichage-CO2-entre,34393.html> (last visited 20.12.2013).

Ministère de l'Économie et des Finances (MEF) (2013) : Le projet de loi de finances 2014 présenté au Conseil des ministres. Online available: <http://www.economie.gouv.fr/projet-loi-finances-2014> (last visited 04.10.2013).

Ministère du Redressement Productif (MRP) (2013): Plan automobile: premier bilan d'étape.

Odyssee (2012): Energy Efficiency in the EU - Country Profiles and National Reports. Online available at: [http://www.odyssee-indicators.org/publications/country\\_profiles.php](http://www.odyssee-indicators.org/publications/country_profiles.php) and [http://www.odyssee-indicators.org/publications/national\\_reports.php](http://www.odyssee-indicators.org/publications/national_reports.php) Portail du Gouvernement (2012): De nouvelles mesures en faveur des véhicules électriques. Online available: <http://www.gouvernement.fr/gouvernement/de-nouvelles-mesures-en-faveur-des-vehicules-electriques>(last visited on 31.01.2013).

Plan Bâtiment Durable (PBD) (2013): Signature de la charte pour l'efficacité énergétique des bâtiments tertiaires. Online available: <http://www.planbatimentdurable.fr/signature-de-la-charte-pour-l-a747.html>(last visited on 20.12.2013).

Reporting of Member States in accordance with Decision No 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community GHG emissions and for implementing the Kyoto Protocol. Last submission: May 2013. Overview on policies and measures available at the website of the EEA: <http://www.eea.europa.eu/data-and-maps/pam>

Réseau de Transport d'Électricité (RTE) (2013): «Savoie-Piémont »: début des travaux du tronçon italien de la nouvelle interconnexion électrique Italie-France. Online available: <http://www.rte-france.com/fr/nous-connaître/espace-presse/communiqués-de-presse/savoie-piemont-debut-des-travaux-du-troncon-italien-de-la-nouvelle-interconnexion-electrique-italie-france> (last visited on 06.10.2013).

Service Public (2013): Taxe poids lourds (TPL ou écotaxe). Online available: <http://vosdroits.service-public.fr/professionnels-entreprises/F31213.xhtml> (last visited on 06.10.2013).

UNFCCC (2012) Reports on in-depth reviews of the fifth national communications of Annex I Parties. Online available: [http://unfccc.int/national\\_reports/annex\\_i\\_natcom/idr\\_reports/items/4056.php](http://unfccc.int/national_reports/annex_i_natcom/idr_reports/items/4056.php)

UNFCCC inventory (1990-2011): National greenhouse gas inventories (IPCC Common Reporting Format sector classification). Online available for the EU: <http://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer> (Last modified: May 29, 2013 09:30 AM )