Report from France on the transposition of Article 7 of Directive 2012/27/EU on energy efficiency

I. Target for energy savings over the period

Under Article 7(1) of the Directive, France must make annual savings of 1.5 % of energy sales to end consumers compared to the average for 2010-12. To obtain the volume of energy sales, own generation of energy and the renewable share of renewable heat energy were subtracted from the non-climate corrected end energy consumption.

<u>Average 2010-12</u>		<u>97.06</u>	
Real end energy consumption minus own consumption		103.82	96.40
Own production non-renewable heat energy	9.0816	7.6489	8.9771
Own production of energy (source: production survey, except 2012 estimate)	0.9357	0.774	0.7613
Estimated real energy consumption including own consumption	100.97	112.25	106.14
Climate correction: total all energy (source: energy balance sheet 2012)	-4.5178	6.5661	0.9232
Transport consumption: total except bunkers (source: energy balance sheet 2012)	49.403	49.559	49.177
End energy consumption: total except bunkers (source: energy balance sheet 2012)	154.90	155.24	154.39

After excluding the energy consumption of the ETS sector from this calculation and taking into account some operations already completed in the second period of energy saving certificates¹ up to a limit of 25 % flexibility, France's annual energy saving objective under Article 7 is 1.092 Mtoe.

Over the whole 2014-20 period, 30.57 Mtoe of final energy, or 355 TWh, are to be saved.

II. Measures implemented to meet the requirements of Article 7

Within the framework of Article 7(1) and (9), France will use a series of measures, the weighting of which may change, in particular in the light of their effectiveness, to reach the annual target of 1.092 Mtoe of energy savings. They include:

- the obligation on sellers of energy to provide proof of energy-saving operations, budgetary and fiscal measures (sustainable development tax credit, interest-free eco-loans, eco-tax for heavy vehicles, increase in domestic consumption duty based on CO2 content);
- financing measures (guarantee fund for energy renovation) and
- organisation measures aiming to encourage energy renovation projects (energy renovation passports, implementation planned from 2014).

1. Obligation on sellers of energy to provide proof of energy saving operations

The public authorities have imposed an obligation to save energy on 'obliged' sellers of energy (electricity, gas, heat, cold, domestic fuel oil and fuel for motor vehicles). This obliges them to hold energy efficiency certificates, which were created by Articles 14 to 17 of Programme Law No 2005-781 of 13 July 2005 setting guidelines for energy policy. Obliged sellers are thereby encouraged to actively promote energy efficiency to their customers, whether households, businesses or local authorities.

A three-year objective is set and shared between operators depending on their sales volumes. At the end of this period, obliged sellers of energy must show that they have met their obligations by holding a number of certificates equivalent to their obligations (1 energy efficiency certificate = $1 \text{ kWh}_{\text{cumac}}^2$ of final energy). Certificates are obtained as a result of action taken by the operators themselves, or are bought from other

¹ With an objective of 345 TWh_{cumac}, the second period has allowed annual savings of 8.5 TWh since 2011.

² The term 'cumac' is an abbreviation for 'cumulative and recalculated' in French. The number of kWh_{cumac} saved following the installation of an energy efficient appliance therefore corresponds to the cumulative total of the energy saved each year during the appliance's life cycle. In addition, the energy savings each year after the first are recalculated by dividing the previous year's savings by 1.04 (4 % recalculation rate).

operators which have taken action to save energy. If they do not meet their obligations, obliged sellers must make a full-discharge penalty payment of EUR 0.02 per kWh_{cumac} of shortfall.

Obliged parties: energy suppliers whose sales are above the threshold.

<u>Sectors concerned:</u> all sectors except for actions in facilities subject to the ETS. Since this programme was put in place, 90.1 % of operations have been in the construction sector.

Energy savings made through obligations on energy sellers within the framework of the Directive

Target notified in accordance with Article 7(1) of the Directive:

The target of the scheme comprising quantifiable energy efficiency certificates in accordance with Article 7 of the Energy Efficiency Directive is 97 TWh_{cumac} in 2014, and 171 TWh_{cumac} from 2015. That target is the subject of this notification in accordance with Article 7(1). It is fixed at a level commensurate with energy savings of 314 TWh³ over the 2014-20 period.

Objective set for the French scheme:

The French scheme supports a number of measures, not all of which can be counted under the terms of the Directive:

- certificates issued under the training, information and innovation programme, bonuses put in place to combat energy-related poverty, overall renovations and the overseas departments cannot be counted.
- Operations concerning renewable heat energy, the transport and distribution of energy, in particular for biomass heaters and stand-alone wood burners and those on heat grids.

It also supports energy passports and the guarantee fund for energy renovation, notified in Point II.6

The obligation set at national level takes the proportion of these operations into account. It represents $115 \, \text{TWh}_{\text{cumac}}$ for 2014. The objective for the third period of the scheme, from 1 January 2015 to 31 December 2017, will be 220 $\, \text{TWh}_{\text{cumac}}$ per year.

The functioning of the scheme (double counting and monitoring) is explained in detail in Annex 1.

France is also implementing additional measures to accompany energy efficiency certificates, which will contribute to reaching the targets set by Articles 3 and 7 of the Directive. The exact impact of these measures on energy savings and their interaction with the energy efficiency certificates scheme will be evaluated for the 2014-15 period and may lead to changes in the contribution of the energy efficiency certificates scheme under the Directive, in particular for the fourth period (2018-20).

2. Sustainable development tax credit

Since 2005, individuals have been able to receive tax credits to buy material or equipment with the highest (existing) energy efficiency performance or to produce energy from renewable sources in their main residence.

Following the President of the Republic's declarations on the Housing Renovation Plan, it was decided to redirect this tax credit towards major renovations (the applicant must plan a renovation project including at least two separate components, while the possibility of a means-tested tax credit for a single component remains in place). In addition, criteria for the qualifications of installers will be introduced for work done from July 2014 onwards.

³ Based on the report on activities carried out in relation to energy efficiency certificates since 1 January 2011, the average recalculated life cycle for the energy efficiency activities is 13.4 years. In the first period, the life cycle was 12.8 years. The life cycle of operations increases with the rolling out of insulation activities. On the basis of an identical increase in the life cycle to that described above, the average recalculated life cycle for 2014-20 is estimated at 14 years.

Implementing public authority: tax authorities

Sectors concerned: main residences

Energy savings and calculation method: no evaluation available for operations carried out from 2014 onwards

<u>Double counting</u>: a study will be conducted for the 2014-15 period to evaluate the extent of double counting with the other support schemes for energy efficiency.

Monitoring, verification and supervision: the monitoring, verification and supervision of the sustainable development tax credit will be carried out by the tax authorities during tax inspections. Circular 5B-18-12 lays down the framework for this.

3. Interest-free eco-loans

These loans have been available since 1 April 2009, and are aimed at individual owner-occupiers or lessors to finance major renovation work. They cover three options:

- 1. carrying out a collection of projects;
- 2. attaining a minimum level of 'overall energy performance' for the home;
- 3. renovating an individual waste-water treatment system using equipment that does not use energy.

The loan can finance up to EUR 30 000 of work to increase the energy efficiency of a home over 10 years.

<u>Implementing authority</u>: banks under contract with the State.

Sectors concerned: main residences

Energy savings and calculation method: sampling from 2014 onwards

<u>Double counting</u>: a study will be conducted for the 2014-15 period to evaluate the extent of double counting with the other support schemes for energy efficiency.

<u>Monitoring</u>, <u>verification</u> and <u>supervision</u>: monitoring, verification and supervision will be carried out for all applications by the bank when the loan is applied for.

4. Increase in domestic consumption duty based on CO2 content

The 2014 draft budget proposes a progressive and proportionate increase in domestic consumption duty based on the carbon dioxide (CO2) content of different energy products. The duty on each product will be set on the basis of its impact on the greenhouse effect by integrating the value of its CO2 content, using a value of EUR 7 per tonne of carbon in 2014, EUR 14.50 in 2015 and EUR 22 in 2016.

This scheme is inspired by the reform of European energy taxation proposed by the Commission with French support.

Starting in 2014, the duty on the three energy products subject to excise duty which are the least heavily taxed in relation to their CO2 content, namely natural gas, heavy fuel oil and coal, will increase.

This measure is expected to bring in EUR 340 million in 2014, EUR 2.5 billion in 2015 and EUR 4 billion in 2016, which will help ensure compliance with the fiscal strategy of stabilising tax rates.

The introduction of a carbon component at EUR 7/tCO2 (then EUR 14.5/t in 2015 and EUR 22/t in 2016) will affect the energy savings in the two main carbon emitting sectors (apart from industry and energy production which are covered by the European ETS), namely road transport and construction.

Implementing public authority: tax authorities

Sectors concerned: multi-sectoral

Energy savings and calculation method: econometric studies from 2014 onwards

<u>Double counting:</u> a study will assess the impact of an energy price increase on consumption in the sectors examined.

<u>Monitoring</u>, <u>verification and supervision</u>: <u>monitoring</u>, <u>verification and supervision</u> will be carried out by the tax authorities during tax inspections.

5. Eco-tax for heavy vehicles

Law No 2009-967 of 3 August 2009 on the programme for the implementation of the Grenelle Environment Forum provides for an eco-tax per kilometre on heavy goods vehicles weighing more than 3.5 tonnes, whether laden or unladen.

The eco-tax for heavy vehicles will be applied on all national roads in metropolitan France that are not subcontracted and on local roads that risk being used as alternative routes. As this scheme has been criticised for its potential impact on certain particularly vulnerable sectors of the economy, Parliament has initiated consultation and evaluation in order to make the necessary changes.

<u>Implementing public authority</u>: the Ministry of the Economy and Finance and the Ministry of Transport are responsible for implementing the regulatory and fiscal parts of the eco-tax. A partnership contract was signed on 20 October 2011, allowing the company Econouv to implement the eco-tax scheme under State supervision.

<u>Sectors concerned</u>: overland transport of goods, specifically heavy goods vehicles over 3.5 tonnes, whether laden or unladen.

<u>Energy savings and calculation method</u>: a study will be carried out to determine the impact of the scheme on consumption in the sectors examined once the details of the scheme are finalised.

<u>Double counting:</u> as there are no standardised operations sheets for overland transport of goods in the energy efficiency certificates scheme, there is no double counting.

Monitoring, verification and supervision: customs, the police, the gendarmerie and road traffic controllers (contrôleurs des transports terrestres) will monitor the scheme. In particular, they will check that vehicles are indeed equipped with the compulsory box.

Fines are also provided for: refusal to pay the eco-tax may incur a fine of up to EUR 750.

6. Energy passports and the guarantee fund for energy renovation

The French government has committed itself to implementing two schemes in 2014 that encourage energy renovation in buildings, and especially in homes.

The first aims to introduce 'energy passports', the content and operating conditions of which will be defined by the State and which will guarantee the possibility for non-obliged players to participate. The 'passports' are documents concerning buildings which, among other information, contain the quantitative and qualitative characteristics of their energy consumption, the technical and financial analysis of action to be taken to reduce energy consumption in a way that is compatible with 'low-energy building' performance, and the recommended order in which work should be done.

It is estimated that 350 000 passports will be drawn up over two three-year periods starting in 2015, which will increase energy savings from work carried out as a result by an average of 2 MWh when the work is in fact started as a result of the energy passport. The following table sets out the estimates of double counting with the energy efficiency certificates scheme, which would lead to annual energy savings of 0.8 TWh_{cumac}.

Number of passports/year		Avg increase in MWhc	share of passports leading to action	share of actions without energy efficiency certificates
116 667	2	28	50 %	50 %

The second scheme is the creation of a fund to guarantee loans for home energy renovation in order to reduce the cost of borrowing for households. The structuring of this fund is still under examination.

It is estimated that 310 000 loans will be guaranteed per year (from 2015), with an average value of EUR 13 500. These loans will finance work leading to average energy savings of 10 MWh (an increase of one performance class). The following table sets out the estimates of double counting with the energy efficiency certificates scheme, which would lead to annual energy savings of 29 TWh_{cumac}.

Number of loans/year	avg	Avg	share of loans without
	increase in	increase in	energy efficiency
	MWh	MWhc	certificates
310000	10	140	66 %

The energy passports and the guarantee fund will therefore contribute to saving 29.5 TWh_{cumac} every year over the 2015-20 period, or 44.2 TWh.

The implementation of energy passports and the guarantee fund for energy renovation will be evaluated during the 2015-16 period. That evaluation will include an estimate of the actual observable double counting with the energy efficiency certificates scheme and the other notified support measures for energy savings. In particular, it will permit the re-evaluation of the energy savings objectives for energy sellers over the 2018-20 period.

7. <u>Load management bonus for operators</u>

The Law of 15 April 2013 on preparing the transition to a low-energy system put in place a bonus for load management operators, financed through the contribution to public electrical utilities, aiming to reward 'benefit to the community, in particular through energy demand management or moderation of energy use'. A Council of State Decree will set the parameters for calculating this bonus. In accordance with the law, a draft decree was presented by the Energy Regulation Commission (CRE) on 24 July 2013. It was revised on 17 October 2013 based on the opinion of the High Council for Energy (CSE). The CRE proposes, in particular, evaluating energy savings based on the average price observed on the energy efficiency certificates market.

Implementing public authority: Energy Regulation Commission

Sectors concerned: industry, residential-tertiary.

<u>Energy savings and calculation method</u>: a method for *ex post* verification of managed loads has been drawn up by RTE. The question of the share of load management leading to delayed consumption (and therefore not representing energy savings) has been studied by the CRE, but this study must be continuously expanded to take into account lessons learned.

<u>Double counting</u>: no double counting with schemes supporting works.

Monitoring, verification and supervision: RTE.

Annex 1 Functioning of the energy efficiency certificates scheme

1. <u>Calculation of energy savings</u>

Two ways to obtain energy efficiency certificates

Standardised operations sheets, defined by ministerial order⁴, have been drawn up to facilitate energy saving projects. They are classified by sector (residential, tertiary, industrial, agricultural, transport, networks) and define the lump sum energy savings in kWh_{cumac} and the life cycle for the most common operations. These operations correspond to 'expected savings'. For operations connected with heating, they take into account the local climate using the division into three geographically defined climate zones used in heating regulation. The list of standardised operations sheets is in Annex 2 to this document.

These standardised operations sheets are proposed by the Technical Energy-Environment Association (ATEE), which brings together the scheme's stakeholders. The sheets are then examined by ADEME experts and arbitrated by the DGEC.

Energy savings made outside standardised operations represent specific operations. These correspond to uncommon operations which could not be standardised, in particular as regards defining a lump sum of energy savings certificates to be issued. This concerns 'estimated savings'.

The applicant must follow six steps for a specific operation:

- 1. Carry out an energy audit
- 2. Establish the situation before the operation
- 3. Determine the reference situation and justify the choice made
- 4. Determine the projected situation after the operation including theoretical before and after energy balance sheets
- 5. Justify the amount of certificates requested and in particular the choice of life cycle for the equipment
- 6. Justify the calculation of the IRR (> 3 years)

The ADEME and the national energy efficiency certificates point will verify the validity and plausibility of the requested energy savings.

Additionality of the scheme

In accordance with Decree No 2010-1664, the scheme adheres to two main principles to ensure its additionality:

- only actions that go further than the rules in force at the beginning of the period can have energy efficiency certificates issued.
- the reference situation for the calculation of lump sum energy savings corresponds to the technical and economic state of the market for the product or service on the most recent date for which data are available. In the case of work to improve the heat performance of the outer walls of an existing building or its in-built heating system, the reference situation for energy performance takes into account the general state of buildings of the same type and the level of performance of the material or equipment used on the most recent date for which data are available.

When a person undertakes action under a specific operation aimed at saving energy, that action may only be taken into account for the issuing of energy efficiency certificates if the savings made take longer than three years to offset the cost of the investment.

The active and encouraging role of obliged sellers

When requesting certificates, obliged sellers must show that they have played an active and encouraging role. To prove this, they must attach the following to their request for energy efficiency certificates:

- a description of the applicant's active and encouraging role,
- evidence that the contribution is direct and was made before the operation started,
- a sworn declaration signed by the beneficiary of the energy efficient operation stating the applicant's active and encouraging role in its execution.

⁴ The list is available in French on http://www.developpement-durable.gouv.fr/1-le-secteur-du-batiment.html

▲ Treatment of duplicates

When an operation is covered by multiple requests, energy efficiency certificates are only issued once, the first complete application to arrive being the first served.

2. Monitoring, verification and supervision

▲ The national energy efficiency certificates point

The national energy efficiency certificates point is a body with a country-wide remit, attached to the Directorate General for Energy and the Climate. It is responsible for the monitoring, verification and supervision of energy efficiency certificates. In particular, it is in charge of:

- examining requests for energy efficiency certificates and issuing them
- examining requests for the approval of energy efficiency action plans and approving them
- implementing checks, discovering infringements and applying specific penalties for such infringements
- managing and setting individual obligations
- administrative reconciliation at the end of each three-year period
- communication and information about the scheme
- informing prefects and decentralised government services about actions in their area
- archiving supporting documents regarding requests for certificates and requests for approval of energy efficiency action plans, the issuing of certificates and approvals, checks, the discovery of infringements and, if appropriate, imposing corresponding penalties.

A Request for energy efficiency certificates and checks by the PNCEE

When requesting energy efficiency certificates from the administration, the applicant has the choice between an individual request containing all supporting information and a request through an energy saving action plan.

The concept of an action plan, brought in during the second period, allows the scheme to be industrialised. After receiving prior approval from the national point, an action plan has the advantage of simplifying subsequent requests for certificates, for which proof of the operations would no longer have to be provided when submitting the application.

The list of the supporting documents to be provided by the applicant is set out in the ministerial order of 29 December 2010 establishing the list of supporting documents for requests for energy efficiency certificates and the content of requests for approval of energy efficiency action plans.

The point checks 20 % of requests from the largest applicants (over 250 GWh_{cumac} requested per year) and 10 % from others.

Energy savings action plans

The content of energy savings action plans is set out in the ministerial order of 29 December 2010 establishing the list of supporting documents for requests for energy efficiency certificates and the content of requests for approval of energy efficiency action plans. It includes the following:

- the scope of its activities: geographical distribution, predicted volumes, types of action concerned, types of encouragement for beneficiaries, etc.);
- all the means put in place to ensure the action plan is followed (types of supporting documents to be presented: templates for sworn declarations by the beneficiary and the contractor carrying out the work (often called 'end of works declarations'), proof that the operation has been carried out, technical documentation, etc.);
- a commitment to send a report on the audits conducted by 31 March of each year.

An action plan only concerns operations defined in standardised energy efficiency operations sheets. Non-standardised operations, referred to as specific operations, therefore fall outside the scope of action plans.

The procedures for examining requests put in place by the administration for the issuing of energy efficiency

certificates and the approval of energy efficiency action plans are based on Decree No 2010-1664 of 29 December 2010 as amended on energy efficiency certificates, and on the above-mentioned order of 29 December 2010.

The national point examines the action plans, and may request additional information, and takes a decision on the approval request within six months after the date on which it receives a full application by post. If no reply is received within that time frame, the request is deemed to have been refused.

▲ Development of checks on the scheme

For the third period, the simplification of the request procedure is under way. The main aspect is generalising the declaration system by putting in place third party certification. The scheme will be overseen using *a posteriori* checks on a sample of applications, allowing any potential irregularities to be penalised, and by ultimately putting in place compulsory certification of applicants or their representatives through a certification body accredited and/or approved by the administration. This type of declaration system would require the accepted supporting documents for the issuing of certificates to be standardised.

Annex 2: Legislative and regulatory framework for the scheme

Fnow	Energy Code			
	zy Code			
Articles L.221-1 to L.222-9 of the <u>Code de</u> <u>l'énergie</u> (Energy Code)	definition of the energy efficiency certificates scheme.			
I	aw			
Article 35 of Law No 2006-1771 of 30 December 2006 amending the 2006 budget	reiterating the principle that the payment in discharge of obligations and the corresponding late penalty payment laid down in Article 14(iv) of Programme Law No 2005-781 of 13 July 2005 setting guidelines for energy policy cannot be deducted from taxable profits.			
De	crees			
Decree No 2010-1663 of 29 December 2010 as amended on energy saving obligations within the framework of the energy efficiency certificates scheme	setting individual energy saving obligations; creation of collective structures; declaration of annual energy sales; where appropriate, drawing up of annual declarations of energy sales by the Ministry responsible for energy; notifying individual energy saving obligations; ensuring compliance with those obligations; cancelling energy efficiency certificates; giving formal notice; setting the amount of the compensatory levy; other financial penalties.			
Decree No 2010-1664 of 29 December 2010 as amended on energy efficiency certificates	definition of persons eligible for the energy efficiency certificates scheme; definition of actions for which energy efficiency certificates may be issued; maximum time between the completion of energy saving operations and the corresponding request for energy efficiency certificates; calculation of the number of energy efficiency certificates to be issued after an energy saving operation; procedure for approving an energy saving action plan; submission and examination of requests for energy efficiency certificates; minimum energy savings threshold for a request for energy efficiency certificates; groupings of eligible persons for the purposes of reaching that threshold; maximum number of energy efficiency certificates to be issued for information, training and innovation programmes; period of validity of energy efficiency certificates; procedure for checks carried out after the issuing of energy efficiency certificates under an energy saving action plan; giving formal notice; setting penalties, in particular fines, for irregularities connected to the issuing of energy efficiency			

	evaluation of the scheme.	
Decree No 2006-604 of 23 May 2006as amendedon keeping the national register of energy efficiency certificates	duties of the national registrar for energy efficiency certificates; coverage of costs for the creation and management of the register.	
Ministerial orders		
For operations started after 1 January 2011: ministerial order of 29 December 2010 establishing the list of supporting documents for requests for energy efficiency certificates and the content of requests for approval of energy efficiency action plans	list of supporting documents for a request for energy efficiency certificates; content of a request for approval of an energy saving action plan; amendment of an energy saving action plan; suspension or withdrawal of approval.	
For operations started before 1 January 2011: ministerial order of 19 June 2006establishing the list of supporting documents for requests for energy efficiency certificates	list of supporting documents for a request for energy efficiency certificates.	
Ministerial order of 29 December 2010 amended on the implementing provisions for the energy efficiency certificates scheme	declaration of annual energy sales to households and tertiary sector businesses; for fuel oil, determination of the lump sum share regarding sales to households and tertiary sector businesses; recalculation rate; bonus for areas not connected to the mainland electrical grid; minimum threshold for making a request for energy efficiency certificates.	
Ministerial order of 22 December 2012 setting the management costs for the national register of energy efficiency certificates	costs for the management of the register in 2013.	
Circular		
Circular of 29 June 2011 on the second period of the energy efficiency certificates scheme	this circular details certain provisions in the above-mentioned decrees and orders.	

Ministerial orders defining standardised energy efficiency operations		
1. <u>Ministerial order of 19 June 2006</u> defining standardised energy efficiency operations	Creation of 70 standardised operations sheets	
2. <u>Ministerial order of 19 December 2006</u> defining standardised energy efficiency operations	Creation of 23 standardised operations sheets	
3. <u>Ministerial order of 22 November 2007</u> defining standardised energy efficiency operations	Creation of 46 standardised operations sheets and amendment of 24 sheets	
4. <u>Ministerial order of 21 July 2008</u> defining standardised energy efficiency operations	Creation of 31 standardised operations sheets and amendment of 8 sheets	
5. <u>Ministerial order of 23 January 2009</u> defining standardised energy efficiency operations	Creation of 12 standardised operations sheets, amendment of 4 sheets and removal of one sheet	
6. Ministerial order of 28 June 2010 defining	Creation of 16 standardised operations sheets,	

standardised energy efficiency operations	amendment of 44 sheets and removal of 2 sheets
7. <u>Ministerial order of 15 December 2010</u> defining standardised energy efficiency operations	Creation of 23 standardised operations sheets, amendment of 66 sheets and removal of 8 sheets
8. <u>Ministerial order of 14 December 2011</u> defining standardised energy efficiency operations	Creation of 29 standardised operations sheets, amendment of 102 sheets and removal of 5 sheets
9. <u>Ministerial order of 28 March 2012</u> defining standardised energy efficiency operations	Creation of 11 standardised operations sheets, amendment of 27 sheets and removal of one sheet
10. <u>Ministerial order of 31 October 2012</u> defining standardised energy efficiency operations	Creation of 23 standardised operations sheets, amendment of 30 sheets and removal of 2 sheets
11. <u>Ministerial order of 4 June 2013</u> defining standardised energy efficiency operations	Amendment of 2 sheets