

White certificates : description of the French scheme

The need was acknowledged to apply this action to existing domains of energy consumption (household and tertiary sectors), characterised by generally widespread - but energy intensive on the whole - user classes. This background brought about opportunities to set up a national policy based on White Certificates trading, with a complementary role to other existing instruments, such as regulations under way, tax credit, etc, and which could be based on encouraging the market parties towards mobilisation of their demand/supply, with no involvement of subsidies.

More synthetically, the main drivers which underlie White Certificates policy instrument in France are essentially :

- Need to reach existing and important but diffuse potentials of energy savings, in particular in residential and tertiary sectors
- Limits of traditional public instruments, which are hardly mobilised and are very often not adapted
- Lack of public money to implement energy savings programmes

The envisaged advantages are :

- Economical efficiency
- Direct relationship between obliged parts, the energy suppliers, and the main addressees of the measures, the households
- Open scheme: the energy suppliers can propose measures not planned yet
- New means of financing energy efficiency projects : between 500 and 1000 M€ over three years
- Instrument adapted to liberalised energy markets

The mandatory targets of the herein considered French scheme involve for the first three years 54 TWh in final energy cumulated and actualised with a 4% discount rate over the life of the energy efficiency actions (depending on the considered measure). The saving actions must be performed in the three years period 2006-2008. Within this period, there are no annual deadlines to be respected, and the targets will be verified only at the end of 2008.

The overall target will be shared among the different energy sources covered, then among obliged actors: depending on their market share. Obligation concerns a very wide collection of subjects : practically, energy suppliers in the fields of electricity, natural gas, LPG, domestic fuel (not for transports), cooling and heating.

As a rule, the total energy savings targets are shared among suppliers with annual sales beyond a fixed threshold. This threshold depends on the kind of supplied energy :

- in case of suppliers of electricity, natural gas and heating or cooling, the threshold proposed for the moment is 0.4 TWh in the year and for LPG 0,1TWh ;
- in case of domestic fuel suppliers, there is no threshold: the obligation occurs “from the first litre”, according to a specific request of the professional organisation

The amount of the apportioned targets over an obliged entity is proportional to his assessed sales volume. An annual adjustment system will be considered to account for variations in market shares (increase, decrease, new entries, new exits). All the domestic fuel suppliers are entrusted with individual obligation; chance will be granted to transfer these obligations to a professional consortium structure. The collective structure will be in charge of the implementation of the sum of the obligations of the components.

All end-use sectors are eligible. Energy substitution of fossil energies with renewable energies is eligible, but only in few selected cases, heat production and sanitary hot water production.

Pre-approval for the eligibility of a technology is not mandatory but possible. Standardised projects are encouraged, since they are considered eligible by default.

There are some definitely not eligible technologies : installations implied in the CO2 abatement UE Directive, savings from only substitution between fossil fuels, installations required to fulfil the regulations in force.

Any economic actor can make savings projects and get certificates. A threshold of savings exists for an actor to be eligible. At present, the threshold is 1 GWh. Residential fuel suppliers can cope with difficulties in reaching the threshold : possibility (not obligation) exists for them of gathering together into a collective professional structure. Actors must show that they comply with criteria for additionality. This criteria depend on the obliged/non-obliged features of the actor performing the energy saving project :

- Obligated implementer : any eligible action aimed at energy savings is considered additional
- Eligible (but non-obliged) implementers : an eligible action is also additional if it does not increase the turnover of the implementer and it isn't part of his main activity.

The kind of the eligible projects will be as open as possible to allow for compliance with target in the widest and most concurrent way. As an illustration, here's a list of potential actions:

- substitution with low energy light bulbs
- loft insulation
- use of double glazing
- installation of heating control mechanisms
- replacement of domestic appliances with more efficient equipment
- replacement of boilers or water heaters by more efficient equipment or thermal renewable energy equipments
- fitting of insulating jackets to water heaters
- boiler maintenance
- creation of wood-fired heating systems for district heating or in industry

The White Certificates are negotiable property titles (White Certificate = n saved kWh, according to the standard evaluation procedures described above). They are delivered by a National Public Body (DRIRE - Directions Régionales de l'Industrie de la Recherche et de l'Environnement).

The White Certificates must be returned by the obligated parties to the delivering Body (Minister of industry) at the end of the compliance period, according to the relevant apportionments ; after returning, clearance of these titles will then occur. Before this date, the market will reconcile possible lack and excess of titles through a gradual and continuous exchange. Price of transactions will depend on the market but an upper limit is given by the value of the penalty for non-compliance (2c€/kWh : payment of the penalty cancels the obligation). The Responsible of the National Certificates Registry will publish the yearly average price of transaction for Certificates.

Elementary Energy Efficiency actions involving products or widely exploited services are pointed in each sector (residential/tertiary sectors, industry, transport). Standardised methodologies are being set up for saving calculation. These methodologies are based on fast and straightforward user-friendly procedures without complex details. Lump evaluation of energy savings are established for each action, expressed in kWh of final energy, cumulated and present-worthed over the life of the product (the so called CUMAC) :

$$CUMAC = EE \cdot DV \cdot Ca$$

where : EE = annual energy savings, DV = lifetime of the action, Ca = discount factor.

The savings are cumulated over the time life of an equipment by actualising the annual savings with a discount rate of 4 %.