

# 1 TABLE FOR THE COMPARISON AMONG DIFFERENT NATIONAL SCHEME ON WHITE CERTIFICATES TRADING

**Kommentar:** Cancellare l'attuale dicitura e inserire al suo posto il titolo effettivo del capitolo

ATTRIBUTE	UK EEC 2002-2005	UK EEC 2005-2008	ITALY WhC	FRANCE	New South Wales
<b>SUPPLY SIDE</b>					
<b>Scheme basis</b>	Mandatory	Mandatory	Mandatory	Mandatory	
<b>Driver/Background</b>	Statutory obligation to achieve energy efficiency targets	Statutory obligation to achieve energy efficiency targets	Statutory obligation to achieve energy efficiency targets	DRIVER/BACKGROUND Revival of the energy demand-side management policy due to: <ul style="list-style-type: none"> <li>• National Kyoto targets</li> <li>• Security of supply of Energy sources.</li> </ul>	
<b>Global energy savings targets</b>	62 TWh fuel weighted energy benefits	130 fuel-standardised, lifetime-discounted terawatt hours	Quota system: 2.9 Mtoe/year (regime value in 2009)	GLOBAL ENERGY SAVINGS TARGETS 54 TWh lifetime-discounted (6% discount rate)	
<b>Reference term of savings</b>	Final energy Absolute savings	Final energy Absolute savings	Primary energy Absolute savings	Final energy Absolute savings	
<b>Compliance period</b>	2002-2005	April 2005 to March 2008	Annual (2006-2010)	COMPLIANCE PERIOD First three years: 2006-2008	
<b>Type of obligation</b>	50% from "priority group"	Obligation to be achieved in relation to domestic consumers in Great Britain. 50% of energy savings to be achieved from a "priority group" of low-income consumers	50% from electricity/gas consumption reduction	TYPE OF OBLIGATION No particular obligation	

ATTRIBUTE	UK EEC 2002-2005	UK EEC 2005-2008	ITALY WhC	FRANCE	New South Wales
<b>Obligation bound entities</b>	Electricity suppliers and gas suppliers	Electricity and gas suppliers	Electricity and gas distributors	OBLIGATION BOUND ENTITIES Energy suppliers of: <ul style="list-style-type: none"> <li>• electricity,</li> <li>• natural gas, GPL</li> <li>• cooling and heating and domestic fuel (not for transports),</li> </ul> Possibility to form consortia of fuel suppliers	
<b>Apportionment criteria</b>					
Threshold	≥15 000 domestic customers served	≥50, 000 domestic customers supplied	≥100 000 customers served	Threshold <ul style="list-style-type: none"> <li>• ≥ 0.4 TWh in annual sales (juridical persons)</li> <li>• none for domestic fuel suppliers</li> </ul>	
Reference parameter used for apportionment	Number of domestic customers served	Number of domestic customers supplied	Electricity/Gas distributed (market share)	Reference parameter Volume of global annual sales in residential and tertiary sectors	
Criteria	Progressively tighter for companies of increasing capacity	Linear	Linear	Criteria Linear with annual adjustment.	

**Tab. 1**

ATTRIBUTE	UK EEC 2002-2005	UK EEC 2005-2008	ITALY WhC	FRANCE	New South Wales
<b>DEMAND SIDE</b>					
<b>Eligible technologies</b>	<ul style="list-style-type: none"> <li>• Domestic uses</li> <li>• Open-ended</li> <li>• Pre-approval</li> </ul>	<ul style="list-style-type: none"> <li>• Domestic uses</li> <li>• Open-ended</li> <li>• Pre-approval (action to be notified to Ofgem within one month of commencement)</li> </ul>	<ul style="list-style-type: none"> <li>• All end-use sectors</li> <li>• Open-ended (from the start)</li> </ul>	<p>ELIGIBLE TECHNOLOGIES</p> <ul style="list-style-type: none"> <li>• All end-use sectors (transports included)</li> <li>• All energies</li> <li>• Substitution fossil with renewable (in some cases)</li> </ul> <p>Exclusion:</p> <ul style="list-style-type: none"> <li>- measures on sites covered by ETS</li> <li>- if savings due only to substitution between fossil fuels</li> </ul>	
<b>Eligible implementers</b>					
Categories	<ul style="list-style-type: none"> <li>• electricity and gas suppliers responsible, but flexible to work with social housing providers, retail businesses, consumers and other partners</li> <li>• ESCO schemes encouraged</li> </ul>	obligation is on electricity and gas suppliers , but flexible to work with social housing providers, retail businesses, consumers, ESCOs and other partners	• all electricity and gas distributors and ESCOs	<p>Categories</p> <ul style="list-style-type: none"> <li>• All obliged agents</li> <li>• All economic actors but threshold of 3 GWh (a trustee asks and gets the certificates in this last case)</li> </ul>	
Accreditation of the implementers			ESCO accredited through a suitable self-declaration	No	
<b>Eligible projects</b>					

ATTRIBUTE	UK EEC 2002-2005	UK EEC 2005-2008	ITALY WhC	FRANCE	New South Wales
Categories	<ul style="list-style-type: none"> <li>• open (pre-approval of schemes) –</li> </ul>	<ul style="list-style-type: none"> <li>• actions approved by the Regulator, Ofgem, as promoting an improvement in energy efficiency</li> <li>• incentive for energy service action</li> <li>• incentive for innovative action</li> </ul>	<ul style="list-style-type: none"> <li>• carried out directly by distributors</li> <li>• carried out via controlled companies</li> <li>• carried out via ESCOs</li> </ul>	Categories <ul style="list-style-type: none"> <li>• Focus on standard measures (more than one hundred planned) but ...</li> <li>• other measures can be proposed</li> </ul>	
Accreditation before/after the realisation of energy savings?			No pre-approval for typologies covered by procedures - but possible for other typologies	Accreditation before/after the realisation of energy savings <ul style="list-style-type: none"> <li>• possible pre-approval for measures</li> <li>• but <i>de facto</i> ex-ante eligibility granted for standard measures</li> </ul>	
<b>Impact evaluation</b>					
Approach	<ul style="list-style-type: none"> <li>• Based on information collected from recognised sources</li> </ul>	Annual reports by Ofgem to Government. Following Ofgem's final report on EEC 2002-05, Government will consider its impact, including carbon abatement.	a) Deemed-savings approach b) Engineering savings approach c) Direct measurement approach	Approach For standard measures <i>ex ante</i> evaluation based on data on technologies, sales of equipment, houses stocks, .... <ul style="list-style-type: none"> <li>• At present, 45 savings actions being considered</li> </ul>	

ATTRIBUTE	UK EEC 2002-2005	UK EEC 2005-2008	ITALY WhC	FRANCE	New South Wales
Additionality	<ul style="list-style-type: none"> <li>• to be demonstrated by suppliers (deadweight removed from targets)</li> </ul>	<ul style="list-style-type: none"> <li>• to be demonstrated by suppliers (deadweight removed from targets)</li> </ul>	<ul style="list-style-type: none"> <li>• Dealt with baseline definition</li> <li>• Other adjustments foreseen but not implemented yet</li> </ul>	<p>Additionality</p> <ul style="list-style-type: none"> <li>• obliged: any eligible action is additional</li> <li>• Non-obliged: turnover must not be increased or very innovative products</li> </ul>	
Time persistence of savings	<ul style="list-style-type: none"> <li>• Account of this is taken when the levels of savings are attributed to a type of measure.</li> </ul>	<ul style="list-style-type: none"> <li>• Account of this is taken when the levels of savings are attributed to a type of measure.</li> </ul>	<ul style="list-style-type: none"> <li>• 5 years in most cases</li> <li>• 8 years for a restricted set of measures on building</li> </ul>	<p>Time persistence of savings</p> <p>Savings cumulated over the time life of the equipment : differs according to the measure</p>	

Tab. 2

ATTRIBUTE	UK EEC 2002-2005	UK EEC 2005-2008	ITALY WhC	FRANCE	New South Wales
<b>OTHER ISSUES</b>					
<b>Market design</b>					
Certificates features	<ul style="list-style-type: none"> <li>• Transfer of Savings</li> <li>• Transfer of all or part of Obligation</li> </ul>	<ul style="list-style-type: none"> <li>• Transfer of Savings</li> <li>• Transfer of all or part of Obligation</li> </ul>	<ul style="list-style-type: none"> <li>• 3 types</li> <li>• 5 years lifetime (( years in some cases)</li> <li>• Metrics: 1 Certificate = 1 toe</li> </ul>	Certificates features <ul style="list-style-type: none"> <li>• 1 Certificate = n kWh saved</li> <li>• life-time: at least 10 years</li> </ul>	
Borrowing/grandfathering			Not foreseen	No	
Banking			Possible under limitations	Yes	
Trading parties	<ul style="list-style-type: none"> <li>• Obligated electricity and gas suppliers</li> </ul>	<ul style="list-style-type: none"> <li>• Obligated electricity and gas suppliers</li> </ul>	<ul style="list-style-type: none"> <li>• Entities to whom the certificates will be awarded: all electricity and gas distributors, companies controlled by distributors and ESCO's</li> <li>• Others: financial intermediates, voluntary buyers</li> </ul>	Trading parties <ul style="list-style-type: none"> <li>• Obligated energy suppliers</li> <li>• Eligible parties who can make saving actions and gain WhC</li> </ul>	
Trading rules	All trades will have to be approved by Ofgem	All trades will have to be approved by Ofgem	<ul style="list-style-type: none"> <li>• Under discussion:               <ul style="list-style-type: none"> <li>- Frequency of trade</li> <li>- Safety deposit</li> <li>- others</li> </ul> </li> </ul>	Trading rules <ul style="list-style-type: none"> <li>• Official marketplace not planned</li> <li>• Only bilateral exchanges</li> </ul>	
<b>Penalty for non-compliance</b>	<ul style="list-style-type: none"> <li>• Penalty for not complying with its energy efficiency target may be up to 10% of the supplier's turnover.</li> </ul>	<ul style="list-style-type: none"> <li>• Penalty for not complying with its energy efficiency target may be up to 10% of the supplier's turnover.</li> </ul>	"Missing" energy savings to be recovered in the following two years. In addition, heaviest non-compliances will involve penalties proportional and greater than the investment required to compensate the non-compliance.	PENALTY FOR NON-COMPLIANCE <ul style="list-style-type: none"> <li>• 2c€/kWh</li> <li>• Doubled if the obliged voluntarily does not buy certificates available at a price equal or under 2c€/kWh</li> </ul>	
<b>Body Responsible for establishing the Scheme</b>	Government	Government	Ministries of Productive Activities and of Environment	BODY RESPONSIBLE FOR ESTABLISHING THE SCHEME Ministry of Industry	

**Kommentar:** emissione WhC in anticipo, in conto di un progetto da effettuare nel futuro (o a fronte della resa di un nuovo titolo di pari valore all'emittente)

**Kommentar:** procedura propria dell'ET, in cui il permesso di emissione si basa su dati storici di emissioni passate; nel nostro caso, ad es. attribuzione di target legati a progetti o politiche passate svolte nel campo del risparmio energetico

ATTRIBUTE	UK EEC 2002-2005	UK EEC 2005-2008	ITALY WhC	FRANCE	New South Wales
<b>Body Responsible for administrating the Scheme</b>	Gas and Electricity Markets Authority (Ofgem)	Gas and Electricity Markets Authority (Ofgem)	Regulatory Authority for electricity and gas	BODY RESPONSIBLE FOR ADMINISTRATING THE SCHEME Ministry of Industry ADEME helps the Ministry to define and evaluate the standard actions	
<b>Body Responsible for Verification of the projects</b>	Gas and Electricity Markets Authority (Ofgem)	Gas and Electricity Markets Authority (Ofgem)	To be appointed by Regulatory Authority for electricity and gas	BODY RESPONSIBLE FOR VERIFICATION OF THE PROJECTS DRIRE delivers WhC:	
<b>Body Responsible for Registering the transactions</b>	Gas and Electricity Markets Authority (Ofgem)	Gas and Electricity Markets Authority (Ofgem)	GME - National Electricity Market Operator (Non electric Markets area)	BODY RESPONSIBLE FOR REGISTERING THE TRANSACTIONS Not specified for the moment	
<b>Scheme financing</b>	<ul style="list-style-type: none"> <li>• Cost-recovery via domestic electricity and gas tariffs</li> </ul>	<ul style="list-style-type: none"> <li>• Costs fall on energy suppliers, who may pass them on to their consumers through domestic electricity and gas tariffs</li> </ul>	<ul style="list-style-type: none"> <li>• Cost-recovery via electricity and gas tariffs (customer differentiated, updatable)</li> <li>• Acknowledged costs to obliged parties: 100 Euro/certificate redeemed (Type I and Type II certificates only)</li> </ul>	SCHEME FINANCING <ul style="list-style-type: none"> <li>• Cost-recovery via tariffs of the supplied energy vector</li> <li>• negotiated increase of tariff for the part of market not yet liberalised</li> </ul>	
<b>Interaction with other policy tools</b>					
Fiscal and other incentives		Incentive for energy service action Incentive for innovative products	Allowed additionality of incentives (from central and regional governments)	Fiscal and other incentives No involvement of subsidies planned	

ATTRIBUTE	UK EEC 2002-2005	UK EEC 2005-2008	ITALY WhC	FRANCE	New South Wales
Link with other schemes	<ul style="list-style-type: none"> <li>• ETS: only surplus</li> </ul>	<ul style="list-style-type: none"> <li>• Suppliers may undertake action with Government programmes, as long as there is an additional improvement in energy efficiency. Suppliers may undertake action which is not in conjunction with a Government programme, but uses contractors who are also managing agents for a Government programme.</li> </ul>	<ul style="list-style-type: none"> <li>• Not decided yet</li> </ul>	Link with other schemes <ul style="list-style-type: none"> <li>• Not decided yet</li> </ul>	
Attained outcomes		Ofgem reports formally in July 2005 on EEC 2002-05. April 2005 informal update indicates that suppliers have exceeded the overall target			
Present scenario/state-of-the-art		EEC 2005-08 commenced on 1 April 2005.	Project performed in 2001-2004 submitted for assessment of ex-post evaluated energy savings.	PRESENT SCENARIO/STATE-OF-THE-ART <ul style="list-style-type: none"> <li>• Law adopted soon</li> <li>• Decrees under negotiation</li> <li>• Implementation of programme planned for 2006</li> </ul>	

Tab. 3



## The French scheme

### DRIVER/BACKGROUND

The drivers which fostered the French scheme involving White Certificates rely on:

- National Kyoto targets
- Security of supply of Energy sources.

Actually, these drivers led to a variety of national energy policies. A French programmatic documents on the matter, the "Le livre blanc sur les énergies"(ref **Fel! Hittar inte referenskölla.**) considers, among the others:

- directives on the energy performance of buildings,
- actions to favour a better exploitation of renewable energy sources,
- fiscal regulations
- mandatory energy target to be attained.

In connection to this last item, targets on energy efficiency were issued, involving a reduction of energy intensity on 2%/year until 2015. The need was acknowledged to apply this action to existing basins (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 in France are essentially:

- Good acceptability from the energy suppliers
- Economically efficiency
- Lack of public money to implement these programs
- Energy suppliers are in direct relationship with the households
- Systems open and energy suppliers can propose measures not planned

### GLOBAL ENERGY SAVINGS TARGETS

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 6% discount rate over the life of the energy efficiency actions (depending on the considered measure)

### COMPLIANCE PERIOD

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.

### TYPE OF OBLIGATION

## **OBLIGATION BOUND ENTITIES**

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

## **APPORTIONMENT CRITERIA**

### **THRESHOLD**

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:

- in case of suppliers of electricity, natural gas, LPG and heating or cooling, the threshold proposed for the moment is 0.4 TWh in the year
- 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

### **REFERENCE PARAMETER**

Reference parameter for apportionment is volume of sales (not the volume of energy supply)

Sales in residential and tertiary sectors are considered

Each supplier makes an annual declaration for total energy sales:

- In kWh of final energy
- For different sectors (residential, tertiary, industrial? Heating/cooling? – still under discussion)
- Within April 30<sup>th</sup> of a year as the balance of the previous year
- Using the year  $n-2$  to evaluate the obligations for the year  $n$

### **CRITERIA**

The amount of the apportioned targets over an obliged entity is proportional to his assessed sales volume (see above).

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.

## **ELIGIBLE TECHNOLOGIES**

There are then 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

## **ELIGIBLE IMPLEMENTERS**

### **CATEGORIES**

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 3 GWh, which can be updated.

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 to reach the threshold

### **ACCREDITATION OF THE IMPLEMENTERS**

No particular accreditation is required from the eligible actors beyond the evidence of savings. The mechanisms are under definition (see Certificates features), but basically will have to set up and to show some records of the carried out programmes.

## **ELIGIBLE PROJECTS**

### **CATEGORIES**

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. However, an illustrative and not exhaustive list of project will be set up

Some programmes have already been pointed out and are still under discussion:

- 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
- fitting of insulating jackets to water heaters
- fitting of heating control mechanisms
- boiler maintenance
- creation of wood-fired heating systems for district heating or in industry

### **ACCREDITATION BEFORE/AFTER THE REALISATION OF ENERGY**

**SAVINGS**

## IMPACT EVALUATION

### APPROACH

The approach for the evaluation of the impact of a project in terms of energy savings is developed through two steps.

1. Definition of elementary Energy Efficiency actions involving products or widely exploited services

At present, about 45 savings actions were preliminarily pointed out, namely :

- 30 savings actions in residential/tertiary sectors
- 10 savings actions in industry
  - 3 savings actions in 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. These procedures are the results of “technical”/objective evaluations of savings, then processed and weighted in suitable ways to keep into account:

- the specific type of equipment or goods
- the process used to save energy (e.g. switching to renewable sources, etc),
- the state of the market of the processes
- a possible state of grid congestion in particular geographical areas, which could be relieved by recovery of energy efficiency at a local scale

In other words, “smart” weighting criteria may be devised to particularly encourage or discourage some specific actions and the resulting so tuned bouquet of procedures can then be used as a tool to favour focused energy policies.

2. Definition of typical pre-fixed combinations of the elementary actions of the above point 1, aimed at fostering energy efficiency (mainly, in the civil sector)

### ADDITIONALITY

The Energy savings actions must be additional with respect to the ordinary activity of the implementer, i.e. they are performed only as a consequence of the present obligation on the mandatory targets and beyond a plain “business as usual” logic. Criteria for additionality depend on the obliged/non-obliged features of the actor performing the energy saving project:

1. Obligated implementer: any eligible action aimed at energy savings is considered additional
2. Eligible (but non-obliged) implementers: an eligible action is also additional if (alternatively):
  - Does not increase the turnover of the implementer
  - Increases the turnover of the implementer but relates exclusively to innovative products in the Energy Efficiency sector. The elements justifying the innovation must be demonstrated by the implementer on bases like these:
    - Remarkable Energy Efficiency in comparison with similar products existing on the market
    - Product belonging to a market sector not well established yet

Finally, more selective criteria are expected to be set up when the EE action is relevant to own equipment or

## **MARKET DESIGN**

### **CERTIFICATES FEATURES**

The White Certificates are negotiable property titles.

1 White Certificate = n saved kWh, according to the standard evaluation procedures described above (see Approach). Moreover, in a frame of extensive use of these standard procedures, it should be reminded that an added value of saved energy (and the of White Certificates) results with respect to a plain “technical” evaluation when renewable energies are used or/and within some geographic (specific) zones where local critical conditions of the grid can be overcome by encouraging energy efficiency at a local scale (see Approach again).

The White Certificates are delivered by a National Public Body (DRIRE - Directions Régionales de l'Industrie de la Recherche et de l'Environnement)

- in a single delivery for each project, for the total of the declared saved kWh
- on the base of the documentation of the programmes carried out - but before the realisation of the total energy savings

In case of transfer of obligation from a group of small residential fuel suppliers to a consortium, delivery is expected for an amount of White Certificates equivalent to the total kWh saved in the project performed by the consortium.

### **TRADING PARTIES**

The parties involved in White Certificates Trading are: the following:

- Obligation bound parties: all Energy suppliers: electricity, gas, domestic fuels (not for transports), cooling and heating
- Eligible implementers: any economic actor who can make savings actions and get certificates

### **TRADING RULES**

The White Certificates must be returned by the obligated parties to the delivering Body (DRIRE) 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

An official national marketplace is not planned: only chance of bi-lateral exchange is expected. If necessary, actions to encourage the market of WhC will be launched by entrusted Bodies (Minister of Industry ?) to foster complete fulfilment of the obligations; to this purpose and to favour this process, a list of potential sellers of certificates will be set up and published by the Administrating Bodies (Minister of industry – Board responsible of the national certificates registry)

Price of transactions will depend on the market but an upper limit is given by the value of the penalty for non-compliance (see PENALTY FOR NON COMPLIANCE below). The Responsible of the National Certificates

of intentional non-fulfilment (i.e. refusal to buy certificates, though they were evidently present on the market). Payment of the penalty cancels the obligation.

## **BODY RESPONSIBLE FOR ESTABLISHING THE SCHEME**

Industry Ministry

## **BODY RESPONSIBLE FOR ADMINISTRATING THE SCHEME**

Industry Ministry in general.

ADEME assists the Industry Ministry in definition and evaluation of the standardised actions (i.e. the methodologies for savings calculations) but the Industry Ministry (*the Conseil Supérieur de l'énergie*) validates the methodologies and he is entitled of the final decision.

The Industry Ministry is also responsible for the allocations of savings targets .

Finally, The Industry Ministry also publishes an annual report during all the three years of application; the report describes the state of operation of the scheme and of the market. The Ministry of Industry also publishes a list of potential sellers of certificates

## **BODY RESPONSIBLE FOR VERIFICATION OF THE PROJECTS**

The Industry Ministry is responsible for control of the actions. DRIRE delivers the White Certificates.

## **BODY RESPONSIBLE FOR REGISTERING THE TRANSACTIONS**

An official national marketplace is not planned. A Body within Ministry of Industry is responsible of the national registry of certificates (in discussion). The responsible of the national certificates registry publishes the average price of transaction for Certificates

## **SCHEME FINANCING**

Obligated entities can recover costs of energy saving projects via tariffs of the energy vector they supply. This recovery is regulated by law for the part of market not yet liberalised. In order to have an acceptable mechanism also for the end-users, obligation level has been devised to limit the possible tariff increase due to cost recovery at the 0.5% as a maximum.

## **INTERACTION WITH OTHER POLICY TOOLS**

### **FISCAL AND OTHER INCENTIVES**

Contribution of the French expert .....

## **ATTAINED OUTCOMES**

The scheme is still under definition. No outcome has been attained yet

## **PRESENT SCENARIO/STATE-OF-THE-ART**

The legislation defining the main rules is under advanced discussion and will be voted within 2005.

Decrees will implement the legislation in terms of quantitative thresholds, details on eligible projects and standard evaluation procedures; two of these decrees are still in a draft version

The implementation of the programme is very likely to start from 2006 on.

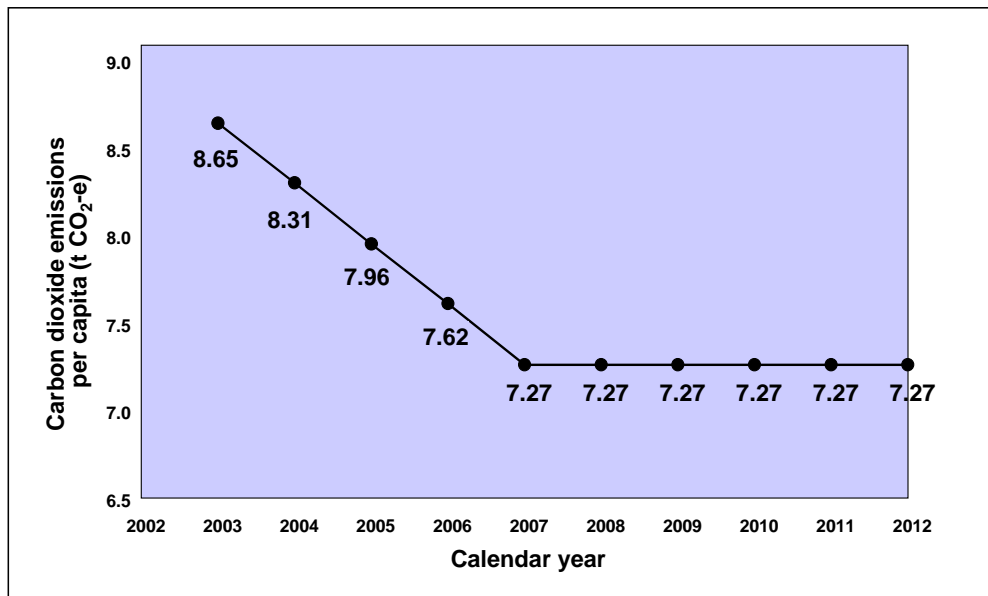
Some questions are still open:

- definition of baseline and additionality criteria for the energy saving projects
- chance of bonus/incentive to improve quality of the scheme and its products
- simple mechanisms for monitoring and verification of the energy savings projects
- cost involved in energy savings actions

## ENERGY EFFICIENCY CERTIFICATES TRADING SCHEME IN NEW SOUTH WALES, AUSTRALIA

An energy efficiency certificates ('white certificates') trading scheme is currently being implemented in New South Wales, Australia. These certificates are part of a larger Greenhouse Gas Abatement Scheme introduced by the State Government of New South Wales, the most populated state in Australia.

Under the New South Wales Greenhouse Gas Abatement Scheme, from 1 January 2003 electricity retailers and other parties are required by legislation to meet mandatory targets for reducing the emission of greenhouse gases resulting from the electricity they supply or consume. To achieve the required reduction in emissions, eligible parties purchase and surrender tradeable certificates called New South Wales Greenhouse Abatement Certificates (NGACs). NGACs can be created in several ways, one of which is by undertaking 'demand side abatement' which includes energy efficiency projects.



### GREENHOUSE BENCHMARK

The New South Wales Government has set a state-wide benchmark of reducing greenhouse gas emissions to



## **BENCHMARK PARTICIPANTS**

Under the New South Wales Greenhouse Gas Abatement Scheme, parties who are required to meet targets for greenhouse gas emissions are called benchmark participants. Each year, the Scheme sets individual benchmark reductions of greenhouse gas emissions for each benchmark participant based on their contribution to the supply of electricity in New South Wales. Each benchmark participant then has to reduce the average emissions of greenhouse gases from the electricity they supply or consume to the pre-set individual benchmark level.

Benchmark participants comprise:

- electricity retailers;
- electricity customers taking supply directly from the Australian National Electricity Market;
- electricity generators with contracts to supply electricity directly to customers;
- certain other parties who consume large volumes of electricity in New South Wales and who elect to participate directly in the Scheme, rather than have their electricity retailer manage the emission reduction obligation in relation to the electricity they consume.

## **PENALTY**

If a benchmark participant does not reduce the average emissions of greenhouse gases from electricity they supply or consume to their pre-set individual benchmark level, they pay a penalty of AUD10.50 per tonne of carbon dioxide equivalent above their benchmark.

## **CREATION OF NGACS**

To achieve the required reduction in greenhouse gas emissions, benchmark participants purchase and surrender certificates called New South Wales Greenhouse Abatement Certificates (NGACs). NGACs are transferable certificates that may be freely traded between any parties. One NGAC represents one tonne of carbon dioxide equivalent that would otherwise have been released into the atmosphere in generating electricity.

The activities which allow persons to create NGACs include:

- reduction in the greenhouse intensity of electricity generation;
- activities that result in reduced consumption of electricity;
- the capture of carbon from the atmosphere in forests, referred to as carbon sequestration; and
- activities carried out by elective participants that reduce on-site greenhouse gas emissions not directly related to electricity consumption.

## **DEMAND SIDE ABATEMENT**

In the New South Wales Greenhouse Gas Abatement Scheme, activities that result in reduced consumption of electricity are termed 'demand side abatement'. Demand side abatement (DSA) refers to actions to reduce electricity consumption that occur on the 'demand side' of the electricity meter, ie at the point where electricity is consumed.

- substituting electricity generated on-site for electricity supplied from the grid, where the substitution results in reduced greenhouse gas emissions.

### **BOOST TO THE ENERGY SERVICES INDUSTRY**

The right to create and sell NGACs rests with the person who is liable to pay for the energy consumed at the site where a demand side abatement project is implemented. That person may transfer the right to create and trade NGACs to other parties including, but not limited to, electricity retailers and other benchmark participants.

The ability to assign the right to create NGACs to third parties creates an opportunity for firms providing energy management services to offer the creation of DSA NGACs as an additional value-adding service.

For example, an energy management firm which specialises in undertaking energy efficiency projects can offer a discounted price to carry out an energy efficiency upgrade at a site if the site owner agrees to assign the creation of NGACs from the project to the energy management firm.

Therefore, one result of the introduction of the New South Wales Greenhouse Gas Abatement Scheme may well be an increase in activity in the energy services industry in the State.

### **FURTHER INFORMATION**

For further information, see the web site of the New South Wales Greenhouse Gas Abatement Scheme at:

<http://www.greenhousegas.nsw.gov.au>

