

## IEA DSM TASK XIV White Certificates Trading



### Why Market-based Policy Instruments?

In general, market-based policy instruments are increasingly being favoured in a wide range of energy and environment policy fields, due to their envisioned economic efficiency, benefits for competition, positive incentives for cost reduction and continuous improvement and ability to minimise and equalise costs of compliance with policy targets.

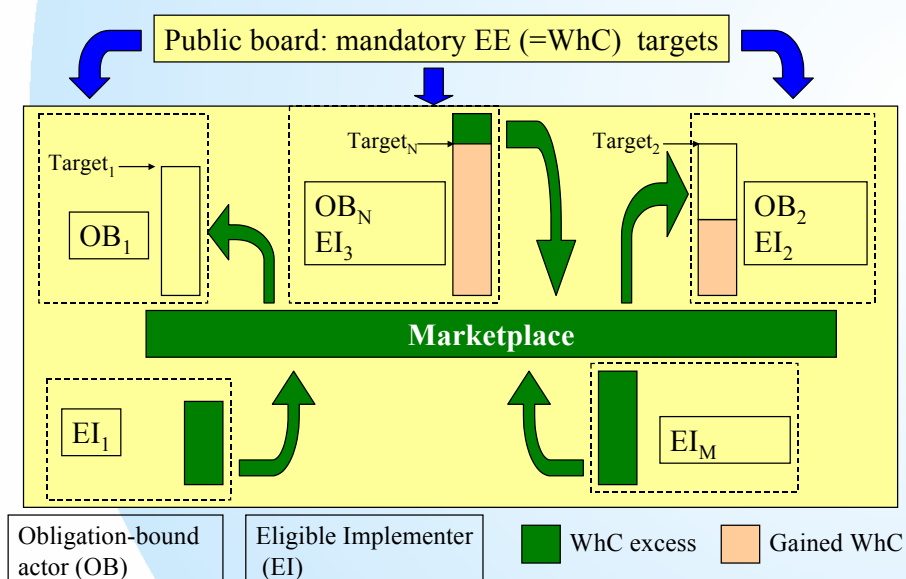
They are particularly applicable where countries have mandatory quantitative targets for the actors concerned that must be met in a verifiable way, inside national or extra-national obligation programmes, and within a fixed period.

### Examples of Market-based Instruments

Examples of this policy approach in the energy area include:

- *White Certificates*: Energy Efficiency trading schemes (end-use energy efficiency programmes);
- *Black Certificates*: Carbon trading schemes (programmes for reducing CO<sub>2</sub> emissions);
- *Green Certificates*: Renewable Energy Commitment trading schemes (increased use of renewable energy sources in power generation).

### A General Scheme for the White Certificates



### White Certificates

These are certificates issued by a regulatory or other public Agency, against the *fulfillment of obligations on energy savings targets*. These targets are expressed in terms of an amount of energy that should be saved as a result of *energy efficiency programs*, promoting and facilitating the provision of energy services and energy efficiency measures to all *end-use sectors* (including the domestic and commercial sectors, the public sector, and small and medium-sized enterprises).

### IEA DSM Work

Six countries participated in Task XIV—France, Italy, Netherlands, Norway, Sweden and the United Kingdom—which was completed June 2006. The objective of the work was to gather experiences gained in operating White Certificates or White Certificates-like schemes in countries where this policy is or will be practiced (as in Great Britain, France and Italy) or discussed (as in the Netherlands). To complement these schemes, knowledge gained through focused research projects was also included.

The Task addressed:

- Whether – and how – a scheme involving the issuing and the trading of White Certificates (WhC) provides an effective means of attaining targets of reduction of 1) primary energy consumption (main concern) and 2) CO<sub>2</sub> emissions (secondarily).

- What is the most suitable format for such a scheme.
- What implementation problems are involved, at national and extra-national levels, and how to interact with other schemes.

Areas discussed were:

- Rationale and basis: why White Certificates?
- Advantages and risks of White Certificates
- Attitude of national stake holders towards White Certificates policy

- Eligible and obliged actors

- Penalties
- Ex-ante or ex-post procedures for evaluations of energy savings
- Free riders effect
- Evaluation of costs – methods used
- Transaction vs. direct costs in White Certificates schemes
- Role for and rules of trading
- White Certificates vs. liberalised markets connected to energy
- National vs. EU-wide White Certificates schemes
- Interaction with other energy efficiency policies
- Interaction with other trading schemes (REC, ET)

### Benefits for the Parties Involved

White Certificates offer a number of practical benefits for all parties involved.

*For regulatory authorities*, they can be an easily verifiable way to track compliance with policy targets.

*For parties obliged to comply with targets*, they offer a means to achieve compliance at least cost, and also offer the flexibility to comply either through 'in-house' action, by contracting with other obliged parties or with other market parties for their supply.

*For those able to create and sell certificates*, they offer an additional revenue stream which is independent of their other business activities, thus offering hedging and risk management benefits in addition to direct financial rewards.

### When to Use

The most effective and profitable applications of White Certificates schemes are expected to be in connection with the following circumstances:

- Where energy taxation mechanisms are less effective in encouraging savings; this typically occurs in the residential and in the tertiary/service sectors, which are outside the context of heavy industry.
- Instead of investment subsidies and tax deduction options; this alternative worked:
  - when these policies showed not to be successful or effective enough, or
  - in national contexts where a subsidiary

role of an institutional body could be considered inappropriate/unfair in energy savings policies.

- Together with or instead of *detailed* performance standards (the White Certificates mechanisms are focused, in principle, to optimize mixes of highly effective vs. cheap measures), though labeling and minimum standards for new products are useful in standardized monitoring and verification procedures.
- In conjunction with voluntary agreements (but it must be assured that there are coherent assumptions on the energy savings targets, baselines, etc.)
- In the presence of an intensive policy in support of energy audits, in order to identify actual and responsive segments of energy savings and to encourage actions of the specialized operators as ESCOs.

### Conclusion

White Certificates offer a number of practical benefits for all parties involved, and proved to be a way to help align supply and demand. In practice, this approach has shown to be more dynamic, more effective and more efficient than legal obligations alone, notably in the field of Renewable Energy Commitment trading.

### Participants

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Italy  
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### TASK XIV Website

<http://dsm.iea.org/ViewTask.aspx?ID=17&Task=14&Sort=1>