

Presentation Session C: Rapporteur

Presentation 1: Started out by outlining that white certificates are both an accounting tool and a tradable commodity. A white certificate can only be owned by one owner at any one time. The value of white certificates is different to the economic value of the energy saved.

The key features of tradable white certificate schemes are:

1. The creation and framing of demand (i.e. setting the target and apportioning it).
2. The creation of an infrastructure
3. A cost recovery system in some cases
4. A system of sanctions
5. The tradable instruments and the associated rules.

Results of schemes depend upon design choices and national circumstances such as the size of the obligation, actors, monitoring and verification etc etc

A number of schemes are ongoing, with more to come (Ireland, Portugal, Romania and Bulgaria in various stages of development/interest).

Scope of sectors covered differs, but a common theme seems to be a focus on the residential sector. Likewise, the obligation is placed at different points in the supply chain in different countries.

Presentation 2: The role of French energy efficiency certificates on the overall performance of the EE scheme

Evolution of the energy savings potential - the quantification of energy savings potential is based on an a technical approach with a 20% rebound effect. However, there is no common economical analysis. Secondly, there is a lack of understanding of customer behaviour or motivation.

84% of the total energy savings are in the building sector, even though this does not reflect the distribution/markets of suppliers.

The building energy savings objective of the French scheme is 274TWh/year in 2020, of which 100TWh is at a marginal cost. However, the remaining 174TWh is more challenging. The payback time that business customers want is 18 months.

7.5m house improvement measures undertaken in 2008 of which 2.4m were energy efficiency-related. A further 1 million were driven by the white certificate scheme. Whereas the 1.5% target would require 4.3 million additional energy efficiency actions are required. However, how can this be done in a time of economic crisis? Moreover, we need proof of the validity of the energy savings.

Based upon EDF's analysis there are differences in observed behaviour pre- and post-energy efficiency installation. An interesting point was that the greater the deviation of household expenditure on energy from 3/4% of income the less energy taken back as comfort.

Real consumption differs widely from the theoretical consumption as predicted by the model. For example the older the home, the more the theory overstates consumption by a factor of 2 or 3. At least 40% of households use less energy than the theoretical model predicts. However, after undertaking energy efficiency measures over time households take more of the savings back as comfort. In other words the rebound effect is closer to 30-40% rather than 20% as is considered standard. This is not the case for the business sector where rebound is negligible.

Conclusions:

1. Energy efficiency in building cannot be considered as a coherent market to be regulated by white certificates.
2. Obligations are on the wrong actors, with the problems of financing not fully addressed.
3. Energy efficiency savings are overestimated.
4. A rebound effect of 30-40% is more realistic and reduces the observed energy savings.

Questions to the Speakers

Comparison between the findings of the EDF analysis and the British Gas experience.? Answer, the findings are unique to the French experience. Mainly down to behaviour of occupants.

50% of housing is owned by occupants

Is there merit in broadening the scheme to improve the viability of the market?

What is the penalty in France?

€20 per megawatt/h - price in the market is about €4

The cost of the scheme is not reflected in the tariff because it is 95% of consumers are on regulated tariffs.

Trading could be good if the scheme are broad enough in order to increase efficiency, whereas the French example suggests that this is not necessarily the case unless there is a profitable market and actors to undertake the work. There is no market in the business to consumer market - it is only obligations.

Trading schemes need to ensure that all actors have a fair crack at the whip, and that there should be no market distortions.

Who should be the obligated parties?

ESCos, Energy suppliers, Energy companies - would all make sense in the B2B market In the B2C it is more complicated. Without financing it doesn't make sense.

One of the problems with a trading system is that the marginal cost of savings is greater than necessary i.e. the price at which all certificates are traded at is greater than would otherwise would need to be the case - just like in the ETS.

Question about the costs of monitoring - very small in France. The results of the French scheme are only calculated by engineering estimates rather than observed behaviour.

Topic: Additionality

How do you measure additionality in households? It is impractical. You can do it by factoring it into deemed savings. Secondly, you can increase the target to take account of

additionality. Thirdly, You can not allow measures where the additionality is low. You need to correct for additionality in a different way.

By bringing in additionality you increase the complexity of any scheme and subsequently the costs.

The Advantages and Disadvantages of Trading Scheme

Advantages

1. In a broader system, trading can be a good idea, with the potential to reduce costs and increase market activity.
2. In certain market circumstances trading can make more sense be on a bilateral or vertical basis, rather than a full trading system.
3. Trading can be a stimulus, allowing obligated parties to meet their targets and governments to increase the overall energy saving target.
4. Trading may increase innovation in the market.

Disadvantages

1. The fact that there can be no one-size fits all system would suggest a disadvantage in that harmonisation would seem to be far away.
2. May not be feasible to have a cross-border trading scheme; at least at this point.
3. Trading may increase the complexity of the scheme which will increase the administrative cost.
4. (Cross-border) Trading may result in one country subsidising the cost energy efficiency in other countries.
5. Trading may increase the propensity for unethical behaviour.
6. Trading may increase the cost of meeting the target, as the marginal price may be more expensive than the cost of realising the energy savings.

Commentary

It should be noted that only Italy has an operational trading scheme. The situation in every country is different, with no one approach distinguishable for all countries. Everything depends upon the behavioural characteristics of the nation. Likewise, different sectors will be more suitable or attractive to trading than others, depending upon the business case (value of the trade).

Theoretically, the wider the scope of a tradable obligations scheme the greater the trading possibility.

It may be possible to look to trade targets rather than have cross-border trading.

Areas of Agreement

1. The ability of an obligation scheme to encompass trading is dependant upon national circumstances.
2. There is no-one size fits all.
3. It is difficult to envisage a pan-European trading scheme.
4. Don't start with trading. Start with obligations then move to trading if appropriate.
5. Start with a simple scheme, the greater the complexity the greater the costs.

Recommendations

1. In the future, independent verification is essential as much of our knowledge is based upon theoretical knowledge, rather than practical experience.