Position Paper

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Subject: Energy End-Use and Energy Services Directive

White Certificates
Is there a case for better buildings?

1. INTRODUCTION

The Energy Efficiency Action Plan proposes the development of an EU-wide white certificate scheme by 2008. Recent discussions with the European Commission suggest that the first step towards this will be to carry-out an impact assessment of such a scheme.

National white certificate schemes already exist in a few EU Member States. However, the intention of the Commission would be to create a system of white certificates that could be traded across borders within the European Union. In addition to developing this scheme, there is a suggestion that this could be the first step towards linking white certificates to the EU’s carbon dioxide emission trading scheme (the ETS). Such a development would be positive, as it would bring more money into the housing sector, as companies would look to offset their carbon dioxide emissions through purchasing white certificates.

Any analysis of the efficacy of white certificates in increasing the energy performance of buildings has to be based on certain assumptions as at present there are no systems in the EU countries which would be fully operational. Hence this discussion paper, considers the different issues, and begins to sketch some of the conclusions which will need to be verified against the outcomes of implementation of tradable white certificates (TWC) in the EU countries.

2. WHITE CERTIFICATES – SOME BACKGROUND

What are white certificates: A white certificate is simply a document that certifies that a specific energy reduction has taken place, through a specified activity, e.g. renovating the roof of a house or replacing a given number of light bulbs. These certificates are usually combined with an obligation on a group of organisations, such as electricity producers, to demonstrate that they have taken specific actions to reduce energy by a given amount.

A tradable commodity: The core benefit of the white certificate is that it can be traded. Therefore, if one organisation has achieved more than its reduction obligations, it can sell the extra white certificates to another organisation that has not done enough. In this sense, it is very similar to the emission trading scheme.

Creating a standard: Clearly one of the objectives is to create a standard way to measure energy savings. However at present, there is no standard way and therefore how you determine the amount of credit (i.e. the number of white certificates) that are awarded for a given measure, will have an important impact on which measure the organisation with the obligations will choose to undertake. Issues such as the lifetime of the measure could for example fundamentally change the choice of measure within different schemes.
Preconditions for having a tradable white certificate scheme: An obligation must be placed firstly on Member States. Member States would then need to transfer the obligation to other parts of the economy (e.g. utility companies) or fulfil it themselves. However, there would still be a need for the Member State to:

- setting up system rules
- create controls and verification procedures
- issue and redeem the TWCs (tradable white certificates)

On the other hand, those companies and organisations interested in creating energy savings (e.g. ESCOs, project owners, etc.) would need to carry-out projects that are eligible to create the TWCs.

Not all TWCs are created equal: The way in which the system rules are set-up can influence the market towards different energy saving solutions. Some of the key elements that can influence the system include:

- Savings lifetime: If measures having long term performance are not recognised for this value, than the system can encourage short term efforts over choices that would make more sense when a lifetime weighting is included.
- Inclusion of potential measures: If for example, certain measures, such as renovation of residential houses is not included, it cannot only miss some of the most cost-effective solutions but also exclude this from the system.
- Ownership of savings: For measures carried out in buildings the ownership issue can affect the way in which the market will work. If the owner of the certificate is the end-user (e.g. building owner) this would act to directly encourage the most effective measures. If on the other hand it is the large player (e.g. the energy company) than this will have a tendency to encourage options with a low upfront cost which bring fast savings, but only in a limited time and scale.
- Period to “bank” the TWC must be defined and limited: For the emission trading it is possible to “bank” CO₂-reductions in a three year period.

3. THE CURRENT SITUATION

A small number of countries have begun or are considering implementing schemes that are either white certificate schemes or very similar. These include: Denmark, France, Italy, the Netherlands and the UK. Of these, the UK scheme is the most advanced although it doesn’t involve trading of white certificates. All the other schemes are either still being put into practice or trading has not yet commenced. (More information on these national programmes can be found in annex).

In addition to the national schemes, the EU has also launched a project called EuroWhiteCert, (www.ewc.polimi.it/index.php) which aims to support the conceptual and technical development of white certificate schemes. They will be looking at a number of issues including:

- Interaction and integration with other trading schemes (e.g. EU ETS)
- A uniform measurement and verification methodology
- Certification
- Analysing potential perverse effects with regard to other regulations and actions (e.g. the EPBD)
4. DRAWBACKS AND ADVANTAGES

The main advantage of TWC is that the obligation to carry-out energy efficiency measures, particularly if transferred to the private sector, injects significant up-front money into the market place. The UK example demonstrates that as energy companies seek to deliver the savings, they purchase large amounts of product. However, a system where the building owner receives the TWC, would also create strong incentives to upgrade the energy performance of buildings.

Beyond increasing the upfront resources available for energy efficiency, such a scheme would also have other advantages linked to its effectiveness and resulting in concrete societal benefits.

- Transfer of obligations to non-government actors if combined with a proper certification scheme ensures that savings will in fact be made
- Tradability, should in principle lead to least cost options
- By creating a real market, this could lead to unlocking a number of current potentials that have not yet been unlocked
- It would reduce the pressure on government
- and stimulate the ESCO market

However, TWCs also have a number of possible drawbacks, particularly if not well implemented:

- Big players, who are only interested in price and simple pay back time, may not choose options that have good long term effectiveness
- High transaction costs can be created and therefore much less money is actually driven into savings
- ESCOs have a tendency to exclude longer term measures, such as insulation, due to a number of factors, meaning that it might not lead to the most cost-effective solutions
- Cross border trade in certificates may lead to large efforts taking place outside the country. Such a movement of resource is beneficial for a country, especially when the measures that have to be taken are to protect a global good (e.g. the climate) and where there is a true cost to the measures as this ensures that the country spending the money delivers maximum global good at the lowest cost. In the area of energy efficiency, where all the measures are meant to lead to economic benefits in the medium to long term, off-shoring the implementation measure may have important implications for long term competitiveness of the economy.
- Ensuring that measures across the EU are compatible and therefore tradable may need a level of harmonisation in energy policies that is politically difficult to conceive

CONCLUSION

Market-based instruments for tackling climate change have proved to deliver energy-efficiency improvements in a quick and cost-effective way. TWC have thus the potential of unlocking the huge efficiency improvement potential of buildings, which account for 40% of energy use in the EU. Such systems will need however to be carefully designed and implemented in order to give the right incentives for savings. It will in particular need to take into consideration the lifetimes of different energy saving measures as to allow investment in best overall value. The administrative framework is another key factor- creating EU-wide or regional trading system may generate to much administrative burden and render the system less effective.