

Energy Efficiency Certificate Trading

A Workshop in association with the

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sponsored by CESI and the Italian Regulatory Authority for Electricity and Gas, AEEG

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Session D1: Gathering the Threads

Phil Harrington, Head of the IEA's Energy Efficiency Policy Analysis Division, summed up the day's proceedings in the following way:

"Let's start by looking back at what our objectives were for the day. We didn't set out to sit in judgement on certificate trading and to make any final decision on whether or not it should be used to promote energy efficiency. Rather, we wanted to take the 'pragmatic focus of assisting policy designers and administrators in their work'. We wanted to 'exchange experiences about this new instrument to enable a better appreciation of its scope for wider use'. And lastly we wanted 'to understand the specific issues, challenges and opportunities associated with certificate trading as an instrument for promote energy efficiency and DSM'".

"In this, I have to say that we have more than exceeded expectations. In fact, we've covered a great deal of territory, which I'd like to briefly recap."

"In the first session we covered the theory of certificate trading and looked at some of the issues that might arise in applying this approach to energy efficiency. I think we learned from that session that certificate trading is a very exciting policy instrument, with some real strengths when compared to other approaches. Above all else, certificate trading offers a way of achieving a defined goal at least economic cost. The outcome of the scheme is clearly set out right at the start, and there is a high degree of certainty that the policy target will be met. The approach is fully consistent with competitive energy markets, since certificates are traded in a separate markets from energy markets and lend themselves to risk-management techniques widely used in competitive energy markets, such as derivatives."

"At the same time, we heard that these schemes are complex, they may have high administration and compliance costs and they are politically challenging to establish. While the outcomes of the schemes are certain, the cost of achieving those outcomes is not known in advance (rather, it is 'discovered' as you go). We also heard that it is more difficult to define the "commodity" being trading with an energy efficiency target, as compared to a carbon or a renewable energy target. In particular the need to measure efficiency against a business-as-usual baseline creates some real difficulties."

"We then moved on to two presentations from countries actually putting energy efficiency certificate trading regimes in place at the moment: Italy and the UK. In Italy's case, their scheme is large and ambitious in scope. It aims to produce a fully-fledged certificate trading market as a way of meeting strict efficiency targets for electricity and gas utilities. Planning is well under way, with a public consultation paper being released earlier this month. In the case of the UK, we heard that the trading of its Energy Efficiency Commitment is a new option on a long-standing policy that has both the alleviation of fuel poverty and reduced greenhouse gas emissions as objectives. It is seen primarily as a 'flexibility mechanism' for electricity suppliers to assist them in meeting their efficiency targets."

“Since these schemes are both under development, we then looked at two fully-established certificate trading regimes, but in the related field of renewable energy: the RECS (Renewable Energy Certificate Systems) ‘platform’ in Europe and MRET (the Mandatory Renewable Energy Target) in Australia. What we learned from this session was that these schemes work! They are both of them meeting or exceeding the policy targets set for them, they are growing in scale and participation, and technical challenges (such as managing internet-based registries and accrediting large numbers of parties) are being solved at relatively low cost. However, it was stressed by both presenters that these schemes are in their early days and that it is not yet possible to draw strong conclusions.”

“Then in the afternoon panel sessions we were able to cover in much greater detail some of the key design and implementation issues that must be solved in order to create certificate trading regimes for energy efficiency. In fact, we spent quite some time discussing whether this should be done at all! Or, more precisely, what should be the policy target and therefore the “metric” of such schemes? We heard that, if least-cost greenhouse gas abatement was the sole or main objective, it might be preferable to use avoided CO₂-e as the policy target and traded commodity. At the same time, it was noted that there are other, and often more local, policy objectives behind both efficiency and renewable energy schemes. These include enhancing energy security, promoting social welfare and developing clean energy industries and ‘options’ for more ambitious greenhouse gas abatement in the future.”

“We noted that, at the time some of these schemes were announced, there was no certainty that global emissions trading would be a reality, and indeed that that was not yet beyond all doubt. But it was also agreed that, even in a world in which carbon is priced and traded internationally, there will still be a need for other policy instruments to promote energy efficiency, particularly for end-users. It is too early to say what role energy efficiency certificate trading should play amongst those other policy instruments.”

“We then moved on to more specific design issues, such as how should the energy efficiency ‘commodity’ be defined (which ‘metric’), against what baseline, and who should be able to buy and sell certificates. Here we heard that this was perhaps the greatest challenge to be solved if these schemes are to be widely used for energy efficiency, as their appears to be a trade-off between accuracy and economic efficiency, on the one hand, and high administration and compliance costs, on the other hand. We noted that there are techniques such as using benchmarks to ‘deem’ the amount of energy efficiency associated with different technologies and applications, and that flexibility can be enhanced by providing alternative methodologies for those who believe the deemed values are inappropriate for their projects. Also, these same issues are being examined actively in the context of the Clean Development Mechanism.”

“Then we covered a set of issues that we might call ‘market organisation’. We heard here that details matter! To build a successful and efficient certificate market, there must be wide access for as many parties as possible to create certificates. This will encourage innovation and competition and reduce economic costs. At the same time, to avoid high administrative costs, it is important to encourage market ‘intermediaries’, such as ESCos but many other parties too, to search out and aggregate efficiency opportunities into large enough bundles to be traded efficiently. Without this, it was feared that trading schemes could act just like a tax, and not stimulate innovation or access the economically-attractive efficiency opportunities that are known to exist. In particular we heard that the design of these schemes must create an ‘incentive structure’ that is consistent with wider energy market regulations, with particular care required in issues such as the choice of liable parties and cost-recovery mechanisms.”

“Finally we covered the difficult issue of how energy efficiency certificate trading schemes, renewable energy trading schemes and carbon trading schemes can all fit together; and if they do, what are the relationships between them, particularly when traded across international borders? We learned that this is inherently challenging, because the “carbon value” of a unit of either renewable energy or energy efficiency varies significantly from country to country. At the same time, we heard

many possible solutions to this problem, ranging from bilateral agreements between countries, to establishing 'exchange rates' between schemes, creating 'jewel boxes' where all these values are bundled, or alternatively unbundling and separate trading of all the 'values' that may be carried by certificates. In any case, it was widely agreed that there needed to be legal clarity and transparency with respect to these issues, in order to avoid confusion – if not disputation – between parties. It was also noted that pre-existing policies, such as support regimes for renewable energy or differences in energy market rules, risk to distort international certificate trading regimes.”

“Overall, I recall the point made by Peter Niermeijer this morning – in a different context – that problems are best solved in the doing. It is therefore most appropriate that we should come together to explore and discuss these issues in the country that is right now 'doing' an energy efficiency certificate trading scheme. I hope that the exchanges we have had today will help Italy in particular to solve some of these issues and, at the same time, we will all learn and benefit from Italy's experience. I want to thank our hosts, CESI and AEEG in particular, as well as the IEA DSM Implementing Agreement, for making this workshop possible. And I want to invite all the participants here today to continue to dialogue with us at the IEA, in order that our project to explore new energy efficiency policies and measures is enriched with your perspectives and practical experiences, and in order that the process of learning by doing, and learning from each other, can continue.”

“Thank you, Mr Chairman.”