MARKET MECHANISMS FOR WHITE CERTIFICATES: A IEA-DSM INTERNATIONAL ACTIVITY

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WHAT’S IEA
International Energy Agency

• established in 1974 within Organisation for Economic Cooperation and Development (OECD)

• programme of energy cooperation among its 26 Member countries + EC
MISSION

• research, development and demonstration of new energy technologies to:
  – reduce excessive reliance on imported oil,
  – increase long-term energy security
  – reduce greenhouse gas emissions.
About IEA Demand-Side Management

ORGANISATION

• Collaborative programmes conducted under Implementing Agreements, signed by Government Agencies

• At present, 40 Implementing Agreements:
  – fossil fuel technologies,
  – renewable energy technologies,
  – efficient energy end-use technologies,
  – nuclear fusion science and technology
  – Demand Side Management
The Demand-Side Management Programme involves 17 Members:

<table>
<thead>
<tr>
<th>Australia</th>
<th>France</th>
<th>Spain</th>
</tr>
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<tbody>
<tr>
<td>Austria</td>
<td>Greece</td>
<td>Sweden</td>
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<tr>
<td>Belgium</td>
<td>Italy</td>
<td>United Kingdom</td>
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<td>Canada</td>
<td>Japan</td>
<td>United States</td>
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<tr>
<td>Denmark</td>
<td>Korea</td>
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<tr>
<td>EC</td>
<td>Netherlands</td>
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<tr>
<td>Finland</td>
<td>Norway</td>
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</table>
15 Tasks have been initiated in IEA-DSM,
9 have been completed.
Each Task is managed by an Operating Agent from one of the participating countries.
The Tasks somehow related to EuroWhiteCert

- Task I - International Database on Demand-Side Management
- Task X - Performance Contracting
- Task XIV - Market mechanisms for White Certificates Trading
The Task XIV: general goals

Studies on methodologies to attain:

– primary energy savings
– reduction of CO₂ emission

through market mechanisms based on:

– schemes of Energy Efficiency Certificates Trading (*White Certificates* - *WhC* - Trading)

and possible connections with other schemes:

– Renewable Energy Commitment scheme (*Green Certificates* Trading)
– Carbon trading scheme (*Black Certificates* Tr.)
WhC: actors

Public board: mandatory EE (=WhC) targets

OB = Obligation-bound actor
EI = Eligible Implementer

OB₁, OB₂, OBₙ
EI₁, EI₂, EIₙ, EIₘ

Target₁, Target₂, Targetₙ

Market platform

WhC excess
Gained WhC
Rationale

- WhC attractive: pursue EE benefits through market-based instruments
- Being applied in UK, Australia (New Wales) and Italy
- Being introduced in France
- Attracting in principle Norway and Sweden
- In line with a Proposal of EC (Dec 2003) for a EU Directive on EE in end-uses and services
- Complements with REC and ET schemes
Task features

• Interested Countries expressed a position in favour of:
  – Concentrating works on WhC Trading (touching other schemes only for interactions)
  – Light task, e.g.:
    • duration: about 12-18 months
    • limited in cost sharing <=> more task sharing

• Priority to operational issues rather than policy
Objective of the study

• Deeper insight
• Discussions through:
  • periodical experts meetings
  • open workshops
on a group of items classified as:
• Principle (Policy) issues
• Practical (Operational) issues
Objective of the study

Policy issues (1)

- Effectiveness of WhC trading on EE
- Obligation-bound actors (DSO, suppliers, ESCO)
- Buyers and sellers (DSO, ESCO, other)
- Targeted sectors and EE programmes
- How to create a market platform (in alternative to bi-lateral)
Objective of the study

Policy issues (2)

– Competition issues
– Possible cost-recovery mechanisms
– Interaction with other EE policy tools
– Interaction with other trading schemes (REC, ET)
– Chance of an enlarged extra-national market of WhC
Objective of the study

Operational issues

– Criteria for design and development of EE projects
– How to measure/evaluate the saving impact of a project
– Monitoring mechanisms (duration, responsibilities)
– Non-compliance regime
– Trading mechanisms (participants, transactions frequency and safety, banking)
– Rebound effects (unexpected upshots)
Objective of the study

The following points will have to be considered for the above issues:

– relevance for the national energy policies
– national expected/forecast/already adopted approaches
– problems connected to possible/actual implementation of the issue
– already gained national experiences - case studies
Approach

• Little experience exists on WhC trading

• Task based on exchange of ongoing/gained experiences

• Through regular events made up of:
  – one-day thematic open workshop with national stakeholders
  – a “day after” restricted meeting of designated task experts
## Approach

<table>
<thead>
<tr>
<th>Event</th>
<th>Workshop</th>
<th>Workshop subject</th>
<th>Task experts meeting subject</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NO</td>
<td></td>
<td>Kick-off, Task organisation, Preparation of following workshop</td>
<td>7-8 June 04 Milano Italy</td>
</tr>
<tr>
<td>2</td>
<td>YES</td>
<td>Existing experiences and expectations at national level</td>
<td>Discussion on the past workshop, Preparation of following workshop</td>
<td>8-9 Nov 04 London UK</td>
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<tr>
<td>3</td>
<td>YES</td>
<td>Policy/principle issues</td>
<td>Discussion on the past workshop, Preparation of following workshop</td>
<td>14-15 April 05 Paris France</td>
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<tr>
<td>4</td>
<td>YES</td>
<td>Organisation / practical issues</td>
<td>Discussion on the past workshop, Preparation of following workshop</td>
<td>16-17 June 05 Lund Sweden</td>
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<tr>
<td>5</td>
<td>YES</td>
<td>Interaction with other schemes/EE policies</td>
<td>Closing meeting, Discussion on the past workshop, Discussions on the organisation and structure Final Synthesis Report</td>
<td>Nov 05 Norway</td>
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## Schedule of activities

<table>
<thead>
<tr>
<th>Month</th>
<th>June 04</th>
<th>November 04</th>
<th>January 05</th>
<th>April 05</th>
<th>June 05</th>
<th>August 05</th>
<th>November 05</th>
<th>December 05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Deliverable</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>FR</td>
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</table>

CS = Critical Synthesis Report of the event (workshop + expert meeting)
FR = Final Synthesis Report
Administrative

• Duration: 19 months

• Mix of:
  – **task-sharing** (work performed by the national experts, funded by the participating Countries)
  – **cost-sharing** (amount of Operative Agent’s costs, shared among the participants’ Countries)
Administrative

Participating Parties

Italy
France
Norway
Sweden
UK

Academia: Central European University - Budapest (as observer)

Netherlands (newcomer)
Interaction with other projects

White & Green
EU SAVE
- presence of task 14 experts and guests to final meet.
- deliverables made available to task 14

CEN-CENELEC
Group on standards on EE, REC and WhC
- presence of task 14 experts

EuroWhiteCert
EU EIE
- attendance of task 14 Organisations/experts
- presence of OA at Steering Committee meeting
Attained results

From London workshop - November 8th 2005

- Participants from UK, France, Italy, Netherlands, Norway, Sweden, Denmark,


- Comparisons between EEC and the Italian EE scheme

- ESCO the solution to EEC success. Increased award to ESCO for energy savings. ESCO operation not so developed for legal and market barriers

- Direct trading of energy savings or obligations in UK: bi-lateral contracts in terms of saved TWh. No standard platform of WhC trading practised yet

- UK ETS versus EU ETS: need of International Emission Trading Registry with on-line real-time access
IEA-DSM Task XIV - MORE INFO?

• SEE TASK XIV WEBSITE

http://dsm.iea.org/NewDSM/Work/Tasks/14/task14.asp

• anyone is welcome as guest to share information through the Task 14 Forum - ask OA
International Energy Agency Demand-Side Management Programme
‘Promoting Energy Efficiency and Demand-Side Management for global sustainable development and for business opportunities’

Task XIV: Market Mechanisms for White Certificates Trading

http://dsm.iea.org/NewDSM/Work/Tasks/14/WhiteCertificates.htm

Market-based policies for accelerating energy efficiency programmes

General goal
This project (‘Task’) aims to address:

- 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)
  2. CO2 emissions (secondarily)
- what is the most suitable format for such a scheme
- what implementation problems are involved, at national and extra-national levels
- how it can interact with other schemes.

Questions to be addressed
Policy and operational issues will considered throughout the task Principle (Policy) issues

1. Specificity and effectiveness of a certificate trading mechanism to promote energy efficiency projects
Thank you

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