

CESI

MARKET MECHANISMS FOR WHITE CERTIFICATES: ISSUES AND CHALLENGES IN DEVELOPING NEW POLICY MEASURES

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MAIN GOAL

Establishment of

**Energy Saving programmes
on energy end-uses**

STEP I

A Public Board (e.g. Governmental) defines:

Energy saving national targets (e.g. Mtoe/year)

Eligible Energy Saving Projects

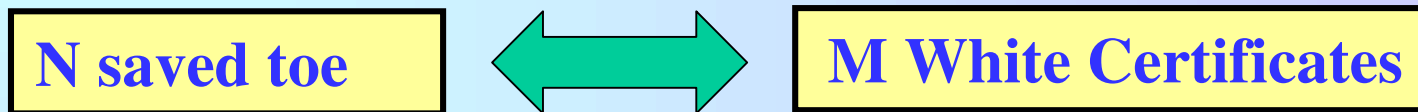
Obligation-bound actors (**OB**)

Apportionment of the global target on **OB**'s

Eligible implementers of Energy Saving Projects (**EI**)

STEP II

Equivalence between attained target and a proportional amount of **White Certificates (WhC)**

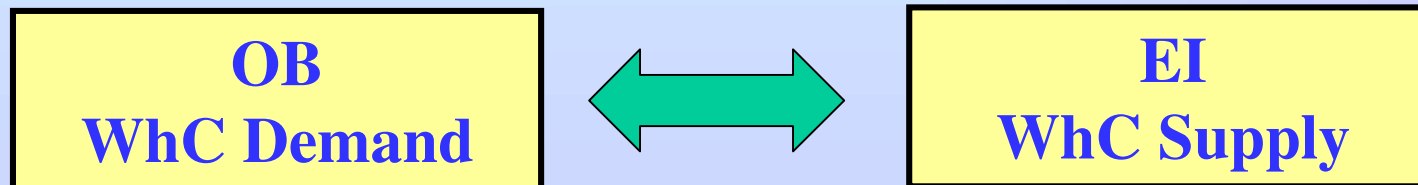


“White certificates”: certificates issued by independent certifying bodies confirming the claims of market actors for savings of energy, as a consequence of energy end- use efficiency measures (From *Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on energy end-use efficiency and energy services*)

STEP II

OB must comply with a WhC target obligation:
WhC demand

EI may gain and own WhC: WhC supply



STEP III

A market can be established where WhC demand and offer match:

OB can buy lacking WhC to reach their target

EI can sell their WhC surplus:

Since:

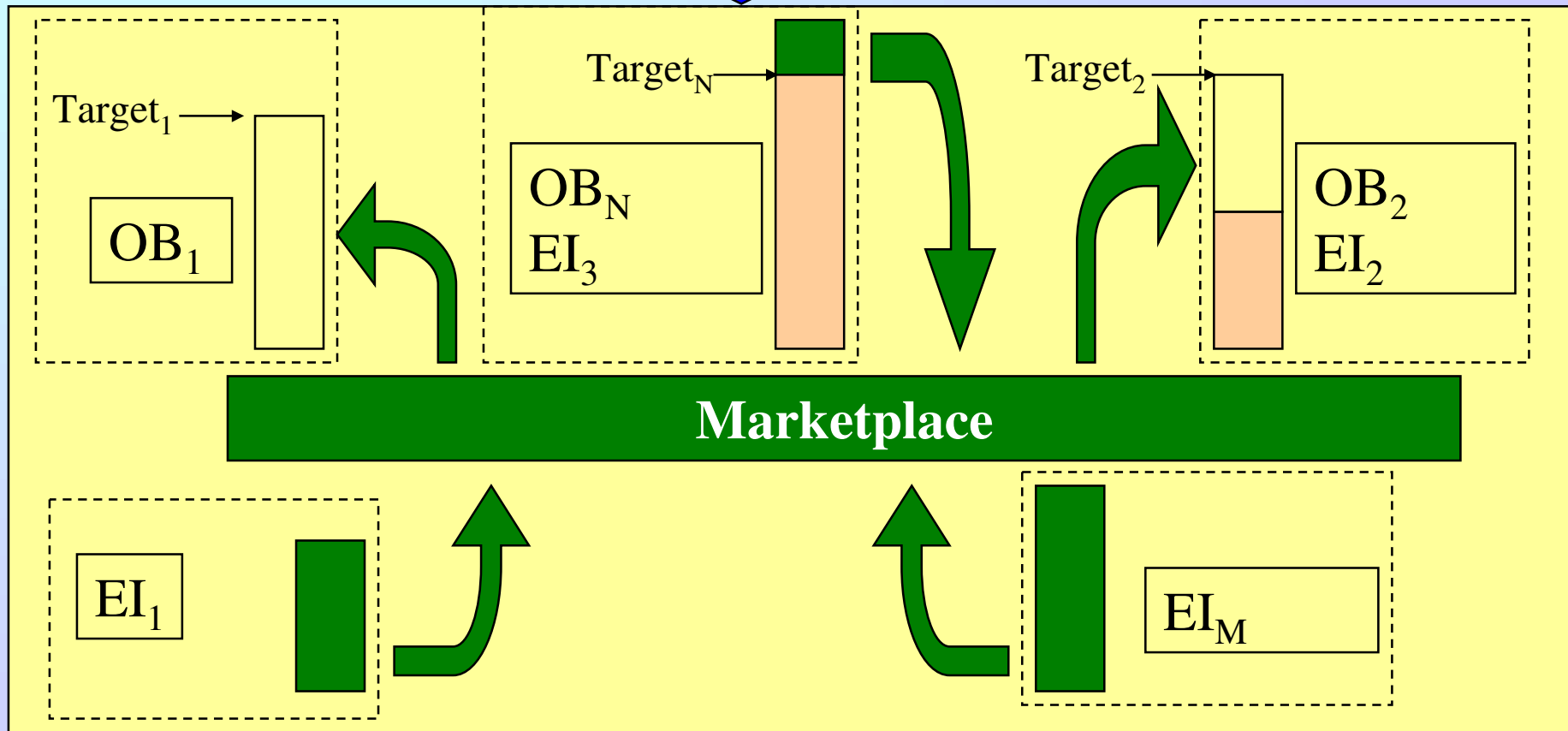
they have no target to match

or

they gained WhC above their target

GENERAL SCHEME

Public board: mandatory EE (=WhC) targets



Obligation-bound actor (OB)

Eligible Implementer (EI)

■ WhC excess

■ Gained WhC

MATTER TO BE DISCUSSED

Obligation-bound actors = WhC target fulfilment:
who?

producers?

distributors (e.g. in Italy, distributors over a
threshold)?

retailers?

consumers?

MATTER TO BE DISCUSSED

Eligible implementers of Energy Saving Projects =

WhC gain: **who?**

obligation-bound actors?

exempted actors (e.g. in Italy: distributors below the threshold)?

energy services companies (ESCO)?

minimum requirements? official register?

consumers?

all? only large ones?

market intermediaries?

MATTER TO BE DISCUSSED

Apportionment criteria for Energy Savings targets
on OB (= WhC targets) : **how?**

number of served customers?

volume of distributed electricity?

Eligible (= WhC generating) Energy Saving
Projects:

criteria

size

valuation of the saving impact = n. of WhC generated

persistence of the saving effects

MATTER TO BE DISCUSSED

Trading mechanisms:

- participants to the market
- lifetime of certificates
- frequency of transactions
- safety rules
- banking

Interaction with other trading schemes (REC, ET)

Chance of extra-national enlarged market:

- within EU (Proposal EU Directive on EE in end-uses)
- within OCDE

A POSSIBLE TRADING SCHEME - Italy

Italian targets

Twins Ministerial Decrees of April 2001

Mandatory quantitative targets of primary energy savings at the national level (against the “business as usual” scenario)

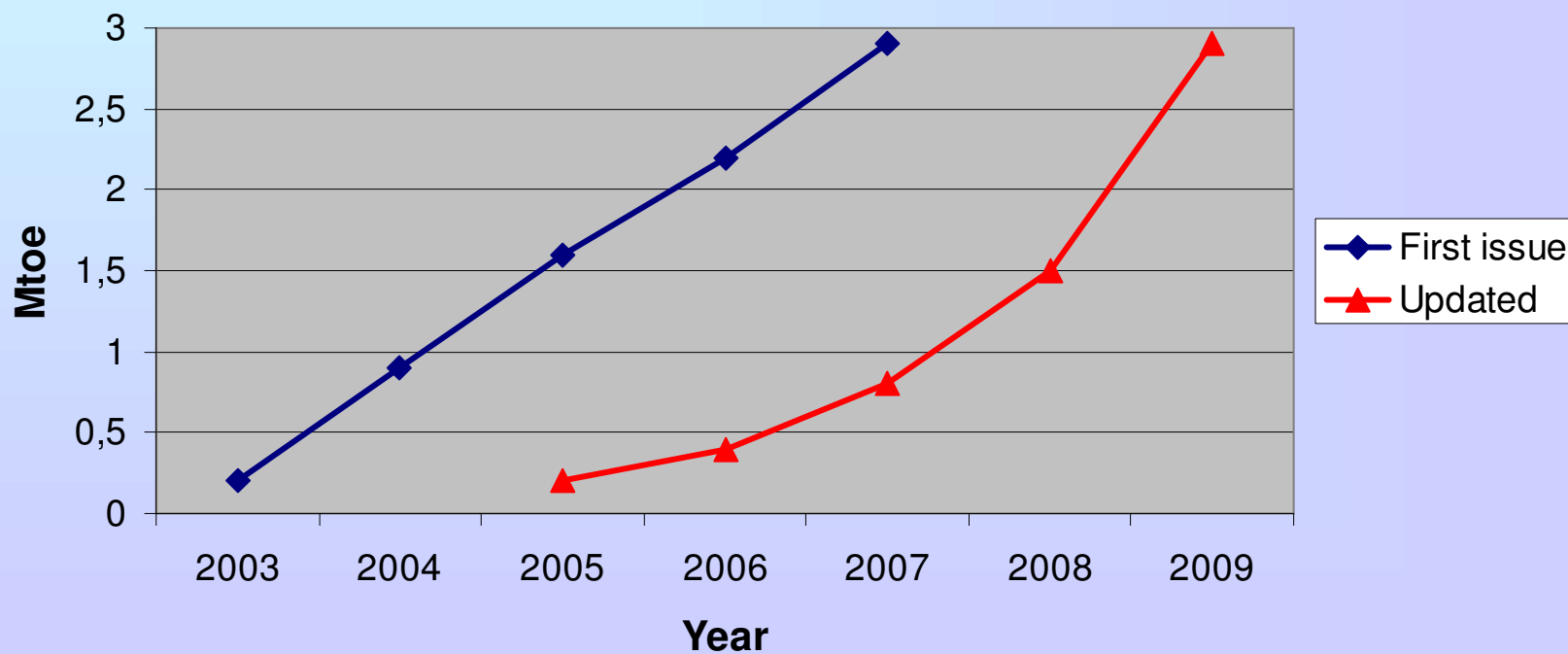
<i>Year</i>	<i>Target (Mtoe/Yr)</i>	
	Electricity	Gas
2002	0,1	0,1
2003	0,5	0,4
2004	0,9	0,7
2005	1,2	1,0
2006	1,6	1,3

A POSSIBLE TRADING SCHEME - Italy

Italian targets

Twins Ministerial Decrees of July 2004

National cumulative energy savings targets



A POSSIBLE TRADING SCHEME - Italy

Obligation-bound actors

Electricity and Gas Distributors

Threshold: 100.000 customers as at 31.12.2001

gas: 22 distributors; 60% of total customers

electricity: 8 distributors; 98% of total customers

A POSSIBLE TRADING SCHEME - Italy

Apportionment criteria

Apportionment on the basis of the quantity of electricity/gas distributed to final customers compared to the national total, in the previous year

A POSSIBLE TRADING SCHEME - Italy

Eligible Energy Saving projects

only demand-side actions (energy savings in generation uneligible)

illustrative list: 14 classes of projects with more than 35 sub-classes; among the others:

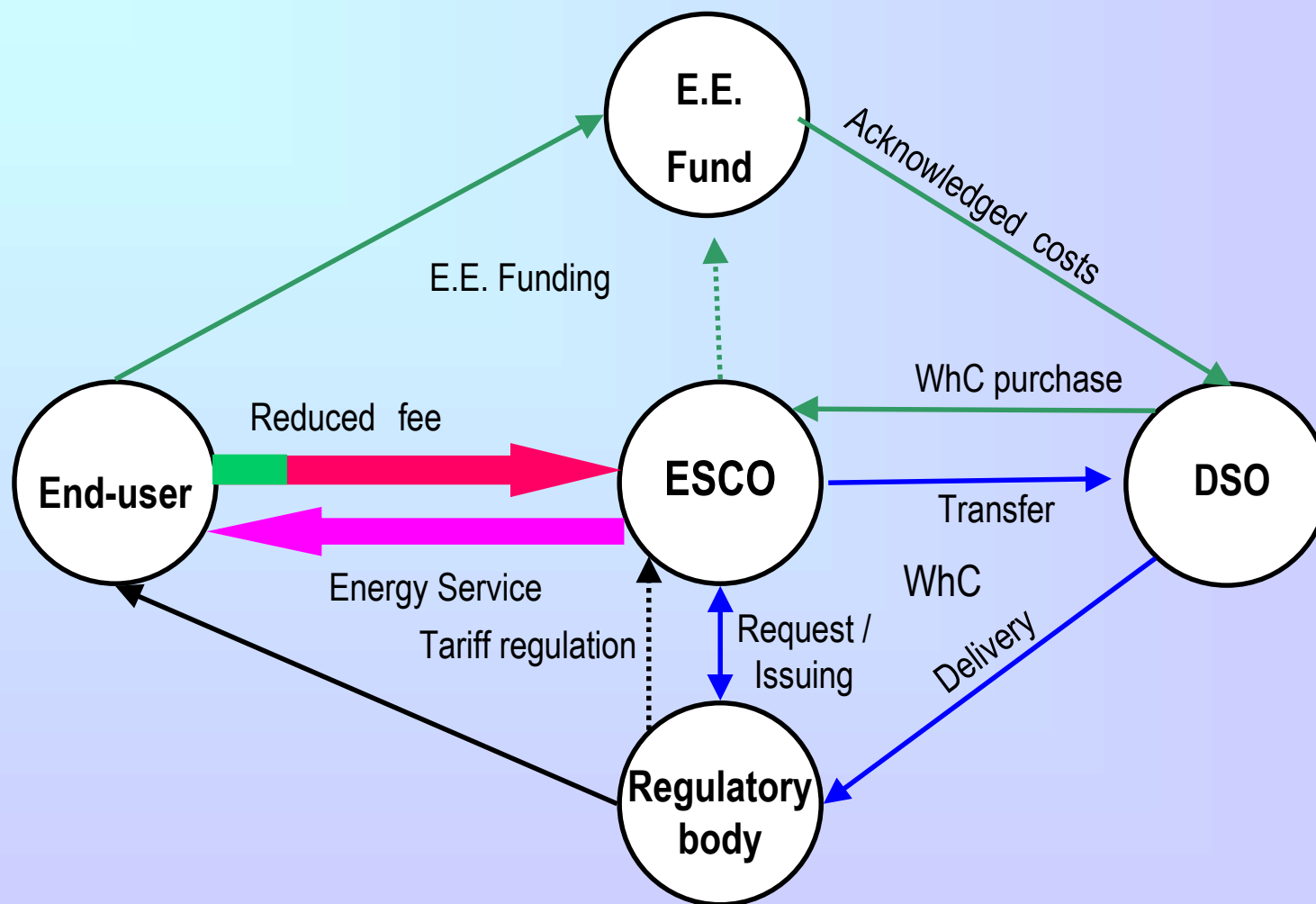
- use of high efficiency electric devices/motors,
- substitution with electric energy where convenient
- containment of electricity leaking (stand-by)
- increasing efficiency of lighting systems
- power factor regulation in final uses
- improving the combustion efficiency
- building insulation

A POSSIBLE TRADING SCHEME - Italy

Eligible Implementers of the Projects

distributors (directly or via controlled companies)
ESCOs (still to develop)

A POSSIBLE TRADING SCHEME - Italy



WILL IT WORK?

Implementation

time-shift of targets: 2 years

planned start-up: May 2004

Energy Savings certification = WhC issuing:
within 2004

WhC trading: from 2005 on

Handled by the Electricity Market Operator

First verification of target matching: May 2005

WILL IT WORK?

Other interested Countries:

UK and New South Wales (Australia) are handling a similar scheme

France is going to introduce WhC trading

Sweden and Norway are interested in principle to the subject

Interest was stated also by Germany, Holland and Academia

IEA-DSM Task XIV

A new task on WhC trading was launched within
IEA-DSM:

Italy

France

Norway

Sweden

UK

Central European University (as observer)

IEA-DSM Task XIV

Other Countries are going to join:

EC

Australia

Holland

Denmark

IEA-DSM Task XIV - OBJECTIVES

- whether – and how – a scheme involving the issuing and the trading of White Certificates (WhC) provides reduction of:
 - primary energy consumption (main concern)
 - CO₂ emissions (secondarily)
- most suitable format for such a scheme
- implementation problems involved
- interactions with other schemes.

IEA-DSM Task XIV - APPROACH

Event	Workshop	Workshop subject	Task experts meeting subject	Month
1	NO		<ul style="list-style-type: none"> - Kick-off . - Task organisation - Preparation of following workshop 	1 June 04 Italy
2	YES	Existing experiences and expectations at national level	<ul style="list-style-type: none"> - Discussion on the past workshop - Preparation of following workshop 	4 Nov 04 UK
3	YES	Policy/principle issues	<ul style="list-style-type: none"> - Discussion on the past workshop - Preparation of following workshop 	8 March 05 France
4	YES	Organisation / practical issues	<ul style="list-style-type: none"> - Discussion on the past workshop - Preparation of following workshop 	12 June 05 Sweden
5	YES	Interaction with other schemes/EE policies	<ul style="list-style-type: none"> - Closing meeting - Discussion on the past workshop - Discussions on the organisation and structure Final Synthesis Report 	16 Oct 05 Norway

IEA-DSM Task XIV - MORE INFO?

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 - Send this to a colleague

General goal - Register your interest
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

- Contact: Operating Agent

SEE TASK XIV WEBSITE

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

THANK YOU

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