

WHITE CERTIFICATES

The case of Italy

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THE ITALIAN SCHEME FOR WHITE CERTIFICATES

Italian targets

Twins Ministerial Decrees of July 2004

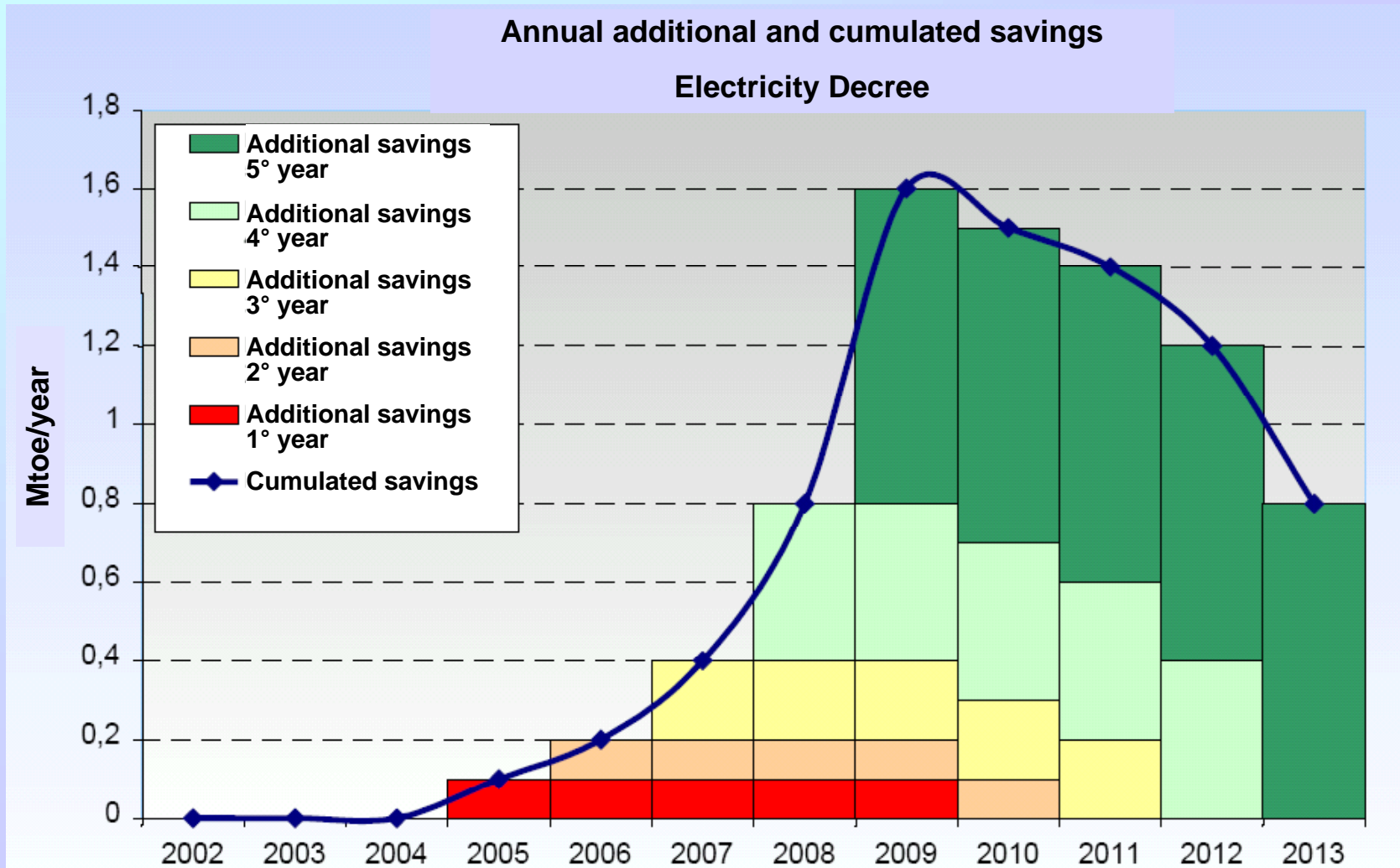
Mandatory quantitative targets of primary energy savings at the national level (against the “business as usual” scenario) - 5 years’ persistence

Year	Annual Energy Savings (Mtoe/year)	
	Electricity Distributors	Gas Distributors
2005	0.1	0.1
2006	0.2	0.2
2007	0.4	0.4
2008	0.8	0.7
2009	1.6	1.3

1 thermal toe = 41.860 GJ - 1 electric kWh = $0.22 \cdot 10^{-3}$ toe

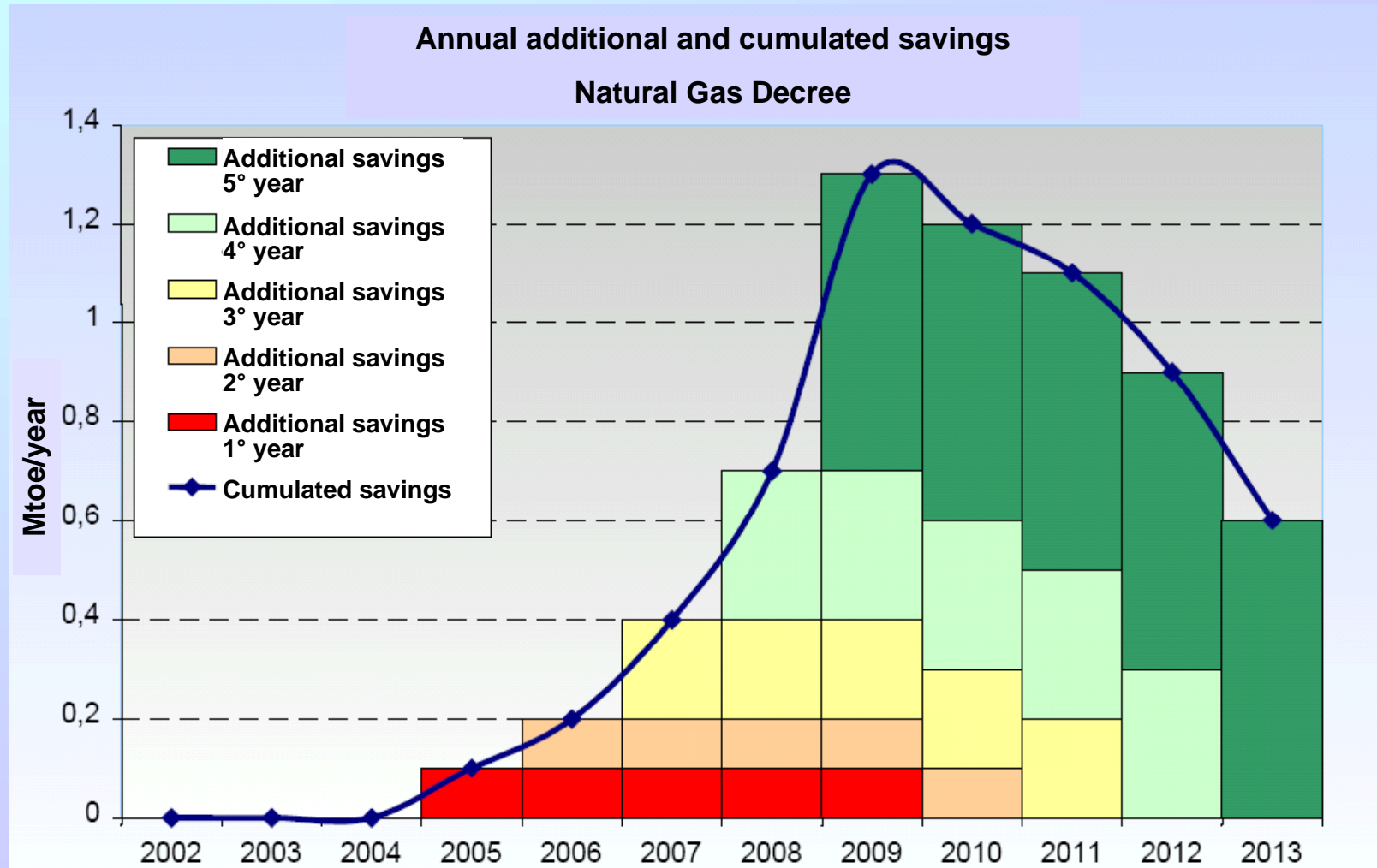
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Italian targets



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Italian targets



Obligation-bound actors

- Electricity and Gas Distributors
- Threshold: 100.000 customers as at 31.12.2001
 - gas: 24 distributors; 60% of total customers
 - electricity: 10 distributors; 98% of total customers

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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

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Eligible Energy Saving projects

only demand-side actions (energy savings in generation not eligible, except PV below 20 kW)

illustrative open-ended 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

Evaluation of Energy Savings

Default method (no on-field measurement)
based on standard evaluation procedures

Analytic method (some on-field measurement)
based on standard evaluation procedures

Metered baseline method
based on measurements 'before' and 'after' the
implementation

Evaluation of Energy Savings

Default method: 20 procedures are officially available:

- Substitution of incandescent lamps with CFLs
- Substitution of electric water heaters with electronic ignition gas heaters
- Installation of gas fired boilers rated "4 star efficiency"
- Substitution of pilot-flame gas water heaters with electronic ignition gas heaters
- Substitution of single-pane with dual-pane windows
- Wall and roofing insulation (heating savings)
- Use of photovoltaic generators below 20 kW
- Use of solar water heaters
- Installation of variable speed drives for pumping systems below 22 kW
- Energy recovery from natural gas decompression

Evaluation of Energy Savings

Default method: 20 procedures are officially available:

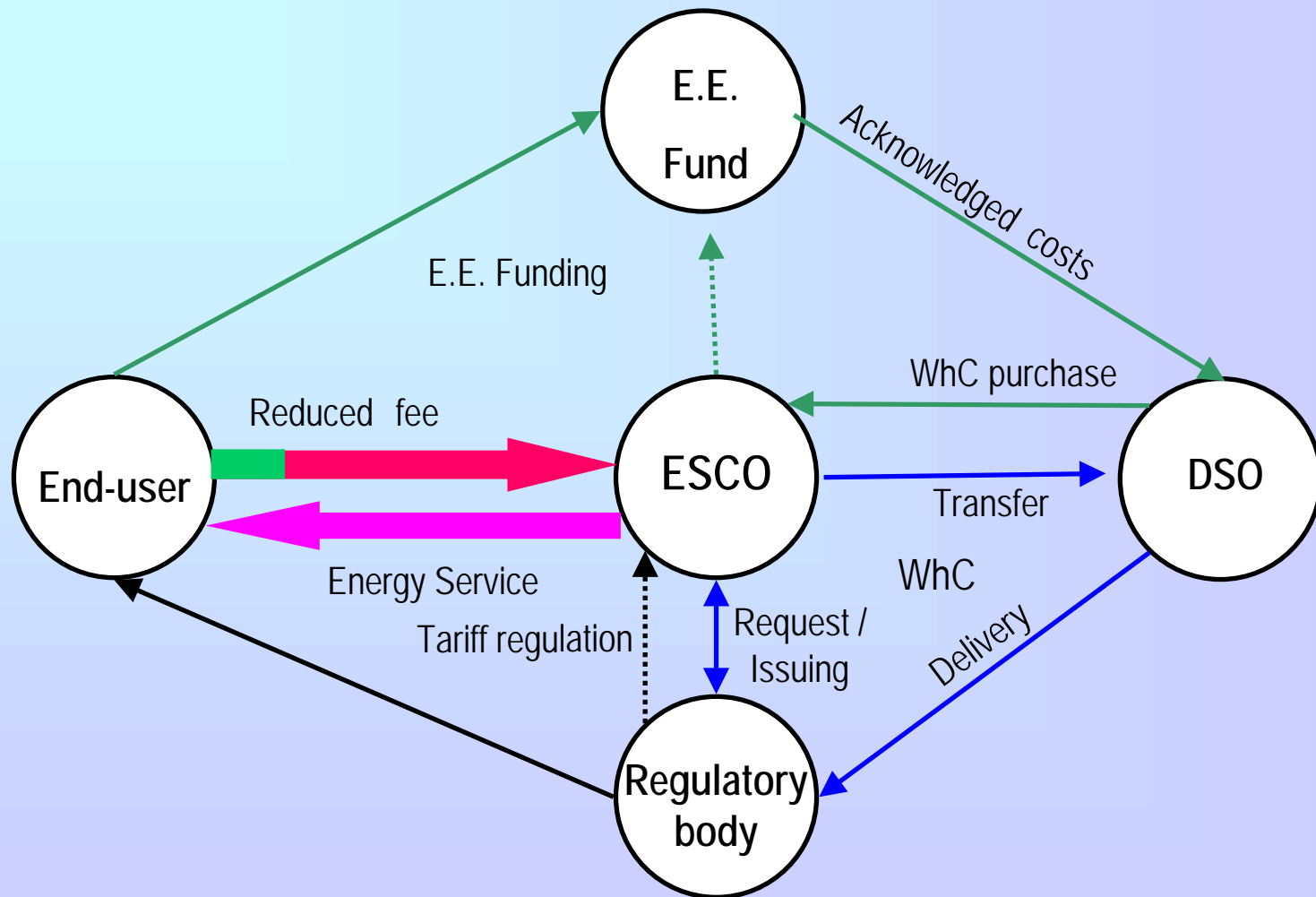
- Installation of high efficiency electric motors
- Installation of high efficiency refrigerators, freezers, washing machines, dish washers facilities
- Installation of low flow showerheads in homes, hotels and recreational
- Installation of faucet aerators in homes
- Installation of air source heat pumps in new or renovated residential buildings
- Installation of power regulators in public lighting systems
- Replacement of mercury vapour lamps with high pressure sodium lamps
- Installation of air conditioners with cooling capacity below 12 kW
- Wall and roofing insulation (cooling savings)

Eligible Implementers of the Projects

- Electricity and Gas Distributors
 - directly
 - via controlled companies
- ESCOs

(ESCO are accredited through a self-declaration: “*the supply of integrated services aimed at realising and possibly managing energy efficiency measures is included among the ESCO’s commercial scopes*”)

THE ITALIAN SCHEME FOR WHITE CERTIFICATES



Start-up: January 2005

- issued rules and standard procedures (Authority - AEEG)
- issued transaction mechanisms (Electricity Market Operator)

Considered projects:

- performed in 2001-2004
- total obligation 0.2 Mtoe (0.155 Mtoe to largest OA)
- grace period: possible “missing” energy savings must be recovered within two years

Submitted projects for verification/certification:

- about 1000 projects, grouped into 350 requests
- about a half performed by the OA (Distributors), usually with third parties (producers of equipment and plants, installers, ESCOs).
- the other half presented directly by the ESCOs among about 400 accredited by AEEG.

PROGRESS OF THE IMPLEMENTATION

Evaluation phase

- At the end of 2005, AEEG concluded the evaluation of about a hundred of request and certified total savings of about 88,000 toe.
- This evaluation phase will be concluded within March 2006.

WhC issuing

- Immediately after AEEG's certification by EMO (GME), according to certified savings
- WhC deposited at the National Registry to be negotiated.

Market start

- March 7th 2006
- trading platform handled by EMO (GME)

PROGRESS OF THE IMPLEMENTATION

http://www.mercatoelettrico.org/GmeWebInglese/default.aspx

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GME

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Italian version

SESSIONS 2006

december

november

october

september

august

july

june

may

april

march

february

january

energy efficiency certificates
results



date	type	minimum price (€/toe)	maximum price (€/toe)	reference price (€/toe)	TEE traded
14 March 2006	I	80	80	80	295
14 March 2006	II	-	-	-	0
14 March 2006	III	-	-	-	0

Updated as of 14/03/2006

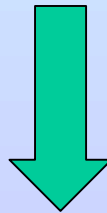
The first session of the Energy Efficiency Certificates Market was held on 7 March 2006



No transactions

Bilateral market

- It may occur in parallel with marketplace bids
- EMO only keeps the register the exchanged quantities of WhC (not the transaction prices) in bilateral exchanges
- Mainly non-official information available:
 - at present, only the two largest Distributors - **Enel Distribuzione** and **Italgas** - seem to be practising also bilateral contracts
 - general prudent “waiting” behaviour



for the first year, probable equilibrium towards an upper limit for the price (the value of the cost recovery: 100 €/WhC)

Contribution of Regional Districts

- National legislation allows Regions for definition of regional targets:
 - either globally consistent with the national ones
 - or additional to the above
- Region are also allowed to establish funding for supplementary cost-recovery or for other actions to foster EE in their territory.
- At the moment, news about actions of:
 - Regione Piemonte (Turin)
 - Regione Lombardia (Milan)

Thank you

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