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The Energy Efficiency Certificates (TEE) in Italy

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Established by Ministerial Decrees (Industry & Environment) on 20.7.2004.

Objective: reduction of primary energy consumption in the first period (2005-2009) of 5 years.

National targets established: 2005: 0.1 Mtep; 2006: 0.2 Mtep; 2007: 0.8 Mtep; 2008: 1.5 Mtep; 2009: 2.9 Mtep

Mandatory burden sharing **for electricity and gas distributors** with at least 100,000 clients (50,000 since 2008)

The Government announced the intention to extend the mechanism for a second period up to 2014

Distributors can comply with projects: - i) "home developed"; -ii) of controlled companies; -iii) of Energy Service Companies (ESCOs).

To comply: Energy Efficiency Certificates (TEE) or “white certificates”.

The Electricity and Gas Regulator (AEEG) in charge of: -i) regulatory reform; -ii) burden sharing for each distributor; -iii) evaluation of the project's results; -iv) determination of a **contribution (€/tep)** or of fines to those not compliant.

By the end of May of each year, each Distributor must hand over to the Regulator a number of certified TEE, corresponding to the obligation of the previous year. The TEEs are released by the Electric Market Operator (GME)

Three types, spared according to the consumption. Type I: electric energy; Type II: gas; Type III: other fossil fuels.

Each TEE valued **1 tep**, independently from the nature of project.

After compliance, TEEs surpluses "bankable" for the following years.

TEEs traded through bilateral contracting and, since March 2006, on a specific market run by GME. Weekly (February - March) and monthly sessions

The TEE prices on the market: a basis for the determination of the contribution, initially fixed at **100 € / tep**.

Some quantitative results

Main Italian Energy **data in 2006**: Internal consumption= 195.6 Mtep;

- Losses = 52.03 Mtep; - **Final uses** = **143.57** Mtep

First year of compliance 2005. 10 electricity distributors and 20 gas distributors subject to the obligation

In addition, other "small" 573 distributors potentially active on the TEE offer side. 577 ESCOs registered by the Regulator

The national targets have been largely achieved

The regulator (Ruling 13/2007) authorized the payment to the electricity distributors of 12.4 M€ and to gas distributors of 2.9 M€, for a total of 15.3 M€, on the basis of a **contribution of 100 €/tep** of increased energy efficiency

Yearly targets shared only among distributors with 100,000 clients in proportion to their electricity and gas sales compared to the **total national.**

A discrepancy arises between the ministerial national targets and those ruled for the distributors under obligation. In recent years, it was **not possible to allocate a share of 22-25% of the national targets** to the distributors

Results 2007: Electricity: 385.6 ktep Gas: 247.8 ktep Total: 633.4 ktep
Ministerial decrees: 800.0 ktep

Electricity: target subdivided among 10 distributors. Largest share (some 85-90%) due to the ENEL Distribution

Gas: target subdivided among 20 distributors, with 2 accounting for almost 50% of the total.

Since the beginning of the scheme up to end of May 2007 the Regulator **certified** primary energy reduction of 898.4 ktep, almost the double of the obligations for the years 2005 and 2006. **Surplus of the offer against obligations.**

Out of the total of the certified TEE, 15.5% are related to projects of the distibutors under obligation and 84.5% to projects of other entities, including 72.3% by ESCOs.

Almost 55% of the total correspond to projects dealing with electricity consumption of the domestic sector; 16% related for heating in the municipal and tertiary premises; 12% energy efficiency in public lighting.

In one year (30 May 2006 - 30 May 2007) the total TEE exchanged were 321,846. Only 24% (76,866) were traded on the GME market.

Market prices gradually dropped. Type I: from 69.4 down to 32.9 €/tep; Type II: from 92.2 down to 82.2 €/tep

Minor incentives for " volountary" parties; windfall profits for distributors, which receive the "contribution" of 100 €/tep.

Recent evolution of the mechanism

Updating of the mechanism: Ministerial decree on 21 Dec 2007.

- From 2008, obligation **extended** to distributors having **> 50,000 client**s
- Increase of national obligations in the **last two years** of **first period:**
  - electricty distributors : 2008 = 1.2 Mtep; 2009 = 1.8 Mtep
  - gas distributors : 2008 = 1 Mtep ; 2009 = 1,4 Mtep
- Targets in a **second period** of three years 2010-2012 also defined:
  - electricty : 2010 = 2.4 Mtep; 2011 = 3.1 Mtep ; 2012 = 3.5 Mtep
  - gas : 2010 =1.9 Mtep ;2011 = 2.2 Mtep; 2012 = 2.5 Mtep
- Windfall profits: the value of 100 €/tep has been kept: the benefits for the consumers in terms of avoided cost (€/tep) in purchasing electricty and gas resulted in 6-10 times the amount of the contribution paid to distributors.
- Lack of liquidity and transparency in the TEE bilateral trading: since April 2008 the Regulator stipulated the obligation of communicating to a new GME web platform all the data concerning bilateral trading. The GME to publish in its internet site: volumes exchanged, prices and volume-weighted prices.

A European TEE mechanism?

- The EU Commission and the IEA studied the Italian TEE model. France and Poland have introduced a system similar to the Italian one; energy efficiency obligations for the electricity and gas suppliers are in force in UK.

- The EU Directive 32/2006 on the efficiency of the final energy uses indicated the "white certificates" (TEE) as one of the market-based mechanisms to reduce the energy consumption by 9% by 2016. Also included in the Italian Energy Efficiency Action Plan (17 countries presented their EEAPs to the EU by Dec 1, 2007)

- Problems: - i) common rules for the European market of the TEE; - ii) interaction with the Green Certificates European market and the CO_2 ETS

- Issue to be considered in the framework of the more ambitious target decided by the EU Council of Ministers the 2007 Spring Summit: reduction of the EU final energy consumption by 20%. Encouraging political initiative, but still a gap between the adopted measure and the allocated resources.