

White certificates in Italy: lessons learnt in recent years

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FEDERAZIONE ITALIANA PER L'USO RAZIONALE DELL'ENERGIA

FIRE: the association for energy efficiency



www.fire-italia.org

The **Italian Federation for the Rational use of Energy** is a no-profit association founded in 1987 that promotes energy efficiency, supporting energy manager, ESCOs and other companies dealing with energy.

Besides the activities directed to its **members**, FIRE operates under an implementing agreement with the Ministry of Economic Development to manage the **Italian energy manager network** since 1992.

In order to **promote energy efficiency** FIRE cooperates and deals with public authorities, energy technology and service companies, consultants, medium and large consumers, universities and associations to **promote best practices** and **improve the legislation.**

FIRE manages **SECEM** - **an accredited body** under ISO 17024 - to certify Energy management experts (EGE - UNI CEI 11339).

FIRE: the association for energy efficiency



Around 400 members, almost equally divided between organisations and professional, including including both supply and demand side (medium and large end-users).

FIRE can be a partner for many activities:

- carrying out **surveys** among energy managers, ESCO, EGE, companies with ISO 50001, etc .;
- implementation of **market and sectoral studies**;
- **evaluation and support** on incentive tools and policies;
- **information campaigns** and behavioural change;
- **dissemination campaigns**;
- **energy audits and feasibility studies**;
- **training courses** on energy management and its tools, policies and incentives, solutions for energy efficiency, cogeneration, IPMVP, etc.;
- **European projects**, international cooperation, and much more…

Get in touch!

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FIRE: the association for energy efficiency

Besides being involved in many **European projects**, listed next, FIRE implement surveys and market studies on energy related topics, **information and dissemination campaigns**, and **advanced training.**

Some of FIRE clients over the years: *Ministero dell'Ambiente*, *ENEA*, *GSE*, *RSE*, *Regione Piemonte*, *Provincia di Torino*, *Comune di Vignola*, *EASME*, *Ecofys*, *ENEL*, *Engie*, *Estra*, *Ferrovie dello Stato*, *FCA*, *Galbani*, *Gruppo HERA*, *Hitachi*, *Leonardo*, *Poste Italiane*, *Schneider Electric*, *TIM*, *Unioncamere*, *Vigili del Fuoco*, *Wind Tre*, universities, associations, energy agencies and exhibition organizers.



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On-going and just completed EU projects:

Management and good practices

ICCEE Improving Cold Chain Energy Efficiency in food and beverage sector

Multiple benefits of energy efficiency

EU MERCI fostering the growth of energy efficiency in the EU industry

SME Energy CheckUp

Financing

esi EUROPE DRIVING INVESTMENT IN ENERGY EFFICIENCY

WHAVES WASTE HEAT VALORISATION FOR MORE SUSTAINABLE ENERGY INTENSIVE INDUSTRIES

Energy Efficiency Financial Institutions Group

EPC and standardisation

INVESTOR CONFIDENCE PROJECT

guarantEE Building Energy Services in Europe

Policy

ENSMOV TOWARDS BETTER ENERGY EFFICIENCY POLICIES

EPATEE

ENSPOL Energy Saving Policies

Cooperation agreements:

DENEFF DEUTSCHE UNTERNEHMENSINITIATIVE ENERGIEEFFIZIENZ

EREK European Resource Efficiency Knowledge Centre

EVO

The scheme basics: EEO + WhC trade



WhC is an EEO

DSOs have to meet energy saving targets

Demand

Certificates can be traded on the market

Supply

Voluntary parties (small DSOs, ESCOs and companies with energy management expert or EnMS) can also obtain certificates

WhC is partly an incentive

Source: FIRE.

1 WhC = 1 additional toe
All sectors are virtually eligible.

The Italian scheme is an EEO scheme with WhC market. It has been working since 2005 and has so far delivered more than 27 Mtoe of additional energy savings, mainly metered.

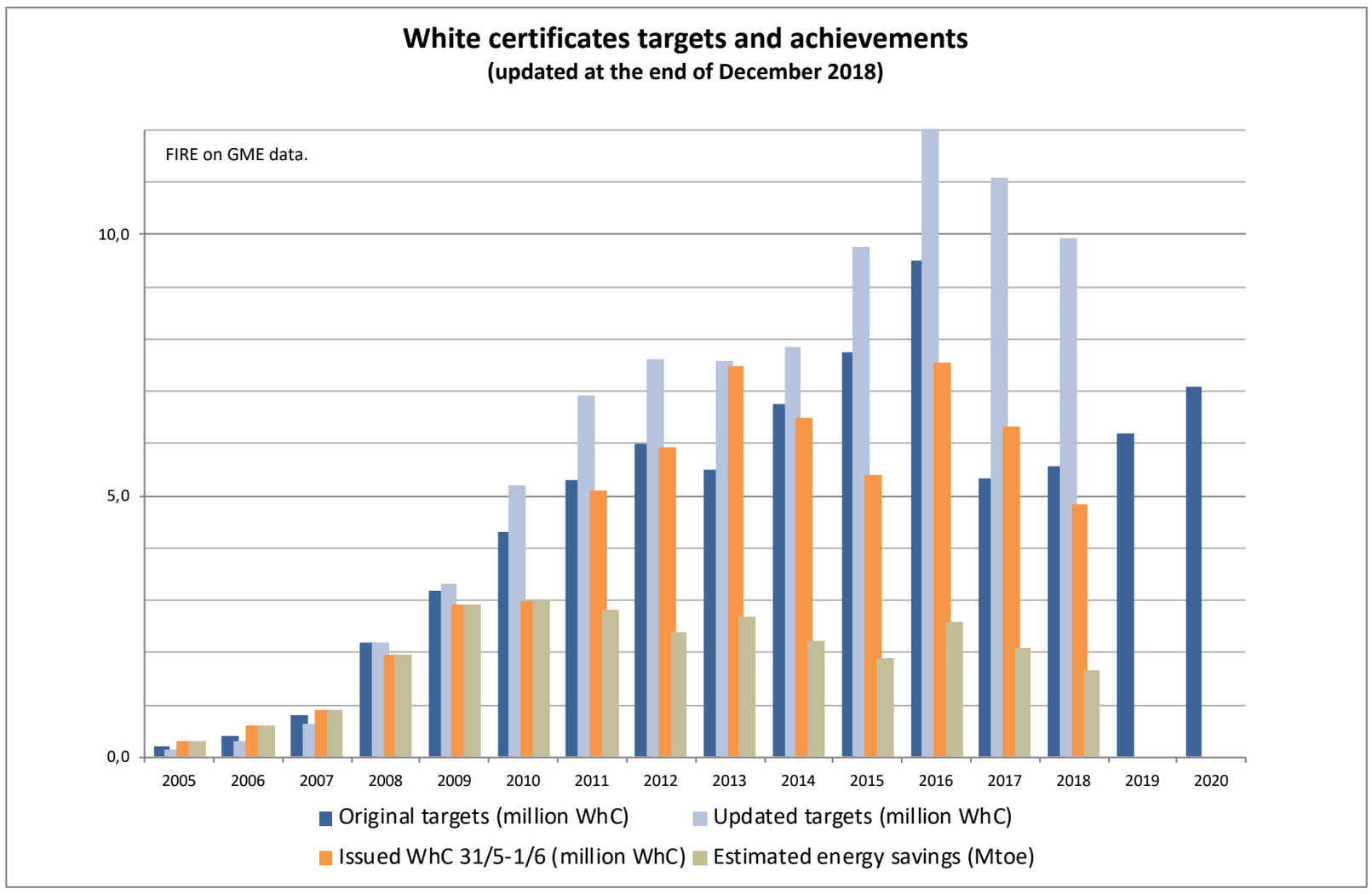
Main results



- Around 51 million WhC issued and 27 Mtoe cumulated delivered by 2018;
- ESCOs have been the main actor in presenting projects both in terms of proposals (96%) and of toe (70%, whereas 25% come from end-user companies and 5% from DSOs);
- ≈61% of those savings have been metered and ≈52% have been linked to monitoring plan projects;
- Lot of data achieved through MPPs leading to a huge and detailed projects' database, even if some data are not easy to categorise;
- Capability to promote industrial energy efficiency projects linked to manufacturing process improvements;
- Low cost of the incentive per toe if compared with other schemes (e.g. tax credit);
- 15 years of working time (it's the longer-life scheme for energy efficiency available in Italy).

WhC targets and achievements





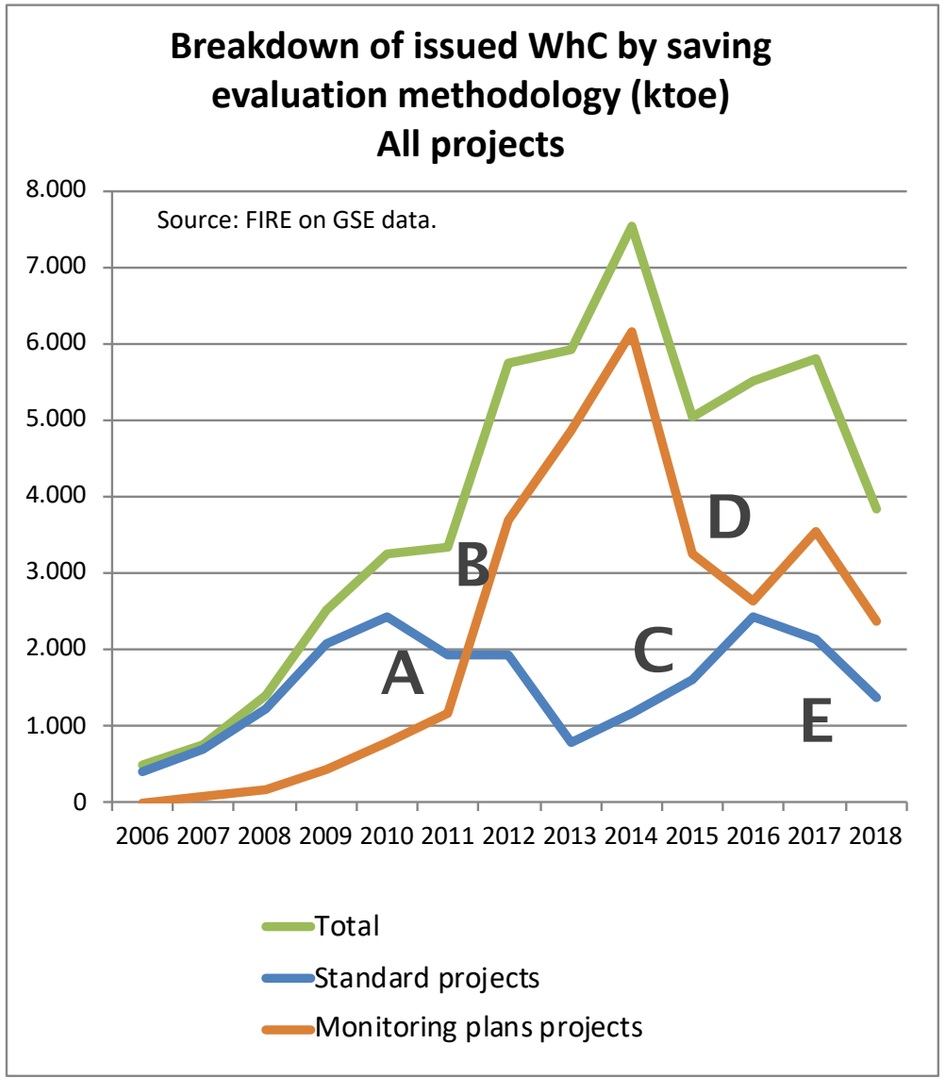
Despite the many issues that had arisen over the years, till 2013 transitions have been managed in a satisfactory way. There are two main problems worth mentioning that translated in the following years in serious shortage: the **management of the additionality in 2015-2016** and the **large frauds discovered in 2017** operated by malicious purpose companies.

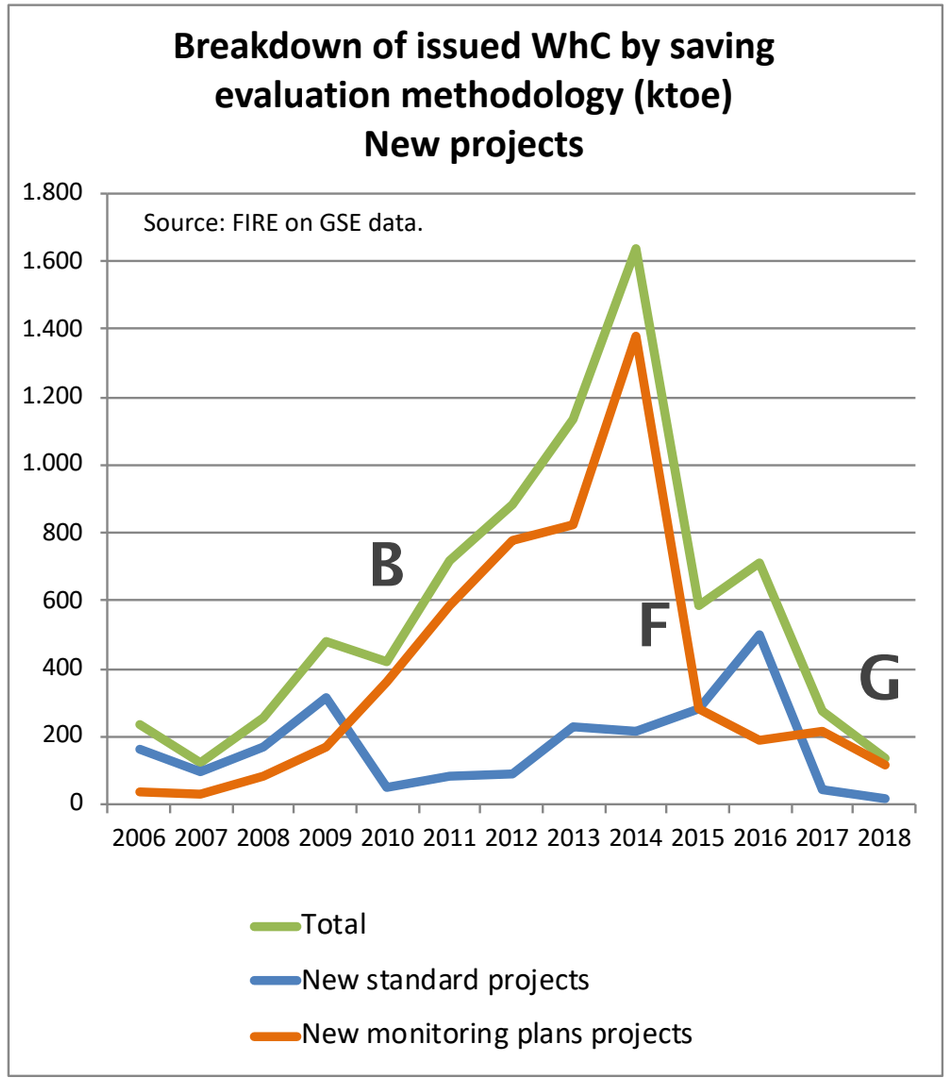
Main events:

- In 2008 targets were risen due to over performance.
- The elimination of CFLs and other simple solutions and the end of the 5-years cycles produced a shortage.
- In 2011 the *tau* multiplier was introduced.
- In 2013 targets were reduced due to shortage (despite the introduction of the *tau*) and cumulability with tax reduction was eliminated.
- Since 2014 it was no more possible to present MPP projects after their start-up.
- Since 2017 new (reduced) targets, no more *tau* and SPs, stricter rules for additionality and consumption baseline.
- Mid-2018: last modification.

WhC issued (total and new projects)

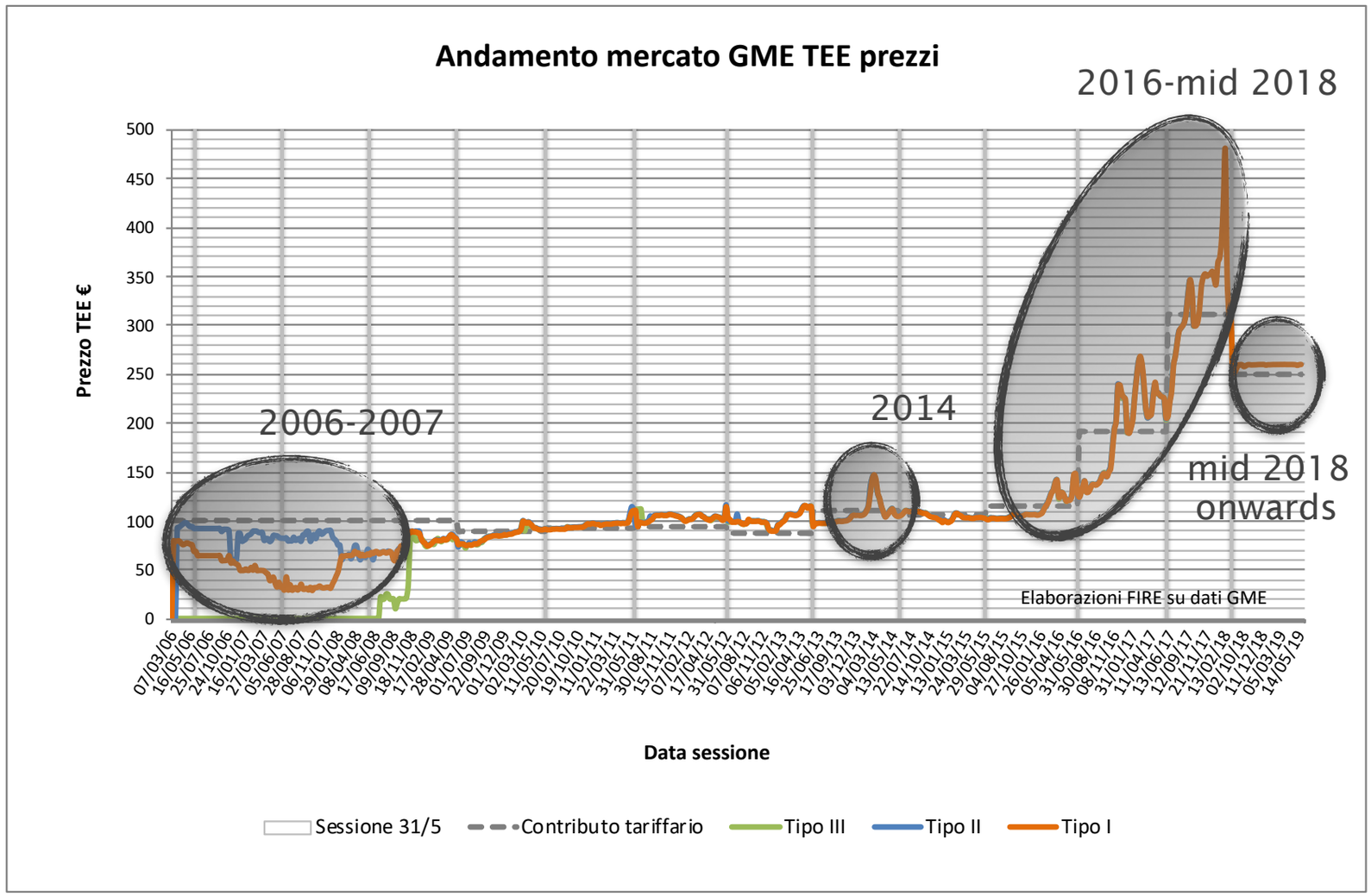






A: CFLs and similar EE measures no more additional
B: Introduction of the *tau* coefficient
C: New SP forms and revival of distributed EE measures (e.g. insulation)
D: EE measures with short pay-back time no more additional (also for approved projects)
E: Frauds discovered and tightened controls
F: Change in rules for MPPs timing (proposals to be presented before start-up)
G: No more SPs and stricter rules

WhC market and economics



Comments:

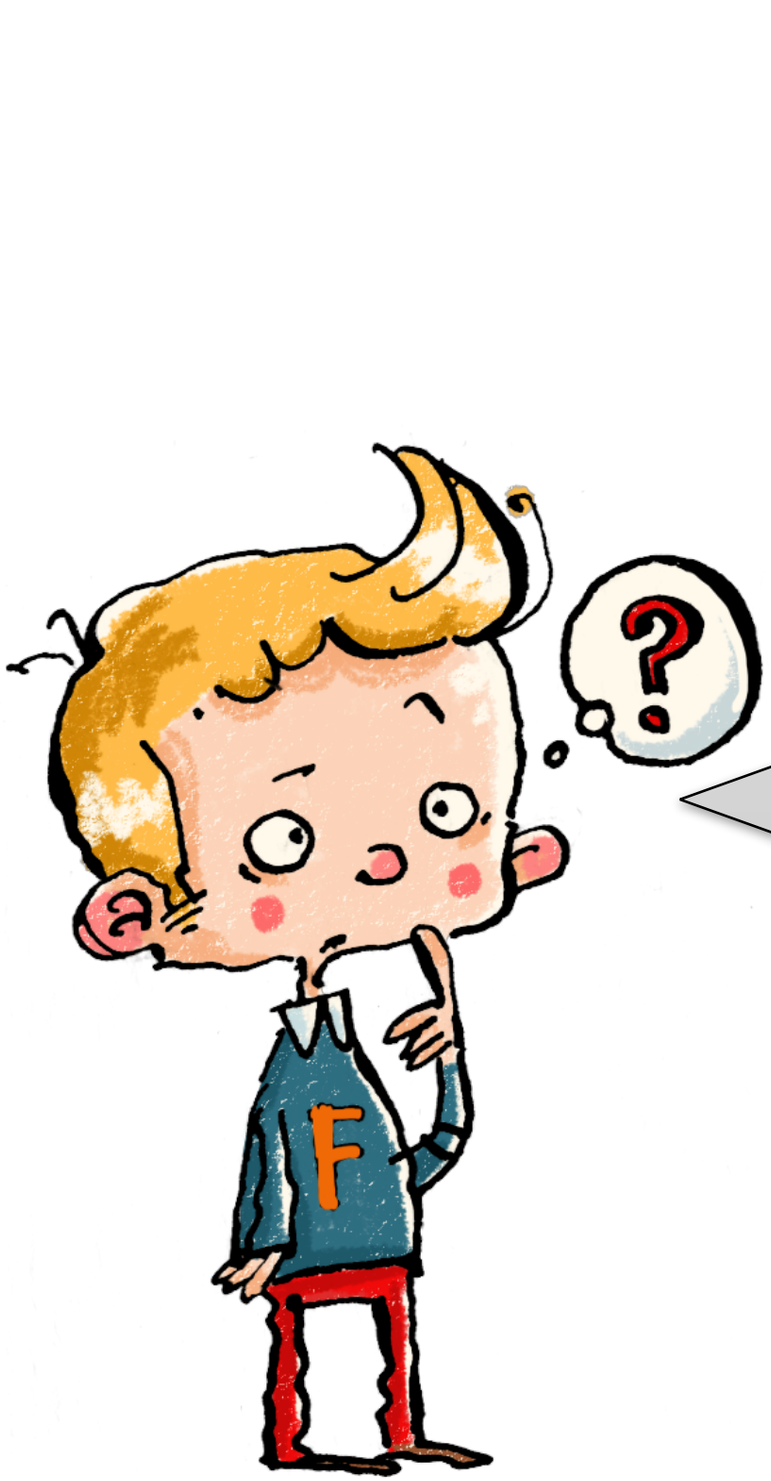
- The WhC market requires an adequate supply elasticity.
- Equilibrium between demand and supply is difficult to obtain by setting targets in the long run due to changes in rules and in the energy efficiency market.
- An unstable market makes the scheme unreliable for investors or speculative.
- If WhC are obtained over a certain lifetime, the effects on the scheme cost can be huge.

Ministerial decree setting the scheme's guidelines	WhC lifetime	Additionality	Certificates issued per year per saved toe	Discounted value of certificates at 100 euro/ certificate	Discounted value of certificates at 250 euro/ certificate
D.M. 28/12/2012	5	10%-100%	0.34-3.36	145-1,455	364-3,637
D.M. 11/01/2017	10	10%	0.10	77	193
D.M. 10/05/2018	7	100%	1.00	579	1,447

For understanding the table contents: https://www.dariodisanto.com/wp-content/uploads/2019/07/3-59-19_Di-Santo.pdf

Main issues





- Low materiality for industrial projects till 2013;
- Over incentivising for some industrial projects initially managed by modifying eligibility criteria, then by changing additionality on-the-run (not good…), then again through eligibility;
- Consumption baseline requirements and proposals deadline are quite strict since 2017 guidelines;
- Additionality evaluated on a per-project basis has been difficult to manage, especially for industrial project, less standardised than buildings and transport ones;
- Complexity improves projects quality and qualifies operators, but needs support in terms of information, training and communication with market operators;
- Target setting is difficult and requires caution and/or strong flexibility in place;
- WhC market is theoretically a good concept, but practically showed some issues, especially with DSOs as obliged parties;
- Frauds can be a real issue with standardised projects.

News introduced by D.M. 10 maggio 2018



Some of the main news:

- No more additionality integrated in the scheme for projects linked to improvements of existing facilities. WhC lifetime reduction (from 10 to 7 years and from 7 to 5).
- New eligible projects and introduction of eight SMSPs files (led for internal and public lighting, electric motors, compressed air generation, smart bill, naval propulsion systems, hybrid and electric vehicles fleets).
- Improved flexibility for DSOs (two years to recover the 60% target flexibility instead of one).
- 250 euro DSOs' reimbursement cap.
- Possibility to issue temporary non-energy saving related certificates by GSE in case of lack of certificates to cover the minimum target.

Another important news was the change of the top management at GSE, with the goal of re-launching the scheme, by improving the support and communication activities, and reducing the legal dispute.

Final comments



D.M. 10 maggio 2018 introduced measures that deal both with demand and supply.

Presently the scheme faces a strong undersupply of certificates. However, a large number of certificates are presently suspended under administrative court trial. If unlocked, the situation should improve in the next two years.

To improve the situation, GSE new management started a new approach from end 2018 to reinforce dialog, improve support to stakeholders, and clarify rules, while continuing to ensure a strict evaluation and verification approach.

In the coming months WhC operators will face interesting and stable WhC prices and clearer rules and this could facilitate an increase in supply.

Options to think about for the future: re-introducing SPs, adding market stability tools (such as the market stability reserve in the ETS), revising timing and metering criteria for MPPs, etc.

Market schemes require a good evaluation in place and continuous management.

Acronyms



MPPs: monitoring plan projects (metered projects)

SPs: standard projects (deemed savings projects)

WhC: white certificates

EE: energy efficiency

ETS: emission trading scheme

Main institutional stakeholders:

MiSE: Italian Ministry for Economic Development

GSE: Italian agency in charge of the WhC scheme management

GME: Italian WhC market (spot and bilateral exchange) operator

ARERA: Italian Regulation Authority for Energy, Networks and Environment

TAR: Administrative courts, appealed by proponents with rejected proposals or other issues

Thank you!





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