Lessons learnt from the Italian white certificate scheme

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FIRE: the association for energy efficiency

Do you need a hand in energy management?

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 nearly 450 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 - to certify the Energy management experts according to the standard UNI CEI 11339.

www.fire-italia.org
FIRE: the association for energy efficiency

Some members of FIRE:

Our membership include organization and professionals both from the supply and the demand side of energy efficiency services and solutions.
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: Ministry of Environment, ENEA, GSE, RSE, large organizations (such as *Centria*, *ENEL*, *Ferrovie dello Stato*, *FIAT*, *Finmeccanica*, *Galbani*, *H3G*, *Poste Italiane*, *Telecom Italia*, *Unioncamere*), universities, associations, energy agencies and exhibition organizers.

[www.fire-italia.org](http://www.fire-italia.org)
SECEM, European System for Certification in Energy Management, is a certification body created by the FIRE.

SECEM was the first body to offer third-party certification for Energy Management Experts (EMEs) according to UNI CEI 11339 and is accredited according to the ISO/IEC 17024 standard.

In Italy two standards were developed in order to promote the qualification of energy efficiency operators: UNI CEI 11339 for EMEs was issued in 2009, UNI CEI 11352 for ESCOs was published in 2010. A new standard for energy auditor is presently under preparation.

Both the mentioned standards are recognized from the national legislation within the energy audit obligations for large companies introduced by the EED directive and the white certificate scheme.
The IEE ENSPOL project

The ENSPOL project’s main aim is to support member states who intend to set up new EEO schemes or implement alternative measures, as well as inform about the on-going development of existing schemes, and support member states with an existing EEO scheme to improve it, learning from and building on existing experiences.

The specific objectives of ENSPOL are to:

- Assess the relative strengths and weaknesses of EEOs and alternative measures based on the existing experiences and plans of member states and make recommendations for the most appropriate approaches against different criteria and under different conditions.

- Improve the knowledge and capabilities of member states (both within and outside of the project) with regards to the different options available for implementation of Article 7 (EEOs and alternative measures).

- Ensure the effective engagement of the broad range of stakeholders with an interest in the implementation of Article 7 and promote a wide consultation at European level.

- Complement and enhance the work of existing EU and member states initiatives concerned with the implementation of Article 7 EED.

The ENSPOL project started up in 2014 and will go on till mid 2016.

More information at: www.enspol.eu.
ENSPOL achievements so far

- Comprehensive analysis of existing EEOs focusing on project results (6 countries). (Deliverable 2.1.1)
- Analysis of planned EEOs focusing on their design elements (10 countries). (Deliverable 2.1.1)
- Context analysis of countries with existing / planned EEOs – Identification of national contextual challenges to the implementation of EEOs. (Deliverable 2.1.2)
- Analysis of alternative measure by examining their key implementation and design features (8 countries). (Deliverable 3.1)
- Comprehensive analysis of existing EEO schemes outside the EU, their design elements and demonstrated results (Deliverable 2.2)
- Analysis of policy mixes in MS (Deliverable 5.1)

The reports available on the website cover all the EEO and alternative measures schemes in place and in design phase.
Webinar’s agenda

1. Introduction to the webinar and the ENSPOL project
2. Lessons learnt from the French schemes (Elodie Trauchessec, Ademe)
3. Lessons learnt from the Austrian schemes (Christoph Ploiner, AEA)
4. Lessons learnt from the UK schemes (Philippa Hulme, Ofgem)
5. Lessons learnt from the Italian schemes (Dario Di Santo, FIRE)
6. Discussion
EE support schemes in Italy

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<td>Other options (Elena, Jessica, EEEF, structural funds, local funds, etc.)</td>
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Source: FIRE.

CHP: high efficiency cogeneration
DH: district heating
RES: renewable energy sources
EEEF: European energy efficiency fund
The scheme basics: EEO + WhC trade

- **WhC is an EEO**
- **DSOs have to meet energy saving targets**
- **Supply**
  - Certificates can be traded on the market
  - Voluntary parties (ESCOs and companies with energy manager or EnMS) can also obtain certificates
  - WhC is an incentive
- **Demand**

1 WhC = 1 additional toe
All sectors and all energy efficiency projects are allowed.

Source: FIRE.
Targets from 200 ktoe in 2005 to 7,600 ktoe in 2016;
Additionality based on market or regulatory baseline per single project or deemed saving file;
Deemed, scaled and metered saving procedures in place (surveyed savings not used yet);
≈85% of savings are metered and ≈82% are monitoring plan projects (in 2007 ≈90% were deemed savings);
ESCOs have been the main actor in presenting projects both in terms of proposals (96%) and of toe (70%, whereas 25% come from companies with energy manager);
Flexible managing agencies needed to deal with the “growing” proposals (13,716 RVCs and 1,035 PPPMs presented in 2014 VS 2,333 RVCs and 225 PPPMs in 2011; 10,763 PPPMs in 2015)*;
All energy efficiency projects in all sectors are allowed; the scheme moved from civil sector projects to industrial ones;
Controls are mainly documental, but on-site controls are rising.

* RVCs are the request made to obtain WhC for a certain amount of additional savings. PPPMs are the proposal under the metered saving procedures, in which the proponents defines the EE project, baseline, additionality, and algorithm to be used (if approved is followed by the needed RVCs).
The tau coefficient

How the *tau* coefficient works

Hypothesis: annual saving 100 toe, tau=3.36

The tau coefficient allows complex projects to obtain more certificates, but in the industrial sector it is difficult to ensure that a project continues to generate savings all over its lifespan.
WhC spot market price trend

WhC market price trend

- WhC oversupply
- WhC shortage
- Equilibrium

Source: FIRE evaluation based on GME data

Market session data:
- "May 31st session"
- "DSO's reimbursement"
- "Other fuels savings"
- "Gas savings"
- "Electricity savings"
Main lessons learnt

- Need for adapting (usually growing) M&V teams for managing bodies, such as ministries or agencies;
- Need for large information and training campaigns to have rapid developments;
- Deemed, scaled and metered saving procedures are all needed (the first ones to start, the others to grow);
- The tau coefficient created issues in case of failures (or changes to the EE project) before the end of the technical life of the EE project;
- If ESCOs and other intermediaries can present projects, it is important to ask for the right assignation of responsibilities, in order to manage potential issues with the EE projects;
- Targets play an important role and should be accompanied by flexibility clauses;
- Poor design of deemed saving files can lead to consistent issues;
- Importance of reliable and well defined consumption baselines and of isolation of the savings due to the EE projects.
News about the Italian scheme

New guidelines to be introduced in order to improve the scheme (cost effectiveness, additionality/materiality, saving assessment, support to complex projects, etc.).

The most important lesson learnt is that such a scheme can not born perfect, but it needs continuos care and also some imperfections should be accepted during transitions.

Some directions from MiSE for the new guidelines, to be issued in few months:

- no more tau coefficient;
- new evaluation methodology (simplified monitoring plans with sample measurements) and surveyed savings;
- stricter evaluation of ex-ante consumption;
- new rules for responsibilities with ESCOs as proponents;
- pay-back time minimum requirements;
- increased controls.
Thank you!

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