

# EED implementation in ITALY

## Introduction

This report highlights the main aspects of the EED implementation in Italy with reference to March 2016

The **Ministry for Economic Development** (cft. MiSE) has the competence on the establishment and implementation of Energy Efficiency policies and measures, supported for the technical and scientific aspects by **ENEA** the National Agency for New Technologies, Energy and Sustainable Economic Development, **GSE** Gestore dei Servizi Energetici and other executive actors such as **Agenzia per il Demanio** - Agency for state property, and national institutional entities, such as the **Ministry of Environment, Land and Sea** – MATTM, the **Ministry for Economy and Finance** – MEF, the **Ministry for Infrastructures and Transports** – MIT, the **Italian Regulatory Authority for Electricity Gas and Water**- AEEGSI, , **ISPRAmbiente**, etc, either for the concertation of guidelines, legislations, recommendations and the data collection, gathering and assessments.

## 1. Legal context

In Italy the EED provisions have been fully transposed into national laws: the main one is The Legislative Decree (Dlgs) n. 102 issued on 4 July 2014 .

**The Dlgs 102/2014** establishes a framework of measures for the promotion and improvement of the efficiency, designed to achieve the national energy saving targets in all sectors, such as defined for 2020, and actions to overcome obstacles and shortages in the market that hamper the efficiency in the supply and end-use of energy.

The national indicative energy savings target is determined using the implementation methodology of Art. 7/ EED: i.e. the reduction of consumption primary energy of 20 million of tons / oil equivalent (Mtoe) in 2020, amounting to 15.5 Mtoe of final energy.

The main issues covered by the decree are:

- a. The introduction of significant updates for the refurbishing of the buildings. In particular, under Articles 5 and 6, Annual energy upgrading interventions are expected on public buildings from 2014 to 2020, as well as interventions programs for the rehabilitation of both public and private buildings.
- b. The obligation for large companies **and** for energy-intensive companies as well, to perform energy audits using certified entities by 5 December 2015, and thereafter every four years.
- c. To allow a major awareness by the final users on their own energy consumption, the decree envisages that the AEEGSI shall prepare enabling requirements for the smart counters, which distribution companies will be committed to comply with, and activities to provide users with individual smart meters
- d. The introduction of a three-year program of training and information aimed at promoting the efficient use of energy;
- e. Promotion of energy performance contracts, and introduction of simplification measures to promote energy efficiency
- f. Establishment of a National Fund for Energy Efficiency in favour of interventions consistent with the achievement of the national targets for energy efficiency.

In addition, specific sector measures have been enacted with reference the public and private building (education building, social housing etc), local level (regions and municipalities), accreditation schemes, information and communications, hereinafter reported under EED specific articles

## 1. Status of the implementation

### 2.1. Legislative provisions

This table contains information on how the EED has been implemented by article, including any relevant web links.

EED Article	Implementation status
Art 4	<p>Two inter-ministerial decrees of MiSE and MATTM, in concertation with other ministries and institutions , based on 2 respective public consultations (deadline Dec. 4th, 2015) are to be issued to launch:</p> <ul style="list-style-type: none"> <li>• the <b>STREPIN</b> : National strategy for Energy Requalification for either Private and Public real estate, and</li> <li>• the <b>PANZEB</b> – National Action Plan to increase the number of NZEB buildings</li> </ul> <p>Moreover: an inter-ministerial Decree has been issued on June 26<sup>th</sup>, 2015, encompassing three decrees : on minimum requirements and calculation methods for energy performance, devoted to Nearly Zero new Buildings, refurbishments, renovations, guidelines, reference schemes for energy performance certifications (APE), EPC inspections, ICT system for the EPCs (SIAPE) . The new guidelines on APEs, entered into force on October 2015, aim to harmonize the EPC procedures and issue at national level.</p> <p>Additional measures will also be provided to assist municipal authorities in their role as promoters of energy efficiency at the local level and to provide homeowners with an (indicative) energy label. This approach applies both for the building of residential and non-residential buildings.</p> <p>Other behavioural measures are included in the Three Years Communication Plan (PIF mentioned below at art. 12)</p>
Art 5	<p>Art. 5(6): Italy has chosen the Default Approach</p> <ul style="list-style-type: none"> <li>• Legislative Decree July 13, 2015 n. 107, a national reform law that establishes, among other things, the construction of innovative schools from the architectural point of view, systems, technology , energy efficiency and structural and earthquake safety.</li> <li>• 2016 Budget year National law (<a href="#">208/2015 or Stability Law</a>), ca. 170 million € have been allocated to EE interventions in Social Houses</li> <li>• C.S.E. 2015 – Comuni per la Sostenibilità e l'Efficienza Energetica (a tender for municipalities to implement sustainability and energy efficiency);</li> <li>• Fondo Kyoto: A revolving fund, of 350 million euro, for the low-interest loans for the retrofit of school and university buildings. UPGRADING SCHOOLS</li> <li>• Allocation of Resources for school building refurbishing (2014) and a Three Year National Program for School Building 2015 ;</li> </ul>

EED Article	Implementation status
	<p>. Increase of financial budget for EE for Convergence Regions (ERDF) 2015: ca 1,5 billion € for EE interventions in local PA</p>
Art. 4 + 5+ 6	<p>.Definition and dissemination of energy performance contract models: A consultation with operators for the finalization of the EPC model proposed by ENEA is underway.</p> <p>.Moreover: an inter-ministerial Decree has been issued on June 26th, 2015, encompassing three decrees : on minimum requirements and calculation methods for energy performance, devoted to Nearly Zero new Buildings, refurbishments, renovations, guidelines, reference schemes for energy performance certifications (APE), EPC inspections, ICT system for the EPCs (SIAPE) . The new guidelines on APEs, entered into force on October 2015, aim to harmonize the EPC procedures and issue at national level. Every intervention must comply with MEPS.</p> <p>.For Article 4(d), MiSE and MATTM issued the inter-ministerial Decree January 9th, 2015 which establishes functions and modalities of the “<b>cabina di regia</b>”, a control room set up by art.4 of <b>Dlgs</b> 102 to agree upon a medium-long term plan of interventions to improve energy performance in buildings , to coordinate EE measures through the National Fund for EE (art 15 of D.lgs 102/2014), to promote training for projects, synergies with Regions, dialogue with operators and FIs for stimulating the energy service market, to propose to Ministries more effective EE measures</p> <p>.Set UP of PREPAC - Program for the renovation of the central public administration buildings:</p> <ol style="list-style-type: none"> <li>About 3500 are the buildings (13 million square meters) occupied by the central PA</li> <li>the aim is to refurbish at least 3% per year (2014-2020) is approximately 400,000 square meters</li> <li>the estimated expenditure is € 541 million, 355 million already put in place by the Government</li> <li>two "call for projects" launched (October 2014 and July 2015)</li> <li>157 projects for about 113 million euro have been presented and are under evaluation.</li> </ol>
Art 6	<p>Budget Law 2007 n. 296/2006 committed MATTM and MEF to issue action plans for the environmental sustainability of the PA consumptions; these Ministries issued the “National Action Plan on Green Public Procurement - PAN GPP “ that at Point 3.6 sets the products for which Minimum Environmental Criteria have to be satisfied. <a href="#">Decreto Interministeriale 135 dell'11 Aprile 2008</a>.</p> <p>Up to 2012, MATTM issued several decrees which rule PA purchasing of goods and services, per sectors (transports, lighting, construction etc.).</p> <p>The set-up minimum criteria (CAM - Criteri Minimi Ambientali), mainly refer to environmental impact (CO2 emission limits) and safety. They have to be consistent also with cost-effectiveness requirements.</p> <p>The products (PCs, printers, photocopy papers, air conditioners, toner and inks, LED for traffic lights, etc.), services (energy, food and cleaning) and buildings with high energy-efficiency performance purchased by PA, have to comply with EE requirements defined also by other related EU acts (Eco Design Directive, Energy Performance of Buildings Directive, Ecolabelling Directive etc. ..)</p> <p>PAN GPP has been revised and updated twice:</p> <p>. in 2013, to strengthen the general approach <a href="#">Decreto 10 aprile 2013 (Gazzetta</a></p>

EED Article	Implementation status
	<p><a href="#">Ufficiale n. 102 del 3 maggio 2013</a>).</p> <ul style="list-style-type: none"> <li>In 2016, <a href="#">Dlgs 8 Aprile 2016, N. 50</a>: relevant changes refer to new CAMs for the construction sector. In particular it is mandatory to carry out energy audits for existing buildings, while for new buildings and relevant refurbishings, their energy need shall be satisfied by RES plants or by, in alternative, high efficient systems (eg. CHP/trigeneration, central heat pumps, etc.) <a href="#">Decreto 24 Dicembre 2015</a></li> <li>Furthermore, art. 17 of the <a href="#">Law nr 221, Dec. 28th, 2015</a>, provides that environmental certifications such as EMAS e Ecolabel, ISO 14001 and 50001 give priority access to environmental grants, incentives and subsidies</li> </ul> <p>The central agency for PA purchases (CONSIP), is involved in developing schemes for public tenders in these sectors and in EPC definition, in collaboration with ENEA, in support to MiSE.</p>
Art. 7	<ul style="list-style-type: none"> <li>The <i>WCs Scheme</i> has completed its 10th year of enforcement; the foreseen energy saving targets have been achieved and new one have been identified. The Guidelines are under revision (issue Sept. 2016) with the aims of : improving efficacy of the mechanism and enhance the additional energy saving achieved by the projects; preventing speculation behaviours, rewarding the most innovative technologies and the most effective initiatives.</li> </ul> <p>As complementary measures art7(9) the following political additional measures have been introduced:</p> <ul style="list-style-type: none"> <li><i>Conto termico</i> (Heating &amp; Cooling Support Scheme): incentive system for small interventions to increase EE and to produce thermal energy from renewable sources. <a href="#">Inter-ministerial Decree 16.02.2016</a> , which includes new provisions as a result of a public consultation held in 2015, strengthens and simplifies the previous supporting scheme introduced by decree 28/12/2012.</li> <li><i>Ecobonus</i>: Fiscal deductions of 65% of total investment for private building refurbishment namely related to transparent and opaque envelopes, thermal solar plants for production of sanitized hot water and ; high efficiency boilers and heat pumps in heating and cooling systems. The measure has been extended to end 2016. IEA recently mentioned this measure as a best practice at international level, with specific reference to its role in the spreading of an energy efficiency culture at local level.</li> </ul> <p><b>Achieved savings</b> for the above measures have been:</p> <ul style="list-style-type: none"> <li><i>White Certificates scheme</i>: in the 2005-2013 period, this tool contributed with a primary energy saving equal to 4.85 Mtoe/year (equivalent to 3.4 Mtoe/year of final energy). To reach this objective, both analytical and standard projects, and ex-post calculation have been implemented.</li> <li><i>55/65% tax deductions</i> : at 2013, the overall primary energy saving has been slightly higher than 0.91 Mtoe/year, equivalent to little more than 0.85 Mtoe/year of final energy . Indeed, between 2007 and 2014, more than two millions of interventions have been realized, and at 2013 households had invested EUR 22 billion, with a cost of EUR 13 billion in terms of fiscal revenue.</li> <li><i>Conto Termico</i>: since its implementation in July 2013 until November 2014, eligible beneficiaries submitted around 9,000 applications, among which more than 6,000 in 2014. Earmarked funds have amounted to more than EUR 22 million. Since most of the proposed projects are still in the realization phase, it was not possible to estimate the achieved energy saving.</li> </ul>
Art. 8	Energy audits in industry are carried on by ESCOs, experts in energy management or energy auditors.

EED Article	Implementation status
	<p>About 7600 obliged subjects have performed audits and they have been collected into ENEA's database; this will soon allow statistics and trends.</p> <p>By an Inter-ministerial <a href="#">Decree</a> issued on May 12th, 2015, MiSE, MATTM and Regions have launched a programme to implement audits in SMEs in 2014-2020. 15 million € are expected to be made available by Regions, thus the total amount for the programme implementation will be 30 million €; projects so far presented by 15/21 Regions will start in September 2016 onwards.</p>
Art. 9-11	<p><b>Measurement:</b> The final customers of energy must be provided with individual meters that reflect their actual energy consumption and provide information on actual time of use of energy: By December 31, 2016 set up of obligation of individual meters installed to measure the actual heat consumption for each building unit. If not feasible, it is mandatory to install temperature control and heating accounting systems in each radiator located inside the building units.</p> <p><b>Billing:</b> The end user must have access to information on his historical consumption and make his consumption data available to an energy service provider.</p> <p>AEEGSI has launched in August 2015 and may 2016 consultations for the definition of the technical requirements of the second generation of smart meters for the measurement of low voltage electricity. Within 2017, 33 million of second generation smart meters are planned to be installed at end-users's premises.</p>
Art 12	<p>A national program for information and training (Programma triennale di informazione e formazione <b>PIF</b>) 2015-2017, has been issued.</p> <ul style="list-style-type: none"> <li>• Funding: 3 million € over three years, 1350000 for the first one.</li> <li>• Targets: enterprises, operators promoting EE such as energy managers, ESCOs and energy experts, PA personnel, students, families, multifamily buildings, consumers, financial institutions and to "multiplier effect subjects": i.e non-technical individuals that transfer EE info and behaviours to close environments.</li> <li>• Features: continuous dialogue with stakeholders and graduality, flexibility, in monitoring and cross-checking the result</li> <li>• Actions: information to large public, targeted information campaigns ( i.e. about the measures and programmes that implement EED articles listed above: PREPAC, Ecobonus, etc.), training to PA, Multifamily building managers, Media professionals, real estate agents, all level education teachers. <a href="http://www.italiainclasse.enea.it">www.italiainclasse.enea.it</a></li> </ul>
Art. 14	<p>To promote efficiency in heating and cooling systems, by October 30, 2015 a <a href="#">Report</a> has been prepared by GSE, containing an assessment of the national potential of application of high-efficiency cogeneration and district heating as well as efficient cooling and identification of measures to be taken in the period 2020-2030 for exploit this potential.</p> <p>A consultation with Regions has been undertaken on the assessment.</p> <p>According to the Decree (art 10), as of June 5, 2014 the proponents of new projects or systems upgrades (power greater than 20 MW) or new district heating networks have to perform a cost benefit analysis.</p> <p>AEEGSI, upon MiSE input, sets the standards of district heating and cooling, establishes the criteria for determining the connection tariffs to utilities and, only in cases of new district heating networks with a supply obligation, sets the heat transfer rates.</p>

EED Article	Implementation status
Art 15	As for transformation, transmission and distribution (Art 11 of the Decree), AEEGSI, upon MiSE input, is in charge of: updating the rules for the remuneration of the development and management of networks, making provisions for dispatching priority to electricity produced from high-efficiency cogeneration plants, ruling the access to the balancing market demand, the reserve and other system services, adjusting the components of the electricity tariff to overcome the current progressive structure.
Art. 16	As for the Operators qualification, certification and accreditation schemes for Energy Management Experts and ESCOs by <a href="#">ACCREDIA</a> , the Italian Association for accreditation and conformity, have been approved.

## 2.2. Non-legislative provisions

- . Covenant of Mayors, now for both Mitigation and Adaptation scopes, is more and more put in place by municipalities in Italy, with its highest number of signatories in Europe; ENEA's mission is (acting as both national agency for energy efficiency in Italy, and technical national coordinator of the CoM) supporting local administrations in drafting their Sustainable Energy Efficiency (and Climate) Action Plans, and in implementing the actions envisaged.
- . "School of Energies" which includes the [4th Summer School for Energy Efficiency](#). The 2016 edition aims at providing young Engineers and Architects with know-how and methodologies to support PA strategies implementation in the building sector.
- . "[Stati Generali](#)" for EE: an annual initiative, promoted by ENEA and EKN, for implementing bottom-up consultations on EE related issues; it represents a good practice aimed at facilitating the shift from the planning phase to the operational one, directly involving the sector operators and other stakeholders, collecting comments and proposals arising from their daily professional experiences.

## 3. Future activities

- . In the second and third year of the PIF (see above art. 12) sensitivity and awareness actions will be implemented for the promotion of audits in SMEs. Different tools (e-learning courses, capitalization events, agreements with professional associations and commerce chambers, expos, newsletters, etc.) will be put in place for the achievement of this objective.
- . New guidelines for White Certificate Scheme (see art. 7).
- . Refining and extending monitoring and evaluation methodologies on the ongoing measures, with the aim of achieving a higher effectiveness.

## 4. Relevant information

[www.enea.it](http://www.enea.it)  
[www.fficienzaenergetica.enea.it](http://www.fficienzaenergetica.enea.it)  
[www.mise.gov.it](http://www.mise.gov.it)  
[www.minambiente.it](http://www.minambiente.it)  
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