



Italian National Agency for New Technologies,  
Energy and Sustainable Economic Development

ITALIAN NATIONAL AGENCY  
FOR ENERGY EFFICIENCY



# ENEA's support to stakeholders in the context of article 8 EED.

## The Energy Audits Scheme in Italy

*Rimini (RN), 06 March 2023*

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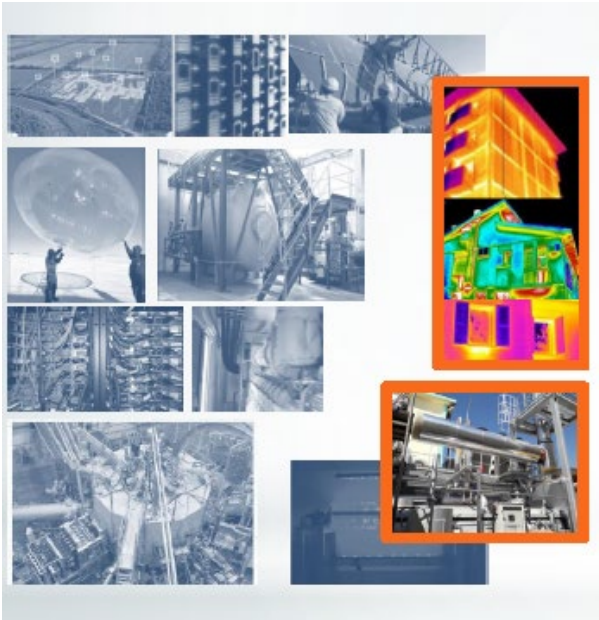
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# Summary

- ENEA's role;
- The EED Art. 8 implementation in Italy;
- Lessons learnt;
- Conclusions.

# ENEA – National Agency for Energy Efficiency (DUEE)



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Energy Efficiency Department of ENEA is the national Agency for Energy Efficiency. Our goal is to support industries, associations and tertiary companies in EE actions, and to support the public administration

DUEE-SPS-ESE coordinate all **energy audits** (EAs) activities:

- Management of Italian **EA database** (Art. 8 – EED) – Link to savings
- **Quality** control and EAs verification (documentary and on-site)
- Co-creation and edition of **sectorial guidelines** for development of mandatory Energy Audits (EAs)
- Development of innovative **methodologies** for energy analysis performance as function of sector and sites
- Standardization of procedures for **energy monitoring** and accounting
- Development of sector/process energy **benchmark** and energy **indicators** (general and specific KPIs)
- Active **training and information** activities in energy management

# ENERGY AUDIT OBLIGATION



[EU energy efficiency directive \(EED\)](#)  
[National Energy & Climate Plan \(NECPs\)](#)

EU - Art. 8 EED (2012/27/EU)  
Italy - Art. 8 D.Lgs. 102/2014

In Italy, according to Art. 8 of Lgs. D. 102/14, two categories of companies have been targeted as obliged to carry out energy audits on their production sites, firstly by the 5th of December 2015, and then at least every four years: **Large Enterprises and Energy Intensive Enterprises**.

Enterprises must upload the audits carried out at their production sites on the site <https://audit102.enea.it/>

*In Italy an organization qualifies as **Large enterprise** if it shows:*

- 1. A number of employees  $\geq 250$  and an annual turnover  $> \text{€ } 50$  million and an annual budget  $> \text{€ } 43$  million or*
- 2. A number of employees  $\geq 250$  and an annual turnover  $> \text{€ } 50$  million or*
- 3. A number of employees  $\geq 250$  and an annual budget  $> \text{€ } 43$  million*

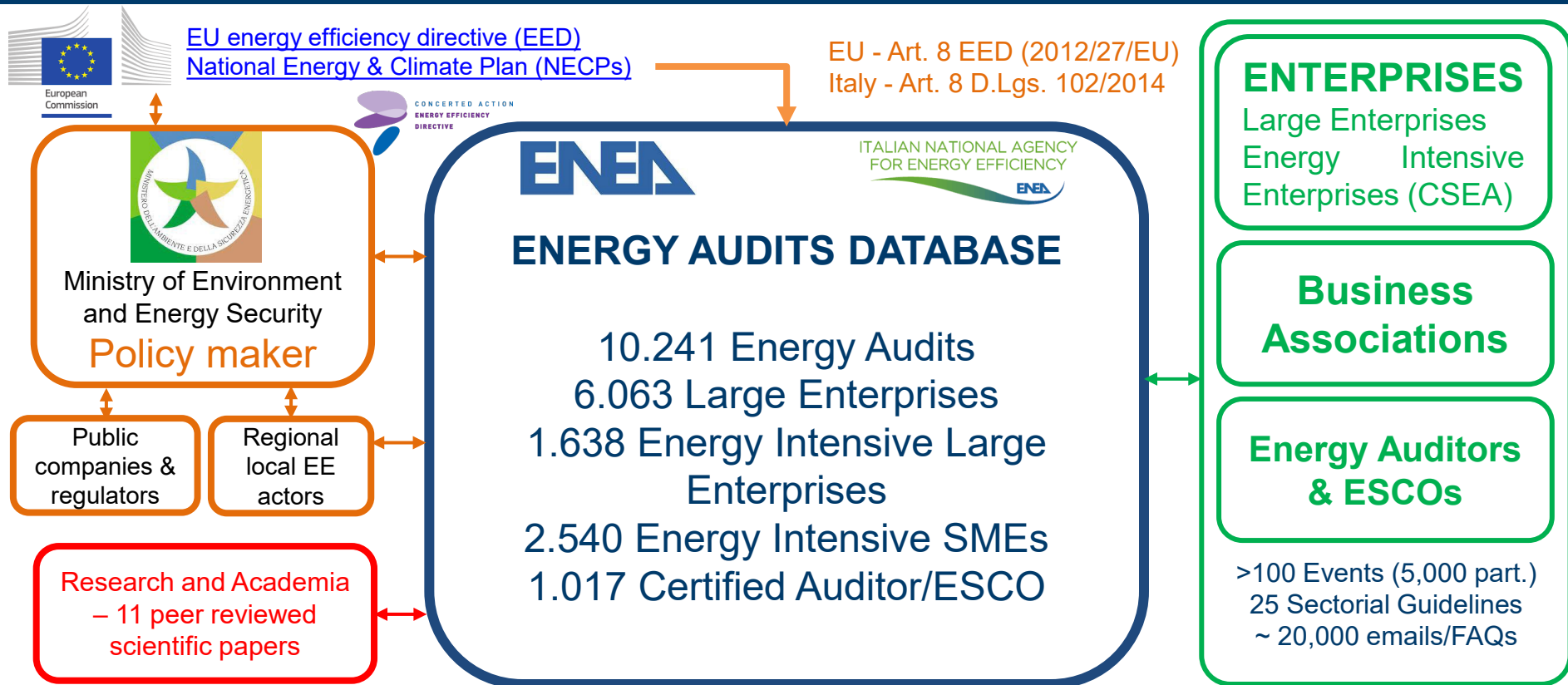
**Energy Intensive Enterprises** are the ones with large energy consumptions ( $> 1\text{GWh}$  Electricity) applying for tax relief on part of the purchased energy. All the energy-intensive enterprises are registered on the list of «Cassa per i servizi energetici ed ambientali» (Governmental Agency related to electricity).

# The Legislative Decree n. 102/2014

Lgs. Decree 102/2014 (Italian transposition of 27/2012 E.E.Directive) entrusts ENEA with the following tasks:

- **Art. 5.** ENEA designs and manages a database of enterprises obliged to undergo energy audits.
- **Art 6.** ENEA shall carry out controls to ensure compliance with the requirements of the diagnosis article, through an annual selection of a statistically significant percentage of the population of enterprises subject to the obligation ....., at least 3%. ENEA shall carry out controls over 100% of the energy audits carried out by internal auditors. The control activities will also include in “situ” inspections.

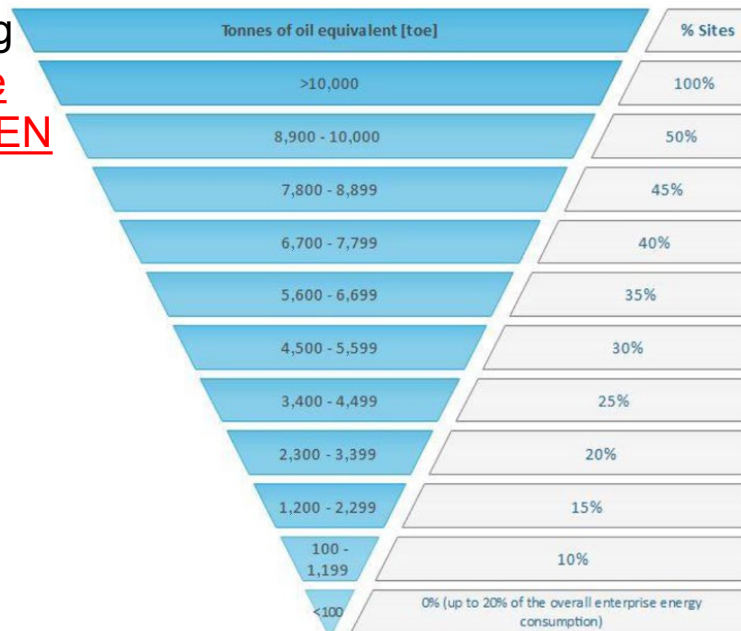
# ENERGY AUDIT ECOSYSTEM – Results December 2023



# HIGHLIGHTS ITALIAN ENERGY AUDITS SCHEME

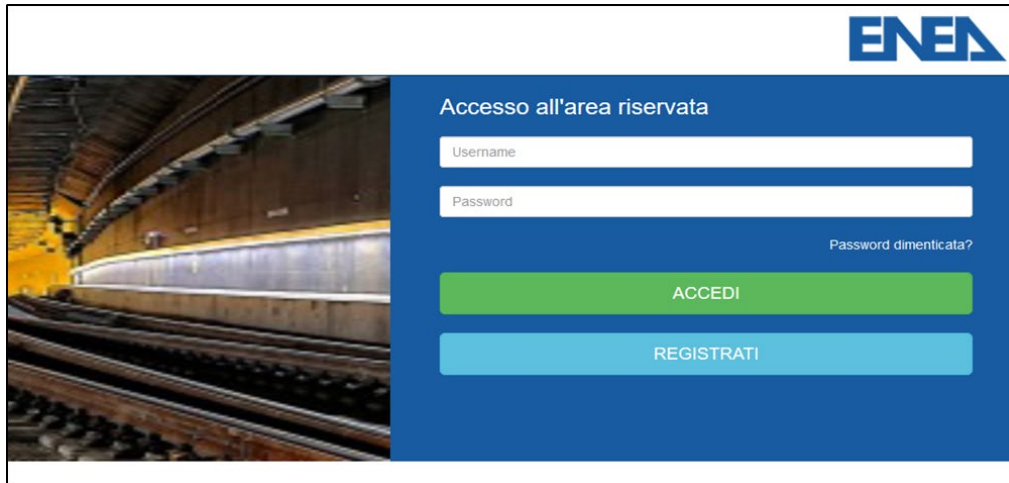
1. **Clustering** multi-site EAs → Sampling of more representative sites by consumption classes (including associated companies). Starting from august 2022 the italian methodology is included in new version of UNI EN 16247/1-2-3-4 (Part 3, Annex D).
2. Compulsory **monitoring** system/strategy
3. Mandatory EAs Energy Intensive Enterprises **LE & SMEs** (Electric consumption >1 GWh)
4. Simplified procedure for **ISO 50001**
5. EAs quality ensured by **certified** Auditor and ESCOs
6. High engagement of **users / associations** – Events, information and training;
7. Controls and sanctions.

## GUIDELINE FOR CLUSTER SAMPLING INDUSTRY



# Audit 102 – ENEA Energy Audits Database

<https://audit102.enea.it/>

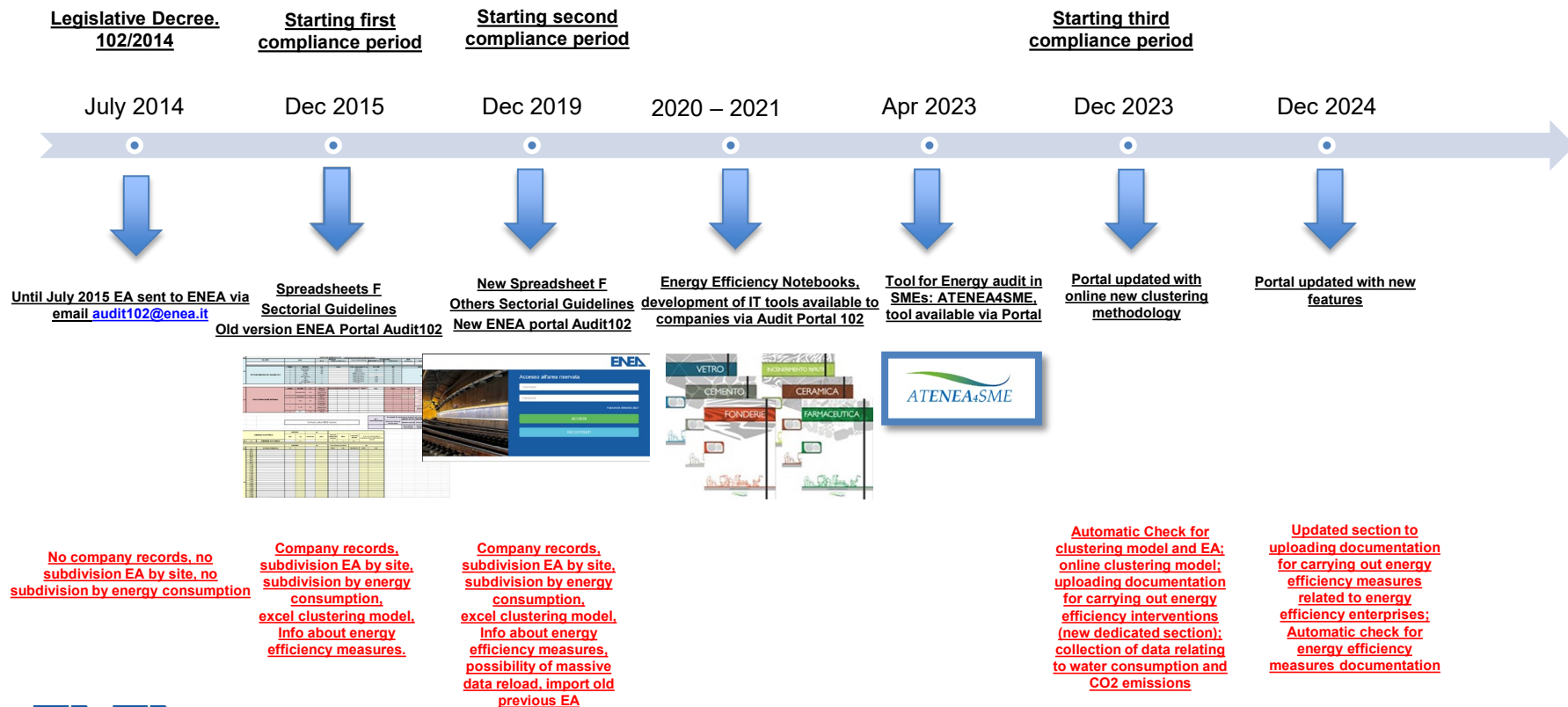


## Audit 102: EA italian database

- > 20.000 enterprises registered
- 1280 ESCO/EGE registered
- More than 40.000 EA uploaded



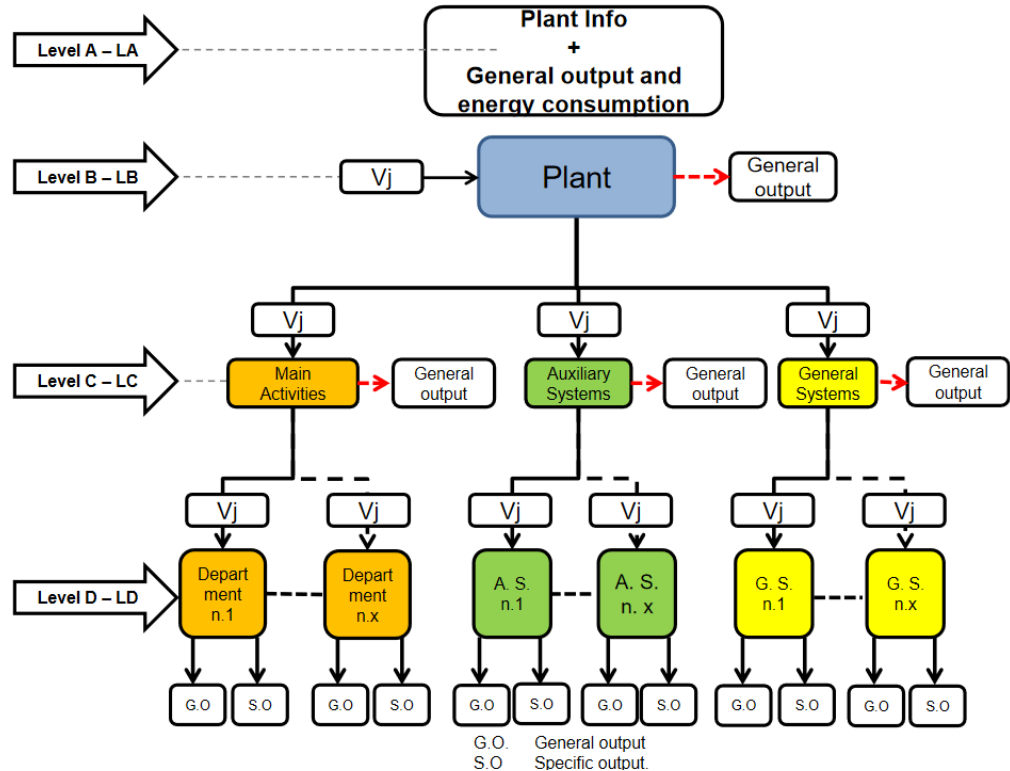
# The ENEA's tools on the Audit102 ENEA web portal



# ENERGY AUDITS DATABASE

## DATA SOURCES

1. EA reports
2. Pre-compiled spreadsheet energy consumption
3. Clustering file
4. User's portal-  
Internal Database



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## Available info for First level benchmark

- General Info: sectorial and geographical
- Class size, certifications and monitoring
- Production (or equivalent)
- Energy final consumption (10 energy carriers)
- Distribution uses: main, auxiliar and general
- Energy Performance Improvement Actions (EPIAs) implemented and identified

## Second level benchmark

- Sectorial models, processes and BAT analysis

# Conclusions

## Lessons learnt

1. Collaboration with trade associations is fundamental for sectoral standardization (sheets F and Portal sections);
2. Data collection is a policy tool;
3. Direct support to companies facilitates the implementation of regulatory obligations;
4. The energy audit becomes an opportunity for everyone if things are done well, not just an obligation;
5. Massive control of compliance by Enea ensures that the companies' approach is proactive.

# AGENZIA NAZIONALE EFFICIENZA ENERGETICA

ENEA

Thank you for your attention

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