



Contracting and Funding Mechanisms for Energy Projects in Italy

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Federesco



Federesco is a National Federation representing and promoting the energy efficiency industry in Italy; it has been created in 2006 and it includes around 100 ESCOs. Federesco works in Italy and Europe to support its members. It serves on the board of Horizon 2020 and the Global ESCo Network; collaborates with the Google Foundation and ICLEI on project about REC and to contrast energy poverty.

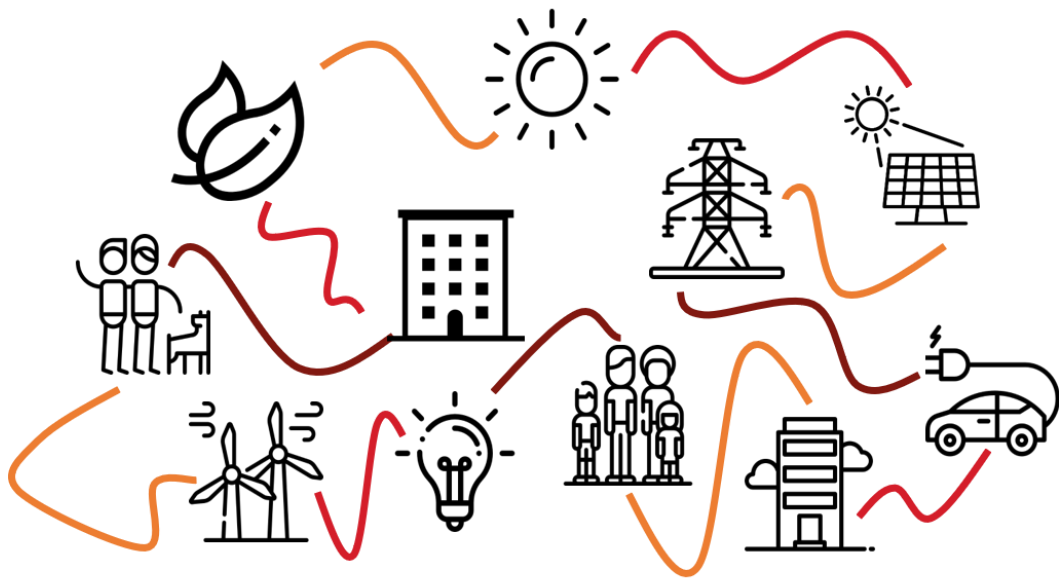
ESCo Definition



An Energy Service Company (ESCo) is «a natural or legal person that delivers energy services and/or other energy efficiency improvement measures in a user's facility or premises, and accepts some degree of financial risk in so doing. The payment for the services delivered is based (either wholly or in part) on the achievement of energy efficiency improvements and on the meeting of the other agreed performance criteria».

Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC

Activities of ESCo



- Strategic and operational approach on the entire energy chain in order to achieve maximum energy savings
- Cost recovery through energy savings
- Financial support - direct or indirect - for EE projects: Third-Party Financing (TPF)
- Guaranteed energy savings for the client
- EE interventions using few capital assets
- Design, realization and maintenance by qualified technical experts
- Consumption and management costs reduction
- Energy Management System development (ISO 50001)

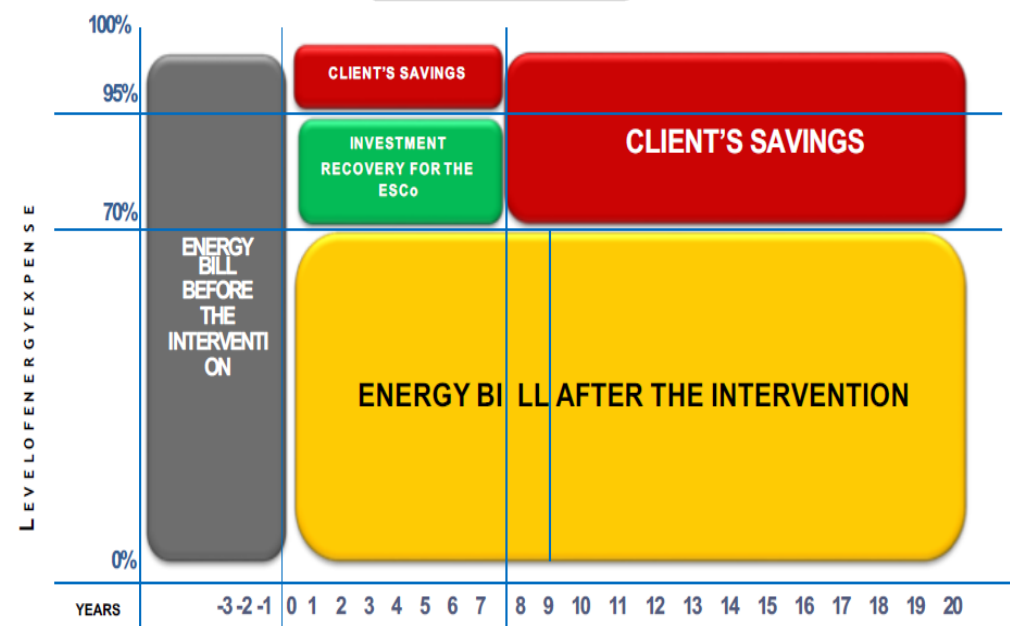
ESCO model and ESPC

The ESPC commits the ESCo to installing the necessary equipment, provides a performance guarantee and establishes the terms of any upfront or ongoing payments, which are intended to be less than the financial savings realised by the project.

The ESCO's remuneration is directly tied to the savings achieved by the reduced energy consumption. The cost of investment is paid back from the savings, and in case the ESCO fails to achieve that, they must cover the difference between the actual and the guaranteed costs: the ESPC aims for energy savings.

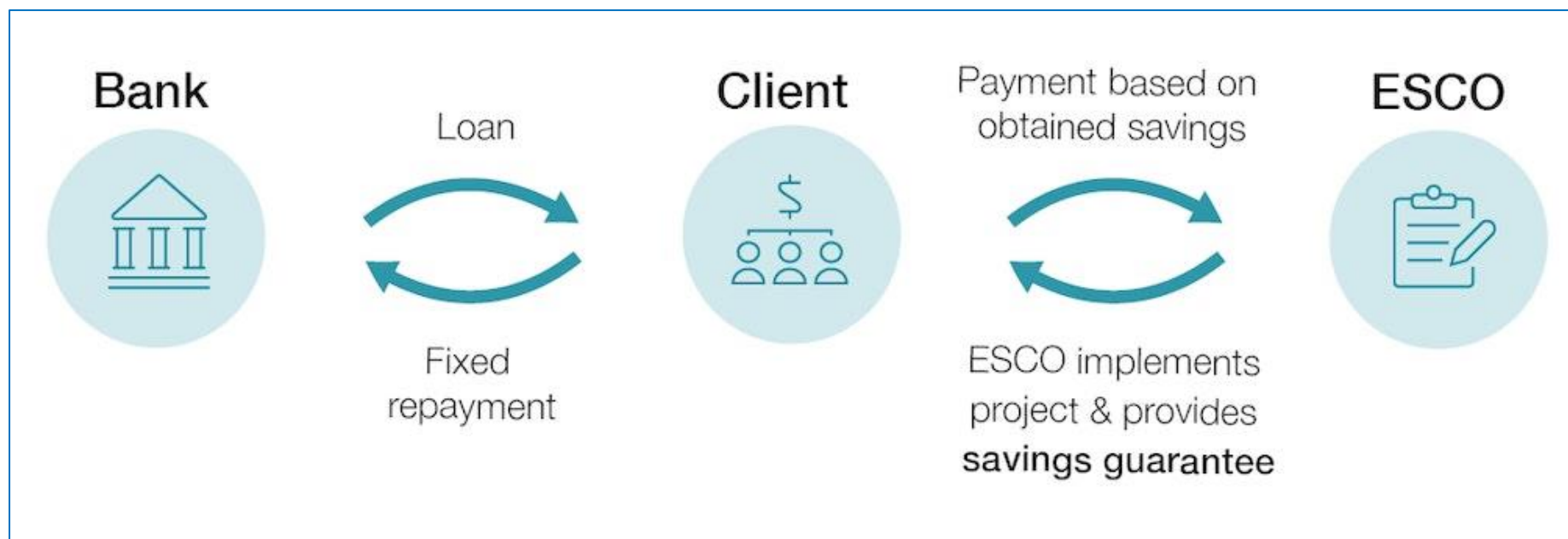
The two most common types of ESPCs are referred to as a **shared savings** or a **guaranteed savings** model.

The ESPC provides the customer with a guaranteed level of energy savings and the ESCo with a reliable source of revenue. ESPCs typically last from two to 20 years, depending on the measures implemented.



Guaranteed savings

The ESCo **guarantees a certain savings on the client's energy bill**. The ESCo **takes on the technical risk**. The client obtains a bank loan, or uses their own equity, to pay contractually determined fees to the ESCo and the bank, and keeps the difference.



Shared savings

The ESCo can provide financing, as well as project development and implementation costs, with the energy savings shared between the ESCo and the client over the contract period.

In this situation, the ESCo is assuming both the technical and the credit risk (of the client), which can be of value to the client as it avoids the need for upfront capital costs, with ongoing payments to the ESCo based on the savings obtained.

The project would therefore be off-balance sheet.



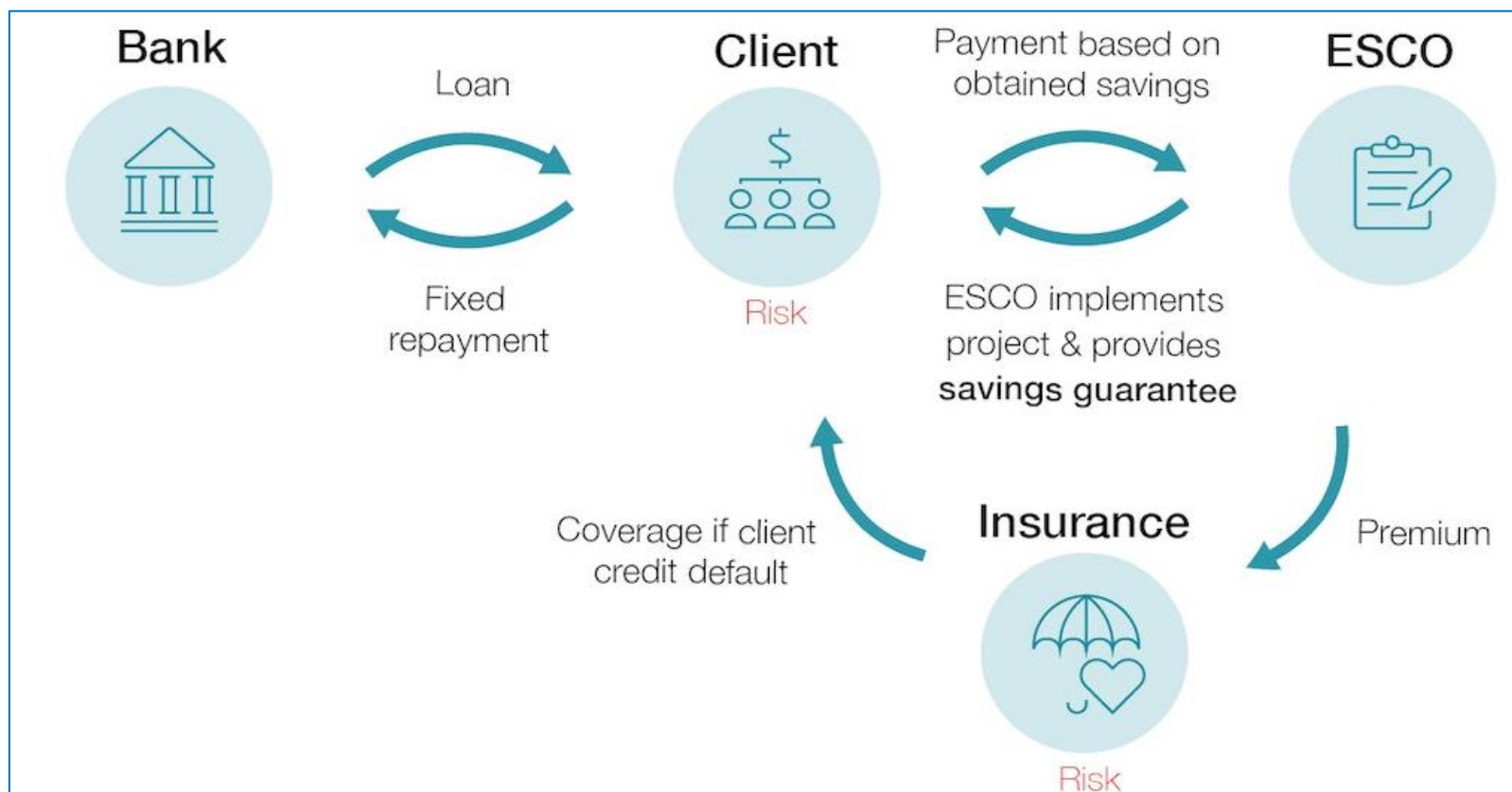
Energy savings insurance and credit risk guarantee

Under the **technical package**, the insurance provider covers the ESCo or technology provider in the event that promised energy savings are not achieved, assuming the technical risk associated with efficiency projects.



Energy savings insurance and credit risk guarantee

In the **credit package**, the insurance provider assumes the credit risk of a project, thereby ensuring that repayments owing to the ESCo can continue to be made, in the case of customer credit default.



Italy's energy system

Italy's energy system has changed notably since 2010 and today the country's energy mix includes more natural gas and renewable energies and less coal and oil. **Italy is on track to reach the emissions reductions and energy efficiency targets set in its National Energy and Climate Plan (NECP) for 2030.**

However, it will need to make substantial additional efforts to meet the much more ambitious new targets for 2030 stemming from the European Union's (EU) Fit-for-55 (FF55) package (and that are still being defined in the EU legislative process) as well as to align with the even more ambitious objectives proposed by the REPowerEU plan aimed at rapidly reducing the European Union's dependence on Russian fossil fuels.

To scale up and accelerate efforts to expand renewables and improve energy efficiency, the government has been prioritising the implementation of the **National Resilience and Recovery Plan (NRRP) 2021-2026**, as foreseen by the EU package to help member countries recover from the Covid-19 socio-economic crisis and prepare for the green and digital transitions (EC, 2021).

REC of Defense



The Decree of April 2022, **Decree No. 50 of May 17, 2022**, provides for functional energy communities for the needs of the Ministry of Defense, or ports, allowing the use of CERs to meet the energy needs of these administrations. There is no upper limit in terms of MWh for shared energy facilities.

For the **defense RECs**, there is an exception to the ordinary regime, which also makes access to the support schemes for the share of energy shared by facilities and consumption utilities not connected under the same primary cabin, subject to payment of the network charges recognized for public lighting.

Renewable energy communities

A REC is a Renewable Energy Community, which is a collection of citizens, businesses, crafts, industries, small and medium-sized enterprises and public administrations that come together to produce, share and exchange zero-impact electricity generated through renewable energy facilities.



There are two types of configuration:

- **Self-consumption group**: self-consumers are located in the same building; systems cannot exceed 1 MW. For defense buildings, it is possible to use the scheme of single self-consumption and remote self-consumption.
- **Energy Community**: participation is voluntary; it is an autonomous legal entity; members can be individuals, small and medium-sized enterprises, local authorities, research and educational institutions, religious bodies, local governments.

Energy efficiency subsidies

The instruments proposed by the National Energy and Climate Plan to stimulate investments and the uptake of more efficient equipment and technology do not differ from those already tried and tested in the past, although the incentives are higher. These include **tax incentives (deduction) for private building renovations and purchasing zero-emission vehicles, direct subsidies for public buildings, subsidies for renewable electricity generation, biofuels quotas, and infrastructure investments.**

In addition to promoting renewable sources through incentives, the efficient management of energy resources is an element of primary importance in Italy to support citizens, enterprises, local bodies and institutions promoting technologies capable of offering greater efficiency and a greater energy performance.

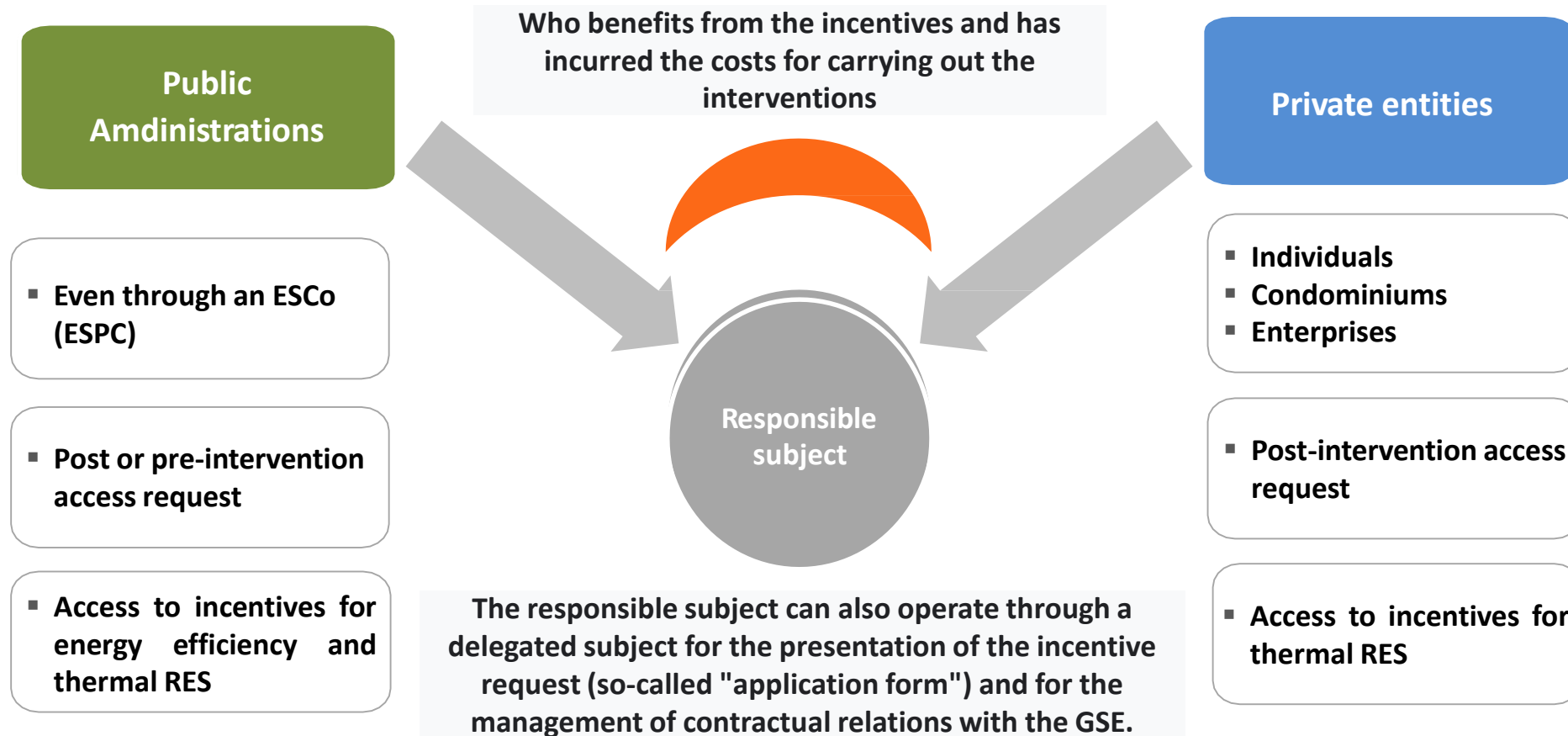
Incentives for energy retrofitting of buildings

- ✓ Deduction rates
- ✓ Renewable energy for heating and cooling support scheme
- ✓ Energy upgrading programme for the central public administration

Industrial energy efficiency

- ✓ White certificates
- ✓ High performance cogeneration
- ✓ Energy audits

Conto Termico 2.0: Admitted subjects and beneficiaries

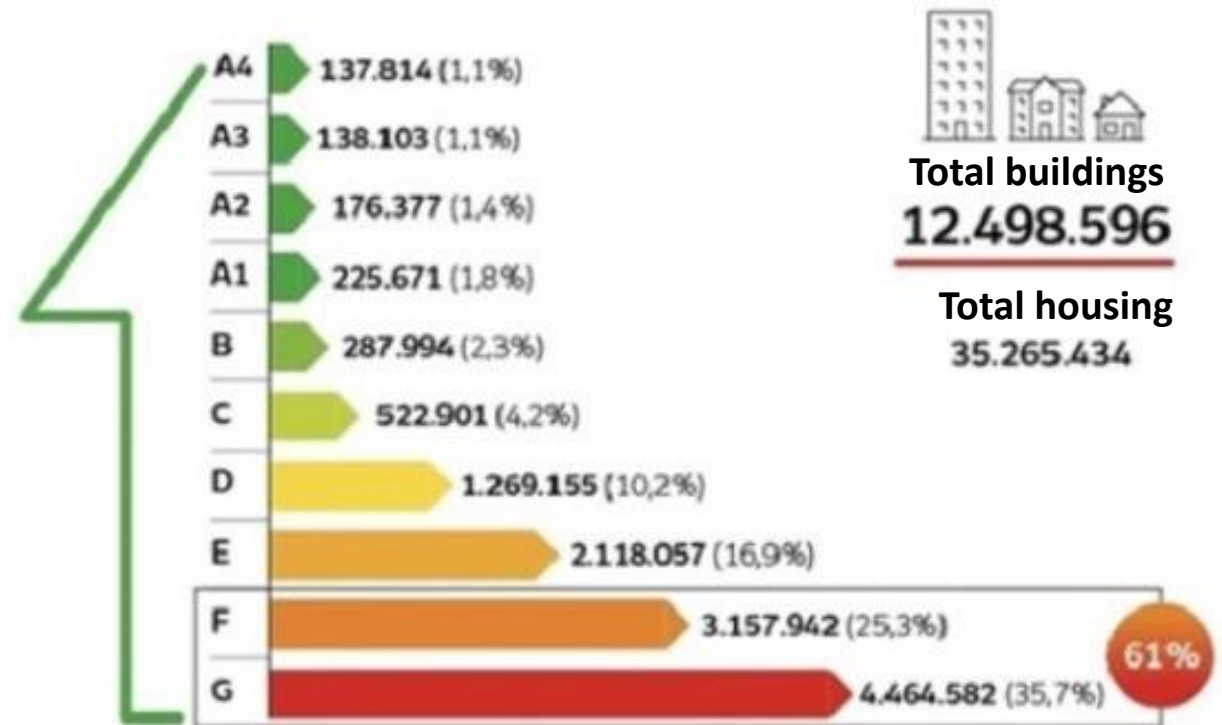


The incentive is a non-refundable aid to the expenses and will be paid annually (between 2 and 5 years) depending on the costs and the interventions.

Green Building EU

The Italian market will soon face the new challenge of the European Climate Pact. Making residential buildings more climate-friendly requires better construction of new ones (NZEB) but also renovation of existing ones (energy class D by 2030). This Green Building EU opportunity can be accounted for in the renovation of nearly 10 million buildings by 2030, creating about 400,000 new green jobs in the construction sector.

Buildings by energy class



Source: ISTAT-ENEA Data

Conto Termico 2.0: admitted interventions

Public Administrations

Category 1 – Energy Efficiency

- 1.A** thermal insulation of opaque surfaces;
- 1.B** replacement of fixtures;
- 1.C** replacement of heating systems with condensing boilers;
- 1.D** installation of screening and/or shading systems.
- 1.E** Nearly Zero Energy Buildings;
- 1.F** replacement of lighting systems;
- 1.G** Building Automation and Control Systems.

Public Administrations and Private entities

Category 2 – Energy Efficiency and thermal RES

- 2.A** replacement of heating systems with heat pumps;
- 2.B** replacement of heating systems with biomass boilers;
- 2.C** installation of solar thermal systems;
- 2.D** replacement of electrical boilers for hot water with heat pumps;
- 2.E** replacement of heating systems with hybrid systems.

Thank you!



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