

<b>Title of the measure:</b>	<b>Energy performance of newly erected and existing buildings</b>
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### **General description**

#### **LD 63/2013:**

The main legal provisions currently in force of Legislative Decree 192/2005, updated with the changes of **LD 63/2013** are illustrated below.

The rules apply to new buildings and **major renovations** or **energy requalification** of existing ones.

"**Major renovation**" means works that insist on more than 25% of the surface of the entire building, including all of the properties that constitute it, and they consist, for example, in the restoration of the exterior walls of the external plaster, the roof or waterproofing of roofs.

"**Energy requalification**" means works which are different from those listed under "major renovation."

#### Energy performance

The new legislation refers to the energy performance of buildings (no longer efficiency) as annual amount of primary energy actually consumed or estimated to be required to meet, with a standardized use of the building, the various energy needs of the building: winter heating and summer cooling, domestic hot water preparation for sanitary use, ventilation, and for the tertiary sector, lighting, elevators and escalators. This quantity is expressed by one or more descriptors that take into account the level of insulation of the building and the technical characteristics and technical systems. The energy performance can be expressed in non-renewable primary energy, renewable, or as sum of the above.

The energy performance of a building shall be determined based on the amount of energy, calculated or actual, consumed annually to meet the different needs associated with its typical use and corresponds to the energy needs for heating and cooling (energy needed to avoid a superheating) to maintain the desired temperature of the building and meet the demand for hot water in the domestic sector.

Until the Italian technical regulations will be adapted to new rules (it will take the decrees to be issued with the cooperation of the Regions), the energy performance will be calculated by applying the technical regulations (Presidential Decree 59/2009 and UNI standards and Cti) known for years and now "metabolized" by the operators ([ITA 24](#) of household sector).

The new article 11 of Legislative Decree 192/2005 (transitional provisions) calls to standards Uni and Cti as a reference to the methods of calculating the energy performance.

#### Calculation of the energy performance

The method of calculation of the energy performance of buildings (Article 4, paragraph 1, of Legislative Decree 192/2005 and subsequent amendments) shall take

into account, among others, the following aspects, which will be defined by subsequent decrees:

- Determination of the energy performance of buildings in accordance with the technical regulations, and Uni Cti, aligned with the standards prepared by CEN in support of Directive 2010/31/EC (see EU28), under a mandate from the European Commission;
- Calculation of the annual energy requirement for each global energy service, expressed in primary energy, on a monthly basis. With the same procedures renewable energy produced within the boundary of the system is determined;
- Monthly compensation between energy needs and renewable energy produced within the boundary of the system, by energy carrier and up to total coverage of the corresponding energy carrier consumed;
- For the purposes of compensation referred to above, the use of electricity generated from renewable sources within the system boundary and exported is allowed, as specified by the decrees referred to in this subparagraph.

The novelty of the Directive of 2010 implemented in Italy in 2013, provides that the Member States must lay down minimum energy performance requirements in order to achieve optimal levels according to the costs.

In this regard, Article 4, paragraph 1, of Legislative Decree 192/2005 provides that a subsequent decree will provide for the application of minimum requirements on the energy performance of buildings ,both new buildings and those subject to major renovation or energy requalification.

These criteria, which must be updated every **5 years**, must be based on the evaluation of optimal levels of costs as required by European standards (Article 5 Directive 2010/31/EU) and on the following general criteria:

- the minimum requirements comply with the technical and economic assessments of convenience, based on the cost benefits of the economic life cycle of buildings;
- in the case of new construction and major renovation, the requirements are determined with the use of "reference building", depending on the building type and climatic zones;
- for the necessary controls to ensure compliance with the prescribed energy quality, there are specific parameters of the building, in terms of performance indicators and thermal transmittance, and overall parameters, in terms of overall energy performance indicators, expressed both in terms of total primary energy and non-

renewable primary energy.

With the regulation 16 January 2012, n. 244, the Commission has prepared a comparative methodology framework ([Cost optimal building performance requirements](#)) that allows to calculate the optimal levels of minimum energy performance requirements in relation to the costs. Member States shall use this framework to compare the results with the minimum energy performance requirements which they have adopted. The regulation will apply from 9 January 2013 for public buildings and from July 9, 2013 for all others.

*The minimum requirements for performance: Application*

Without prejudice to the application of the minimum energy performance, the Legislative Decree 192/2005 as amended by DL 63/2013, converted into Law 90/2013, provides for a gradual application for major renovation:

The minimum energy performance requirements shall apply fully to the whole building in the case of:

- Complete renovation of the building elements forming the envelope of existing buildings floor area greater than 1,000 square meters;
- Demolition and reconstruction of existing buildings under extraordinary maintenance of effective surface area greater than 1,000 square meters.

It shall apply only to limited extension of the building in case the extension results volumetrically more than 20% of the existing building.

There is a limited application in respect of specific parameters, performance levels and requirements, in the case of interventions on existing buildings, such as:

- Total or partial renovation, extraordinary maintenance of the building and volumetric expansion outside of the cases seen above;
- New installation of heating systems in existing buildings or renovation of these systems;
- Replacement of heat generators.

**Measure Impact Level**

**low**

**medium**

**high**

### ***Interaction of measures***

The Decree implement and update the Decree No.192/2005 (ITA5) and L.D. 59/09 (ITA24)

### ***Historical data***

With the adoption of Directive 19 May 2010, n. 2010/31/EU , the European Parliament has taken steps to recast the previous legislation in the field of energy efficiency in buildings by updating it in light of technical progress, and in the light of the achievement of the new objectives of 2020 which provide for a reduction of 20% of energy consumption.

The **L.D. 4 June 2013, n. 63** converted into Law August 3, 2013, n. 90 adopted - with a delay of a year - the Directive 2010/31/EU implementing and updating the **Decree No. 192/2005**.

### ***References***

The original Italian text of the LD no. 192/2005 “*Attuazione della direttiva 2002/91/CE relativa al rendimento energetico nell’edilizia*” also mentioned in the description above can be found at the following URL:[http://www.acs.enea.it/doc/dlgs\\_192-05.pdf](http://www.acs.enea.it/doc/dlgs_192-05.pdf)

The original Italian text of the DL n. 63/2013 “*Disposizioni urgenti per il recepimento della Direttiva 2010/31/UE del Parlamento europeo e del Consiglio del 19 maggio 2010, sulla prestazione energetica nell’edilizia per la definizione delle procedure d’infrazione avviate dalla Commissione europea, nonche’ altre disposizioni in materia di coesione sociale. (13G00107)*” also mentioned in the description above described is at the URL: <http://www.gazzettaufficiale.it/eli/id/2013/06/05/13G00107/sg>