

MINISTRY OF CONSTRUCTION AND PHYSICAL PLANNING

ENERGY AUDIT OBLIGATIONS

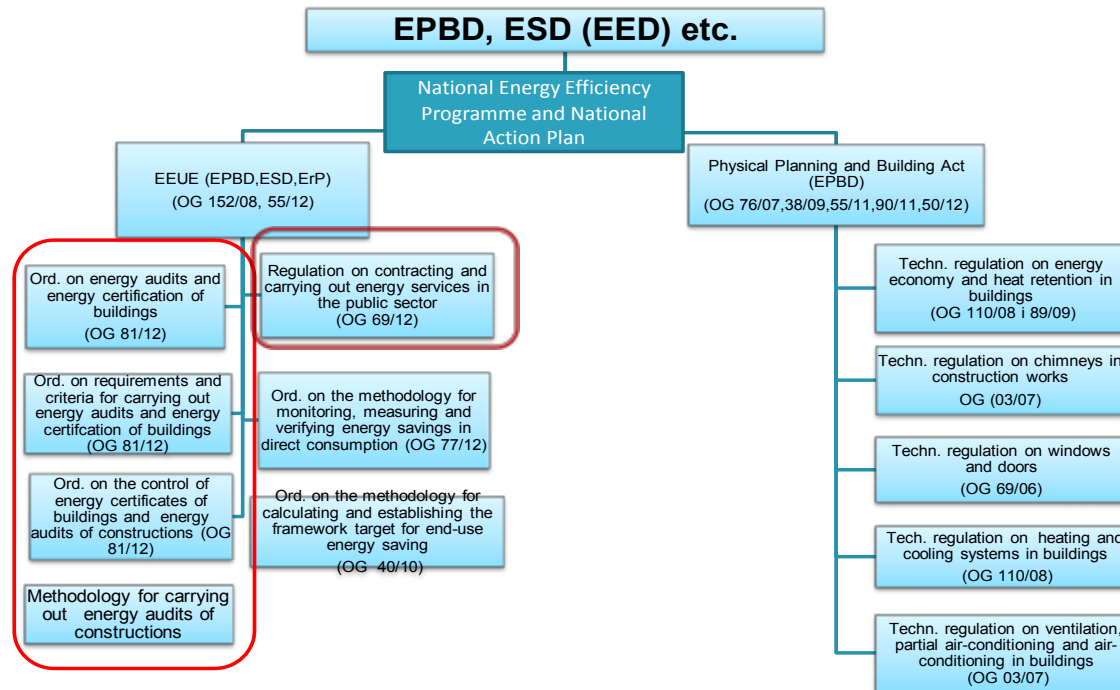
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27 March 2013, Dublin

Legislation of the Republic of Croatia

Legislation of the Republic of Croatia



An energy audit is mandatory for:

- **facility used by a large-scale consumer** for its activity - within 2 years from adoption the Ordinance on energy audits of construction works and energy certification of buildings (till July 2014)
- **public lighting** - the public sector shall carry out energy audits of public lighting which is under its responsibility, within 2 years from adoption the Ordinance on energy audits of construction works and energy certification of buildings (till July 2014)

*LARGE-SCALE CONSUMER = a consumer from the industry sector **the total direct energy consumption of which in buildings used for performing its activity exceeds 10 000 MWh***

An energy audit is mandatory for:

- **public purpose buildings** of net useful floor area above 500 m² (as from 09.07.2015 above 250 m²) or parts of mixed-purpose buildings which as independent functional units are used for public purposes and have a total useful floor area of >500 m² (as from 9. 07.2015 >250 m²)
- **other buildings for which certification is mandatory - buildings** or their independent functional units **which are built,sold, rented out or leased** (this obligation shall be applied from the date of accession of the Republic of Croatia to the European Union – 1.7.2013)

An energy audit is mandatory for:

- **heating systems in buildings** using liquid, gaseous or solid fuels of **total nominal power of 20 kW and more**
- **cooling and air-conditioning systems in buildings** with one or more appliances for generation of thermal/cooling energy of a **total nominal power of 12 kW and more**

By the Ordinance on energy audits of construction works and energy certification of buildings public purpose buildings are defined as:

1. **business buildings** for performing administrative tasks of legal and natural persons
2. **buildings of state administration bodies, bodies of local and regional self-government units**
3. **buildings of legal persons vested with public authorities**
4. **buildings of courts, prisons, military barracks**
5. **buildings of international institutions, chambers, economic associations**
6. **buildings of banks, savings banks and other financial organisations**
7. **buildings of shops, restaurants, hotels, travel agencies, marinas, other service and tourist activities**
8. **buildings of railway, road, air and water transport, buildings of posts, telecommunication centres etc.**

9. **buildings for pre-school, primary and secondary education, nursery schools, buildings for higher education, research laboratories etc.**
10. **buildings for housing of communities: retirement homes, homes for pupils, students, workers, children and other homes intended for temporary or permanent dwelling**
11. **buildings of sports associations and organisations, buildings of sports facilities**
12. **buildings for cultural purposes: cinemas, theatres, museums etc.**
13. **buildings of hospitals and other institutions intended for health, social and rehabilitation purposes**

Register of issued certificates

An energy audit report is submitted in digital format by e-mail to MCPP.

The certificate is entered into the base of certificates by authorised people who have a password to access the Register (base) and enter certificates directly into the Register of certificates.

In Croatia you can't obtain an energy certificate for the building without an energy audit report – it's required by the law. (Law on energy-use efficiency and Ordinance on energy audits of construction works and energy certification of buildings).

Another obligation prescribed by the law is to perform energy audits regularly every 5 years.

Obligation of an energy audit

public lighting

facility used by a large-scale consumer

heating systems in buildings

cooling and air-conditioning systems in
buildings

New buildings prior to
their use/putting into
operation

Existing buildings which
are sold, rented or leased

Public purpose buildings

Obligation of issuing energy certificates of buildings

Ordinance on energy audits of construction works and energy certification of buildings

Obligations of the public sector

- The public sector shall carry out **energy audits of public lighting** which is under its responsibility, within 2 years from adoption of the Ordinance on energy audits of construction works and energy certification of buildings (till July 2014)

Obligation of issuing energy certificates of buildings

- **New buildings prior to their use/putting into operation**
- **Existing buildings or their independent functional units** which are **sold, rented or leased** at the latest **on the date of accession of the Republic of Croatia to the EU**
- **Public purpose buildings** or independent functional units of buildings which are used for public purposes in mixed-purpose buildings - **certificate publicly displayed:**

useful floor area $>500 \text{ m}^2$ by 31 December 2013

useful floor area $>250 \text{ m}^2$ by 31 December 2015

Ordinance on energy audits of construction works and energy certification of buildings

Obligations of owners and investors of public purpose buildings, additionally :

- to provide an **architectural drawing of the current state** of a building which is subject to an energy audit and certification with recorded useful floor area of the heated or cooled part of the building

Obligations of users of a construction / building or a part thereof:

- **to enable authorised persons to carry out the energy audit** of the construction and/or energy certification of the building and access to all parts of the construction

Implementation mechanisms

Penalties

Investor: 25.000 kn legal person, 5.000 responsible person of the legal person, 10.000 natural person, owner 10.000 kn

➤ if they FAIL to obtain an energy certificate for the building prior to the beginning of its use

Owner of the construction 20.000-100.000 kn , responsible person of the legal person 5.000 kn, natural person 10.000 kn

➤ if they FAIL to carry out the energy audit of the construction, heating and air-conditioning system of the building

➤ if they FAIL to provide an energy certificate when selling, renting, leasing

➤ if they FAIL to publicly display the energy certificate of the building

Ordinance on energy audits of construction works and energy certification of buildings

The methodology for carrying out energy audits of buildings + algorithm contain:

Implementing steps of the energy audit

Preparation of the energy audit

Drawing of the existing status

Identification of energy cost units

Implementation of control measures

Analysis of technical and energy performance of the building and analysis of the technical systems in the building

Analysis of consumption and costs of all forms of energy, energy sources and water


Analysis and proposal of measures for improvement of energy efficiency of buildings

Evaluation of proposed measures in terms of energy, economy and ecology

Content of the final energy audit report

Template of the energy audit report of a building

THANK YOU FOR YOUR ATTENTION!

Energetski certifikat za nestambene zgrade	
	
prema Direktivi 2002/91/EC	
Zgrada <input type="checkbox"/> nova <input type="checkbox"/> postojeća	
Vrsta zgrade	
K.č. k.o.	
Adresa	
Mjesto	
Vlasnik / investitor	
Izvođač	
Godina izgradnje	
Q_{H,nd,rel}	%
A+	≤ 15
A	≤ 25
B	≤ 50
C	≤ 100
D	≤ 150
E	≤ 200
F	≤ 250
G	> 250
Podaci o osobi koja je izdala energetski certifikat	
Ovlaštena fizička osoba	
Ovlaštena pravna osoba	
Imenovana osoba	
Registarski broj ovlaštene osobe	
Broj energetskog certifikata	
Datum izdavanja/rok važenja	
Potpis	
Podaci o zgradi	
A _e [m ²]	
V _e [m ³]	
δ [m ⁻¹]	
H _{tr,rel} [W/(m ² K)]	
Q _{H,nd,rel} [kWh/(m ² a)]	

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