

# EED implementation in Slovenia

## Introduction

The implementation of the Directive on Energy Efficiency (EED) (2012/27/EU) is the responsibility of the Ministry of Infrastructure. Also the Ministry for Environment and Spatial Planning and Energy Agency are involved in the implementation of the EED. Eco fund, public fund implements several instruments and programmes related to energy efficiency in assignment of the Ministries. Institute Jozef Stefan, Centre for Energy Efficiency is involved for calculations regarding energy efficiency (EE).

## 1. Legal context

To implement the EED, changes have been made to several national laws. These have been among others effectuated by the new Energy law (Official Gazette, No. 17/14 in 81/15) coming into force March 2014. For the full transposition of EED Decree on physical assets of the state, regions and municipalities must be changed for transposition of Article 6 regarding buying and renting houses by public sector.

## 2. Status of the implementation

### Energy efficiency obligation scheme (EEO)

Slovenia has chosen to effect the provisions of Article 7(9) of the Energy Efficiency Directive (Directive 2012/27/EU), through opting to combine alternative policy measures and an energy efficiency obligation scheme (EEOS) to meet the national target. The two measures thus (EEO and Eco-Fund) will be responsible for achieving the 1.5% target annually.

The obligation is divided in half of the 1.5% energy savings to the Eco-Fund and the other half on EEOs.

Obligated parties under the EEOS are energy suppliers of electricity, heat, gas and liquid and solid fuels to final customers. There are no exceptions for small scale suppliers foreseen. These market parties must achieve the targeted energy savings among final consumers, 0.75% annually of final energy they have sold in the past year. The final customers are public and service sectors, industry and some measures in households. The measures must function up until and including 2020. From 2015 suppliers of motor fuels are also obligated, on the level of savings 0,25% sold fuel in the previous year.

Eco Fund (Eko sklad), Slovenian Environmental Public Fund, is a public fund (owned by the state). Eco-Fund aims at improving energy efficiency through financing investments in energy efficiency, mostly in households. The funds for subsidies are collected from the contributions-fee for improving energy efficiency; from charges from district heating, electricity and solid, liquid and gaseous fuels, paid by final consumers on top of the price of energy or fuel to the operator or supplier of energy or fuels, which pays the funds collected to Eco-Fund.

Non-repayable subsidies (grants) (higher for investments in at least three eligible measures and total retrofits vis-à-vis singular investments; up to 50 % of the eligible cost for investments on areas with high PM<sub>10</sub> pollution; up to 100 % of the eligible costs for socially deprived households) are offered to:

- households for energy efficiency in residential buildings:
  - solar heating systems
  - biomass boilers
  - heat pumps
  - connection to district heating on renewable energy sources
  - energy efficient wooden windows
  - facade insulations
  - roof insulations
  - heat recovery ventilations
  - new nearly-zero-energy buildings (nZEBs)
  - full retrofits
  - purchases of apartments in nZEBs multi-residential buildings (full retrofits)

- individuals (households) for energy efficiency and use of renewable energy sources investment projects in in multi residential building:
  - facade insulations,
  - roof insulations.
- households, legal entities and municipalities for electric cars
- municipalities for nearly-zero energy public buildings.

In 2016 for grants there is around 50 mio EUR available.

Eco Fund's is supporting also Energy Advisory Network which offers free advises regarding EE investments for households.

The energy savings in the framework of EEO and Eco Fund are calculated by the method of evaluating energy savings determined by Ministry of Infrastructure published in Regulation on methods for determining the energy savings to end consumers (UL RS, No 67/15).

## 2.1. Legislative provisions

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

Energy Law (EZ-1), <http://www.energetika-portal.si/predpisi/energetika/slovenija/krovni-zakon-ez/>

EED Article	Implementation status
Article 4	Article 348, Energy Act The Slovenian "Long-Term Strategy for Mobilising Investments in the Energy Renovation of Buildings" was adopted in October 2015.
Article 5	Article 29, 324,346, 347, 348 Energy Act Decree on energy management in public sector is to be adopted in June 2016. The Decree is bringing obligation for all public bodies to perform energy bookkeeping and achieve EE and RES goals in the building owned and used by them. Regarding transposition of EED decree is defining minimum energy performance requirements for buildings which central government will purchase or rent.
Article 7	Article 314, 316, 317, 318 Energy Act Decree on energy savings requirements Rules on the methods for determining energy savings
Article 8	Article 350, 351, 352, 353, 354 Energy Act Rules on the Methodology for Compiling Energy Audits and the Content of those Audits is to be adopted in June 2016
Article 9	General Condition for connection to the distribution Electric system Decree on the method of provision of an electricity DSO service of general economic interest and a service of general economic interest of electricity supply to tariff , Decree on measures and procedures for the introduction and interoperability of advanced electric power metering systems, Rules on dividing and billing heating costs in multiple-dwelling and other buildings with several units Rules on the system operation of electricity distribution network
Article 10	Article 355, Energy Act Article 358, Energy Act
Article 11	Article 358, Energy Act

EED Article	Implementation status
Article 12	Article 312, 315,351, 352 Energy Act
Article 13	Article 319, Energy Act
Article 14	Article 532, 534, 359,360, 363, 364 Energy Act Rules on issuing energy permits Regulation on determination of the amount of electricity from cogeneration of heat and electricity which is generated with high efficiency and determination of efficiency of transformation of energy from wood biomass Decree on issuing declarations for generation units and guarantees of electricity origin Decree on support for electricity generated from high-efficiency cogeneration of heat and electricity
Article 15	Article 30, 43, 164, 371, 385, Energy Act Act on the methodology determining the regulatory framework and the methodology for charging the network charge for the electricity system operators. <a href="http://www.uradni-list.si/1/objava.jsp?sop=2015-01-2713">http://www.uradni-list.si/1/objava.jsp?sop=2015-01-2713</a> <ul style="list-style-type: none"> <li>- Demand response measures like Time of Use Tariffs and Critical Peak Tariffs (Article 98);</li> <li>- System efficiency improvement in infrastructure design and operation by the Quality of Service regulation (Articles 42-64);</li> <li>- System efficiency improvement in infrastructure design and operation by incentives for Smart Grids and Smart Metering projects (Articles 67-70 );</li> <li>- Non-discriminatory participation of demand response in ancillary service procurement (Article 31, paragraph 4);</li> <li>- Incentives for pilot projects in the field of demand response in relation to the efficient use of networks and generation capabilities (Article 71 );</li> <li>- Large scale storage is supported by the Act (Article 107, paragraph 1) which states that electricity consumed from the transmission system for the purpose of storage and later delivered into the transmission system is free of network charges.</li> </ul>
Article 16	Article 357, Energy Act
Article 17	Article 348, 349, 351, Energy Act
Article 18	Article 319, 351, Energy Act
Article 19	Article 27, 348 Energy Act
Article 20	Article 314, 316, 317 Energy Act
Article 21	Decree on the method of determining and calculating the contribution for ensuring support for the production of electricity from high-efficiency cogeneration and renewable energy sources.

## 2.2. Non-legislative provisions

Regarding Article 5 Slovenia has opted for a default approach. The list of central government buildings is updated yearly.

For the implementation of Article 5(7), the Ministry of Infrastructure is preparing Decree on energy management in public sector which is to be adopted in June 2016.

The Decree is bringing obligation for all public bodies to perform energy bookkeeping and achieve EE and RES goals in the building owned and used by them. For implementation of that provision electronic register will be established. Organisations will report on energy consumption in the register. In the framework of register report on achieving goals regarding EE will be generated.

To set public bodies' buildings as exemplary role the Ministry of Infrastructure has established a special Project Office for Building Energy Renovation in October 2015. The Project Office is a coordinating body concentrating knowledge and experience for the implementation of investments in the energy renovation of state-owned buildings, with special emphasis on the energy performance contracting model. It provides an expert team to assist in designing invitations to tender, conducting public-private partnership procedures, evaluating tenders, overseeing the implementation of measures, overseeing the implementation of the contract on the provision of energy savings and transferring knowledge and good practice to the entire public and other sectors.

The main tasks of the Office are to manage and ensure the systematic preparation of a set of projects to meet the targets of renovation of state-owned buildings; to support the implementation of energy performance contracting projects: an active role in establishing an energy performance contracting model (including the preparation of procedures and documents for the standardised implementation of projects) and in removing administrative barriers, the speeding-up of the preparation of projects, analyses of the quality of projects already carried out; to provide information and participate in the training of all important entities in these fields; to transfer knowledge and experiences relating to investments in the renovation of buildings between different segments of public administration (with entities such as local energy agencies, etc.), and transfer international knowledge and experiences to other sectors (e.g. SMEs, housing sector); to support the transfer of knowledge and experiences in the field of the energy renovation of cultural heritage buildings; to manage demonstration project records (the role of the project office will be to ensure the demonstration effects by making the appropriate selection of projects and solutions and by monitoring them, disseminating the results, etc.); to retain and maintain records of central government buildings for energy renovation requirements.

By now the Project Office in the framework of Cohesion Fund has prepared and published instructions for the work of intermediary bodies and beneficiaries, manual of eligible costs and instructions and technical guidelines for all participants in the energy renovation of buildings.

In 2014 the Republic of Slovenia has adopted a new Energy Law (EZ-1), that came into effect in March 2014. In Article 351 it addresses aspects of Articles 17 and 18 of the Energy Efficiency Directive (EED, 2012/27/EU), particularly providing information and training as well as development of energy services. A dedicated web platform - [www.trajnostnaenergija.si](http://www.trajnostnaenergija.si) - was set up by the electricity market operator Borzen already in 2014. It is the main vehicle through which various sub-programmes are publicized and available to the public.

Regarding EED Article 18 on energy services/contracting, a special section (<http://trajnostnaenergija.si/Trajnostna-energija/Energetske-pogodbeništvo/Modeli-energetskega-pogodbeništva/Pogodbeno-zagotavljanje-energije>), containing contract samples, relevant legislation, project templates – and a clear focus on best practices (projects already carried out that can serve as an example) and also list of potential new projects. This was done in close collaboration between the Ministry of Infrastructure, Borzen (who carries out the programmes pertaining to Article 351), local energy agencies, ESCOs and others. Since energy supplier as required (by a Decree) to achieve a certain amount of yearly energy savings, they are motivated to offer also ESCO services, so this model / market has been picking up in recent years.

Below is a list of some other activities that were either completed in 2015 or 2016 – or will be completed by end 2016:

- Partial refurbishment and update of GIS portal for RES and energy efficiency – containing locations of plants, info on possible further RES development (potentials), info on Energy Efficiency projects ([www.engis.si](http://www.engis.si))

- Conference on local energy concepts – how to integrate them into the regional and national plans
- Info book on renewables in Slovenia – will be available in PDF format on [www.trajnostnaenergija.si](http://www.trajnostnaenergija.si)
- Series of 15 TV shows addressing various RES and efficiency topics (developed in cooperation with and transmitted by RTV Slovenia, the national broadcaster) – also available on [www.trajnostnaenergija.si](http://www.trajnostnaenergija.si)
- Extensive research (survey) on RES / efficiency habits and plans of households in Slovenia – serves to establish “state-of-play” as well as basis for further measures – also available on [www.trajnostnaenergija.si](http://www.trajnostnaenergija.si)
- Competition for students – short term forecasting of RES production in electricity – also available on [www.trajnostnaenergija.si](http://www.trajnostnaenergija.si)
- Extended topic on Trajnostna energija portal (waste, water, smart grids, carbon footprint, PV recycling etc.)
- Info portal on wood biomass (by end 2016)
- Conference on near-zero-energy buildings (by end 2016)
- Competition for students – how to sensibly develop wind and biomass energy in Slovenia (by end 2016)
- Cartoons on RES and efficiency topics, aiming at the youngest segment of the population (by end 2016).

There are three on-going pilot/ demonstration comprehensive energy renovation projects, each covering different category of public sector building stock: one building fulfilling nearly-zero renovation criteria, one building with more building operators (three different public service providers/ bodies occupying the same building), and three buildings of the same type from the same owner at three different locations. All will be performed in the scope of energy performance contracting.

Additionally, the Ministry of Infrastructure plans to publish a call on a yearly basis to all interested investors who plan comprehensive energy renovation of their public buildings helping them with grants from Cohesion Fund.

### 3. Future activities

Regulation on methods for determining the energy savings to end consumers (UL RS, No 67/15) will be updated with national and international standards applied to equipment and installers and supplemented with some new measures.

Rules on the Method of Distributing and Calculating the Costs of Heat in Residential and Other Buildings with Several Individual Parts (UL RS, No 82/15) pursuant to Article 357 of the EZ-1 will be changed and corrected to eliminate some anomalies which came out.

Training for energy bookkeeping for public sector will be performed.

Survey and control of quality of Energy Audits will be performed and certification system implemented.

The future activities of the Project Office face the challenges regarding compiling the list of and defining the criteria for ESCO companies.

### 4. Relevant information

Any other relevant information should go here. Please provide include URLs of useful websites, but make sure to provide a brief description, for instance:

Ministry of Infrastructure, Portal energetika:

<http://www.mzi.gov.si/>

<http://www.energetika-portal.si/>

and link to NEAAPs: <http://www.energetika-portal.si/dokumenti/strateski-raz-vojni-dokumenti/akcijski-nacr-za-energetsko-ucinkovitost/>.