



Responsible authority: Ministry of Environmental Protection and Energy

Managing authority: National Energy Efficiency Authority (within the Ministry)

History, current targets and results

Energy Efficiency Obligation Scheme (EEOS) was firstly introduced in Croatia in late 2014 with the adoption of the Energy Efficiency (EE) Act. The Act put the obligation to energy distributors / distribution system operators, while all implementing details related to the EEOS should have been regulated in a special by-law. However, the definition of 'distributor' was not clear enough, hence changes were initiated.

In late 2018, the amendments to the EE Act were adopted, obliging now energy suppliers to achieve energy savings in energy end-use. The Ordinance on EEOS was additionally adopted in April 2019, fully prescribing the functioning of the EEOS.

The target set in the 4th NEEAP for EEOS is cumulative savings of 27.07 PJ for the period 2014-2020. The first results of the scheme will be known in 2020, when obliged parties are due with the first reports on their achievements.

In period from 2021 until 2030, as envisaged in the draft National Energy and Climate Plan, the EEOS will continue its operation with the aim of delivering 50% of Article 7 target in Croatia.

Scope and focus

OPs are free to choose EE measures they will use to fulfil their obligation. Apart from EE measures, it is also eligible to implement small-scale RES and CHP projects for self-supply, which are very important for Croatia, as well as smart metering. OPs are especially encouraged to tackle energy poverty. If EE measures are implemented in underdeveloped areas, energy savings achieved may be increased by 10%, while when implemented in vulnerable energy consumer's household, they may be increased by 20%.

Key actors, roles and options

Ministry of Environmental Protection and Energy is responsible for adopting regulatory framework related to the EEOS. Within the Ministry, the National Energy Efficiency Authority is responsible for the overall management of the EEOS, including operation of the monitoring and verification platform (SMiV).

Obliged Parties (OPs) are energy suppliers of electricity, natural gas, heat and oil products. They enter the EEOS gradually, depending on their annual sales volume: in 2019 OPs are only those suppliers with annual sales volume higher than 300 GWh. This will be extended in 2020 to suppliers with annual sales higher than 100 GWh, and from 2021 all suppliers with annual sales higher than 50 GWh will enter the EEOS. There will be approximately 40 OPs, with one main electricity supplier (HEP) and one main oil supplier (INA), whose obligations would represent about 70 to 75% of the overall EEOS target.

Apart from own actions, OPs may fulfil their obligation through purchase of energy savings from third parties. It is expected that this possibility will trigger the ESCo market.

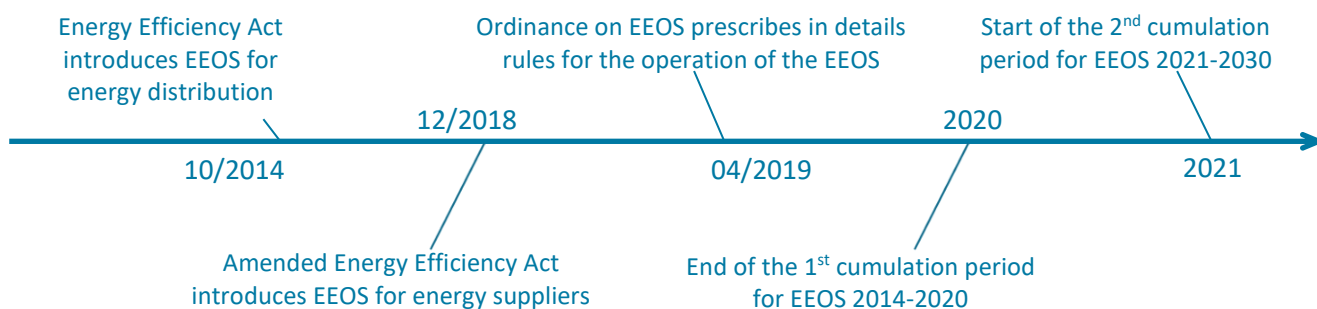
A third possibility for OPs to fulfil their obligation is to pay a prescribed fee to the Environmental Protection and Energy Efficiency Fund. The payment is mandatory in case of non-compliance with the annual target. The Fund is obliged to use the gathered financial means to co-finance alternative measures. The fee is calculated annually, based on costs encountered by the Fund to achieve savings with alternative measures.

Monitoring, Reporting and Verification

Banking/borrowing options are allowed: over-achievements can be transferred to next years in the current cumulation period or to the next cumulation period. Under-achievements in one year, if not higher than 10%, may be compensated in the next year.

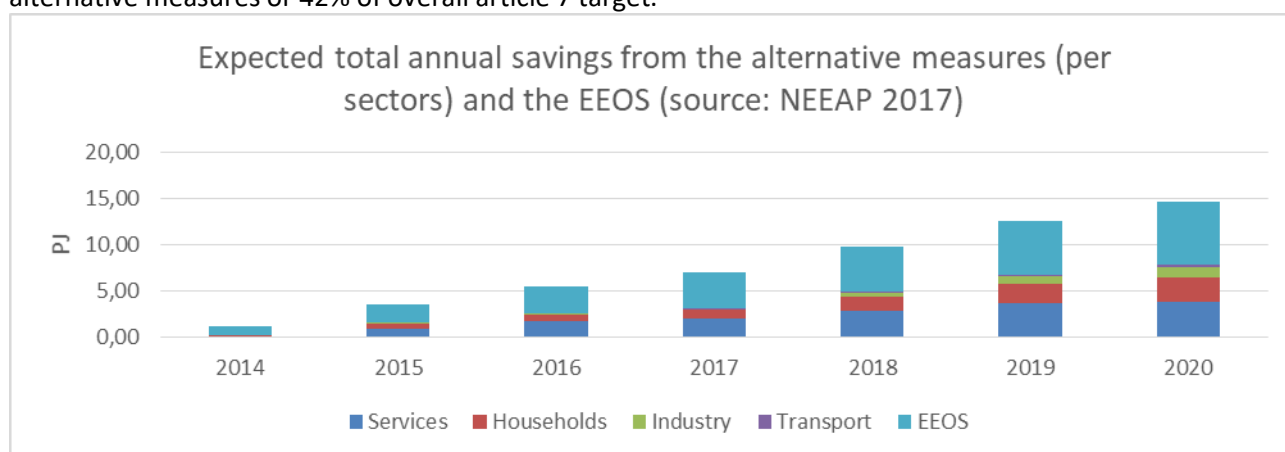
All measures undertaken must be entered in the M&V platform (SMiV). The platform calculates energy savings, based on the Ordinance on monitoring, measurement and verification of energy savings, using dominantly deemed savings or engineering estimates. Documentation that proves the savings should also be uploaded in SMiV, for verification purposes performed by the National Energy Efficiency Authority.





Overview of the policy mix reported by Croatia for article 7

Croatia reported to fulfill its article 7 obligation by the mix of EEOS (49,9%) and alternative measures (50,1%). The figure below shows the planned contribution of EEOS and alternative measures as reported in the [4th National Energy Efficiency Action Plan](#). Since EEOS has only become operational in 2019, it is not possible to report on its achievements. Regarding the alternative measures, the first period of their implementation was 2014-2016, when co-financing from the Environmental Protection and Energy Efficiency Fund was ensured using national financial means gathered from various environmental fees, including incomes from EU ETS. In that respect, data shown in the figure below for this period represent actually achieved energy savings. Since 2017, Croatia is intensively using the European Structural and Investment (ESI) funds to implement alternative measures. In particular those for energy renovation of buildings. Since many of these projects are still under implementation, it is not possible to show the achieved results, hence planned savings are given in the figure below. Measures related to energy renovation of buildings contribute to 83% of target for alternative measures or 42% of overall article 7 target.



Services

- Programme for energy renovation of public sector buildings (grant scheme, soft loan, ESCo model)
- Energy Management in public sector (regulation, training and education)
- Programme for energy renovation of commercial buildings, with emphasis on trade and tourism (grant scheme, soft loans)
- Programme for energy renovation of public lighting (grant scheme, soft loans)

Residential

- Programme for energy renovation of single-family houses (grant scheme)
- Programme for energy renovation of multi-apartment buildings (grant scheme)
- Programme for tackling energy poverty (grant scheme)

Industry

- Financing scheme for energy efficiency and renewable energy sources in manufacturing industry (grant scheme, soft loans)

Transport

- Grant scheme for purchase of energy efficient vehicles
- Grant schemes for urban mobility solutions
- Eco driving trainings
- Special tax on motor vehicles based on CO₂ emissions

Interview with Kristina Čelić, Ph.D.

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1) What would be the first lessons learnt from starting an EEOS?

Croatian EEOS has just started its operation in 2019. It is still too early to talk about lessons learnt. However, it may be said that the start of the scheme is promising as obliged parties are actively revising the activities they have implemented since 2014 in order to claim the energy savings and fulfil their obligation. Although the legal framework was thoroughly prepared based on the background studies and consultation process, there is still a need for continuous support to the obliged parties in terms of clarifications what can and what cannot be claimed as eligible energy savings. As some obliged parties are both suppliers and distributors, one of the most common questions is weather savings in distribution networks (natural gas and district heating) can be claimed under the EEOS. Also, the issue of overlapping with alternative measures and trading of energy savings is often raised. This all requires strong involvement of the Ministry in provision of information to obliged parties but also to third parties (e.g. ESCos), which are now starting to find their interest in the scheme. With limited capacities in the Ministry, this represent a significant challenge.

2) And more specifically about monitoring, verification and controls?

Monitoring and verification system is established in Croatia through regulation that defines the bottom-up methods for 19 typical energy efficiency measures. Obligated parties are required to use these methods when reporting the savings achieved and to provide prescribed proofs for data that are used in the calculations. The whole process is done through an on-line platform for M&V – SMiV – administered by the Ministry. Since obliged parties are allowed to implement other measures than those 19 covered by the regulation, in their annual report on fulfilment

of the target, they should propose their own methodologies based on which they have calculated the savings. The Ministry will revise these methodologies and approve them. It is envisaged to amend the existing regulation with new measures and calculation methods based on the actual inputs from obliged parties. It is also envisaged to upgrade SMiV to better address the issues relevant to the EEOS, especially the trading of energy savings.

3) What are the main interactions with other policies?

Croatia reported a combination of EEOS and alternative measures to achieve its article 7 targets for period 2014-2020. Alternative measures are dominantly financing programmes from national or ESI funds. However, obliged parties may also participate with their funding in alternative measures, whereas the savings will be shared between the EEOS and alternative measures based on the shares of financing. We are also expecting that EEOS will boost the ESCo market due to the possibility to fulfil the obligation through purchase of energy savings from a third party.

4) Are there challenges or changes foreseen for the coming years? (especially after 2020)

According to the latest draft of the NECP (currently under the public discussion), we are planning to implement combination of EEOS and alternative measures also in the period 2021-2030, with 50-50% contribution. Further alignment of the legislation and regulation with the revised EED will be done in 2020, while possible changes in the EEOS will be considered in the next period based on the gained experience in the operation of the scheme.

5) If you could go back in time, what would you do differently?

Start with the operation of the EEOS earlier.