



## **ENERGY EFFICIENCY POLICY IN THE CZECH REPUBLIC**

Briefing Note No.8, March 2022

#### SUMMARY

Energy savings are an integral part of the national energy policy in the Czech Republic in accordance with EU climate action and energy policy objectives and legislation. There are numerous public support schemes channelling significant funds in subsidies and other supportive measures that may promote energy efficiency investments. However, despite the coordinated effort by numerous ministries and other state institutions, the goals set by Articles. 5 and 7 of the Energy Efficiency Directive have not been met yet. Therefore, increasing effectiveness of public support and facilitating financing and implementation of energy efficiency projects presents an opportunity to be sought after.

#### **K**EYWORDS

Policy Framework; Energy Efficiency Goals, Public Support Programmes, Czech Republic

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## 1 Energy Efficiency goals

Czech Republic seeks objectives in energy efficiency (EE) complementary to EU goals. They are embodied in the long run National Energy Policy¹ and further elaborated in the National Energy Efficiency Action Plans (NEEAP) by the Ministry of Industry and Trade (MIT). Action plans cover significant EE improvement measures and expected or achieved energy savings, including those in the supply, transmission and distribution of energy as well as energy end-use. First NEEAP of the Czech Republic was published in 2007.

Current fourth update of the NEEAP<sup>2</sup>, published in 2017, was prepared after the final approval of the programs financed by the European Investment and Structural Funds. Cumulative energy savings target in final consumption under Article 7 of the Energy Efficiency Directive (EED) was

recalculated according to the Eurostat methodology and was set at 50.67 PJ (14.08 TWh). After the assessment of the current measures of the alternative scheme an additional policy measures in household, industry, transport and agriculture sectors and on the level of local governments were added.

Since 2013, MIT issues a yearly report on meeting EE objectives according to the EED: set national non-obligatory energy saving target by the Article 3; renovate public buildings by Article 5; and generate cumulative savings that amount to 1.5 % of final energy consumption per year. Table 1 shows the status of the national EE objectives from the latest report.<sup>3</sup>

It can be concluded that the Czech Republic is lacking in achieving cumulative savings according to Article 7. Increasing the renovation rate and generally boosting EE projects is therefore necessary.

Table 1: Status of national EE objectives as of 2021

Targets and commitments, Czech Republic till 2020			
Article 3 (non-binding)	Article 5 (obligatory)		Article 7 (obligatory)
Final energy consumption: 1,060 PJ	Final energy saving: 98.7 TJ		Yearly energy savings: 51.1 PJ
Primary energy consumption: 1,855 PJ		Cumulated savings: 204.4 PJ	
Meeting targets and commitments evaluation for 2014-2020 (on March 18, 2021)			
Final energy consumption: 1,057 PJ 100 %	Final energy saving: 97.1 TJ 98 %		Yearly energy savings: 44.5 PJ 87 %
Primary energy consumption: 1,679.5 PJ		Cumulated savings: 138.1 PJ	
110 %		68 %	

Source: SEVEn, 2022

## 2 Status in key sectors

In its yearly reports, MIT releases detailed specific consumption figures for four economy sectors: households, transportation, industry and services. Although an absolute yearly final energy consumption has risen back to 1,060 PJ in 2019, the level where it had stood in 2010, specific consumption in sectors decrease with improved EE.

Overall energy intensity of the Czech economy decreases over time. In 2019 it went down 3.4% year-on-year to 364 GJ per CZK 1 million GDP or around 9.1 GJ per EUR million (based on ex. rate).

**Households** have lowered specific energy consumption 1.6% y-o-y to 69.7 GJ per household per year with absolute figure decreasing 0.8 % to 297.6 PJ in 2019.

<sup>&</sup>lt;sup>1</sup> Available at: <a href="https://www.mpo.cz/dokument161030.html">https://www.mpo.cz/dokument161030.html</a>
<sup>2</sup> Available at: <a href="https://www.mpo.cz/en/energy/energy-effi-">https://www.mpo.cz/en/energy/energy-effi-</a>

Available at: <a href="https://www.mpo.cz/en/energy/energy-efficiency/strategic-documents/national-energy-efficiency-action-plan-of-the-czech-republic--173843/">https://www.mpo.cz/en/energy/energy-efficiency-efficiency-efficiency-efficiency-efficiency-action-plan-of-the-czech-republic--173843/</a>

<sup>&</sup>lt;sup>3</sup> The latest report available at: <a href="https://www.mpo.cz/cz/energetika/energeticka-ucinnost/strategicke-doku-menty/zprava-o-pokroku-v-oblasti-plneni-vnitrostatnich-cilu-energeticke-ucinnosti-v-cr--172771/">https://www.mpo.cz/cz/energetika/energeticka-ucinnost/strategicke-doku-menty/zprava-o-pokroku-v-oblasti-plneni-vnitrostatnich-cilu-energeticke-ucinnosti-v-cr--172771/</a>

**Transportation** sector showed modest growth of 1.8% in absolute terms in 2019 and an increase of EE marked by decreases in specific indicators of energy consumed per person/km and per car.

The same trend can be seen in **industry** with both GDP specific and production specific energy consumptions decreasing by 3.5 and 1.7% respectively. At the same time, absolute consumption fell by 2%.

Lastly, in **service** sector, both absolute and GDP specific, per employee, consumption rose by 2.1 and 1.2% to 2.7 PJ in total and 42.5 GJ per employee respectively in 2019.

## 3 Policy framework

EE is framed in several Acts and Decrees. Most of them translate EU directives. Act No. 406/2000 Coll. "Energy Act", last updated in 2020, includes foundations of all the concepts and themes related to energy consumption, viz. obligatory measures to increase the efficiency of energy use, requirements for reducing the energy performance of buildings, rules for the creation of the State Energy Concept, eco-design requirements for energy related products et al.

Coll. on Energy Performance of Buildings is an implementing regulation for the Energy Act that includes cost-optimal level of energy performance requirements for buildings (including nearly zero energy buildings – nZEB); method of calculating the energy performance of the building; template for assessment of technical, economic and ecological feasibility of alternative energy supply systems and recommended measures and a template and content of the energy performance of building certificate along with requirements for its publication in the building.

Decrees No. 480/2012 Coll. and Decree No. 140/2021 Coll. on Energy Audit and Energy Assessment specify calculation of energy savings and stipulates the scope, content and processing method of the energy audit and energy assessment.

## 4 Incentives & Schemes

A series of scheme's fostering sustainable investments are available to the Czech public and businesses. In this section a general overview is provided listing the most relevant to the Triple-A project and the identified Czech cases. The amount and scope of sustainability schemes that are available or are currently planned in the Czech Republic and are targeted at the enhancement and uptake of EE investments is quite significant and major financial benefits are available to businesses and citizens.

Various funds are funnelled towards increasing EE in the Czech Republic. Currently, the biggest allocations are in Operational Programmes (i.e. EU ESIF funds); EU ETS via Modernisation and Innovation Funds; COVID recovery fund; and various national sources.

#### 4.1 Homeowners

# 4.1.1 New Green Savings Programme 2021-2030

New Green Savings Programme (NGS) is a follow up of a successful eponymous initiative. It adds the support for charging stations for electric cars or water heating using heat pumps on top of the former programme. NGS is funded primarily from the sale of emission allowances within the European Union Emissions Trading Scheme (EU ETS). The secondary source of funds comes from the National Recovery Plan. NGS supports both family houses and apartment houses in all the Czech Republic.

### 4.2 Public and commercial

Incentive schemes for non-residential sector cover public and commercial building. While there is just one comprehensive programme (NGS) for the residential sector, different programmes cover numerous types of non-residential buildings.

# 4.2.1 State programme to promote energy savings

EFEKT programme administered by MIT supports small-scale investment projects (sub-program 1) and non-investment projects in the form of energy consulting, implementation of energy management, preparation of energy saving projects, events and documents to support energy savings (sub-program 2). Its current incarnation, EFEKT 3 covering years 2022-2027, focuses on investment and noninvestment aid for EE support measures. The financial mechanism provides support for specific energy-saving measures with an emphasis on non-investment financial aid. EFEKT programme is financed solely by national funds.

## **4.2.2 Operational Programmes**

In 2021 marked the end of the seven years' Operational Programme (OP)<sup>4</sup> Environment and, at the same time, commencement of the new one tied with the upcoming EU budget period. Both old and new **OP Environment** have allocated significant funds for EE investments. The OP Environment is a backbone of EE support for the buildings in public sector in the country. Upcoming OP allocates CZK 3.3 billon (EUR 126 million).

The other grand OP Technology and Applications for Competitiveness<sup>5</sup> (OP TAC) is under auspices of MIT. Current OP design is still under being discussed. However, EE is one of the sub objectives with considered allocation of up to CZK 13 billion (EUR 500 million) for commercial subjects (i.e. mainly enterprises). When compared with OP Environment, OP TAC covers more EE applications. On top of building renovations, technology upgrades are also eligible for support. Along with the grant schemes, there is also a loan support in the form of interest rate discount, a programme in preparation with the National Development Bank.

## 4.3 Other schemes

## 4.3.1 Consultation Centres

EKIS Energy Consultation<sup>6</sup> is a free service for the public that serves to support the introduction of energy savings and renewables. Funds are provided through the EFEKT programme.

### 4.3.2 Modernisation Fund

Modernisation Fund<sup>7</sup>, administered by the Environment Ministry, focuses generally on the generation and use of energy from renewable sources, EE and facilities for the accumulation and distribution of energy. It includes programmes supporting "Energy efficiency in public buildings and infrastructure" and "Community energy" (Energy communities). The Fund draws funds primarily from the monetisation of 2 % of the total number of emission allowances in the EU ETS system for the period 2021-2030.

## 4.3.3 National Recovery Plan

National Recovery Plan<sup>8</sup> is a part of post-COVID investment action and includes measures for "Energy consumption reduction in the public sector" and "Building renovation and air protection" (incl. households). Specific calls are yet to be called.

## 4.3.4 Voluntary scheme

The voluntary scheme for improving EE is an alternative policy measure based on a voluntary arrangement between the State and stakeholders (energy distributors and / or energy sellers) to carry out end-consumer end-use activities aimed at reducing final energy consumption. Individual stakeholders will implement individual energy saving measures.

<sup>4</sup> https://www.opzp.cz/opzp-2021-2027/

<sup>&</sup>lt;sup>5</sup>https://www.mpo.cz/cz/podnikani/dotace-a-podpora-podnikani/optak-2021-2027/

<sup>&</sup>lt;sup>6</sup> More information here: <a href="https://www.mpo-efekt.cz/cz/ekis/strediska-EKIS">https://www.mpo-efekt.cz/cz/ekis/strediska-EKIS</a>

 $<sup>^{7}</sup>$  More information here:  $\underline{\text{https://www.sfzp.cz/en/about-the-}}\underline{\text{modernisation-fund/}}$ 

<sup>&</sup>lt;sup>8</sup> Dedicated web page: <a href="https://www.planobnovycr.cz/">https://www.planobnovycr.cz/</a>

## 5 Conclusions

Although the Czech economy gradually decreases its energy intensity, the country has not achieved the goals set by EU energy policy, in particular by EED. There is a functional legal framework setting EE standards and obligations and numerous public programmes providing financial support for the EE measures in every sector of the economy.

Despite available support, it is necessary to streamline support programmes in order to achieve set objectives. There is a significant potential of engaging private and mixed finance that is untapped for now.

#### TRIPLE-A IN BRIEF

Triple-A -Enhancing at an Early Stage the Investment Value Chain of Energy Efficiency Projects - is an EU-funded research project under the Horizon 2020 programme, aiming to assist financial institutions increase their deployment of capital in energy efficiency, making investments more transparent.

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