

8. REPORT ON PROGRESS TOWARDS NATIONAL ENERGY EFFICIENCY TARGETS IN THE CZECH REPUBLIC

pursuant to Article 24 of Directive 2012/27/EU on energy efficiency

1. Introduction

Pursuant to Article 24 (Review and monitoring of implementation) of Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC, as amended by Directive (EU) 2018/2002 of the European Parliament and of the Council of 11 December 2018 amending Directive 2012/27/EU on energy efficiency ('the Directive'), 'by 30 April each year as from 2013, Member States shall report on the progress achieved towards national energy efficiency targets'.

The Czech Republic's energy efficiency strategy is detailed in the National Energy Efficiency Action Plan (NAPEE), the fifth version of which (NAPEE-V) was approved by the government on 15 May 2017.

The 2019 Progress Report focuses on assessing the impact of the practical implementation of Directive 2012/27/EU in the Czech Republic and its actual impact on energy consumption (i.e. the Czech Republic's contribution to the EU's 2020 energy efficiency target), progress made towards meeting the objectives and obligations stemming from the Directive, and predicting further developments in implementation, updating instruments aimed at improving energy efficiency and assessing policy measures under Article 7 of the Directive.

In its report, in accordance with point (5) of Annex V to the Directive, the Czech Republic gives notification of new policy measures for an alternative scheme in accordance with Article 7 of the Directive.

National indicative energy efficiency target of the Czech Republic for 2020

The national indicative energy efficiency target, the 'national contribution' to achieving the Union's 2020 20% headline target for energy efficiency, was set in line with the requirements of Article 3 of the Directive. Under the provisions of this Article, each Member State is to set a national indicative energy efficiency target based on primary energy consumption or final energy consumption.

The Czech Republic's approach to setting the national energy efficiency target is based on the Common European Framework for the Promotion of Energy Efficiency, which specifies achievement of the EU's energy efficiency target by 2020. With this target, the EU has committed itself to a 20% decrease in energy consumption by 2020, compared with the reference scenario for the development of energy consumption in 2007.¹ The Czech Republic's approach to setting the national contribution was similar, i.e. reducing the value of final energy consumption by 20% in 2020 compared with the Czech reference scenario. Under this scenario, the Czech Republic's final energy consumption in 2020 would be 1,324.87 PJ, i.e. 31.644 Mtoe, without taking into account the effect of savings from implementing Directive 2012/27/EU.

The Czech Republic's indicative energy efficiency target was taken into account when drawing up the 'Update of the Czech Republic's State Energy Policy' ('the Update'), and is in accordance with this document, approved by the Czech Government in its Resolution No 362 of 18 May 2015.²

¹ "Modelling Tools for EU Analysis - Primes". Online. European Commission. EU. https://ec.europa.eu/dima/policies/strategies/analysis/models_en

² The Update is a strategy document by which the Czech Government formulates the political, legislative and administrative framework for reliable, affordable and sustainable energy supply

The Czech Republic's national indicative energy efficiency target is set at 1,060 PJ, i.e. 25.315 Mtoe of final energy consumption. The estimated national target expressed in primary energy consumption was established at 1,855 PJ, i.e. 44.305 Mtoe, based on a primary energy coefficient of 1.75.³

2. Statistical data for the Czech Republic and analysis of trends in energy consumption

Evaluation of the implementation of NAPEE and/or final/primary energy consumption trends following the introduction of energy efficiency policies is carried out on the basis of official statistics. A basic overview is given in summary Table 1, which respects the Commission's recommendations.

Table 1: Czech statistics

	Source	Unit	2014	2015	2016	2017	2018
Primary energy consumption	1	TJ	1,745,424	1,747,169	1,726,589	1,801,855	1,801,091
Total final energy consumption	1	TJ	946,319	974,675	998,603	1,029,584	1,017,197
Final energy consumption by sector:							
industry	1	TJ	266,022	272,283	268,682	281,257	279,536
transport	1	TJ	249,068	259,388	268,680	277,019	278,836
households	1	TJ	279,888	289,716	302,989	308,160	300,081
services	1	TJ	122,456	124,740	129,546	133,349	131,031
Final energy consumption using Europe 2020-2030 methodology	2	TJ	987,275	1,013,075	1,039,286	1,067,029	1,060,034
Gross value added by sector – 2005 prices:							
Industry	2	CZK million	1,393,856	1,451,040	1,467,826	1,577,095	1,598,643
Services	2	CZK million	2,033,796	2,142,527	2,210,852	2,273,216	2,366,217
Gross value added by sector – current prices:	2						
Industry	2	CZK million	1,477,294	1,562,192	1,600,393	1,676,537	1,715,166

(<https://www.mpo.cz/dokument158012.html>).

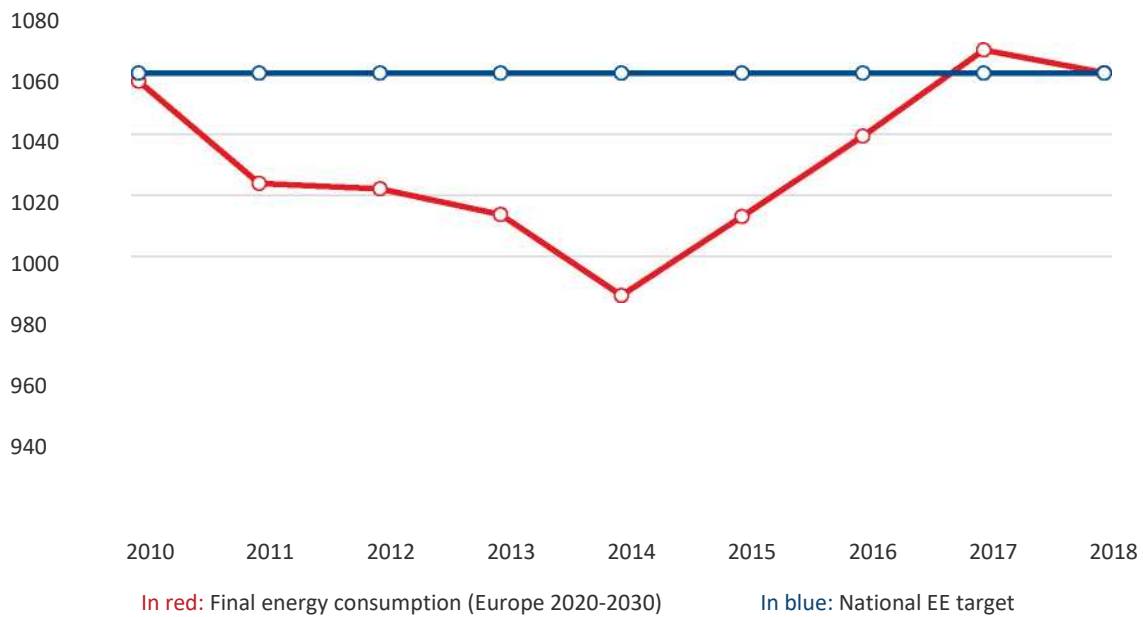
³ The coefficient was determined on the basis of developments in the primary energy coefficient in 2010-2015, assuming increasing energy conversion efficiency.

Services	2	CZK million	2,314,585	2,470,997	2,586,987	2,748,756	2,969,060
Disposable household income	2	CZK million	2,284,609	2,383,321	2,474,370	2,575,885	2,761,123
Gross domestic product (GDP) – 2005 prices	2	CZK million	3,801,154	4,002,966	4,101,060	4,279,563	4,401,362
Gross domestic product (GDP) – current prices	2	CZK million	4,313,789	4,595,783	4,767,990	5,047,267	5,323,556
Electricity generation from thermal power plants	1	GWh	80,587	77,984	77,479	81,226	82,384
Electricity generation from combined heat and power	1	GWh	42,680	42,424	42,904	43,849	43,484
Heat generation from thermal power generation	1	TJ	119,666	121,233	127,519	122,851	118,123
Heat generation from combined heat and power plants, including industrial waste heat	1	TJ	94,380	95,794	99,906	95,618	91,085
Fuel consumption for energy production from heat energy sources	1	TJ	940,368	904,638	889,375	924,494	933,186
Number of person-kilometres	3	pkm million	110,114	113,814	118,957	124,165	129,967
Number of tonne-kilometres	3	tkm million	71421	76,613	68,172	62,936	60,327
Population (mean)	4	persons	10,524,783	10,542,942	10,565,284	10,589,526	10,625,695

Sources: 1 - Aggregate energy balance (MIT, Eurostat methodology); 2 - Eurostat; 3 - Ministry of Transport; 4 - Czech Statistical Office

The Czech Republic's target in final energy and primary energy consumption was established in accordance with the original Eurostat Europe 2020-2030 methodology ('Eurostat Europe 2020'). Despite its 2017 revision, the Czech Republic is responsible for providing evidence of compliance with the national energy efficiency target for 2020. **According to Eurostat, final energy consumption in the Czech Republic was 1,060 PJ and primary energy consumption was 1,687.1 PJ.** It can therefore be noted that **the Czech Republic's final energy consumption in 2018 reached the 2020 figure, i.e. 1,060 PJ.** Primary energy consumption in 2018 was below the target value of **1,855 PJ**, which according to Eurostat amounted to 1,691.3 PJ in 2020. Fig. 1 shows the development of final consumption in relation to the Czech Republic's stated objective for 2020.

Fig. 1: Trend in meeting the national energy efficiency target, 2010-2018



Source: Eurostat Europe 2020

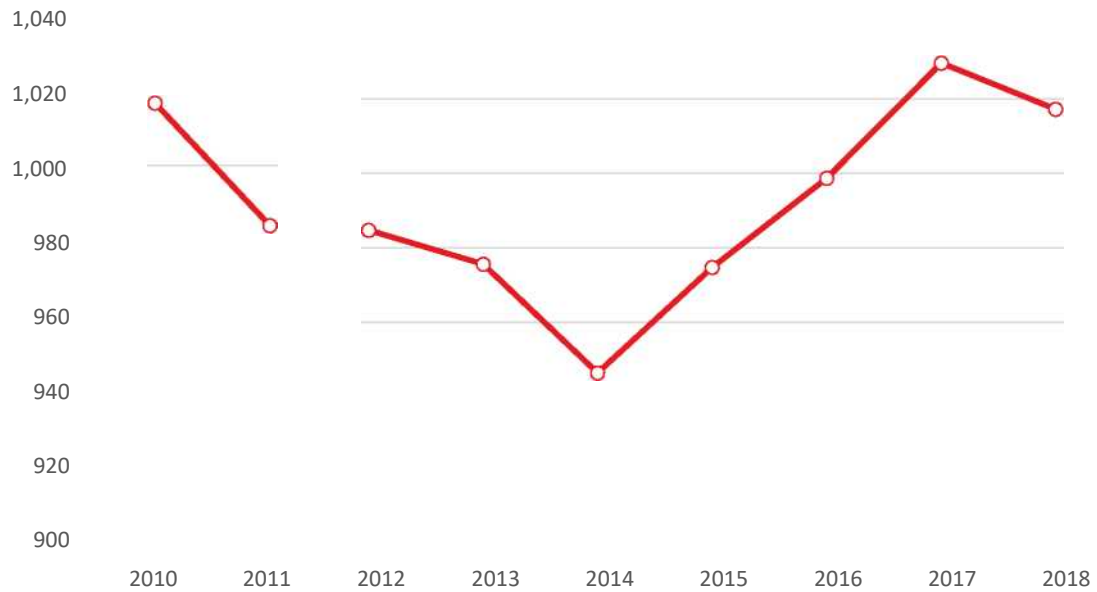
The trend in final energy consumption in accordance with the revised Eurostat 2017 methodology is shown below; the Czech Republic's global energy balance⁴ is drawn up in accordance with this, with a more detailed analysis of the trend in consumption by sector. The monitoring of final energy consumption by sector helps, to a certain extent, to identify the factors influencing the trend in overall final energy consumption.

The trend in final energy consumption has shown a year-on-year increase since 2014, but in 2018 the trend was disrupted, falling 1.2% year-on-year, representing 12 PJ in absolute terms. According to the updated aggregate energy balance, Czech final energy consumption in 2018 was 1,017 PJ⁵ and the primary energy consumption was then 1,801 PJ.

⁴ Commission Regulation 2017/2010 of 9 November 2017 amending Regulation (EC) No 1099/2008 of the European Parliament and of the Council on energy statistics, as regards the updates for annual and monthly energy statistics.

⁵ The level of final energy consumption corresponds to the aggregate energy balance of the Ministry of Industry and Trade (MIT), drawn up on the basis of a new Eurostat methodology.

Fig. 2: Trend in final energy consumption, 2010-2018

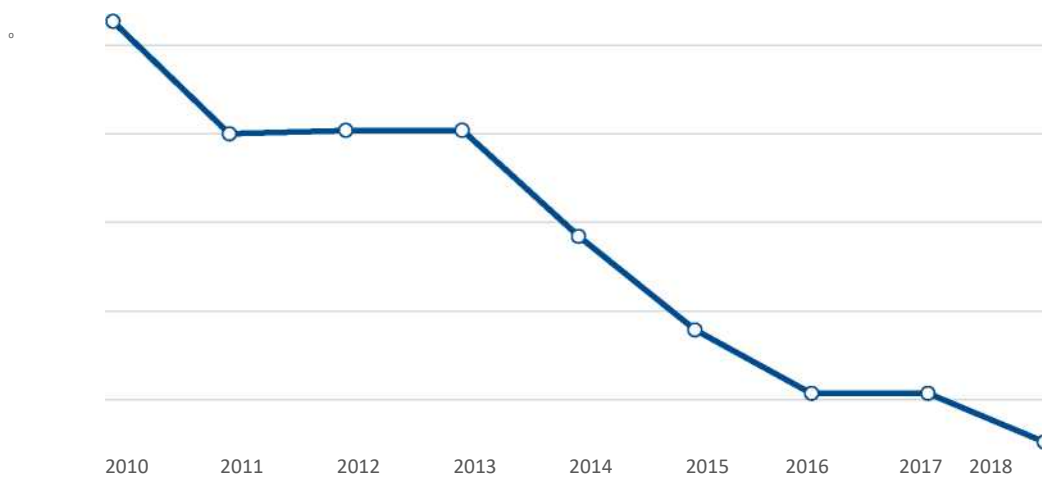


(Table incorrectly reproduced; see original.)

Source: MIT

Significant fluctuations are noted when monitoring the trend in final consumption without any adjustment for external effects, and their origin is hard to identify. For this reason also, it is interesting to look at improving energy efficiency through an energy performance indicator other than the absolute value of final consumption. Therefore, it is interesting to look at improving energy efficiency in the light of the Czech Republic's energy performance; see Fig. 3. **In 2018 the energy intensity level fell by 2.8% to 380 GJ/CZK million of GDP.**⁶

Fig. 3: Trend in energy performance in the Czech Republic, 2010 -2018



(Vertical axis: GJ/CZK million GDP; for figures see original)

Source: MIT, Eurostat 2017

⁶ Gross domestic product at market prices in 2010 (source: Eurostat).

Energy consumption in the household sector increased by 2.6% year-on-year in 2018, reaching a level of 300 PJ. The energy performance of households per housing unit has also declined. It fell by 3% year-on-year in 2018 to 70.9 GJ/unit.

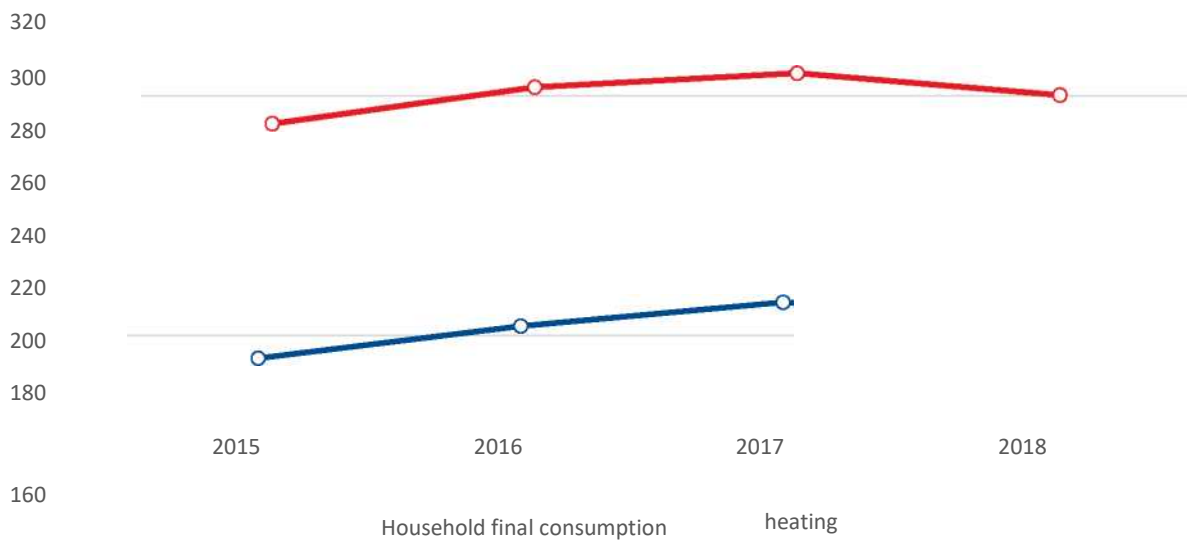
Fig. 4: Final energy consumption per household, 2010-2018



(Vertical axis: GJ/household; for figures see original)

Source: MIT

Fig. 5: Final energy consumption per household and for heating, 2015-2018



(Table incorrectly reproduced; see original.)

Source: MIT⁷

⁷ Data referring to heating consumption is based on MIT data collected for the EUROSTAT report 'Questionnaire for statistics on final energy consumption in households'.

Energy consumption in the household sector has been influenced in the long term by the increased number of new housing units and a fall in the number of people per housing unit.⁸ In 1994-2018, Czech households as a whole consistently exceeded a quarter of the Czech Republic's total final energy consumption, with an average of 28.3%. The resulting trend in that period was upwards, with an average of 288 PJ. The fact that there has been no de facto reduction in their final energy consumption, despite public funding for measures to improve the energy performance of houses, has also resulted in a high annual share (consistently above 50% since 2010) of completed dwellings in family homes, which are the most energy-intensive form of housing. In contrast, over the past 20 years, only 30% of completed dwellings have been in multi-apartment buildings, which are the most environmentally friendly and economical form of housing.

In demographic terms, the level of consumption reflects an increase in the population and in disposable household income,⁹ raising living standards and influencing consumer behaviour, which affects energy consumption.

The transport sector has shown a long-term upward trend in energy consumption. However, 2018 saw a slowing down of this trend compared to 2017 (growth at 0.7%), where an increase of over 4% was recorded. The increase between 2017 and 2018 amounts to approximately 1.8 PJ in total. Growth in energy consumption is linked to an increase in passenger-kilometres from 124,165 in 2017 to 129,967 in 2018, i.e. a year-on-year increase of almost 5% in the number of passenger-kilometres. In spite of this, a change of trend was noted in 2018, with a fall in energy consumption per passenger-kilometre (including private car transport and public transport)¹⁰ linked to the decline in energy consumption per vehicle (including only private car transport). Based on the trends in these indicators, it can be assumed that the efficiency of public transport has increased.

Fig. 5: Energy consumption in the transport sector in passenger-kilometres, 2010-2018

See original; vertical axis: GJ/pkm

Source: Ministry of Transport, MIT

⁸ The fall in the number of people living in a single housing unit reflects a trend towards independent living. The average number of people in a housing unit fell by 11% between 2004 and 2015 (source: ČSÚ (Czech Statistical Office) - ENERGO 2015).

⁹ Gross disposable income increased year-on-year by 4% in 2017 and by 3.4% in 2016 (source: Eurostat).

¹⁰ Public transport includes rail, bus, air, internal waterways and urban public transport.

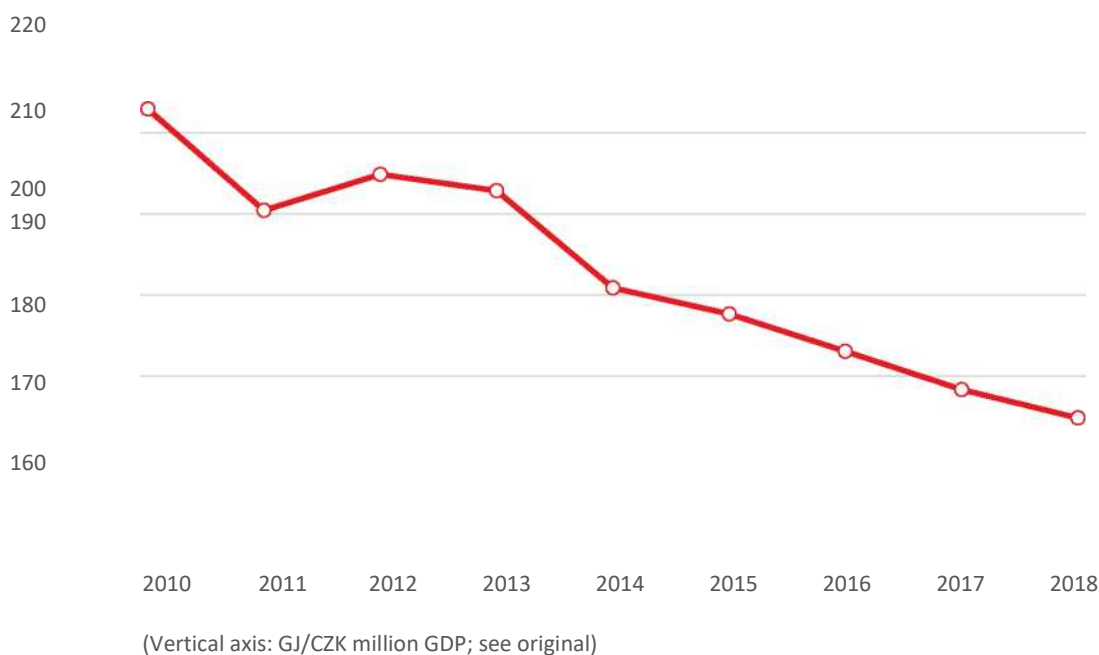
Fig. 6: Energy consumption in the transport sector per vehicle, 2010-2018

See original; vertical axis: GJ/vehicle

Source: Ministry of Transport, MIT

The industry sector saw a year-on-year fall in final energy consumption of 0.6%. This decrease is, inter alia, the result of improved energy performance in industry. Based on this long-term trend, energy performance in industry has also improved steadily since 2012 in gross value added (GVA). Compared to 2017, energy performance in industry has improved year-on-year by 2.0%. Over the long term, the ratio of energy consumption to industrial production has also fallen, as measured against the industrial production index (IPI).¹¹ In 2018, this ratio fell year-on-year by 3.6%, confirming the trend towards increasing technical efficiency in the industrial sector.

Fig. 7: Development of energy performance in industry in the Czech Republic, 2010-2018



Source: Eurostat, MIT

¹¹ The industrial production index (IPI) measures own output from industries, price-adjusted. The index is primarily calculated as a monthly basic index, currently for an average month in 2015.

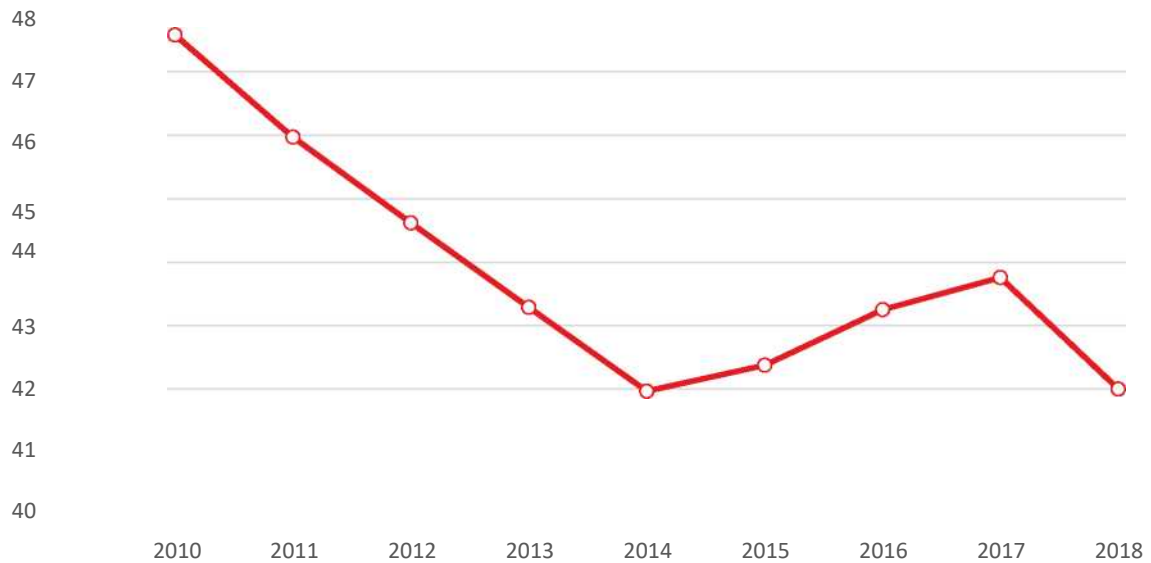
Fig. 8: Energy consumption in relation to industrial production, 2010-2018

(See original)

Source: Czech Statistical Office, MIT

On the other hand, final energy consumption in the service sector also fell year-on-year by approximately 3%, representing approx. 4 PJ.

Fig. 9: Energy performance in the service sector per employee, 2010-2018



(Vertical axis: GJ/employee)

Source: Czech Statistical Office, Eurostat

3. Implementing the tools for meeting the targets of the Energy Efficiency Directive in 2019

3.1. Legislative measures

The Directive was already fully transposed in 2015, with the amendment of three legislative acts. These were amendments to Act No 458/2000 on business conditions and the performance of State administration in the energy sectors, as amended, Act No 406/2000 on energy management, as amended, and Act No 165/2012 on subsidised sources, as amended.

No new legislative measures were applied in 2019 to support the implementation of energy-saving measures, nor was existing legislation updated, whether directly or indirectly connected with increasing energy efficiency. However, the following legislation was submitted for the legislative process:

- draft Act amending Act No 406/2000 on energy management, as amended (after approval, Act No 3/2020 amending Act No 406/2000 on energy management, as amended),
- draft Implementing Decree amending Implementing Decree No 118/2013 on energy specialists, as amended (following approval, new Implementing Decree No 4/2020 on energy specialists),
- draft Implementing Decree amending Implementing Decree No 78/2013 on the energy performance of buildings, as amended,
- draft Act amending Act No 458/2000 on conditions for engaging in business and exercising state administration in the energy sectors and amending certain acts (the Energy Act)).

The first two pieces of legislation have already been approved and published in the Official Gazette at the end of 2019. These provisions will come into effect from 25 January 2020. Both pieces of legislation are closely linked. Implementing Decree No 4/2020 implements the amendments introduced by Act No 406/2000 in the field of energy specialists. The Act changes the system of continuous training in order to make it more efficient and to ensure a higher level of expertise among energy specialists, by making it possible to choose the topics for training actions and their form. Furthermore, Act No 406/2000 harmonises market conditions in the provision of services of energy specialists between natural and legal persons. Under the new legislation, a legal person wishing to offer energy specialist services must hold an authorisation issued by the Ministry of Industry and Trade. As a result of this amendment, legal persons providing these activities will be supervised by the State Energy Inspectorate. It is also intended to ensure a higher quality of processing of energy performance certificates for buildings, the performance of energy audits and energy assessments and inspection reports for heating and air-conditioning systems.

In addition, Act No 406/2000 regulates the field of energy audits. Again, the aim of the amendment is to harmonise requirements between the different obliged entities (enterprises that are not SMEs, enterprises that are SMEs but have significant energy consumption, and public and State authorities). At the same time, there are changes to the way energy audits are carried out. These will no longer be implemented under national legislation, but in line with harmonised standard 50002 on Energy Audits. The implementing legislation will only establish the requirements for a report on the energy audit, so that it can also be substantively checked by the Czech State Energy Inspectorate.

The draft Act amending Act No 458/2000 on conditions for engaging in business and exercising state administration in the energy sectors and amending certain acts (the Energy Act) will be approved during 2020.

This proposal corrects inaccurately transposed parts of Directive 2012/27/EU in the field of billing (explicit statement of entitlement to free billing) and the definition of an aggregator.

In 2019 the approval process began for the Implementing Decree amending Implementing Decree No 78/2013 on the energy performance of buildings, as amended. The proposal foresees a tightening of NZEB requirements from 2022 onwards. At the same time, it responds to some aspects of newly adopted EU legislation, namely Directive (EU) 844/2018 of the European Parliament and of the Council amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency. Implementing Decree No 78/2013 will be approved in May 2020, with a deferred date of entry into effect of 1 September 2020 owing to the adaptation of the calculation tool and its availability on the market.

The approval at the end of 2019 of the act amending Act No 383/2012 on the conditions for trading in greenhouse gas emission allowances, as amended, to enter into effect on 1 January 2021, was of great importance in establishing the policy for increasing energy efficiency. This draft Act transposes Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments and Decision (EU) 2015/1814. The amendment to Act No 383/2012 provides for the use of part of the proceeds from the trading of emission allowances to promote improvement in the energy performance of buildings and the use of the Modernisation Fund to improve energy efficiency, for instance in the industry and transport sectors.

The 2018 progress report indicated that work had started on the proposal for the 'new' Building Act, one of the objectives of which is to speed up the authorisation process. In 2019, the new Building Act was drawn up on the basis of this proposal and transferred to the legislative process. Simplification and streamlining should facilitate the implementation of a long-term building renovation strategy. Another aspect of the new regulation is the more effective linkage between the Building Act and energy performance requirements under Act No 406/2000, and thus their enforceability.

4. Exemplary role of public bodies' buildings (Article 5)

In 2015, the Ministry of Industry and Trade, in cooperation with other stakeholders, drew up an investment plan for the renovation of buildings owned by central government institutions under the rules set out in Article 5 of the Directive. The document included a list of the institutions subject to the commitment under Article 5 of the Directive and their renovation plans, quantifying the expected energy savings in buildings they own and occupy with an energy reference area of over 250 m² not meeting the energy performance requirements under Section 7 of Act No 406/2000.

In accordance with Annex IV to the Public Procurement Directive (2004/18/EC), the following 42 institutions were identified in the Czech Republic in 2014:

Table 2: Institutions identified in accordance with Annex IV to the Directive

1.	Academy of Sciences of the Czech Republic	22.	Ministry of Foreign Affairs
2.	Security Information Service	23.	Ministry of Health
3.	Czech National Bank	24.	Ministry of Agriculture
4.	Czech Mining Authority	25.	Ministry of the Environment
5.	Czech Statistical Office	26.	National Security Authority
6.	Czech Telecommunications Office	27.	Supreme Audit Office
7.	Czech Surveying and Land Registry Office	28.	Supreme Court
8.	Energy Regulatory Office	29.	Supreme Administrative Court
9.	Grant Agency of the Czech Republic	30.	Supreme Public Prosecutor's Office
10.	Office of the President	31.	Chamber of Deputies of the Parliament of the Czech Republic
11.	Office of the Ombudsman	32.	Senate of the Parliament of the Czech Republic
12.	Ministry of Transport	33.	Administration of State Material Reserves
13.	Ministry of Finance	34.	State Labour Inspection Office
14.	Ministry of Culture	35.	State Office for Nuclear Safety
15.	Ministry of Defence	36.	Office for the Protection of Competition
16.	Ministry of Labour and Social Affairs	37.	Office for Personal Data Protection
17.	Ministry of Regional Development	38.	Office for Government Representation in Property Affairs ¹²
18.	Ministry of Industry and Trade	39.	Industrial Property Office
19.	Ministry of Justice	40.	Office of the Government of the Czech Republic
20.	Ministry of Education, Youth and Sports	41.	Constitutional Court
21.	Ministry of the Interior	42.	Prison Service

Under Article 5(1) of the Directive, the obligation to renovate applies to buildings that are both owned and occupied by central government institutions. As a result of these combined conditions, some of the institutions have not been included in the plan. The list is reviewed annually to take account of the creation of any new central institution, as is the list of buildings relevant for establishing a commitment to reduce final energy consumption in buildings that do not meet the energy efficiency requirements.

¹² A non-obligated institution, included at its own request.

Table 3 Central institutions included in the implementation of Article 5 of the Directive

1.	<i>Czech National Bank</i>	20.	<i>Ministry of the Environment</i>
2.	<i>Czech Mining Authority</i>	21.	<i>National Security Authority</i>
3.	<i>Czech Statistical Office</i>	22.	<i>Supreme Audit Office</i>
4.	<i>Czech Telecommunications Office</i>	23.	<i>Supreme Court</i>
5.	<i>Czech Surveying and Land Registry Office</i>	24.	<i>Supreme Administrative Court</i>
6.	<i>Energy Regulatory Office</i>	25.	<i>Supreme Public Prosecutor's Office</i>
7.	<i>Office of the Ombudsman</i>	26.	<i>Chamber of Deputies of the Parliament of the Czech Republic</i>
8.	<i>Ministry of Transport</i>	27.	<i>Senate of the Parliament of the Czech Republic</i>
9.	<i>Ministry of Finance</i>	28.	<i>Administration of State Material Reserves</i>
10.	<i>Ministry of Culture</i>	29.	<i>State Labour Inspection Office</i>
11.	<i>Ministry of Defence</i>	30.	<i>State Office for Nuclear Safety</i>
12.	<i>Ministry of Labour and Social Affairs</i>	31.	<i>Office for the Protection of Competition</i>
13.	<i>Ministry of Regional Development</i>	32.	<i>Office for Personal Data Protection</i>
14.	<i>Ministry of Industry and Trade</i>	33.	<i>Office for Government Representation in Property Affairs</i>
15.	<i>Ministry of Justice</i>	34.	<i>Industrial Property Office</i>
16.	<i>Ministry of Education, Youth and Sports</i>	35.	<i>Office of the Government of the Czech Republic</i>
17.	<i>Ministry of Foreign Affairs</i>	36.	<i>Constitutional Court</i>
18.	<i>Ministry of Health</i>	37.	<i>Prison Service</i>
19.	<i>Ministry of Agriculture</i>		

The relevant input data for 2019 are set out in Table 4.

Table 4 Status of the building stock of institutions with obligations under Article 5 of Directive 2012/27/EU for 2019

No of institutions	No of properties owned and used	No of compliant properties	Energy reference area of compliant properties [m ²]	No of non-compliant properties	Energy reference area of non-compliant properties [m ²]	Annual commitment deriving from non-compliant reference area [TJ]
37	774	189	804,779	585	1,600,494	13.33

The above-mentioned 37 central government institutions own and occupy 774 buildings with an energy reference area of over 250 m² and with a total energy reference area of 2,400,512 m². **Of these, as of 2019 585 buildings with a total non-compliant energy reference area of 1,565,217 m² do not meet energy performance rating C (energy-efficient building).** The amount of energy savings for 2019 resulting from the requirement to renovate the non-compliant energy reference area was calculated from the non-compliant energy reference area, the size of which was established on the basis of an update of the building stock, including changes in the building stock due to the inclusion of a new building in Article 5 of Directive 2012/27/EU, the sale or demolition of a building, and renovation works undertaken.

Implementation of the 2019 commitment

The 2019 commitment was set at 20.7 TJ. This level of commitment is the sum of the 2019 commitment (see previous chapter) and the non-fulfilment of commitments from previous years (see Table 5). Compliance with the 2019 commitment was assessed in March 2020 on the basis of data collected as part of regular monitoring under Section 9b(3) of Act No 406/2000. **In 2019, energy-saving measures were implemented at 15 buildings of the central institutions and 39 Czech Prison Service sites, resulting in energy savings in 2019 of 12.11 TJ.**

In particular, these involved construction measures such as roof-shell insulation, replacement of windows, renovation of the heating system, or replacement of lighting. Not all the measures implemented concerned merely the renovation of the building itself; the central institutions also focused on replacing technical equipment.

Buildings of the Czech Prison Service were not included in the commitment during 2014-2016. In 2017, the commitment was recalculated due to the inclusion of the Czech Prison Service's buildings (reasons set out in the 7th Progress Report), so that from 2017 the Czech Republic's commitment reflects the energy-saving requirement achieved by the Czech Prison Service if its non-compliant buildings were included in the commitment from 2014 (energy savings of 26.7 TJ for three years, divided over the following four years, i.e. 2017-2020).

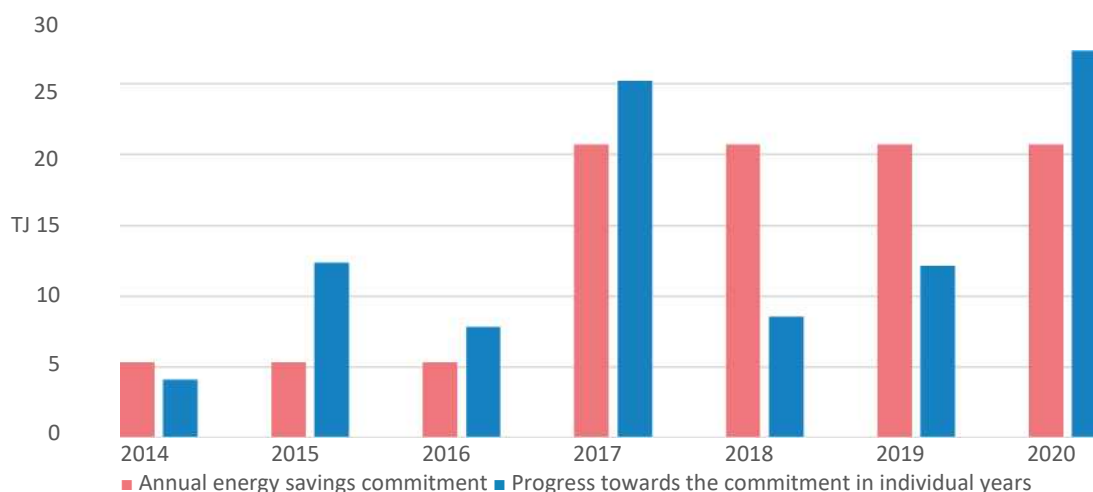
Table 5: Summary of annual commitment under Article 5 of the Directive and fulfilment as of 2019

	2014	2015	2016	2017	2018	2019	2020	Total
Annual energy savings commitment [TJ]	5.3	5.3	5.3	20.7	20.7	20.7	20.7	98.7
	Actual						Planned	
Annual energy savings [TJ]	4.1	12.3	7.8	25.2	8.5	12.1	27.3	97.4
Progress towards the commitment (plan – commitment) [TJ]	-1.2	7.0	2.5	4.5	-12.1	-8.6	6.7	-1.3
Cost of renovations [CZK million]	31.2	195.5	117.2	173.1	136.3	316.0	621.8	1,591.1

Fulfilment of the commitment for the period 2014-2020

In view of point 3 of Article 5 of the Directive, the excess may be counted towards the annual renovation rate in any of the three previous or following years. It can be seen from Table 4 that this rule resulted in the annual energy savings commitment being met for 2014-2018, despite the fact that energy savings were not actually achieved in 2014 and 2018. According to the projects scheduled for 2020, a deficit of 1.3 TJ can be expected to be incurred between 2014 and 2020 in respect of the annual energy savings obligation. This is despite the 2020 plan, where 11 central institutions have 79 projects planned which should result in savings of 27.3 TJ.

Fig. 11: Progress towards the commitment under Article 5, 2014–2020



However, point 3 of Article 5 of the Directive also applies in the following period, which is why, according to Table 6, presenting an overview of planned projects in 2021-2023, the commitment over the period 2014-2020 can be expected to be met retroactively.

Table 6: Overview of planned projects for 2021-2023

	2021	2022	2023	Total
Planned annual savings [TJ]	27.5	17.5	41.0	86.0

For 2021-2023, in fulfilment of Article 5, six projects are being developed for the renovation of entire sites covering more than one building using the EPC method. The projects were initially planned for 2019 and 2020. Due to administrative and financial factors, implementation of the projects has shifted to the beginning of the following period. For these six projects, implemented by the Prison Service, an energy saving of 58.2 TJ was calculated with projected investment costs of CZK 607.7 million. Details of the planned projects can be found in Annex 1.

In view of the lack of public funds for implementing savings measures, the Environment Operational Programme (OPE) has in the past been secured as the source of funding, supported by the New Green Savings Programme ('NZÚ'). Funding from the OPE and national funding from the NZÚ programme can be combined on the basis of the second amendment to the NZÚ programme documentation approved by Government Resolution No 955 of 2 November 2016. The amount of subsidy granted by the OPE derives from the overall energy savings from the measures implemented and may be 35%, 40% or 50%. It is possible to increase the coverage of eligible expenditure by an additional 45% under the combination of funding from the NZÚ programme. In the case of renovation works using the EPC method or the award of a public contract in accordance with Design & Build, a bonus of 5% of the eligible costs of the whole project can be obtained under the OPE. In cases where the project meets the conditions governing the drawdown of funds from the OPE,¹³ the ministries should grant priority use

¹³ Specific target 5.1 *Improve the energy performance of public buildings and increase the use of renewable energy sources* and Specific target 5.3 *Improve energy performance and increase the use of renewable energy sources in central government institution buildings.*

of the aid to subordinate areas before using funds from the Czech State budget.

5. Energy efficiency obligation scheme

5.1. New energy savings target under Article 7 of the Directive

The commitment of the Czech Republic under Article 7 of Directive 2012/27/EU is set at 204.39 PJ of cumulative energy savings by 2020. The level of the commitment was based on the assumption of annual energy savings of 7.3 PJ for new energy savings (with a lifetime corresponding to the implementation period until the end of the commitment period, i.e. until 2020).

5.2. State of play of the implementation of energy efficiency obligation tools

The current analysis of fulfilment of the commitment shows that 98.2 PJ of cumulative energy savings were achieved in 2014-2019. This is a total of 36.6 PJ in new energy savings for the period 2014-2019.

Fig. 14: Fulfilment of cumulative energy savings under Article 7 of the Directive

(See original)

- Behavioural measures (2 years)
- Environmental tax (1 yr)
- Investment measure — new implementation (10 + years)
- Investment measure — cumulative savings

Source: MIT

Table 7 Overview of annual fulfilment for the calculation of compliance with the cumulative energy savings obligation

[TJ]	2014	2015	2016	2017	2018	2019
Behavioural measures ¹⁴	337.3	266.7	265.1	384.8	380.6	257.4
Environmental tax ¹⁵	1,324.9	1,544.2	1,746.6	1,653.1	1,377.9	0.0
Investment measures	1,784.9	4,555.5	5,807.4	4,904.8	5,617.1	4,401.8
Total	3,447.1	6,366.4	7,819.1	6,942.7	7,375.6	4,659.2

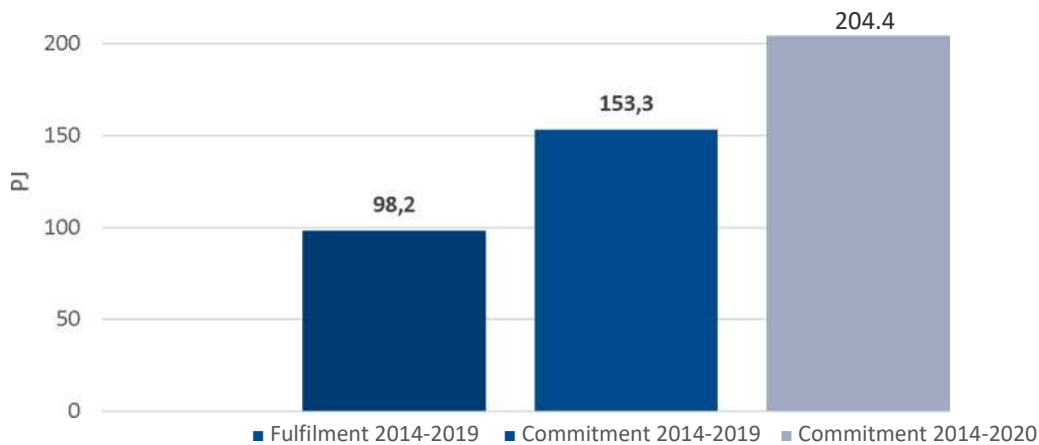
Source: MIT

The Czech Republic has incurred a deficit in the fulfilment of annual energy savings due to a slower uptake of measures to implement the savings measures in 2014 and 2015. The slower implementation of energy savings at the beginning of the period has had a negative impact on the fulfilment of the cumulative savings obligation. The cumulative savings deficit is now 55.1 PJ for 2014-2019; see Fig. 15.

Fig. 15: Fulfilment of the Czech cumulative energy savings commitment under Article 7 of Directive 2012/27/EU

¹⁴ Behavioural measures are currently implemented only under the EFEKT II programme as part of the non-investment measures offered by the programme. These are measures with a two-year timespan.

¹⁵ The environmental tax on motor fuels has a lifetime of one year.



Source: MIT

This deficit will be reduced, since for some measures the savings from the implemented measures are calculated only additionally on the basis of savings actually measured. Another factor affecting reporting is the availability of data, where the measures to be reported on the basis of statistics are reported with delays resulting from statistical reporting rules.

Furthermore, it should be noted that the Ministry of Industry and Trade continues to work on the implementation of other measures in the NAPEE which are implemented in the Czech Republic. However, these measures are not reported due to the lack of a methodology for evaluating them. For this reason, some additional measures will be evaluated and reported only in 2021.

5.3. Notification of policy measures

For 2019, the following policy measures are evaluated to implement the commitment under Article 7 of Directive 2012/27/EU as a result of the revision of the methodologies for reporting on the following measures:

- the Clean Energy Prague programme;
- Operational programme Environment;
- Declaration on strategic cooperation by ČEZ

This policy measure had already been implemented in 2014. However, due to the lack of methodologies for evaluating them, energy savings were not reported in previous years. Following the drawing up of new methodologies by the Ministry of Industry and Trade in 2019, the energy savings achieved for the period 2014-2019 have been declared retrospectively. The notification of new measures under Annex V to the Directive is in Annex 1 to this report.

5.3.1. Clean Energy Prague programme

Policy measures are designed to encourage, through financial support, owners or tenants of residential buildings in the city of Prague, to exchange energy-inefficient original heating systems for more environmentally friendly forms. The goal is a more efficient and environmentally friendly heating system in houses and apartment blocks and an overall improvement in air quality. The energy saving corresponds to the difference in energy consumption between the original and the new heating system.

5.3.2. Operational Programme Environment

This policy measure recognises energy savings resulting from investment projects aimed at reducing light pollution in municipalities located in the territories specified in the call (e.g. national parks or protected landscape areas). Specifically, this involves the purchase and installation of luminaires, including lamps, on existing or newly installed lampposts or the acquisition and optimisation of public-lighting control systems when renovating or modifying public lighting.

The energy saving is assessed on the basis of the actual final energy saving from the measures implemented from 2018.

5.3.3. Declaration on strategic cooperation by ČEZ

This is an agreement concluded between the Ministry of the Environment and ČEZ a. s. The subject of the agreement is the improvement of energy performance for final customers for electricity and heat and a contribution to emissions reduction and to overall sustainable development.

The data collected are currently evaluated according to the available methodology, which will be replaced by a standardised catalogue of measures to facilitate collection and verification of energy savings for subsequent years. Preliminary data collections on energy savings are currently available and will be further specified in the next progress report. Preliminary, unverified data show that for the period 2014-2020, under this measure, final consumption savings will be 175.7 TJ, distributed as follows:

Table 8/ Preliminary final energy savings, 2014-2019

[TJ]	2014	2015	2016	2017	2018	2019
Declaration on strategic cooperation by ČEZ	5.1	60.6	25.3	44.4	40.3	*

* Data for 2019 not yet available.

This is a preliminary assessment of the investment measures to be verified in 2020. Soft measures (information campaigns) will be further assessed for these investment measures.

Table 9/ Fulfilment of the commitment for new annual energy savings (new actions implemented in a given year), 2014-2019

Measure		2014 [TJ]	2015 [TJ]	2016 [TJ]	2017 [TJ]	2018 [TJ]	2019 [TJ]
1.1.	Regeneration of pre-fabricated concrete buildings – programmes: PANEL/NEW PANEL (MoRD)/PANEL 2013+	26.3	54.7	31.0	17.9	14.3	5.7
1.2.	Green Savings Programme (MoE)	terminated	—	—	—		
1.3.	New Green Savings Programme 2013 (MoE)	63.7	148.8	98.9	0.0	terminated	
1.4.	New Green Savings Programme 2014-2020 (MoE)	21.6	233.0	600.1	864.5	833.1	855.7
1.5.	JESSICA Programme (MoRD)	14.4	40.3	19.2	0.0	terminated	
1.6.	Integrated Regional Operational Programme (MoRD)	—	—	17.4	197.4	331.4	346.8
17	Joint Boiler Replacement Scheme (MoE)	49.6	0.0	terminated			
19	Operational Programme Environment 2014–2020 (MoE) (Priority Axis 2 – SO 2.1)	—	10.4	514.4	466.0	406.5	76.3
1.8.	Operational Programme Environment 2007-2013 (MoE)	84.7	864.1	1,111.2	0.0	terminated	
1.9.	Operational Programme Environment 2014–2020 (MoE) (Priority Axis 5 – SO 5.1)	—	0.0	12.4	181.8	176.8	86.0
1.10.	State programmes to promote energy savings and the use of renewable energy sources (EFEKT) (MIT)	344.4	274.2	279.0	1.4	terminated	
1.11.	State programme to promote energy savings (EFEKT 2) (MIT)	—	—	—	401.9	380.6	257.4
1.12.	OP Prague Growth Pole – Buildings section (City of Prague)	—	—	0.0	21.4	3.5	3.9
1.13.	Operational Programme Enterprise and Innovation 2007-2013 (MIT)	441.8	1,096.0	561.0	0.0	terminated	
1.14.	Operational Programme Enterprise and Innovation for Competitiveness 2014–2020 (MIT)	—	0.0	19.0	261.6	788.2	375.6
1.15.	ENERG Programme (Czech-Moravian Guarantee and Development Bank, ČMZRB)	—	—	—	0.0	0.3	0.4
1.16.	Reasonable Energy Savings Programme (MIT)	—	—	—	—	—	under
1.17.	Alternative measures for increasing energy efficiency in Czech industry and in municipalities and regions	—	—	32.4	61.3	16.1	12.0
1.18.	Transport Operational Programme (MoT)	—	4.8	0.0	7.6	0.0	
1.19.	Sustainable Development Strategic Framework	1,064.5	1,916.1	2,554.8	2,554.8	2,554.8	2,600.0
1.27	Integrated Regional Operational Programme (MoRD) — Public transport (IROP SO 1.2)	—	—	—	41.1	118.7	26.9
1.28	Environmental tax on fuels	1,324.9	1,544.2	1,746.6	1,653.1	1,377.9	*
1.29	Marketing ban for solid-fuel boilers in emission classes 1 and 2		171	213	199	365.7	*
1.30	Clean Energy Prague programme	11.3	8.8	8.6	12.3	5.5	12.5
1.31	Operational Programme Environment					2.1	0.0
Total		3,447.1	6,366.4	7,819.1	6,942.7	7,375.5	4,659.3

* Data for 2019 not yet available.

Annex 1 Overview of planned savings measures from central institutions in 2020-2023

Organisation	Site	Project name	Project implementation date	Annual saving in MWh	Project investment costs in CZK
Czech Mining Authority	Czech Mining Authority	Savings project — Construction work on an administration building	2020	130	18,358,925
Czech Mining Authority	District Mining Authority for the regions of Plzeň and South Bohemia	Savings project — Construction work on an administration building	2020	36	32,302,557
Czech Statistical Office (ČSÚ)	Regional administration of ČSÚ Brno	Energy-saving project for the renovation of the Czech Statistical Office Regional Administration building in Brno	2023	106	24,000,000
Czech Statistical Office	ČSÚ — Headquarters	Energy-saving project for the renovation of the ČSÚ headquarters building in Prague	2023	1442	180,000,000
Czech Surveying and Land Registry Office (ČÚZK)	Building site of Surveying and Land Registry Offices, Kobylišy	ČÚZK — Additional insulation of the building and replacement of windows	2023	196	146,766,889
Czech Surveying and Land Registry Office	Building site of Surveying and Land Registry Offices, Kobylišy	ČÚZK — Refurbishment of lighting in the building and installation of PVPP	2022	533	31,285,364
Czech Surveying and Land Registry Office	Building site of Surveying and Land Registry Offices, Kobylišy	ČÚZK — Refurbishment of cooling system	2022	185	20,097,167
Office of the Ombudsman	Office of the Ombudsman	Measures to improve the energy performance of the building	2020	290	35,600,000
Ministry of Culture	Ministry of Culture — Milady Horákové	Refurbishment of the building to improve energy performance	2020	407	30,000,000
Ministry of Culture	Ministry of Culture — Nostitz Palace	Refurbishment of the building to improve energy performance	2020	263	20,000,000
Ministry of Defence	Kbely barracks	Prague, Kbely — Refurbishment of building No 2	2023	0	52,500,000
Ministry of Defence	Human Resources Planning and Development Agency, Komorní Hrádek	UV955/2016/5Chocerady — Education Centre, building 7 — refurbishment CZ.05.5.18/0.0/0.0/18 100/0008991	2023	298	161,850,000
Ministry of Defence	Žatec	Žatec, Capt. Jasioka barracks, building 131 - refurbishment	2022	0	76,000,000
Ministry of Defence	Military Historical Institute	Administration Building 1	2022	531	727,231,937
Ministry of Defence	Ministry buildings, Brno Kounicova	Brno Kounicova 44 — refurbishment of the external part of the building	2021	0	122,712,000

Ministry of Defence	Agency for the Management of Immovable Property (AHNM)	UV955/2016Prague — AHNM building, Sobotecká CZ.05.5.18/0.0/0.0/18_100/0008008	2021	42	44,742,000
Ministry of Defence	General Píky Barracks	Prague — General Píky Barracks — administration buildings — refurbishment	2021	0	87,856,349
Ministry of Defence	New Military Health Faculty site, Hradec Králové	Hradec Králové, new Military Health Faculty site UO CZ.05.5.18/0.0/0.0/17 070/0006355	2021	655	218,545,000
Ministry of Defence	Šumavská barracks, building No 5	UV955/2016 Brno, Šumavská, building No 5 CZ.05.5.18/0.0/0.0/18 100/00086598010	2021	305	78,307,000
Ministry of Defence	Pohořelec	Prague — refurbishment of building No 122, Central Band of the ACR	2021	0	7,575,000
Ministry of Defence	Strahov military building	UV955/2UV955/2016 Prague, Vaníčková, Strahov military building — measures to improve energy performance	2021	203	30,603,000
Ministry of Defence	Šumavská barracks Brno No 3	UV955/2016 Brno, Šumavská barracks, building No 3 CZ.05.5.18/0.0/0.0/18 100/0009244	2021	101	37,585,000
Ministry of Labour and Social Affairs	MoLSA, Prague 2, Karlovo náměstí 1359/1	Replacement of doors and windows	2020	11	7,000,000
Ministry of Labour and Social Affairs	MoLSA, Prague 2, Karlovo náměstí 1359/1	Replacement of doors and windows	2020	1	1
Ministry of Labour and Social Affairs	MoLSA, Prague 2 — Nové Město, Podskalská 1290/19	Improvement of the energy performance of buildings	2020	121	15,000,000
Ministry of Labour and Social Affairs	MoLSA, Prague 2 — Nové Město, Na Poříčním právu 376/1	Improvement of the energy performance of the Ministry building — Na Poříčním právu 1, Prague 2	2020	11	15,000,000
Ministry of Labour and Social Affairs	MoLSA, Ústí nad Labem, Bělehradská 1338/15	Improvement of the energy performance of the Ministry building — Bělehradská 15, Ústí nad Labem	2020	41	12,382,142
Ministry of Labour and Social Affairs	MoLSA, Plzeň, Kollárova 942/4	Improvement of the energy performance of buildings	2020	11	8,000,000
Ministry of Labour and Social Affairs	MoLSA, Prague 2 — Nové Město,	Improvement of the energy performance of buildings	2020	214	10,000,000
Ministry of Industry and Trade	MIT — Gorazdova + Dittrichova	Improvement of the energy performance of Ministry buildings Gorazdova 24, Dittrichova 21	2021	404	133,100,000
Ministry of Justice	Legerova	136V01200 0162 - MoJ - refurbishment and maintenance of the building at Legerova 49	2021	0	74,676,762
Ministry of Health	Ministry of Health	Implementation of energy-saving measures in the Ministry of Health building	2022	785	87,325,256

Ministry of Health	Ministry of Health	Upgrading of lighting using LED technology	2020	79	10,397,268
Ministry of Health	Ministry of Health	Insulation of ceilings and floors	2020	48	2,508,491
Ministry of Health	Ministry of Health	Replacement, remanufacturing of windows	2020	97	57,638,823
Ministry of Health	Ministry of Health	Replacement of boilers and balancing of the heating system	2020	561	16,780,674
Ministry of Agriculture	Olomouc	Overhaul of electrical installations in the Ministry of Agriculture building, Blanická 1 and 3	2023	1	120,000
Ministry of Agriculture	Náchod	Replacement of windows and balcony doors	2021	16	1,350,000
Ministry of Agriculture	Nový Jičín	Insulation of buildings in Nový Jičín, Husova 2003/13 and Divadelní 946/9	2021	158	8,170,000
Ministry of Agriculture	Těšnov	Improvement of the energy performance of buildings	2021	517	117,333,410
Ministry of Agriculture	Jindřichův Hradec	Refurbishment of electrical installations in the MoA building, Pravdova 837/II, Jindřichův Hradec	2021	0	20,000,000
Ministry of Agriculture	Rokycany	Complete overhaul of electrical installations	2020	6	3,425,000
Ministry of Agriculture	Šumperk	Improvement in energy performance of Ministry buildings in Šumperk (N.B. aggregated for three buildings, i.e. A+B+C)	2020	209	18,300,000
Ministry of Agriculture	Strakonice	Insulation of the building	2020	106	11,008,753
Ministry of Agriculture	Pardubice	Improvement of the energy performance of buildings	2020	116	9,213,639
Ministry of Agriculture	Strakonice	Refurbishment of lighting	2020	5	2,000,000
Administration of State Material Reserves	Olbrachtova	17-106 Improvement of the energy performance of the ASMR administration building, Olbrachtova 3, Prague 4	2021	224	151,856,773
State Labour Inspection Office	State Labour Inspection Office - Svahová, 1170	OIP Plzeň — refurbishment of the Karlovy Vary building	2021	0	33,920,837
State Labour Inspection Office	State Labour Inspection Office - Kladenská, 103	City of Prague OIP — building superstructure, including insulation of the roof	2020	9	5,003,000
State Labour Inspection Office	State Labour Inspection Office — Schwarzova, 2617	OIP Plzeň — insulation of the roof shell of the building	2020	0	2,095,241
State Office for Nuclear Safety	České Budějovice Regional Centre	Refurbishment of the heat source	2020	0	1,000,000
Office for Government Representation in Property Affairs	Ústí nad Labem - Mírové nám. 3129	Construction work	2023	262	143,000,000

Office for Government Representation in Property Affairs	Nový Jičín — Husova 1079	Boiler upgrade - heat pump with condensing boiler OMITTED FROM THE ACTION	2022	87	1,500,000
Office for Government Representation in Property Affairs	Brno, Buildings A and B, č.p. 818	Insulation of building block B	2022	31	1,500,000
Office for Government Representation in Property Affairs	Beroun — Politických vězňů 20 and Wagnerovo náměstí 1289	insulation of the building envelope	2021	268	12,135,000
Office for Government Representation in Property Affairs	Kolín	OP Kolín — refurbishment of building envelope	2021	80	3,280,000
Office for Government Representation in Property Affairs	Jihlava, Tolstého 1914	insulation of building block A and B, including the roof, at Tolstého, Jihlava	2021	186	8,000,000
Office for Government Representation in Property Affairs	Liberec - nám. Dr. E. Beneše 585	Insulation of part of roof, replacement of roof covering	2021	40	12,000,000
Office for Government Representation in Property Affairs	Jeseník - Lipovská 125/12	Insulation of the floor of the roof area at Lipovská, Jeseník	2021	15	3,350,000
Office for Government Representation in Property Affairs	Havlíčkův Brod, Štáflova 2003	insulation of a building	2021	60	2,150,000
Office for Government Representation in Property Affairs	Rakovník - Na Sekyře 2123	Refurbishment of the thermal envelope at Na Sekyře, Racovník	2020	123	7,964,000
Office for Government Representation in Property Affairs	Brno, Buildings A and B, č.p. 818	Insulation of the building envelope, building A	2020	97	6,800,000
Office for Government Representation in Property Affairs	Olomouc — Jeremenkova 1263	Replacement of the remaining windows in the façade, refurbishment of boiler room with condensing boilers	2020	36	6,000,000
Office for Government Representation in Property Affairs	Plzeň – Radobyčická 14	Insulation of the building envelope, Radobyčická, Plzeň	2020	34	2,800,000

Office for Government Representation in Property Affairs	Vsetín, Pod Vršky 27	Refurbishment of heating system	2020	7	792,000
Office for Government Representation in Property Affairs	Kolín	Kolín Karlovo nám. 44	2020	14	600,000
Office for Government Representation in Property Affairs	Kladno - nám. 17. listopadu	Refurbishment of the building envelope	2020	70	3,600,000
Industrial Property Office	Industrial Property Office	Replacement of fluorescent lighting fixtures with LED lighting	2020	18	1,203,278
Office of the Government of the Czech Republic	Straka Academy site	Replacement of windows on the southern and western façades	2020	147	30,000,000
Office of the Government of the Czech Republic	Liechtenstein Palace site	Boiler room and ventilation upgrade including MaR	2020	0	26,300,000
Office of the Government of the Czech Republic	Straka Academy site	Upgrading the measurement and regulation of electrical boiler rooms	2020	0	2,500,000
Office of the Government of the Czech Republic	Straka Academy site	Roof insulation	2020	0	1,000,000
Office of the Government of the Czech Republic	Straka Academy site	Insulation of underground ceilings	2020	0	2,400,000
Prison Service	Nové Sedlo (V)	Energy-saving project 'EPC'	2023	1423	56,200,000
Prison Service	Všehrady (V)	Energy-saving project 'EPC'	2023	2075	127,380,000
Prison Service	Ostrov (V)	Energy-saving project 'EPC'	2023	3046	124,630,000
Prison Service	Prague Pankrác (VV)	Energy-saving project 'EPC'	2023	2550	176,000,000
Prison Service	Jiřice (V)	Energy-saving project 'EPC'	2022	2699	52,560,000
Prison Service	Valdice (V)	Energy-saving project 'EPC'	2021	4370	71,000,000
Prison Service	Brno (VV and ÚpVZD)	Brno — refurbishment of laundry	2020	490	35431825
Prison Service	Brno (VV and ÚpVZD)	Brno — refurbishment of gas-boiler room	2020	1095	23,343,000
Prison Service	Kuřim (V)	Refurbishment of gas-boiler room	2020	404	11,500,000
Prison Service	Horní Slavkov (V)	Roof insulation	2020	20	6,500,000
Prison Service	Horní Slavkov (V)	Replacement of windows	2020	10	2,500,000

Prison Service	Horní Slavkov (V)	Replacement of windows	2020	10	900,000
Prison Service	Liberec (VV)	Replacement of lighting	2020	35	3,500,000
Prison Service	České Budějovice (VV)	Refurbishment of transfer station	2020	200	7,200,000
Prison Service	České Budějovice (VV)	Replacement of windows	2020	5	320,000
Prison Service	Plzeň (V)	Overhaul (replacement) of water measurement and regulation III	2020	5	400,000
Prison Service	Plzeň (V)	Replacement of lighting	2020	6	500,000
Prison Service	Plzeň (V)	Replacement of windows in laundry	2020	5	600,000
Prison Service	Stráž pod Ralskem (V)	Refurbishment of risers	2020	3	850,000
Prison Service	Litoměřice (VV)	Replacement of windows	2020	12	1,700,000
Prison Service	Nové Sedlo (V)	Replacement of windows in central warehouses	2020	5	700,000
Prison Service	Valdice (V)	Replacement of windows	2020	3	500,000
Prison Service	Světlá nad Sázavou (V)	Replacement of lighting	2020	25	1,660,000
Prison Service	Odolov (V)	Replacement of windows stage II	2020	26	3,300,000
Prison Service	Oráčov (V)	ÚT refurbishment	2020	3	1,000,000
Prison Service	Oráčov (V)	Refurbishment of boiler room	2020	50	4,400,000
Prison Service	Oráčov (V)	Replacement of windows stage II	2020	10	880,000
Prison Service	Karviná (V)	Reconditioning of hot-water pipes	2020	3	300,000
Prison Service	Ostrava (VV)	Replacement of windows	2020	6	2,100,000
Prison Service	Kuřim (V)	Reconditioning of hot-water pipes	2020	3	500,000
Prison Service	Academy of Sciences of the Czech Republic	Replacement of entrance portals	2020	2	350,000
Prison Service	Olomouc (VV)	Replacement of lighting	2020	25	5,000,000
Prison Service	Břeclav (V)	Replacement of windows	2020	3	600,000
Prison Service	Kynšperk nad Ohří (V)	Replacement of windows and entrance doors	2020	5	2,800,000
Prison Service	Kynšperk nad Ohří (V)	Replacement of lighting	2020	4	600,000
Prison Service	Opava (V and ÚpVZD)	Replacement of lighting	2020	3	200,000
Prison Service	Opava (V and ÚpVZD)	Replacement of lighting	2020	5	300,000

Prison Service	Valdice (V)	Replacement of air-conditioning technology	2020	22	6,809,000
Prison Service	Pardubice (V)	Replacement of lighting	2020	18	600,000
Prison Service	Vinařice (V)	Replacement of windows	2020	5	950,000
Prison Service	Pardubice (V)	Replacement of entrance doors	2020	5	670,000
Prison Service	Olomouc (VV)	Refurbishment of heating system	2020	756	6,788,100
Prison Service	Stráž pod Ralskem (V)	Insulation of a building	2020	328	11,490,000
Prison Service	Nové Sedlo (V)	Replacement of entrance doors	2020	4	600,000
Prison Service	Skuteč dispatch warehouse	Insulation of a building	2020	27	8,317,540
Prison Service	Kuřim (V)	Construction of a production hall	2020	14	19,998,585
Prison Service	Bělušice (V)	Bělušice — refurbishment of gas-boiler room	2020	600	10,195,319

Note 1: Projects not covered by Article 5 of Directive 2012/27/EU and projects not yet in the investment plans of individual institutions are not listed in the summary. The projects were exported from the energy consumption monitoring system as of 18 March 2020.

Note 2: For some projects, the amount of the saving or the investment cost is quantified as 0 or 1. However, this is a temporary work-around until the resulting figures are known, because the energy consumption monitoring system does not allow the project to be awarded without indicating these figures.

Annex 2: Notification of additional policy measures in the Czech Republic's alternative scheme

Measure number	1.30
Title of measure	Clean Energy Prague programme
Sector	households
Concise description of the policy measure	The measure is aimed at financial support for the conversion of original heating systems to more environmentally friendly forms or for the use of renewable energy sources, with a view to improving the energy performance of houses and apartment blocks and improving air quality.
Eligible measure	Replacing obsolete heating systems with more energy-efficient options and promoting the use of renewable energy sources.
Regional application	This measure can be applied only in the City of Prague.
Target group	Households, residential buildings (houses, apartment blocks)
Implementing body	Prague City Hall
Energy saving calculation method	Relative savings
Service life	12-30 years
Monitoring of the benefits of the measure	As part of ex-post evaluation, each project carried out is verified (individual measures).

Measure number	1.31
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Title of measure	Operational Programme Environment
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Sector	Public sector
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Concise description of the policy measure	As part of the policy measure, energy savings from investment projects aimed at reducing light pollution are reported. Specifically, this involves the purchase and installation of luminaires, including lamps, on existing or newly installed lampposts or the acquisition and optimisation of public-lighting control systems when renovating or modifying public lighting.
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Eligible measure	Project preparation, verification and implementation of the supported activity
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Regional application	The measures can only be implemented in the municipalities specified in the given call.
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Target group	Municipalities
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Implementing body	Ministry of the Environment
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Energy saving calculation method	Relative savings
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Service life	12-30 years
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Monitoring of the benefits of the measure	As part of ex-post evaluation, each project carried out is verified (individual measures).
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Measure number	1.32
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Title of measure	Declaration on strategic cooperation by ČEZ
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Sector	Industry and the public sector
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Concise description of the policy measure	A voluntary agreement to involve a third party in improving energy efficiency or to implement measures and efficient energy management in order to reduce energy consumption by the final consumer in industry, services and the public sector.
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Eligible measure	<p>Additional alternative measures will be aimed at reducing energy consumption and related emissions or improving energy efficiency.</p> <p>To incentivise companies and local authorities, energy efficiency will be incorporated in behavioural-change measures:</p> <ul style="list-style-type: none"> • introduction of energy management • promotion of energy-saving projects (EPC projects) • information campaigns • advice on energy audits and licences, processing of studies <p>However, the measures will also be implemented directly for the different types of applicants; those implemented to date are:</p> <ul style="list-style-type: none"> • implementation of energy-saving projects (EPC projects) • adaptations to heating sources in order to increase efficiency • replacement of lighting, introduction of management and optimisation elements • promoting electro-mobility, building recharging points for electric cars
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Regional application	This measure can be applied throughout the Czech Republic.
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Target group	<p>The business sector, particularly industry.</p> <p>Local authorities in the Czech Republic and their organisational units.</p>
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Implementing body	ČEZ, a.s.
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Energy saving calculation method	<p>Where individual investment measures are implemented, measured savings are used if, in the light of the individual measures implemented, this is feasible and cost-effective. In other cases, the method of proportional savings based on technical engineering estimates is used.</p> <p>For energy savings from targeted consultations and measures to change consumer behaviour as a result of education and awareness-raising, the examined savings method is used. In order to evaluate the energy savings achieved through targeted consultations, the link between the consultation itself and the follow-up by the consulting person is essential. Energy savings have been identified on the basis of a methodology developed by České vysoké učení technické (Czech Technical University).</p> <p>In the case of measured or proportional savings, the saving is calculated by certified energy specialists authorised to perform the activity pursuant to Act No 406/2000 on energy management. The energy saving is calculated by comparing the state of final energy consumption before and after implementation of the energy-saving measure, as established by a technical document (energy audit, energy assessment or building energy-performance certificate) drawn up in accordance with Act No 406/2000.</p>
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Service life	<p>Investment measures: 12-30 years</p> <p>Educational and awareness-raising activities: 2 years</p> <p>Energy management: 2 years</p>
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Monitoring of the benefits of the measure	Energy savings are monitored and verified under obligations deriving from a standard energy services contract.
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