THE MINISTRY OF THE ECONOMY OF THE SLOVAK REPUBLIC

DOCUMENTATION

FOR DISCUSSION AT A MANAGEMENT BOARD OF THE MINISTRY OF THE ECONOMY OF THE SLOVAK REPUBLIC

No

Title of documentation	Annual report on progress achieved towards national energy efficiency targets for 2018		
Reason for submitting documentation	Section 4(1)(d) of the Energy Efficiency Act, No 321/2014, as amended		
Documentation drawn up by:	Miroslav Mariaš, Chief State Counsellor 4120 Peter Drotár, Chief State Counsellor 4120 Peter Štibraný, Slovak Innovation and Energy Agency		
Documentation submitted by	Ján Petrovič, PhD., General Director of Energy Department		
Documentation approved by	Vojtech Ferencz, PhD., State Secretary		
The documentation contains	 Draft conclusions from the Management Board Presentation report Annual report on progress achieved towards national energy efficiency targets for 2018 Assessment of intra-ministerial consultation exercise 		
We recommend inviting the following to the meeting			
The documentation has restricted access	No		

Draft conclusions

from the Management Board of the Slovak Ministry of the Economy on2019

The Management Board of the Slovak Ministry of the Economy

A. approves

A.1 the Annual report on progress achieved towards national energy efficiency targets for 2018

The Minister

B. orders:

the Director-General of the Energy Section

- **B.1** to draw up documentation according to the conclusions from the Management Board of the Slovak Ministry of the Economy
 - T: within three working days from the date of its approval by the Management Board of the Slovak Ministry of the Economy
- **B.2** to send the documentation to the European Commission

T: by 30 April 2019

Presentation report

The 'Annual report on progress achieved towards national energy efficiency targets for 2018' (the 'Annual Report') has been presented by the Energy Section for discussion by the Management Board of the Slovak Ministry of the Economy on the basis of Section 4(1)(d) of Act No 321/2014 on Energy Efficiency and amending some other acts, as amended.

The aim behind submitting the document is to assess energy consumption in the Slovak Republic in individual sectors of the national economy and to assess fulfilment of the energy efficiency targets set by Slovakia.

The report contains basic statistics on energy consumption in Slovakia and selected statistical indicators for 2017, a description of trends in energy consumption in individual sectors of the national economy in 2017 and updated information about the most important legislative and non-legislative energy efficiency measures implemented in 2018.

The report also contains assessments of fulfilment of the national indicative energy efficiency target for 2020, the final-consumer energy savings target and the energy savings target for public buildings.

Energy consumption in the Slovak Republic grew by $5.68\,\%$ compared to the previous year. Only for primary energy consumption is Slovakia meeting its national energy efficiency targets, by $101.45\,\%$. Slovakia is not meeting the target for final energy consumption, where energy consumption has increased by $8.75\,\%$.

The mandatory final-consumer energy efficiency target, monitored for the period 2014–2020, is on course to reach 110.10 %, whereas the new annual target value, which needs to be achieved in 2019 and 2020, has been reduced to 149.88 GWh. For that reason we can also assert that we do not need to introduce energy efficiency obligation schemes by 2020, and it is highly likely that the mandatory final-consumer energy efficiency target will be met in 2020.

Slovakia is also on course to achieve the energy savings target pursuant to Article 5 of Directive 2012/27/EU on energy efficiency for public buildings, set in accordance with the notification. This target was met by 117 % in 2017. However, it is important to pay more attention to renovating buildings owned by government entities.

The document does not impact on government budgets, the business sector, the social sphere, the environment or the information society, nor does it impact on public services for citizens, marriage, parenthood or family.

Annual report on progress achieved towards national energy efficiency targets for 2018

The Ministry of the Economy of the Slovak Republic draws up an annual report on energy efficiency for the preceding calendar year on the basis of Section 4(1)(d) of the Energy Efficiency Act, No 321/2014, and amending certain other acts, as amended. This is an annual assessment of fulfilment of the energy efficiency targets set by Slovakia.

The report contains basic information on energy efficiency and on consumption in individual sectors of the national economy, and interim information on how and to what extent the energy efficiency targets are met, and in particular:

- basic statistics on energy consumption in Slovakia and the statistical indicators used for 2017,
- a description of trends in energy consumption in individual sectors of the national economy in 2017,
- updated information on the most important legislative and non-legislative energy efficiency measures implemented in 2018,
- an assessment of fulfilment of the national indicative energy efficiency target for 2020 in the form of an absolute value for primary energy consumption and final energy consumption pursuant to Section 5(1)(c) of Act No 321/2014,
- an assessment of fulfilment of the final-consumer energy savings target pursuant to Section 5(1)(b) of Act No 321/2014,
- an assessment of fulfilment of the energy savings target for public buildings.

The content of the annual report is in accordance with part 1 of Annex XIV to Directive 2012/27/EU on energy efficiency, as amended, and with the report structure requested by the European Commission in February 2019.

1. Basic energy efficiency statistics

The basic energy consumption statistics are provided for the 2017 calendar year. Owing to differences in certain indicators, data from both Eurostat and the Slovak Statistical Office (ŠÚ SR) are provided. Eurostat has changed its methodology for calculating energy balances. That is why, for the sake of continuity in energy consumption trends, the data are provided in both the old and new Eurostat methodologies.

The principal reason for the differences between $\check{S}\check{U}$ SR and Eurostat data lies in the different methodologies used to calculate the data for various items, since they are based on identical data. This chiefly involves differences in terms of reporting coal consumption and energy consumption to power gas pipeline compressor stations, and the fact the $\check{S}\check{U}$ SR uses calorific value for all fuels, whereas Eurostat uses gross calorific value for some fuels. The $\check{S}\check{U}$ SR and Eurostat databases are identical, as required by Regulation (EC) No 1099/2008 of the European Parliament and of the Council of 22 October 2008 on energy statistics.

In 2017, energy balances were issued in accordance with Eurostat's new methodology. Nevertheless, energy efficiency and, therefore, mainly primary energy and final energy consumption are still calculated in accordance with the methodology used by Eurostat up to 2016. Consumption developments in individual sectors are set out in accordance with the methodology used by ŠÚ SR for reasons of continuity in displaying consumption trends.

Table 1: Basic energy efficiency figures for 2017

	Eurostat	Eurostat	ŠÚSR
Indicator	Old	New	201=
	methodol ogy 2017	methodol ogy 2017	2017
Primary energy consumption (ktoe)	16 149	16 149	16 147
Final energy consumption (ktoe)	11 127	9 903	9 802
Final energy consumption - industry (ktoe)	4 636	3 452	3 429
Final energy consumption - transport (ktoe)	2 813	2 773	2 698
Final energy consumption - households (ktoe)	2 109	2 109	2 105
Final energy consumption - trade and services (ktoe)	1 427	1 427	1 427
Final energy consumption - agriculture (ktoe)	143	143	143
Gross value added – industry (NACE Rev. 2 B-F) - EUR millions, in constant prices			26 661
Gross value added – services (NACE Rev. 2 G-U) - EUR millions, in constant prices			47 143
Gross disposable income (EUR millions)	49 9	987	49 987
Gross domestic product (GDP) at constant prices (EUR millions)	84 3	850	84 850
Electricity generation at thermal power plants (ktoe)			1 944 1)
Electricity generation from CHP (ktoe)			1 542 1)
Heat production at thermal installations (ktoe)			902 1)
Heat production from CHP plants (ktoe)			663 1)
Fuel inputs at thermal installations (ktoe)			6 418 2)
Passenger kilometres (pkm millions) - all passenger transport not counting private cars	9 1	10	11 068
Passenger kilometres (pkm millions) - all public passenger transport not counting private cars			10 986
Passenger kilometres (pkm millions) - all non-public passenger			104
transport not counting private cars			
Tonne kilometres (tkm millions) - total	44 8		44 724
Tonne kilometres (tkm millions) - rail transport	8 4		8 486
Tonne kilometres (tkm millions) - road transport	35 4		35 362
Tonne kilometres (tkm millions) - waterborne transport	93		679
Population as at 1.1.2018	5 443	3 120	5 443 120

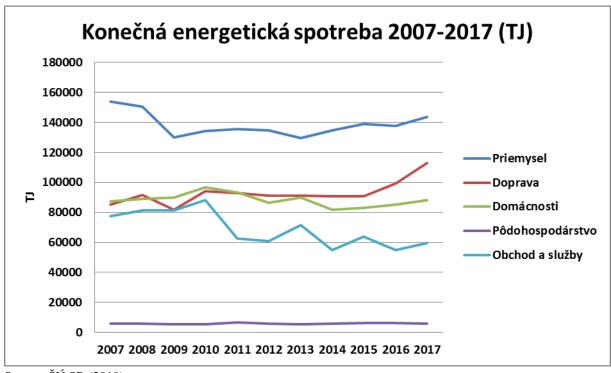
Source: ŠÚ SR (2019), Eurostat (2019)

¹⁾ $\check{S} \acute{U} \; SR$ calculates these data only for the purposes of international questionnaires.

²⁾ ŠÚ SR does not calculate this data. This estimate is based on Eurostat's 2016 calculation.

2. Energy consumption trends by sector

Fig. 1: Final energy consumption 2007–2017 by sector



Source: ŠÚ SR (2019)

[Graph: Final energy consumption 2007–2017 (TJ)

Industry

Transport

Households

Agriculture

Trade and services]

Energy consumption trends by sector

Industry

The industrial sector is the largest consumer of energy in the Slovak Republic. Energy consumption in industry gradually decreased until 2009, after which it levelled out, with a moderate increase in 2015 and 2017. Final energy consumption in industry was 144 PJ in 2017, accounting for 38 % of final energy consumption in Slovakia. Year-on-year energy consumption in industry grew by 0.8 % due to a kick-start in the economy and growth in production.

Transport

In 2017 the transport sector consumed 113 PJ of energy, expressed in final energy consumption. The largest year-on-year rise in energy consumption compared to the previous year was recorded in 2017 (13.8 %). Between 2007 and 2017 energy consumption in the transport sector rose by as much as 33 %, making it the largest increase in consumption during that ten-year period under review.

In terms of individual modes of transport, road transport in particular contributed to the sharp growth. The energy consumption trend in the other modes of transport has remained steady. The chief factors fuelling long-term energy consumption growth in transport include: the ever-growing numbers of registered motor vehicles and the accompanying rise in the numbers of people travelling by car, along with an expansion in road haulage as the carriage of goods switches from less energy-intensive modes of transport to road transport. Comparable financial costs for road haulage are also an important factor when a very high number of vehicles are used.

Households

In 2017, households consumed 88 PJ. Year-on-year consumption grew by 3.7 %. The increase in energy consumption was mainly due to lower average outdoor temperatures, meaning higher consumption for household heating.

Agriculture

Energy consumption in the agriculture sector does not exhibit such pronounced fluctuations as in other sectors. In 2016, energy consumption in agriculture was 6 PJ and the sector recorded a year-on-year fall in consumption of 4.2 %.

Commercial and public services

Energy consumption in the commercial and public services sector was $60\,\mathrm{PJ}$; this was a growth in consumption of 9 % compared to the previous year. This variation can be explained by the break-up and merger of undertakings, changes in their sectoral classification and the resulting changes in how their consumption is classified in the energy balance, and by the calculation method used by the ŠÚ SR for this item.

3. Information on legislative and non-legislative measures in 2018

A description of the most important legislative and non-legislative measures implemented in 2018 which made a significant contribution to meeting the energy efficiency targets for 2020.

3.1 Legislative measures

Legislative activity in the field of energy efficiency in 2018 was devoted to completing European legislation – three amendments to Directive 2012/27/EU on energy efficiency, which are provided for in Directives 2018/844 and 2018/2002 and Regulation No 2018/1999. Two more amendments are still going through the legislative process. Furthermore, two new amendments were issued to Directive 2010/31/EU on the energy performance of buildings in Directive 2018/844 and Regulation 2018/1999. During 2018, a number of pieces of legislation were drawn up in the field of energy labelling and ecodesign, which will be issued in 2019.

On 8 May 2018 Eurostat issued a detailed methodology on ways to carry out energy performance contracting (EPC) in the public sector in such a way that expenditure associated with renovating public buildings, which public entities have decided to renovate through EPCs, is not offset in the national accounts, namely, it has not contributed to the creation of public State debt. Eurostat has also drawn up a new methodology for calculating energy balances, which it used for the first time for data from 2017.

At national level, an amendment to Energy Efficiency Act No 4/2019 was drawn up following the Eurostat methodology on energy performance contracting, which was approved in December 2018. The amendment allows for energy performance contracting in the public sector without impacting public State debt. On the basis of an authorisation from the Slovak Ministry of the Economy, the Slovak Innovation and Energy Agency provides technical assistance in preparing public-sector EPC projects. The recipients of the technical assistance provided are public administrations; priority is given to State administrations involved in the preparation and implementation of projects for increasing the energy efficiency of buildings though EPC.

An amendment was also drawn up in 2018 under No 302/2018 to Act No 71/2013 on the granting of subsidies within the competence of the Ministry of the Economy of the Slovak Republic, which allowed for aid to be extended in the area of energy efficiency, and on whose basis calls will be announced in 2019.

Meeting the obligations under Energy Efficiency Act No 321/2014 and Act No 555/2005 on the energy performance of buildings made a particular contribution to meeting the national energy efficiency targets.

Particular aspects under the Energy Efficiency Act are:

• the conclusion of further voluntary agreements between the Ministry of the Economy and the biggest energy consumers in industry and the energy sector,

- ensuring the implementation of mandatory energy audits for large companies, including the introduction and maintenance of certified energy and environmental management systems and eco-management and audit schemes (EMAS),
- implementing energy efficiency measures in buildings with a total floor area of over 1 000 m², in particular by insulating hot-water systems in buildings with central hot-water distribution,
- creating a blueprint for developing EPC in the Slovak public sector and applying the rules of a support system for developing energy performance services with a primary focus on the public sector,
- ensuring the further development and linking of data when energy efficiency monitoring systems are used.

The main aspect under the Act on the energy performance of buildings was the implementation of the requirements for compliance with the minimum requirements for the construction of new buildings and major renovations of existing buildings.

3.2 Non-legislative measures

The most important non-legislative projects and measures in the field of energy efficiency in 2018 were:

- improvements to the energy efficiency of industrial production, financed mainly through private funding and, in the case of the energy transformation, transmission and distribution sector, jointly financed from revenues from the sale of emission allowances (e.g. the SLOVSEFF III programme),
- a blueprint for developing EPC in the public sector was approved by Government Resolution No 321/2018 of 11 July 2018. This contains the requirement to draw up legislation and set up technical assistance for the public sector, which should be carried out by the Slovak Innovation and Energy Agency from 2019,
- improvements to the thermal characteristics of national or local government buildings through major renovation, with a requirement to exceed minimum energy performance requirements, were financed using the European structural and investment funds (ESIF) and the Integrated Regional Operational Programme (IROP),
- increasing the effectiveness of technical equipment in and improving the thermal characteristics of public buildings to a level below that of major renovation, financed mainly from national funds, using resources from e.g. the Environmental Fund or local and national budgets,
- improving the thermal characteristics of residential buildings through major renovation financed in particular through the State Housing Development Fund,
- renewal and modernisation of vehicle fleets, particularly in bus and rail transport, financed in particular from ESIF 2014-2020 through the Operational Programmes 'Integrated Infrastructure' (OP II) and IROP.

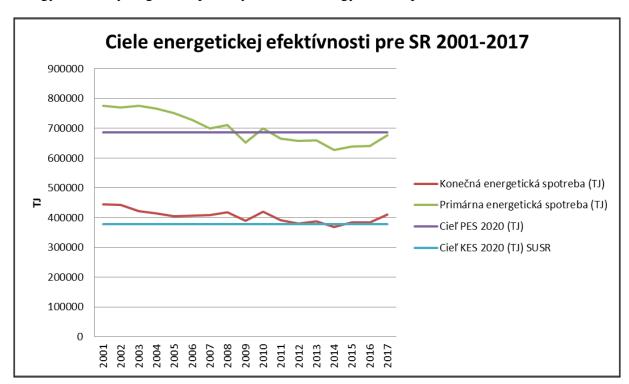
4. Evaluation of achievement of the national energy efficiency target

On the basis of Article 3 of Directive 2012/27/EU and in accordance with Section 5(1)(c) of Act No 321/2014, a national energy efficiency target was set for 2020 in the form of an absolute value for primary energy consumption and final energy consumption. The national indicative energy efficiency target for 2020 is expressed in the form of an absolute value for primary energy consumption in 2020 (20 % - 686 PJ) and one for final energy consumption in 2020 (31 % - 378 PJ) compared with the PRIMES reference scenario from 2007, and based on data from the ŠÚ SR.

Primary energy consumption in 2017 amounted to 676 PJ, i.e. 36 PJ (5.68 %) more than in 2016. The national indicative energy efficiency target for final energy consumption for 2020 is set at 686 PJ. Slovakia is on course to meet this target by 101.45 %.

Final energy consumption in 2017 amounted to 410 PJ, which was 27 PJ (7.17 %) more compared to 2016. The national indicative energy efficiency target for final energy consumption for 2020 is set at 378 PJ. Slovakia has exceeded this target by 8.57 %.

Fig. 2: Energy consumption in Slovakia between 2001 and 2017 and national indicative energy efficiency targets for primary and final energy consumption met



Source: ŠÚ SR (2019)

[Graph: Energy efficiency targets for the Slovak Republic 2001-2017

Final energy consumption (TJ)

Primary energy consumption (TJ)

2020 primary energy consumption target (TJ)

2020 final energy consumption target (TJ) SUSR]

5. Fulfilment of the target pursuant to Article 5 of Directive 2012/27/EU

Pursuant to the requirements of Article 5 of the Directive, each Member State must ensure that, as from 1 January 2014, 3 % of the total floor area of heated and cooled buildings owned and occupied by its central government is renovated each year to meet at least the minimum energy performance requirements for buildings. This target may also be met by alternative means that will result in the same volume of energy savings by 2020 as the basic approach. Slovakia gave notification in 2013 that it had met the target for energy savings in public buildings pursuant to Article 5 by alternative means pursuant to Article 5(6) of the EE Directive, i.e. the energy savings target for buildings is reported in energy units and measures other than major building renovations can be used to meet it. Under the alternative approach, according to the notification from 2013 the annual energy savings target was set at 52.17 GWh/year.¹⁾

By continuing with the monitoring process even after the data collection deadline for drawing up the annual report for 2017, some more data were ascertained for building renovation which brought additional energy savings of 1.50 GWh during 2017. The preliminary result of 48.21 GWh stated in the 2017 annual report was corrected to the final value of 49.71 GWh. Older periods were not corrected again. Annual fulfilment of Article 5 of the Directive according to the data ascertained to date, following the introduction of an extended monitoring process, reached a level of 158.2 % in 2018 (see Table 2).

Table 2: Updated energy saving (fulfilment of annual target) in public buildings pursuant to Article 5 of Directive 2012/27/EU by year

Year	Annual target	Actual fulfilment of annual target		Difference in fulfilment of annual target	Fulfilment of annual target after redistribution of savings
	[GWh]	[GWh]	[%]	[GWh]	[GWh]
2014	52.17	43.79	83.9 %	-8.38	52.17
2015	52.17	91.06	174.5 %	+38.89	52.17
2016	52.17	38.89	74.5 %	-13.28	52.17
2017	52.17	49.71	95.3 %	-2.46	52.17
2018	52.17	82.54	158.2 %	+30.37	52.17

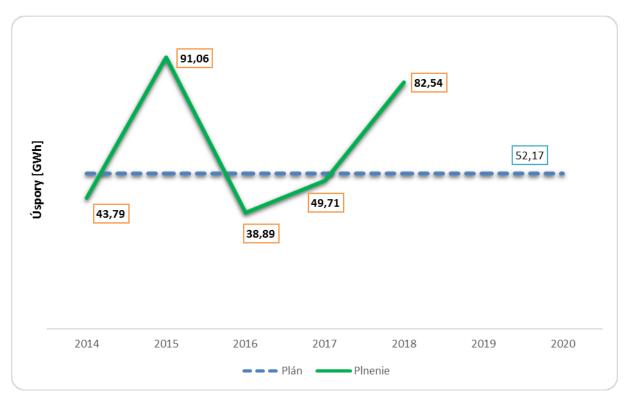
Assessment of fulfilment of the target with distribution of savings

According to this table, the energy savings target was not actually met in 2014, 2016 and 2017. In 2015 and 2018 the savings target was significantly exceeded, giving a positive differential balance of 38.89 GWh in 2015 and 30.37 GWh in 2018. Since the Directive allows for its redistribution between other years (three years before/after), after redistribution of this differential balance it is possible to conclude that **Slovakia met the savings target**

¹ Notification of alternative approach as provided for in Article 5 of Directive 2012/27/EU on energy efficiency. The notification was sent to the European Commission on 27 December 2013.

each year from 2014 to 2018. In 2018 there is a new differential balance of +30.37 GWh available, which may be taken into account for the 2019 and 2020 assessments. Slovakia did not use the differential balance of 38.89 GWh in 2018, since it achieved a 158.2 % annual fulfilment.

Fig. 3: Annual fulfilment of target 2014-2018



Source: SIEA - Energy efficiency monitoring system (MSEE)

[Graph: Savings [GWh]

Planned

Achieved]

Assessment of fulfilment of the target with the addition method

Table 3: Energy saving in public buildings pursuant to Article 5 of the Directive – trajectory

Year	Total annual targets	Annual fulfilment	Total annual fulfilments	Fulfilment according to totals
	GWh	GWh	GWh	%
2014	52.17	43.79	43.79	83.94 %
2015	104.34	91.06	134.85	129.24 %
2016	156.51	38.89	173.74	111.01 %
2017	208.68	49.71	223.45	107.08 %
2018	260.85	82.54	305.99	117.30 %
2019	313.02			
2020	365.19			
Total	365.19	305.99		

Based on the information available as of the deadline for processing the annual report, fulfilment of the binding target pursuant to Article 5 of Directive 2012/27/EU as of

31/12/2018 under the addition method was at 117.30 %. This means that the savings trajectory up to 2018 was met, and even exceeded by 17.3 %.

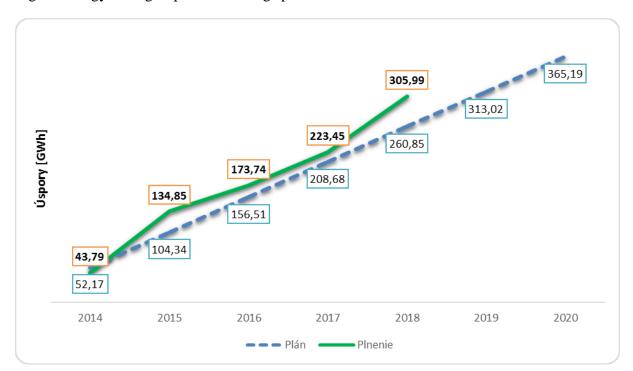


Fig. 4: Energy saving in public buildings pursuant to Article 5 of Directive 2012/27/EU

Source: SIEA - Energy efficiency monitoring system (MSEE)

[Graph: Savings [GWh]

Planned

Achieved]

Energy savings in public buildings were achieved in particular through:

- consistent application of the requirements of Act No 555/2005 on the energy performance of buildings in complying with the minimum requirements for new building construction and major renovations of existing buildings, including the provision of expert advice (SIEA, MTC, MoE) on the advantages of going beyond the minimum requirements for renovating buildings,
- supporting improvements in the thermal characteristics of national or local government buildings through major renovation, above and beyond the minimum requirements, financed from the European structural and investment funds (ESIF), in particular through the OP QoE,
- supporting increases in the effectiveness of technical equipment in and improving the thermal characteristics of public buildings to a level below that of major renovation (e.g. by changing openings, particularly windows, insulating roofs, etc.), financed mainly from national funds (e.g. the Environmental Fund or local and national budgets).

From the point of view of maintaining the trend towards renovating buildings in 2019 and 2020, and to meet the energy savings target for public buildings, it is important to pay more attention to renovation projects in buildings owned by government entities and, in particular, to breaking down the barriers to accessing appropriate funding. The biggest contribution to the positive result for 2018 was made by the fact that funding began to be drawn from the ESIF, intended for renovating State and public buildings. From an analysis of the trajectory for fulfilment of the plan at figure 4, we can see that without this funding Slovakia cannot meet the ambitious savings target of 52.17 GWh for Article 5 of the Directive. The biggest barrier is the length of time required for public procurement processes, which explains why the start of the planned implementation of the renovation was delayed by two years and why there was local deficit in 2016 and 2017.

6. Fulfilment of the target pursuant to Article 7 of Directive 2012/27/EU on energy efficiency

The target pursuant to Article 7 of Directive 2012/27/EU is set at 1.5 % of annual energy sales to final customers for each energy supplier. The resulting cumulative energy savings target for 2014-2020 was set at 26 565 GWh, and the annual target for 2014 at 948.75 GWh (3 416 TJ), making it possible to achieve the cumulative target in 2020. Slovakia is applying Article 7 of the EE Directive using alternative measures in accordance with Article 7(9) thereof. Prioritising alternative measures before introducing the energy efficiency obligation schemes has been significant in terms of eliminating the regulatory barriers in the business environment when meeting the binding final-consumer energy savings target. Introducing the obligation schemes would significantly increase the administrative burden, particularly for energy suppliers, but also for end consumers and, last but not least, for the State, not to mention the almost identical increase in energy prices.

In 2018, discussion continued on coming to voluntary agreements with major energy consumers in industry and the energy sector, based on which these entities provided the Ministry with information on measures implemented with an impact on reducing energy consumption. These measures contributed further energy savings during that time amounting to 251 GWh. In 2018, voluntary agreements contributed to fulfilling the target in line with Article 7 by almost 50 %, which meant that for the first time in the history of monitoring energy savings, they took the pole position from improving the thermal characteristics of residential buildings, which traditionally contributed to fulfilling this target through larger savings. In the industry sector there was also a correction to data for 2014, 2015 and 2016 in the 'voluntary agreement' measure. The correction in industry is linked with offsetting the savings ascertained on the basis of measures from energy audits and on the basis of voluntary agreements achieved at a later date. However, this is borne out in the change in the overall redistribution of savings between years as well as in the change in the final cumulative contributions compared to the situation reported in the 2017 annual report assessments.

Table 4: Adjustment to the annual energy savings target in line with Article 7 following an additional identification of energy efficiency measures implemented in 2015–2017 and provisional results for 2018

	Energy savings target (annual)		Fulfilment of updated (annual) energy savings target			
Year	Original* Updated**					
	[GWh]	[GWh]	[GWh]	[TJ]	[%]	
2014	948.75	948.75	1 086.52	3 911.46	114.52 %	
2015	948.75	892.32	1 416.84	5 100.63	158.78 %	
2016	959.84	741.04	881.08	3 171.88	118.90 %	
2017	1 019.49	714.72	912.12	3 283.64	127.62 %	
2018	1 019.49	782.47	1 070.74	3 854.67	136.84 %	
2019	1 019.49	149.88				
2020	1 019.49	149.88				
Total			5 367.30	19 322.28		

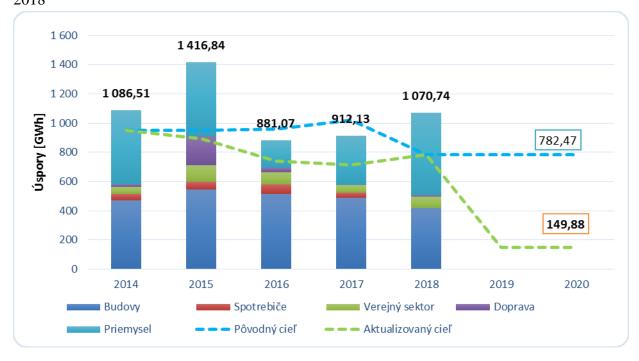
Other measures for these previous years were not corrected. Improvements to the way in which energy efficiency is monitored for improving the thermal characteristics of buildings and the start of drawing funding from the ESIF that are appropriate for renovating State and public buildings contributed greatly to achieving the target.

Energy savings of **1 070.74 GWh** were achieved through energy efficiency measures carried out in 2018, which were identified at the deadline for drawing up the annual report. Taking into account the lifespan of these measures, their **cumulative contribution can be quantified as 3 025.63 GWh**. The final amount of energy savings for 2018 will be updated in the next annual report.

As a result of the yearly fulfilment of annual energy savings targets in 2014-2018, and thereby of the increase in cumulative energy savings already achieved, there has been a significant fall in the end-consumer target for 2019 and 2020. Meeting the 2014-2018 target made it possible to set a new annual energy savings target for 2019, which is a mere 149.88 GWh, laying the foundations for achieving the planned cumulative target of 26 565 GWh in 2020. In order to meet the overall cumulative target in 2020, we still need to achieve cumulative energy savings of 449.64 GWh in 2019 and 2020, which will make it possible to achieve the saving of 149.88 GWh in 2019 and 2020. Due to the relatively very low increase in energy savings required in 2019 and 2020, we anticipate that the end-consumer target will be met in line with Article 7 of the Directive in 2020.

Fig. 5: Annual energy savings pursuant to Article 7 of Directive 2012/27/EU and updated target

for 2018



^{*} Original savings target set in the Energy Efficiency Action Plan for 2017-2019, looking forward to 2020, Table 13.

^{**} The updated target includes the impact of the year-on-year data update. It is based on final savings of previous years and provisional savings for 2018 for planning 2019 and 2020.

Source: SIEA - Energy efficiency monitoring system (MSEE)
[Graph: Savings [GWh]
Buildings
Appliances
Public sector
Transport
Industry
Original target
Updated target]

Cumulative fulfilment and new trajectory

A linear distribution of the missing quantities of energy savings for the required cumulative savings up to 2020 gave rise to a new trajectory for cumulative energy savings for 2019-2020 to make it possible to meet the cumulative target in 2020.

Table 5: Trend in cumulative achievement of savings compared to original plan

Year	Cumulative contribution from original annual target	Total cumulative contributions from original annual target	Cumulative contribution from measures implemented in the year	Total cumulative contributions to fulfilment	Cumulative fulfilment according to totals
	[GWh]	[GWh]	[GWh]	[GWh]	[%]
2014	6 641.25	6 641.25	7 175.80	7 175.80	108.05 %
2015	5 692.50	12 333.75	8 097.59	15 273.39	123.83 %
2016	4 743.75	17 077.50	4 296.65	19 570.04	114.60 %
2017	3 795.00	20 872.50	3 519.69	23 089.73	110.62 %
2018	2 846.25	23 718.75	3 025.63	26 115.36	110.10 %
2019	1 897.50	25 616.25		_	
2020	948.75	26 565.00		_	
Total	26 565.00		26 115.36		

In comparing the original trajectory for energy savings and cumulative achievement, Slovakia is on course to meet this target in 2018 by 110.10 % and to meet the binding target for 2020. It is not therefore necessary to introduce energy efficiency obligation schemes for 2020.

Fig. 6: Trajectory for cumulative energy savings pursuant to Article 7 of Directive 2012/27/EU



[Graph: Cumulative savings [GWh]

Original trajectory

Achieved

Updated trajectory]

7. Conclusion

The national indicative energy efficiency target for 2020 for primary energy consumption in Slovakia is on course to be met by 101.45 %. The national indicative energy efficiency target for 2020 for final energy consumption in Slovakia is being exceeded by 8.57 %.

Slovakia is meeting the energy savings target for public buildings pursuant to Article 5, set in accordance with the notification. Provisional achievement of the binding target pursuant to Article 5 of the EE Directive under the addition method is at 117 %, whereas annual achievement of this target was as high as 158 %. In 2018, Slovakia is on course to meet the binding target for 2020 pursuant to Article 5 of the EE Directive. However, it is important to pay more attention to breaking down the barriers to financing the renovation of buildings owned by government entities.

Based on updated data for 2014-2017 and provisional data for 2018, Slovakia has achieved **110.10** % of the planned cumulative energy savings target pursuant to Article 7 of the EE Directive for 2018. The target set for 2019 is **149.88 GWh**. It therefore follows that **Slovakia** is on course to meet the binding target pursuant to Article 7 of the EE Directive in 2020, and thus there is no need to introduce energy efficiency obligation schemes.

Assessment of intra-ministerial consultation exercise

concerning the document 'Annual report on progress achieved towards national energy efficiency targets for 2018'.

Number of comments made / of which critical

2/0

Comments from division	Comment	Тур	Res.	Assessment method
		e		
1010 – Minister's Office	Formal comments	O	A	Incorporated into the text
1020 – Security and Crisis Management Department	No comments			
1030 – Control and Corruption Prevention Department	Noted			
1050 – Department of Trade Measures	No comments			
1060 – Shareholder Rights Department	No comments			
1070 – Internal Audit Department	Noted			
2010 – Private Office	No comments			
2020 – IT Department	No comments			
2030 – Economic Administration Department	No comments			
2040 – Public Procurement Department	No comments			
2060 – Legislation and Legal Department	No comments			
2100 – Budget and Finance Section	No comments			
2200 – EU Structural Funds Department	No comments			
3030 – Consumer Protection Department	No comments			
3050 – Centre for Chemical Substances and Products	No comments			
3100 – Section for Foreign Trade Policy and European Affairs	No comments			
3400 – Business Environment and Innovation Section	Also state the impact on the business	0	A	Supplemented
	environment and regulation when assessing	_		
	the established targets			
4030 – Centre for Economic Issues	No comments			
4200 – Strategy Section	No comments			

Legend:

Type: O – ordinary, Z – critical

Assessment: A – accepted, N – not accepted