



EUROPEAN COMMISSION

Brussels, 04.03.2021
C(2021) 1545 final

<p>In the published version of this decision, some information has been omitted, pursuant to articles 30 and 31 of Council Regulation (EU) 2015/1589 of 13 July 2015 laying down detailed rules for the application of Article 108 of the Treaty on the Functioning of the European Union, concerning non-disclosure of information covered by professional secrecy. The omissions are shown thus [...]</p>	<p>PUBLIC VERSION</p> <p>This document is made available for information purposes only.</p>
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Subject: State Aid SA.54318 (2020/NN) – Slovakia
Support of electricity from high efficient cogeneration of electricity and heat

Excellency,

The Commission wishes to inform Slovakia that, having examined the information supplied by your authorities on the matter referred to above, it has decided not to raise objections to the proposed aid measure.

1. PROCEDURE

- (1) Following pre-notification contacts, Slovakia notified on 7 May 2019 a measure concerning the support of electricity from high efficient cogeneration of electricity and heat, pursuant to Article 108(3) of the Treaty on the Functioning of the European Union (“TFEU”).
- (2) The Commission requested further information on 8 May 2019, 31 July 2019, 23 October 2019, 11 February 2020, 20 May 2020, 15 September 2020 and 13 November 2020. The Slovak authorities provided the requested information on 29 May 2019, 19 September 2019, 20 November 2019 (complemented with

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additional information on 25 November 2019), 6 March 2020, 16 July 2020, 3 and 19 November 2020 respectively. Slovakia submitted additional information on 17 and 22 December 2020, on 19 and 27 January 2021 and on 11 and 18 February 2021.

- (3) On 16 December 2020, Slovakia has waived its right under Article 342 TFEU in conjunction with Article 3 of Regulation (EEC) No 1/1958 to have the decision in procedure SA.54318 adopted in Slovak and agreed that the decision be adopted and notified in English.

2. DESCRIPTION OF THE MEASURE

2.1. Background

- (4) Due to climate reasons and to extensive gas coverage in Slovakia, independent heat generation from natural gas is used intensively. A comprehensive assessment of national potential for high efficiency cogeneration has pointed out the benefits of diversification of energy sources and increased use of high-efficiency cogeneration in existing district heating systems with small and medium-sized heat sources, in which natural gas is burned (the “2019 CHP Comprehensive Assessment”)¹.
- (5) Currently, about 55% of the heat provided through district heating is supplied by cogeneration installations, and around 33% of this percentage is generated by non-high efficient cogeneration installations (using coal or lignite).

2.2. Objective of the measure

- (6) The main objectives of the notified scheme is to promote the development of high efficient cogeneration of heat and power (“CHP”), in particular in connection with district heating systems. The scheme also aims at promoting the necessary investment to enable existing coal-based CHP installations to convert to the use of less polluting fuels. This would allow Slovakia to save primary energy, reduce emissions, and ensure security of energy supplies.
- (7) These objectives would be achieved by:
 - Promoting investments in existing CHP installations connected to district heating, which would no longer be high-efficient in the near future; coal-based existing installations would be required to switch to a less polluting fuel to be eligible to the scheme²;

¹ In the “Comprehensive assessment of the national potential for the application of highly efficient cogeneration”, available here: <https://www.mhsr.sk/uploads/files/tYdoCiD1.pdf>, several scenarios have been analysed.

² The Slovak authorities have explained the importance given to the replacement of the use of coal with the use of natural gas, in the report Energy Policy of the Slovak Republic, October 2014, available at the following link: <https://www.mhsr.sk/uploads/files/47NgRIPQ.pdf>. As highlighted on page 71 of the report, “the decommissioning of heat and thermal power units will primarily be compensated for by reconstructing existing installations with smaller but modern and high efficiency equipment compliant with ecological parameters, primarily utilising natural gas”.

- Stimulating investments in new high-efficient CHP installations to be connected to district heating systems.
- (8) Slovakia claims that this objective is in line with Article 24(2) of Directive 2012/27/EU on Energy Efficiency (“Energy Efficiency Directive”)³ and Article 24(2) of Directive 2018/2001/EU on Energy from Renewable Sources (“Renewable Energy Directive II”)⁴.
 - (9) The Slovak authorities have identified 11 existing high-efficient installations that are connected to district heating networks and supply heat to the public in defined locations, which would no longer meet the high efficiency requirements in the absence of support for their modernization / reconstruction. In particular, seven of these installations would no longer be high efficient in 2023 and the other four by the end of 2025⁵.
 - (10) The 11 installations have a total installed capacity of approximately 236 MW. The Slovak authorities expect that, further to the implementation of the measure, the total electricity production will be around 1,300 GWh / year and the supply of usable heat around 1,400 GWh / year. The expected minimum annual Primary Energy Consumption (“PEC”) savings are about 400 GWh (assuming 10% PEC savings), and could even reach about 500 GWh.
 - (11) The support to new installations aims primarily at fostering investments in co-generation facilities to be connected to currently inefficient district heating systems. The Slovak authorities estimate that, as a result of the implementation of the measure, 80 small district heating systems would meet the definition of efficient district heating if approximately 85 MW of co-generation capacity were installed. They also estimate that if small installations with a capacity up to 1 MW were installed in around 35 locations (for a total installed capacity of up to 20 MW), annual savings in primary energy consumption would amount to at least 35 GWh. Furthermore, for installations with an output of more than 1 MW, a total installed capacity of about 65 MW would bring annual savings in primary energy consumption of at least 120 GWh.
 - (12) The Slovak authorities estimated that high efficient cogeneration could grow 18.16 MW annually⁶, with an estimated increase of the amount of the share of heat provided through high-efficient cogeneration of 6.5% between 2020 and 2025⁷.

³ Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency (OJ L 315, 14.11.2012, p. 1–56).

⁴ Directive 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82–209).

⁵ The Slovak authorities explained that, compared to separate heat production and separate electricity production, a minimum of 232 GWh is saved annually in these seven installations (10% Primary Energy Consumption savings), in real terms, based on the operation of existing installations, annual savings of up to about 350 GWh can be expected.

⁶ See “Economic-technical evaluation of the application of district heating in Slovakia and comprehensive assessment of the national potential for the application of district heating Comprehensive assessment of national potential for high efficiency cogeneration”, available here: <https://ec.europa.eu/energy/sites/ener/files/documents/SlovakiaReport.pdf>

⁷ See footnote 2, p. 185.

- (13) However, the current economic conditions in Slovakia are not favourable to invest in high efficient cogeneration technology, due to a low return on investment to install new high efficient cogeneration units, high investment costs and high operating expenditures (see recitals (47) and (55) below).
- (14) The 2019 CHP Comprehensive Assessment mentioned above highlights that the increase in new high efficient cogeneration facilities was very limited in recent years⁸. Moreover, in the absence of operational support for the construction or operation of high-efficiency cogeneration, the share of heat supply in district heating systems from cogeneration technology will be reduced *vis-a-vis* the increase in heat production, which is not connected to district heating.

2.3. Legal basis

- (15) The measure is based on three national acts, which are already in force:
- Act 309/2018 Coll. Amending Act 309/2009 Coll. on aid for renewable resources and high efficiency cogeneration and on amendments to certain laws (“CHP Act”);
 - Act 309/2009 Coll. on aid for renewable resources and high efficiency cogeneration and on amendments to certain laws (“Renewable Energy Act”); and
 - Act 358/2015 Coll. on amendments to certain relationships in the area of state aid and de minimis aid as well as on amendments to certain laws (“State Aid Act”).
- (16) The conditions to provide the support are set out based on the following secondary legislative acts that have the character of implementing acts:
- Decree of the Regulatory Office for Network Industries No. 490/2009 Coll., which sets out particularities about the support of energy from renewable sources, high-efficient cogeneration and biomethane;
 - Decree of the Ministry of Economy of the Slovak Republic No. 599/2009 Coll., which implements certain provisions of the act on aid for renewable resources and high efficient cogeneration and on amendments to certain laws;
 - Decree of the Regulatory Office for Network Industries No. 18/2017 Coll., which sets out price regulation in the electricity sector and certain conditions for executing regulated activities in the electricity sector.

2.4. Beneficiaries and form of support

- (17) The beneficiaries of the scheme are operators of CHP facilities, which comply with the Energy Efficiency Directive and the Renewable Energy Directive II. The Slovak authorities highlighted that only high-efficient cogeneration in the district heating systems can receive the support.

⁸ See footnote 6.

- (18) The scheme is open to new installations with a capacity up to 50 MW⁹, regardless of the technology used to produce energy, excluding coal, as well as to 11 existing CHP installations with capacity below 125 MW (“the existing installations”). CHP installations that use waste as input fuel will be able to participate in the scheme provided that the waste hierarchy is complied with, in line with the Directive 2018/851 (“Waste Directive”)¹⁰.
- (19) Existing installations are eligible if they:
- Undergo extensive reconstruction or upgrading without increasing the installed capacity;
 - Keep electricity production using cogeneration;
 - Switch to a cleaner fuel, if using coal.
- (20) The eligibility criteria for existing installations and the conditions for them to receive the support are set out in detail in section 3c of Act 309/2018. Existing installations that meet the criteria in recital (19) above and were eligible for support under Act 309/2009 Coll. can participate in the scheme. The list of the existing installations can be found in **Annex 1**. Slovakia explains that these projects are mostly facilities of heating companies (supplying thermal energy to households).
- (21) The eligibility criteria for the notified scheme depend on the size of the installation and whether it is a new or existing installation.
- (22) New installations below 1 MW and existing installations:
- Shall supply at least 60% of the generated heat to district heating systems;
 - Their savings in primary energy must amount to at least 10%;
 - Shall not use coal.
- (23) If the eligibility criteria are not met for the new installations below 1 MW, no support will be granted. If the existing installations do not meet the eligibility conditions, they will receive a reduced amount of support.
- (24) Slovakia explained that the reason for this different approach between new installations with a capacity below 1 MW and existing installations is that existing installations are already connected to district heating systems and supply heat consumers through these systems, meeting the 60% heat supply requirement for the public. Thus, the reduction aims at maintaining the current situation. The reduction will apply as follows: 3% reduction for each missing percentage point in the requirement for energy efficiency and a 5% reduction for each missing percentage point in requirements for supply to district heating

⁹ The maximum limit of 50 MW is set by the law, in the point 3 of the Renewable Energy Act (309/2009).

¹⁰ Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste (Text with EEA relevance), OJ L 150, 14.6.2018, p. 109-140.

systems and supply to the public. In any case, only electricity that is produced by highly efficient cogeneration receives the support.

- (25) The eligibility criteria for the new installations above 1 MW will be set by the Ministry, ahead of the auctions. Slovakia will set requirements consistent with those for smaller or existing installations, i.e. 60% of heat supply to the public.
- (26) The Slovak authorities submitted that the estimated number of beneficiaries for the whole duration of the scheme is between 11 and 50.
- (27) In order to receive the support, the beneficiaries (both existing and new installations) shall submit a request addressed to OKTE (the entity in charge of administering the support, see recital (41) below) before the start of the operation of the CHP installation. The request shall be sent at least 30 days before the installation is put into operation. The beneficiary shall provide in the request all basic data related to the beneficiary, to the support sought for and to the CHP plants concerned.
- (28) The beneficiary shall send this application also to the energy regulator RONI. The decision by RONI contains the date of putting the facility into operation (based on the Completion Certificate or expert testimony), its capacity, and the duration of the right for receiving support. RONI will also evaluate in its decision the impact of the support on the tariff for system operation. The decision also contains the expected volume of electricity produced that will be supported and information on whether the project has been supported from other sources. The RONI decision approves the price of electricity for the determination of the surcharge from renewable energy sources and highly efficient cogeneration for the years 2019-21 on the basis of Decree 18/2017 Coll¹¹. The beneficiary can request a certificate of origin of the electricity from high efficient CHP, which certifies compliance with the Energy Efficiency Directive. Furthermore, Slovakia explained that the new installations that participate in the auctions cannot start works before the auction takes place.
- (29) The amount of capacity eligible under the scheme is limited and determined every year by the Ministry, based on the connection capacity of the following year. The amount of capacity auctioned (see section 2.5.1 below) is determined on that basis, after deducting the capacity of the existing installation(s) to be commissioned that year (see **Annex 1**).

2.5. Form of support and allocation process

- (30) Depending on the size of the beneficiary, the support is provided either in the form of a feed-in premium per MWh, which covers the difference between operating costs and market price of electricity, or in the form a comprehensive feed-in tariff, which covers the estimated operating costs of the installations.

¹¹ The Slovak authorities indicated that the price of electricity for the facilities put into operation in years 2017-2019 was also set on the basis of RONI Decree No. 18/2017 Coll., which sets out price regulation in the electricity sector and certain conditions for executing regulated activities in the electricity sector, in the recital 10(2). Available at this link: <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2017/18/20191020.html>.

- (31) The size of the installation and whether it is new or existing also determine whether the support is allocated through a tender or through an administrative procedure, as illustrated in **Table 1** below:

Table 1 – Categories of beneficiaries and form of support

New installations				Existing installations
Size	≤250kW	>250kW≤1MW	>1MW	<125 MW
Type of support	Feed-in tariff	Feed-in premium or Feed-in tariff	Feed-in premium	Feed-in premium
Amount of support	Set by RONI based on the Levelized Cost of Energy (LCOE)	Set by RONI based on LCOE	Auction clearing price	Set by RONI based on LCOE
Subject to market integration rules (para. 124 EEAG)	No	Yes	Yes	Yes
Allocation process	Administrative	Administrative or Auction	Auction	Administrative

Source: Slovak authorities

- (32) The Slovak authorities confirmed that if negative electricity prices occur in a short-term organised power market at least during two consecutive hours, the co-generation producers are not entitled to receive the support for the entire period of negative prices.
- (33) All installations above 250 kW are subject to standard balancing responsibilities.
- (34) The scheme will also be open to cogeneration producers from other Member States, if they fulfil the generally applicable conditions for granting the support. The main condition will be to secure a physical supply of heat into the district heating and cooling systems on the territory of the Slovak Republic, in line with the objective of the notified measure to transform district heating systems into systems that use high efficient cogeneration.

2.5.1. Allocation process

- (35) New installations with a capacity between 10 kW and 1 MW are entitled to receive the feed-in tariff (“FIT”), but they can also participate in auctions. New installations with a capacity above 1 MW are entitled to receive support solely on the basis of auctions.
- (36) The Ministry of Economy, in cooperation with the National Regulatory Authority, will determine the eligibility and award criteria and will publish them at least two months in advance of the auction. Slovakia confirmed that the auctions will be technology neutral.

- (37) Slovakia explained that the price (level of the bid) will be the only award criterion, but this does not preclude the Ministry from setting further conditions.
- (38) Furthermore, the legislation sets out that the Ministry can set a maximum electricity price in the auctions. The Slovak authorities submitted that setting a maximum price in the auctions would allow them to check the financial sustainability of the scheme, which is financed by the mandatory contributions of electricity customers included in the final electricity price. The maximum price shall be determined in consultation with RONI. Stakeholders will be consulted on the parameters of the planned auctions.
- (39) For existing installations, the support is allocated through an administrative procedure. As explained in recital (29) above, the amount of capacity eligible under the scheme is limited by the connection capacity available for the following year. The Slovak authorities explained that the costs for technology for refurbished existing installations and new installations are generally comparable. However, in the case of refurbishment of existing installations, it is not necessary to deal with related ancillary (side-related) costs, such as land costs, preparation of the construction site, construction part of the installation, connection to the existing electricity, heat and gas infrastructure. These ancillary costs represent about 25% of the total costs of new installations. Therefore, due to the limited connection capacity available every year, if existing installations were put in competition with new installations, the latter would be unlikely to succeed in the tender. In Slovakia's view, a separate tender procedure dedicated to existing installations would entail the risk of strategic bidding, given the small number of eligible projects. As shown in Annex 1, on the basis of the forecasted available network capacity, the Slovak authorities have established the order of existing installations, which are eligible for refurbishment every year, on the basis of the date of the realization of the investment.
- (40) Therefore, the number of installations eligible every year is even significantly lower than the total number of existing installations. In order to avoid overcompensation, an auction cap would have to be established. However, given the limited amount of capacity available and the small number participants it is likely that all of them would bid at the level of the cap. For these reasons, Slovakia is of the view that a tender procedure would not produce any positive effects.
- (41) The support is administered by OKTE, a short-term market operator in Slovakia that is wholly owned by the Slovakian transmission system operator (TSO) (Slovenská elektrizačná prenosová sústava, a. s.), which is in turn 100% owned by the Slovak Republic.

2.5.2. Support to new installations with capacity above 1 MW

- (42) The support to new CHP installations with capacity above 1 MW is granted in the form of a feed-in premium determined by the auction-clearing price. The premium will be paid only to co-generated electricity minus the installations' own technical consumption.

2.5.3. Support to new installations with capacity below 1 MW

- (43) For new installations below 1 MW, the amount of the support is fixed by RONI based on the estimated LCOE of different categories of electricity producers, in order to take due account of specific construction and operating costs of individual technologies. RONI's estimates are based on data obtained from technology manufacturers, plants operators, and technical-economic projects of new technologies as well as on data elaborated by RONI itself.
- (44) The FIT is established in accordance with the following formula:

$$\text{FIT} = \text{LCOE} - (\text{InvAid} + \text{Okv})/\text{Qn}$$

where:

FIT	is the feed-in tariff price set by RONI in EUR / MWh;
InvAid	is the amount of investment support from schemes financed from the State budget in EUR (if used);
Okv	are other calculation revenues for the duration of the operating support in EUR, represent the revenues for heat and any other revenues that result from the manufacturing process of the technology under consideration, excluding electricity revenues;
Qn	is the amount of produced electricity for the duration of the operating support in MWh;
LCOE	are the levelised costs of producing energy in EUR/MWh, calculated as

$$\text{LCOE} = \text{TC}/\text{Qn}$$

where

TC	are the total costs for the duration of the operating support in EUR, including investment costs of acquiring the relevant technology; personnel costs for the duration of the operating support, expressed in labour costs; operating costs for the duration of the operating support; overheads for the duration of the operating support; interest on the loan; a reasonable profit calculated on the basis of the discount rate notified by the European Commission in the Official Journal of the European Union in force at the time the electricity price was determined;
Qn	is the amount of produced electricity for the duration of the operating support in MWh;
Duration	of the operating support is 15 years.

- (45) The methodology to calculate the FIT is the same for all installations below 1 MW. The installations with a capacity below 250 kW will receive the whole FIT, whereas for the installations with a capacity between 250 kW and 1 MW

the electricity market price will be deducted from the FIT. Therefore, for those latter installations the premium is based on the formula:

$$\text{Bonus} = \text{Fixed price (FIT)} - \text{Market Price (EUR / MWh)}$$

- (46) The market price taken into consideration by RONI when calculating the level of the support is the day-ahead spot price (on the basis of the stock exchange prices). RONI regularly publishes on its website information on the reference price¹².
- (47) The FIT of CHP plants with capacity below 1 MW was determined for 2020 on the basis of the following data:

Table 2 – Calculation of FIT for 2020 for new installations below 1 MW

Technology	Fuel	Combustion engines		
		Natural gas	Fuel oil	Mixture of air and methane
LCOE (EUR/MWh)	(15 years)	79,9	78,23	69,75
	Average investment costs (EUR/MW)	890 000	890 000	890 000
	Average annual personnel costs (EUR/MW)	51 000	51 000	61 200
	Operating costs (fuel) (EUR/year)	438 410.00	441 502.00	372 294,00
	Average annual overhead costs (EUR/MWh)	10,46	10,49	12,77
	Interest on the loan (%)	4,3	4,3	4,3
	IRR (%), pre-tax nominal	1	1	5
InvAid: Investment aid (EUR)		0	0	0
Okv: Other calculation revenues (EUR)	Useful heat	256 579.00	256 579.00	256 579,00
Qn: amount of produced electricity (MWh/year)		4 875,00	4 875.00	4 875.00
Depreciation (years)		20	20	20
FIT (EUR/MWh)		75,64	73,67	68,9
Electricity market price (EUR/MWh)		51,85	51,85	51,85
Premium (FIT-market price) (EUR/MWh)		23,79	21,82	17,05

Source: Slovak authorities

- (48) Regarding the IRR, Slovakia explained that the source for calculating the IRR for model cases is the data published by RONI. The real IRR values for a given installation may differ from the values in the model example, as they depend on several factors, including the number of operating hours, the overall efficiency

¹² Available here: <http://www.urso.gov.sk/?q=Pre%20spotrebite%C4%BEEa/Burzov%C3%A9%20ceny%20elektriny%20a%20plynu>.

of the installation, fuel costs and price of usable heat. Depending on these factors, Slovakia expects that the real IRR of high efficient CHP projects will be between 1% and 5%, while it should not exceed 5%. Based on actual operational data, RONI will regularly monitor the IRR and adjust the FIT to avoid providing undue compensation.

- (49) RONI will analyse every year the electricity production costs according to the individual technologies and, based on this analysis, it will reassess and adjust the FIT prices, in case of changes in the conditions, by way of a RONI decree.
- (50) The fixed price for CHP plants with capacity below 1 MW was determined for 2020 by RONI based on one type of CHP technology, namely combustion engines. The criterion is to achieve a simple 15-year return on invested capital (ROIC). The fixed price is determined from the condition of achieving zero accumulated cash flow in the 15th year of operation of the CHP technological equipment.
- (51) Both the feed-in tariff and the feed-in premium are paid per MWh of electricity produced. The electricity used for the installations' own technical consumption is not remunerated. Furthermore, when calculating the feed-in tariff/feed-in premium, the revenues from the entire volume of usable heat produced in the CHP plant are deducted, i.e. heat supply to district heating systems as well as heat used by the producer within its company.

2.5.4. Support to existing installations

- (52) The support for the existing installations will be granted according to the same formula as for new installations with capacity between 250kW and 1 MW, *i.e.*:

$$\text{Bonus} = \text{Fixed price (FIT)} - \text{Market Price (EUR / MWh)}$$

- (53) For the existing installations, RONI determined the fixed price for the following CHP technologies: Combined cycle gas turbine ("CCGT"); Combustion turbines with heat recovery; Combustion engines; Back-pressure steam turbines and Condensing steam turbines with heat collection.
- (54) The criterion is again to achieve a simple 15-year return on invested capital. The fixed price is determined from the condition of achieving zero accumulated cash flow in the 15th year of the CHP plant operation.
- (55) The FIT for the existing installations was determined for 2020 on the basis of the following data:

Table 3 – Calculation of FIT for 2020 for existing installations below 125 MW

Technology		Combined cycle gas turbine (CCGT)	Combustion turbines with heat recovery	Combustion engines	Back-pressure steam turbines and Condensing steam turbines with heat collection
Fuel		Natural gas			
LCOE (EUR/MWh)		78.92	79,3	80,06	74,00
	Average investment costs (EUR/MW)	1 290 000	1 312 500	1 026 000	1 756 000
	Average annual personnel costs (EUR/MWh)	4,98	6,22	10,6	19,5
	Operating costs (EUR/year)	2 074 017,00	2 188 722,00	1 127 832,00	2 144 994,00
	Average annual overhead costs (EUR/MWh)	8,62	6,97	13,14	11.65
	Interest on the loan				
	IRR (%), pre-tax nominal	2	1	1	1
InvAid: Investment aid (EUR)		0	0	0	0
Okv: Other calculation revenues (EUR)	Useful heat	1 657 895,00	1 855 385,00	752 632,00	2 450 000,00
Qn: amount of electricity (MWh/year)		22 500,00	18 000,00	13 000.00	15 750.00
Depreciation (years)		20	20	20	20
FIT (EUR/MWh)		74,1	74.05	75,64	68,5
Electricity market price (EUR/MWh)		51.85	51.85	51.85	51.85
Premium (FIT-market price) (EUR/MWh)		22,25	22,2	23,79	16.65

Source: Slovak authorities

- (56) The table in **Annex 2** provides a summary of the input data per technology used to determine the FIT.
- (57) An overview of fixed prices for 2019 is stated in the RONI decree n. 309/2019 Coll., amending and supplementing RONI Decree n. 18/2017 Coll., establishing

a price regulation in the electricity and certain conditions of regulated activities in the electricity sector, as amended.

- (58) Based on these principles, a simplified calculation of the internal rate of return was made for selected projects out of the 11 existing installations, using assumptions on the number of operating hours, overall efficiency of the installation and heat price. The Slovak authorities have provided the input data as example of calculation per technology. These data are available in **Annex 3**.
- (59) The Slovak authorities explained that the small difference in the premium for new and existing installations, especially those using combustion engines, is due to the fact that certain costs, such as the network connection costs and land costs are not taken into account neither for new nor for existing installations. Nevertheless, new installations would still have to bear such costs, unlike existing ones. If new and existing beneficiaries would be in competition, and if the new beneficiaries would be selected, it would lead to higher costs to be borne by the society. For this reason, a tender open to new and existing beneficiaries would lead to suboptimal results and the absence of tenders for existing beneficiaries is therefore justified.

2.6. Duration and cumulation

- (60) The envisaged duration of the scheme is from 01/01/2019 until 31/12/2025. The support will be granted for a period of 15 years. The typical average lifetime of high-efficient cogeneration installations according to normal accounting rules is 20 years.
- (61) In relation to cumulation of the notified scheme with other State aid, the Slovak authorities explained that:
- For the new installations with capacity above 1 MW: The law does not allow the cumulation of operating aid with investment aid for installations, which receive support on the basis of a successful auction process.
 - For the new installations with capacity below 1 MW: it is possible to combine the support under the notified scheme with support obtained from other sources for the reconstruction/modernisation of the facilities. However, when fixing the FIT, RONI will deduct any such investment aid.
 - For the existing refurbished installations with capacity below 125 MW: the law permits the cumulation of support under the notified scheme with investment aid to existing installations, which undergo reconstruction or modernisation, in order to reduce the impact of the support through the feed-in tariffs at the final electricity price, since these are larger installations. In this case, RONI, when fixing the FIT, will deduct the investment aid from the operating aid.
 - No cumulation is possible for a unit of electricity that has already received aid from another operating aid scheme.
- (62) Slovakia also committed to individually notify support granted under this scheme, if the relevant notification thresholds set out in paragraph 20(d) of the

Commission Guidelines on State aid for environmental protection and energy 2014 (“the EEAG”)¹³ are met.

2.7. Financing and budget

- (63) The budget of the scheme would amount to a maximum total of EUR 1050 million for the 15 years, and up to EUR 70 million per year. The budget is determined annually.
- (64) The measure is financed through an increase of the system operation tariff, which is one of the components of the final electricity price charged to consumers. That charge is fixed on the basis of criteria established by the State (see section 2.5 above) and is transferred in accounts managed by OKTE. Afterwards, the respective compensation is transferred in the accounts of the entitled electricity producers.
- (65) The Slovak authorities indicated that the support on the basis of the CHP Act, which was adopted on 17 October 2018 and entered into force on 1 January 2019, has been paid out to date to three existing installations.

2.8. Undertakings in difficulty

- (66) Slovakia confirmed that undertakings in difficulty are not eligible to participate in the notified scheme.
- (67) The Slovakian authorities committed not to provide support under the notified scheme to an undertaking that is subject to an outstanding recovery order following a Commission decision declaring an aid illegal and incompatible with the internal market. The undertaking applying for support will have to declare in its application process with an affidavit that it is not subject to an outstanding recovery order. Moreover, OKTE may use the data from the central State aid registry in order to confirm compliance with this requirement.

2.9. Transparency

- (68) Slovakia committed to comply with the transparency requirements set out in paragraphs 104-106 of the EEAG. The relevant information will be published on the website of the Slovakian Competition Authority¹⁴.
- (69) In addition, in accordance with Act 250/2012 Coll. on regulation of network industries, RONI publishes all price decisions on its website¹⁵, immediately after their adoption, including decision on corrective measures. RONI will also publish on its website by 30 June every year a list of the electricity producers that received support in the last calendar year together with the amount of support.

¹³ OJ C 200, 28.06.2014, p.1.

¹⁴ Available at the following links : <https://semp.kti2dc.sk/>, <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2009/309/20190101.html>.

¹⁵ Available at this link: www.urso.gov.sk/.

- (70) Furthermore, OKTE, as provider of the support under the notified scheme, will be assigned, in accordance with the State Aid Act 328/2015 Coll., to register data about the granted support into the central registry.
- (71) Slovakia noted that all the above transparency measures shall ensure a sufficient oversight about the scheme provided, also for the possible cumulation of support.

3. ASSESSMENT

3.1. Presence of State aid

- (72) Under Article 107(1) TFEU, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods, as far as it affects trade between Member States, is incompatible with the internal market.
- (73) According to Article 107(1) TFEU, the qualification of a measure as State aid therefore requires the following conditions to be met cumulatively:
- the measure is imputable to the State and financed through State resources;
 - it grants a selective advantage liable to favour certain undertakings or the production of certain goods;
 - the measure distorts or threatens to distort competition;
 - it has the potential to affect trade between Member States.

3.1.1. State Resources and Imputability

- (74) According to settled case law, only advantages, which are granted directly or indirectly through State resources, are to be regarded as aid within the meaning of Article 107(1) TFEU.
- (75) The distinction between aid granted by the State and aid granted through State resources serves to bring within the definition of aid not only aid granted directly by the State, but also aid granted by public or private bodies designated or established by the State¹⁶. Thus, resources do not need to transit through the State budget to be considered as State resources. It is sufficient that they remain under public control¹⁷.
- (76) In accordance with the case-law, Article 107(1) TFEU covers all the financial means by which public authorities may actually support undertakings, irrespective of whether or not those means are permanent assets of the public sector. Even if the sums corresponding to the aid measure concerned are not permanently held by the Treasury, the fact that they constantly remain under

¹⁶ To this effect, see case C-78/76 Steinike & Weinlig EU:C:1977:52, paragraph 21, joined cases C72/91 and C-73/91 Sloman Neptun EU:C:1993:97, paragraph 19.

¹⁷ See case C-482/99 France v Commission EU:C:2002:294, paragraph 37.

public control, and therefore available to the competent national authorities, is sufficient for them to be categorised as ‘State resources’¹⁸.

- (77) The Court of Justice has, more specifically, held that funds financed through compulsory charges imposed by the legislation of the Member State, managed and apportioned in accordance with the provisions of that legislation, may be regarded as State resources within the meaning of Article 107(1) TFEU even if they are managed by entities separate from the public authorities¹⁹. The decisive factor, in that regard, consists of the fact that such entities are appointed by the State to manage a State resource and are not merely bound by an obligation to purchase by means of their own financial resources²⁰.
- (78) As results from established case law and constant practice, proceeds of levies imposed by the State and which are then managed and apportioned in accordance with the provisions of the legislation constitute State resources (*Vent de Colère*)²¹.
- (79) In this case, the Commission notes that the measure will be financed through an increase of the system operation tariff, which is one of the components of the final electricity price charged to consumers. That charge will be fixed on the basis of criteria established by the State (see section 2.5 above) and is transferred in accounts managed by OKTE, a State-controlled entity, specifically appointed by the State to collect the financing and to pay out the aid amount. Afterwards, OKTE transfers the respective aid amounts to the accounts of the entitled electricity producers.
- (80) The financial flows aiming at financing the CHP premium are thus constantly under the control of the State even if they ultimately take place with the participation of private parties, i.e. electricity consumers, TSO and distribution system operators (DSOs), and OKTE. The latter is acting as an intermediary entrusted by the State to administer the funds collected through the CHP charge exclusively for the objective of supporting CHP electricity. Accordingly, the Commission concludes that the funds coming from CHP charge remain under the dominant control of the public authorities and the measure is therefore financed through State resources.
- (81) In light of the above, the Commission concludes that the CHP charge is a levy on electricity consumption and thus the support of high efficient cogeneration is financed through State resources.

¹⁸ See judgment of 28 March 2019, *Germany v Commission* (EEG 2012), C-405/16P, ECLI:EU:C:2019:268, paragraph 57. Judgments of 16 May 2002, *France v Commission*, C-482/99, EU:C:2002:294, paragraph 37; of 13 September 2017, *ENEA*, C-329/15, EU:C:2017:671, paragraph 25 and the case-law cited.

¹⁹ Judgments of 2 July 1974, *Italy v Commission*, 173/73, EU:C:1974:71, paragraph 35, and of 19 December 2013, *Association Vent De Colère! and Others*, C 262/12, EU:C:2013:851, paragraph 25.

²⁰ See, to that effect, judgments of 17 July 2008, *Essent Netwerk Noord and Others*, C 206/06, EU:C:2008:413, paragraph 74; of 19 December 2013, *Association Vent De Colère! and Others*, C 262/12, EU:C:2013:851, paragraphs 30 and 35; and of 13 September 2017, *ENEA*, C 329/15, EU:C:2017:671, paragraphs 26 and 30.

²¹ Judgment of 19 December 2013, *Vent de Colère*, C-262/12 EU:C:2013:851.

- (82) In addition, since the support for electricity from high efficient cogeneration of electricity and heat has been established by different national acts (see recitals (15) and (16)) and the CHP Act is further implemented by the Ministry of Economy of the Slovak Republic (see recital (16)), the measure is therefore imputable to the State within the meaning of Article 107(1) TFEU.

3.1.2. Selective Economic Advantage

- (83) An advantage, within the meaning of Article 107(1) TFEU, is any economic benefit, which an undertaking would not have obtained under normal market conditions, that is to say in the absence of State intervention²². Article 107(1) TFEU also requires that a measure, in order to constitute State aid, is selective in the sense that it favours "certain undertakings or the production of certain goods".
- (84) The Commission notes that the notified scheme promotes high efficient cogeneration of heat and power ("CHP") systems by the beneficiaries. The scheme is not accessible to non-high efficient cogeneration producers (see recital (17)), nor to electricity producers that do not operate in the subsector covering CHP electricity production. Furthermore, for existing installations, only the 11 existing operators of high efficient CHP installations connected to a district heating network which sell their electricity on the market and fulfil the criteria set by the Renewable Energy Act can be granted support (see recital (17)). The measure is therefore selective.
- (85) The notified measure confers an advantage to the operators of high efficient CHP installations as they obtain support in the form of a guaranteed remuneration (feed-in tariff) or a cogeneration premium on top of the market price for electricity. The Commission notes that those payments guarantee operators of high efficient CHP installations revenues higher than what they would obtain under normal market conditions.
- (86) On the basis of the above, the Commission concludes that the notified measure confers a selective advantage within the meaning of Article 107(1) TFEU.

3.1.3. Effect on Trade and Distortion of competition

- (87) In accordance with settled case law²³, for a measure to impact competition and trade it is sufficient that the recipients of the aid compete with other undertakings on markets open to competition.
- (88) The electricity market has been liberalised and electricity producers engage in trade between Member States. The electricity generated by operators of the high efficient CHP installations is generally sold on the spot market where it enters in competition with electricity from different sources (such as electricity from renewable, conventional and nuclear sources).

²² Judgment of the Court of Justice of 11 July 1996, SFEI and Others, C-39/94, ECLI:EU:C:1996:285, paragraph 60; Judgment of the Court of Justice of 29 April 1999, Spain v Commission, C-342/96, ECLI:EU:C:1999:210, paragraph 41.

²³ Judgment of 30 April 1998, T-214/95, Het Vlaamse Gewest v Commission, ECLI:EU:T:1998:77.

- (89) It follows that the advantage granted to the operators of the high efficient CHP installations is therefore likely to distort competition and affect trade between Member States.

3.1.4. Conclusion on the Existence of State aid

- (90) In light of the above, the Commission concludes that the notified measure constitutes State aid within the meaning of Article 107(1) TFEU.

3.2. Lawfulness of the aid

- (91) The Commission notes that Slovakia has not respected the standstill obligation laid down in Article 108(3) TFEU and has granted aid under the notified scheme to existing installations prior to the Commission's approval (see recital (65)).

3.3. Compatibility of the aid under Article 107(3)(c) TFEU and the EEAG

- (92) Article 107(3)(c) TFEU provides that the Commission may declare compatible "aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest". Therefore, compatible aid under that provision of the Treaty must contribute to the development of certain economic activity²⁴. Furthermore, the aid should not distort competition in a way contrary to the common interest.
- (93) Moreover, the Commission notes that the notified CHP support scheme aims at promoting energy efficiency. Consequently, the aid measure falls within the scope of the EEAG.
- (94) The Commission has therefore assessed the compatibility of the measure on the basis of the general compatibility provisions of the EEAG (set out in section 3.2. of the EEAG) and the specific compatibility criteria for energy efficiency measures, including cogeneration and district heating and cooling (section 3.4. of the EEAG).
- (95) The Commission has thus verified below:
- (a) The contribution to the development of an economic activity;
 - (b) The need for State intervention;
 - (c) The appropriateness of the aid;
 - (d) The incentive effect of the aid;
 - (e) The proportionality of the aid;
 - (f) Avoidance of undue negative effects on competition and trade;
 - (g) Transparency of the aid.

²⁴ C-594/18 P, *Austria v Commission*, EU:C:2020:742, paragraphs 20 and 24.

3.3.1. Contribution to the development of an economic activity

- (96) In the present case, the cogeneration premium aims at incentivising the development of high efficient cogeneration of heat and power. Such development contributes to increase energy efficiency and is in line with the requirements of Article 24(2) and Annex II of the Energy Efficiency Directive. Moreover, the aid to existing installations also aims at promoting the investments needed to switch from coal to less polluting fuels, therefore promoting the development of electricity production from more environmentally-friendly sources. The measure will thus ensure in this manner energy efficiency and environmental protection.
- (97) In view of the above, the Commission concludes that the notified measure facilitates the development of certain economic activities, as required by Article 107(3)(c) TFEU.

3.3.2. Need for State intervention

- (98) According to section 3.2.2. of the EEAG, the Member State needs to demonstrate that there is a need for State intervention and in particular that the aid is necessary to remedy a market failure that otherwise would remain unaddressed.
- (99) The Commission notes in this regard that, as recognised in paragraph 142 of the EEAG, energy efficiency measures can be presumed to target negative externalities by creating individual incentives to attain environmental targets for energy efficiency and for the reduction of greenhouse gas emissions.
- (100) In addition, Slovakia demonstrated that the current economic conditions are not favourable to invest in high efficient cogeneration technology, as shown in Tables 2 for new installations with a capacity lower than 1 MW and 3 for existing installations with a capacity below 125 MW. Furthermore, the Slovakian authorities have indicated that investments in new installations entail even higher costs than those in existing ones (see recital (39) above). Therefore, absent the aid, the construction and operation of all the high-efficient cogeneration installations covered by the scheme would not take place.
- (101) In light of the above, the Commission concludes that the measure is a necessary instrument to contribute to the development of certain economic activities.

3.3.3. Appropriateness of the aid

- (102) The aid is provided either in the form of a feed-in premium per MWh, which covers the difference between operating costs and market price of electricity, or in the form of a feed-in tariff, which covers the estimated operating costs of the installations (see recital (30)).
- (103) Paragraph 40 of the EEAG provides that the aid scheme must be an appropriate instrument to address the policy objective concerned. State aid may be considered an appropriate instrument to finance energy-efficiency measures, independently of the form in which it is granted, in line with paragraph 145 of the EEAG.

- (104) The measure at stake sets up a stable framework that can encourage necessary investments in the high efficient CHP sector, leading to new installations being built and to the gradual refurbishments of the existing cogeneration plants, which would no longer be high efficient in the absence of such investments.
- (105) The Commission therefore concludes that the notified aid measure is an appropriate instrument to contribute to the development of the economic activity at issue, which concerns electricity production from cogeneration of heat and power.

3.3.4. Incentive effect

- (106) An aid measure has an incentive effect if it incentivises the beneficiary to change its behaviour towards the development of a certain economic activity pursued by the aid and if such change in behaviour would not occur or would not occur to the same extent without the aid²⁵.
- (107) Paragraph 50 of the EEAG states that aid does not present an incentive effect for the beneficiary in all cases where work on the project had already started prior to the aid application by the beneficiary to the national authorities.
- (108) Paragraph 151 of the EEAG further specifies that the operating aid for high-efficient cogeneration plants may be granted to undertakings generating electric power and heat to the public as long as the costs of producing such electric power or heat exceed its market price.
- (109) In the present case, the cogeneration installations are required to provide at least 60% of heat to the public and to sell their own electricity production to the market (see section 2.4 above). Further, as explained in recital (100), the market alone does not incentivise the investments in the construction or refurbishment of high efficient CHP installations. Consequently, in the absence of the aid, high-efficient CHP plants would not be able to cover their investment and production costs through the revenues obtained from selling the electricity and the heat on the market and their operation would not be economically viable.
- (110) As regards the existing installations, the calculations in Table 3 show that the notified aid creates the incentive to maintain the installations in operation to continue to meet the requirements for high-efficient CHP plants, and switch to less polluting fuels. Such investments would not have taken place without the support. Moreover, investments in new installations entail even higher costs than those in existing ones (see recital (39) above). Therefore, absent the aid, the construction and operation of those installations would not take place.
- (111) The Commission further notes that, according to the information provided by the Slovak authorities, new installations selected through an auction fully comply with the requirement laid down in paragraph 50 of the EEAG (see recital (27) above).

²⁵ See in that sense points 49 and 144 of the EEAG.

- (112) Furthermore, the existing installations that participate in a competitive bidding process cannot start works before the auction takes place (see recital (27) above), in compliance with paragraph 50 of the EEAG.
- (113) Beneficiaries which are not selected through a competitive bidding process have already started the works before submitting an application for the disbursement of the aid, as they must submit a request for the disbursement of the aid at least 30 days before the installation is put into operation (see recital (27) above). However, the legal basis of the scheme set out in detail the conditions potential beneficiaries should meet, namely the eligibility criteria, capacity of the project and duration of the aid, in order to receive the aid (see recital (20) above), thereby, in line with previous Commission practice²⁶, providing an incentive to carry out the investment.
- (114) In addition, RONI will re-calculate annually the level of the tariffs and premiums, reflecting the changes in costs and revenues.
- (115) In light of the above, the Commission considers that the aid has an incentive effect as the measure induces the beneficiaries to change their behaviour towards the development of cogeneration of heat and power by investing in high efficient CHP technology and installations, which they would not undertake or they would not undertake to the same extent, absent the aid.

3.3.5. *Proportionality*

- (116) The measure consists of operating aid for the production of electricity in high efficient new CHP installations connected to the public network. It is thus paragraph 151 together with section 3.3.2.1. of the EEAG that is applicable for the assessment of the proportionality of the aid.
- (117) According to paragraph 124 of the EEAG, beneficiaries with an installed capacity above 500 kW must sell their electricity directly on the market and are subject to market obligations to incentivise the market integration of electricity generators. The following cumulative conditions apply:
- (a) aid must be granted as a premium in addition to the market price (premium) whereby the generators sell their electricity directly on the market;
 - (b) beneficiaries must be subject to standard balancing responsibilities, unless no liquid intra-day balancing markets exist; and

²⁶ Commission Decision of 6 December 2017 in SA.47354 - Estonia - Amendments to Estonian RES and CHP support scheme, paragraph 63; Commission Decision of 23 July 2014 in SA.38632 - Germany - EEG 2014 - Reform of the Renewable Energy Law, paragraph 287; Commission Decision of 20 December 2016 in SA.45461 - Germany - EEG 2017 - Reform of the Renewable Energy Law, paragraphs 179-180; Commission Decision of 20 November 2017 in SA.48327 - Germany - Support for PV installations on rented buildings (Mieterstrom), paragraphs 65-67; Commission Decision of 28 April 2016 in SA.43756 - Italy - Support to electricity from renewable sources in Italy, paragraphs 40-41; Commission Decision of 28 October 2014 in SA.36023, Estonia - Support scheme for electricity produced from renewable sources and efficient cogeneration, paragraph 83.

- (c) measures must be put in place to ensure that generators have no incentive to generate electricity under negative prices.
- (118) As already demonstrated in section 2.5, paragraph 124(a) of the EEAG is complied with, as the aid is granted in form of a cogeneration premium to the installations with a capacity above 250 kW.
- (119) Moreover, the operators of the installation above 250 kW have to sell their electricity on the market and they are subject to standard balancing responsibilities (see section 2.5).
- (120) Finally, Slovakia confirmed, in line with paragraph 124(c) of the EEAG, that if negative electricity prices occur in a short-term organised power market at least during two consecutive hours, the producer shall not be entitled to the aid. The aid will therefore not be paid for production in periods in which market prices are negative (see also recital (32)). The Commission therefore considers that the conditions of paragraph 124 of the EEAG are fulfilled.
- (121) The installations with a capacity below 250 kW will receive a feed-in-tariff. This is in line with paragraph 125 of the EEAG.

3.3.5.1. Aid to new installations with capacity above 1 MW
(granted through auctions)

- (122) Paragraph 126 of the EEAG provides that aid to installations above 1 MW has to be granted in a competitive bidding process on the basis of clear, transparent and non-discriminatory criteria. As explained in section 2.5, Slovakia will organise competitive auctions for new high efficient CHP installations with capacity of more than 1 MW. A bidding process shall be announced by the Ministry of Economy, while bidding terms and conditions and evaluation criteria shall be announced at least two months in advance of the auction (see recital (36)). With regard to the terms and conditions, Slovakia committed to set a requirement for the installations participating to the auctions to supply a 60% of heat supply to the public.
- (123) Slovakia confirmed that the auctions will be open to all technologies except for coal. The bidding process is thus expected to be competitive and the amount of aid to be proportionate.
- (124) Furthermore, the cogeneration premium granted through the auctions can be granted only for the duration of 15 years. The aid will not be paid out after the CHP installations have been fully depreciated in accordance with normal accounting rules in Slovakia. In addition, the law does not allow the cumulation of operating aid with investment aid for installations, which receive aid on the basis of successful auction success (see recitals (60) and (61)). Paragraph 129 of the EEAG is thus complied with.
- (125) In view of the above, the Commission concludes that the aid granted to new installations through auctions is proportionate.

3.3.5.2. Aid to new installations with capacity below 1 MW (granted outside of auctions)

- (126) In case of installations with an installed capacity of less than 1 MW, paragraph 127 of the EEAG provides that aid may be granted without a competitive process. Therefore, the granting of the aid in the present case to installations with capacity below 1 MW without a competitive process is in line with paragraph 127 of the EEAG.
- (127) In line with paragraph 128 of the EEAG, in the absence of a competitive bidding process, the requirements of paragraphs 124-125 and 131 of the EEAG need to be met. As explained in recitals (118) and (121), the requirements of paragraph 124-125 of the EEAG are fulfilled.
- (128) As required by paragraph 131(a) of the EEAG, the aid per unit of electricity in the present case will not exceed the difference between the LCOE and the market price of electricity (see Tables 2 and 3). As shown in the tables, when determining the FIT and in order to take into account different LCOEs for individual technologies, Slovakia will introduce reference values for different types of fuels to avoid overcompensation.
- (129) Furthermore, the aid will include an IRR of 1-5% (pre-tax nominal). This rate corresponds to a normal rate of return in the sector and can be thus considered reasonable in line with paragraph 131(b) of the EEAG. Slovakia also explained that the support under the notified scheme can be combined with investment aid obtained from other sources. However, Slovakia confirmed that investment aid is deducted from the total investment amount in calculating the LCOE for facilities entitled to aid through feed-in premium as well as those facilities entitled to feed in tariff. RONI will determine the feed-in tariff so as to adhere to the rules for cumulation of received State aid (see recital (61)).
- (130) Moreover, RONI will analyse every year the electricity production costs for each individual technologies (see recital (49)), in compliance with paragraph 131(c) of the EEAG.
- (131) For the purposes of determining the FIT for 2020 (see Tables 2 and 3 and recital (124)), Slovakia used a depreciation of 20 years. All the costs associated with the investments in equipment were taken for a period of 15 years. Consequently, the operating aid cannot be higher than the depreciation of the investments. The aid will thus not be paid out after the CHP installations have been fully depreciated in accordance with normal accounting rules in Slovakia. Moreover, RONI will adjust the FIT prices by RONI decree in the legislative process. Paragraph 129, 131(c) and 131(d) of the EEAG are thus complied with.
- (132) The Commission thus concludes that the aid granted to new installations outside of auctions is proportionate.

3.3.5.3. Aid to existing installations (granted outside of auctions)

- (133) Under paragraph 126(a) of the EEAG, if Member States demonstrate that only one or a very limited number of projects or sites could be eligible, aid can be granted without applying the bidding processes rules.

- (134) In the present case, Slovakia explained that only 11 projects in total would be eligible, as they are connected to the network and they would no longer be high efficient in the coming years (see Annex 1). Slovakia explained that the order of the existing installations is based on the date of realization of the investment, with the consequence that only a limited number of projects (ranging between 1 and 4) would be eligible for refurbishment every year (see recital (39)).
- (135) The 11 projects have different costs compared to the new installations and therefore they cannot be subject to the same bidding process in competition with the new installations. In particular, their costs are around 25% lower than the costs of new installations. Due to the limited connection capacity available every year, if existing installations were put in competition with new installations, the latter would be unlikely to succeed in the tender (see recital (39)).
- (136) Based on the above, it can be concluded that the inclusion of the existing refurbished installations with the installed capacity below 125MW in the competitive bidding process would lead to suboptimal results and the inclusion of these plants is therefore justified in line with paragraph 126, third indent, letters (a) and (b) of the EEAG.
- (137) Furthermore, a separate auction for existing refurbished plants is unlikely to be competitive given the limited amount of eligible beneficiaries per year, in line with paragraph 126 (a) EEAG.
- (138) In the absence of a competitive bidding process for the existing installations, the proportionality of the aid has to be assessed, in line with paragraph 128 of the EEAG, on the basis of the conditions set out in paragraphs 124, 125 and 131 of the EEAG.
- (139) As already demonstrated in section 2.5, paragraph 124(a) of the EEAG is complied with, as the aid is granted in form of a cogeneration premium. Moreover, section 2.5 shows that the operators of the existing high efficient gas fired CHP installations have to sell their electricity on the market and they are subject to standard balancing responsibilities (paragraph 124(b) of the EEAG). Finally, Slovakia confirmed, in line with paragraph 124(c) of the EEAG, that the aid will not be paid for production in periods in which market prices are negative (see also recital (32)).
- (140) As regards the calculation of the cogeneration premiums, Slovakia confirmed that the level of the cogeneration premium together with the market price of electricity will not exceed the LCOE of the supported units (see Table 3). Recital (44) enumerates the individual elements on which basis the LCOE will be calculated (the calculations will i.e. include forecasted revenues from the sale of heat and electricity as well as revenues from the provision of ancillary services). Slovakia further confirmed that the LCOE will be calculated specifically for each type of supported fuels.
- (141) Furthermore, in line with paragraph 131(a) of the EEAG, the aid per unit of electricity will not exceed the difference between the LCOE and the market price of electricity (see Table 2 and 3). In order to take into account different LCOEs for individual technologies, Slovakia will introduce reference values for given types of fuels to avoid overcompensation.

- (142) The aid will include an IRR of 1-5% (pre-tax nominal). This rate corresponds to a normal rate of return in the sector and can be thus considered reasonable in line with paragraph 131(b) of the EEAG.
- (143) For the existing refurbished installations with capacity below 125 MW, Slovakia explains that the support under this scheme can be cumulated with investment aid to existing installations, which undergo reconstruction or modernisation, in order to reduce the impact of the aid through the feed-in tariffs at the final electricity price, since these are larger installations. As already mentioned in section 2.6, RONI will reduce the cogeneration premium granted under this scheme by the investment aid earmarked for the execution of an investment in the given CHP unit in line with paragraph 151 of the EEAG, read in conjunction with paragraphs 128 and 131(b) of the EEAG. On the other hand, no cumulation is possible for a unit of electricity that has already received aid from another operating aid scheme.
- (144) Slovakia confirmed that the market price of electricity and the production costs will be updated regularly, as required by paragraph 131(c) of the EEAG (see recital (49)).
- (145) Moreover, the granting of aid will be limited and it can be granted only for the duration of up to 15 years. Operating aid is budgeted for the lifetime of the reconstructed or modernized facility in order to fully depreciate the reconstructed or modernized facility while minimizing the amount of support provided in individual years. The aid will thus not be granted after the CHP installations have been fully depreciated in accordance with normal accounting rules in Slovakia. Paragraph 131(d) of the EEAG is thus complied with.
- (146) The Commission therefore concludes that the aid granted to the existing installations is proportionate.

3.3.6. *Distortion of competition and balancing test*

- (147) The negative effects of the measure on competition and trade must be sufficiently limited, so that the overall balance of the measure is positive. The Court has clarified that in order to assess whether a measure adversely affects trading conditions to an extent contrary to the common interest, the Commission must weigh up the positive effect of the planned aid for the development of the activities that that aid is intended to support and the negative effects that the aid may have on the internal market²⁷.
- (148) On the positive side of the balance, the notified CHP scheme will facilitate the increase in the production of electricity in high efficient CHP installations in Slovakia. This will improve energy efficiency, achieve primary energy savings and increase security of energy supply. The scheme will also incentivise the fuel switch and the reduction of CO₂ emissions.
- (149) On the negative side, the Commission considers that the measure is liable to strengthen the competitive position of certain beneficiaries and confer a competitive advantage to all beneficiaries (both new and existing installations) as

²⁷ C-594/18 P *Austria v Commission* EU:C:2020:742, paragraph 101.

opposed to their competitors in the electricity market that are excluded from the measure. However, the Commission notes that, in line with paragraph 151 of the EEAG, the aid is granted in line with section 3.3.2.1 of the EEAG and only in cases where the costs of producing electricity exceed the market price, therefore limiting its impact on other electricity producers.

- (150) Therefore, the Commission concludes that the distortion of competition remains limited.
- (151) In light of the above, the Commission concludes that, overall, the positive effects of the planned aid for the development of the economic activity of high efficient cogeneration of heat and power, which support energy efficiency and thus promote environmental protection, outweigh the limited negative effects of the aid on the internal market in terms of competition distortion.

3.3.7. Transparency of the aid

- (152) According to paragraphs 104-106 of the EEAG, Member States have the obligation to ensure the transparency of the aid granted, by publishing certain information on a comprehensive State aid website. Slovakia has committed to ensure the compliance with these transparency requirements.

3.3.8. Compliance with other treaties provisions

- (153) As indicated in paragraph 29 of the EEAG, if a State aid measure or the conditions attached to it (including its financing method when it forms an integral part of it) entail a non-severable violation of Union law, the aid cannot be declared compatible with the internal market. In the field of energy, any levy that has the aim of financing a State aid measure needs to comply in particular with Articles 30 and 110 TFEU. The Commission has therefore verified that the financing mechanism of the notified aid measure complies with Articles 30 and 110 TFEU.
- (154) Slovakia confirmed that cogeneration producers from other countries will be allowed to participate in the notified support scheme, if they fulfil the conditions for granting the support. The Slovakian authorities set the main condition to secure a physical supply of heat into the district heating system on the territory of the Slovak Republic.
- (155) As the measure aims at promoting highly efficient cogeneration of energy, which can include waste fuel, while still respecting the waste hierarchy principle enshrined in paragraph (118) of the EEAG, Slovakia seeks to contribute to meeting the Union objective of saving 20% of the Union's primary energy consumption by 2020. The measure is therefore in line with the Energy Efficiency Directive²⁸ and the Waste Framework Directive²⁹.

²⁸ 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, (OJ L 315, 14.11.2012, p. 1-56).

²⁹ Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3–30).

(156) The Commission therefore concludes that this measure is in line with other treaties provisions and directives.

3.3.9. Conclusion on compatibility of the measure with the EEAG

(157) In light of the above, the Commission concludes that the aid facilitates the development of an economic activity and does not adversely affect trading conditions to an extent contrary to the common interest. Therefore, the Commission considers the aid compatible with the internal market based on Article 107(3)(c) TFEU and on the relevant provisions of EEAG.

4. AUTHENTIC LANGUAGE

(158) As mentioned in recital (3) above, the Slovakian authorities have accepted to have the decision adopted and notified in English. The authentic language will therefore be English.

5. CONCLUSION

The Commission regrets that Slovakia put the aid in question into effect, in breach of Article 108(3) of the Treaty on the Functioning of the European Union.

However, it has decided, on the basis of the foregoing assessment, not to raise objections to the aid on the grounds that it is compatible with the internal market pursuant to Article 107(3)(c) of the Treaty on the Functioning of the European Union.

If this letter contains confidential information, which should not be disclosed to third parties, please inform the Commission within fifteen working days of the date of receipt. If the Commission does not receive a reasoned request by that deadline, you will be deemed to agree to the disclosure to third parties and to the publication of the full text of the letter in the authentic language on the Internet site: <http://ec.europa.eu/competition/elojade/isef/index.cfm>.

Your request should be sent electronically to the following address:

European Commission,
Directorate-General Competition
State Aid Greffe
B-1049 Brussels
Stateaidgreffe@ec.europa.eu

Yours faithfully,

For the Commission

Margrethe VESTAGER
Executive Vice-President

Annex 1

List of existing installations (source: Slovak authorities)

Beneficiaries	Location	Installed electricity capacity (MWe)	Installed thermal capacity (MWth)	Year of commissioning after planned reconstruction	Fuel before/after reconstruction	Planned reconstruction investment (million EUR)
BYTKOMFORT, s.r.o.	Nové Zámky	4,682	4,803	2020	Gas/Gas	[2,304-2,816]
Martinská teplárenská, a.s.	Martin	28,140	23,700	2020	Coal/Gas	[30,06-36,74]
STEFE Banská Bystrica, a.s.	Banská Bystrica	4,680	4,581	2020	Gas/Gas	[3,6-4,4]
Tepláreň Košice, a.s.	Košice	37,500	34,392	2020	Coal/Gas	[31,05-37,95]
Žilinská teplárenská a.s.	Žilina	25,000	298,700	2021	Coal/Gas	[31,5-38,5]
Veolia Utilities Žiar nad Hronom, a.s.	Žiar nad Hronom	12,000	21,540	2022	Biomass/Gas	[19,53-23,881]
Bratislavská teplárenská, a.s.	Bratislava	25,000	180,000	2022	Gas/Gas	[31,5-38,5]
Mondi SCP, a.s.	Ružomberok	25,000	45,000	2024	Gas/Gas	[11,484-14,036]
Zvolenská teplárenská, a.s.	Zvolen	6,000	77,500	2025	Coal/Biomass and Gas	[27,81-33,99]
Tepláreň Považská Bystrica, s.r.o.	Považská Bystrica	63,900	50,670	2025	Gas/Gas	[31,86-38,94]
TERMONOVA, a.s.	Nová Dubnica	3,775	26,000	2025	Biomass/Biomass	[6,3-7,7]

Annex 2

Average input data per CHP technology for calculation of FIT for 2020 for existing installations below 125 MW (source: Slovak authorities)

CHP technology	Average operation hours data [hours/year]	Average specific investment costs [EUR/MW]	Average annual cost of wages and other personnel costs [EUR/MWh]	Average annual overhead costs [EUR/MWh]
Combined cycle gas turbine	4 500	1 290 000	4,98	8,62
Combustion turbine with heat recovery	4 500	1 312 500	6,22	6,97
Combustion engine	6 500	1 026 000	10,60	13,14
Back-pressure steam turbine, Condensing steam turbine with heat collection	4 500	1 756 000	19,50	11,65

Annex 3

Examples per CHP technology for calculation of FIT for 2020 for existing installations below 125 MW (source: Slovak authorities)

Example 1: Combustion engine

Receiver of support	Location of CHP installation	Installed capacity for electricity production [MW]	Installed heat production capacity [MW]	Fuel before/after reconstruction	Planned investment costs [mil. EUR]	Expected realization of the project
[...]	[...]	[...]	[...]	Natural gas/ Natural gas	[...]	2020

Name (label) of the indicator	Unit	Value
Expected investment loan (percentage from overall planned investment costs)	[%]	50
Number of operating hours	[hour/year]	5 660
Expected ratio between electricity from CHP/ usable heat	[-]	0,975
Expected annual efficiency	[%]	75
Expected gas prices calculated to calorific value of gas	[EUR/MWh]	35,93
Average value of wage costs and other personnel costs (set for 6 500 operating hours)	[EUR/MW]	51 000
Average value of annual other overhead costs (set for 6 500 operating hours)	[EUR/MWh]	10,46
Fixed price of electricity set by RONI (combustion engine, natural gas, 2019)	[EUR/MWh]	75,64
internal rate of return (IRR)	[%]	1

Average annual costs for electricity production (EUR/MWh) depending on the operating hours and overall efficiency of the installation:

Operating hours [hour/year]	Overall yearly efficiency of the CHP installation [%]		
	75	80	85
2 500 – 6 500	82,78	76,71	71,36

Example 2: Combustion engine

Receiver of support	Location of CHP installation	Installed capacity for electricity production [MW]	Installed heat production capacity [MW]	Fuel before/after reconstruction	Planned investment costs [mil. EUR]	Expected realization of the project
[...]	[...]	[...]	[...]	Coal/ Natural gas	[...]	2020

Name (label) of the indicator	Unit	Value
Expected investment loan (percentage from overall planned investment costs)	[%]	0
Number of operating hours	[hour/year]	5 660
Expected ration between electricity from CHP/ usable heat	[-]	1,09
Expected annual efficiency	[%]	75
Expected gas prices calculated to calorific value of gas	[EUR/MWh]	35,93
Average value of wage costs and other personnel costs (set for 6 500 operating hours)	[EUR/MWh]	10,46
Average value of annual other overhead costs (set for 6 500 operating hours)	[EUR/MW]	25 500
Fixed price of electricity set by the Office (combustion engine, natural gas, 2019)	[EUR/MWh]	75,64
internal rate of return (IRR)	[%]	1

Average annual costs for electricity production (EUR/MWh) depending on the operating hours and overall efficiency of the installation:

Operating hours [hour/year]	Overall yearly efficiency of the CHP installation [%]		
	75	80	85
2 500 – 6 500	76,64	70,90	65,84

Example 3: Combined cycle gas turbine (CCGT)

Receiver of support	Location of CHP installations	Installed capacity for electricity production [MW]	Installed heat production capacity [MW]	Fuel before/after reconstruction	Planned investment costs [mil. EUR]	Expected realization of the project
[...]	[...]	[...]	[...]	Natural gas/ Natural gas	[...]	2025

Name (label) of the indicator	Unit	Value
Expected investment loan (percentage from overall planned investment costs)	[%]	50
Number of operating hours	[hour/year]	3920
Expected ration between electricity from CHP/ usable heat	[-]	1,26
Expected annual efficiency	[%]	80
Expected gas prices calculated to calorific value of gas	[EUR/MWh]	35,93
Average value of wage costs and other personnel costs (set for 6 500 operating hours)	[EUR/MWh]	4,98
Average value of annual other overhead costs (set for 6 500 operating hours)	[EUR/MWh]	8,62
Fixed price of electricity set by the Office (combustion engine, natural gas, 2019)	[EUR/MWh]	74,10
internal rate of return (IRR)	[%]	1

Average annual costs for electricity production (EUR/MWh) depending on the operating hours and overall efficiency of the installation:

Operating hours [hour/year]	Overall yearly efficiency of the CHP installation [%]		
	75	80	85
2 500 – 4 500	75,03	69,66	64,92