EUROPEAN COMMISSION

Brussels, 20.12.2021
C(2021) 9878 final

PUBLIC VERSION

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Subject: **State Aid SA.58731 (2020/N) – RRF Austria - Operating aid to electricity from RES in Austria**

Excellency,

1. PROCEDURE

(1) On 23 September 2020, Austria notified to the Commission by electronic notification, pursuant to Article 108(3) of the Treaty on the Functioning of the European Union ("TFEU"), the planned support scheme of operating aid to electricity from renewable energy sources ("RES") in Austria.

(2) The Commission requested additional information from Austria on 4 November 2020, 29 March 2021 and 4 August 2021. Austria submitted additional information on 26 January 2021, 12 May 2021 and 20 September 2021 respectively.

(3) Further to these submissions, a series of meetings with Austria took place. Austria submitted additional information on 4, 5, 16, 18, 23 and 26 November and on 1, 3, 7, 14, 15 and 16 December 2021.

(4) Austria submitted a draft Evaluation Plan on 12 November 2021 and further information concerning the Evaluation Plan on 16, 24 and 26 November. Austria submitted the final Evaluation plan on 1 December 2021.

Seiner Exzellenz Herrn Alexander Schallenberg
Bundesminister für europäische und internationale Angelegenheiten
Minoritenplatz 8
1014 Wien
ÖSTERREICH

(5) On 3 November 2021, Austria exceptionally agreed to waive its rights deriving from Article 342 of the TFEU, in conjunction with Article 3 of Regulation 1/1958[1] and to have this decision adopted and notified in English.

2. DESCRIPTION OF THE MEASURE

(6) The measure notified and assessed in this decision is the support scheme of operating aid granted in the form of market premiums to electricity generated from RES in Austria ("the measure").

2.1 National legal basis, background and objective

(7) The legal basis of the notified measure is the Renewables Expansion Law (*Erneuerbare Ausbau Gesetz*, hereinafter "EAG") and in particular Part 2, Section 1 of the law (Articles 9-54 EAG). The law was adopted on 7 July 2021[2] and contains a suspension clause for the notified measure, which sets out that the measure shall enter into force following the approval or non-prohibition by the Commission pursuant to Article 108(3) TFEU (Article 103 EAG).

(8) On 3 December 2021, Austria submitted draft targeted amendments to the EAG, which were introduced to the Austrian Parliament on 16 December 2021[3]. The notified scheme in this decision is therefore based on the relevant articles of the EAG including these amendments.

(9) The EAG also implements the Renewable Energy Communities as set out in Article 22 of the Renewable Energy Directive ("RED II")[4] and lays down rules on guarantees of origin, green certificates and an integrated Austrian network infrastructure plan.

(10) This decision covers only the notified scheme. It does not cover other parts of the EAG related to other measures for the promotion of electricity generation from RES such as the investment grants for the construction, expansion or conversion of installations.

(11) The notified scheme replaces the previous support scheme, approved until 2021 by the Commission decision in case SA.33384 of 2012[5], and provided for support in the form of feed-in tariffs and investment grants ("the 2012 Commission Decision"). Under the previous scheme, operating support for

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[1] Regulation No 1 determining the languages to be used by the European Economic Community (OJ 17, 6.10.1958, p. 385).

[2] The law was published on the Federal Gazette of the Republic of Austria on 27 July 2021, available here: RIS - BGBLA_2021_I_150 - Bundesgesetzblatt authentisch ab 2004 (bka.gv.at).

[3] See 2184/A (XXVII. GP) - Erneuerbaren-Ausbau-Gesetz (EAG), Elektrizitätswirtschafts- und -organisationsgesetz 2010 (EIWOG 2010) und Energie-Control-Gesetz (E-ControlG) | Parlament Österreich.

[3] Directive (EU) 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).

[5] Commission decision of 8 February 2012 in State aid SA.33384 (2011/N) – Austria - Ökostromgesetz 2012 (Green Electricity Act 2012).

electricity from renewable sources has been granted in Austria on the basis of fixed feed-in tariffs. From 2012 to 2020, the sustainable electricity processing office (OeMAG) has been obliged to purchase the electricity produced by renewable energy producers for a certain period of time, usually for the first 13 or 15 years of operation, at prices fixed by the authorities.

(12) The aim of the notified scheme is to promote the production of electricity from renewable sources. The scheme aims at achieving the target of increasing the national annual production of electricity from renewable sources by 27 TWh by 2030, in order to achieve a 100% consumption from renewable sources by that date. Out of the 27 TWh, 11 TWh are to come from photovoltaic ("PV"), 10 TWh from wind, 5 TWh from hydropower and 1 TWh from biomass[6]. By comparison, in 2018 around 54 TWh of electricity were generated from renewable sources (mainly hydro).

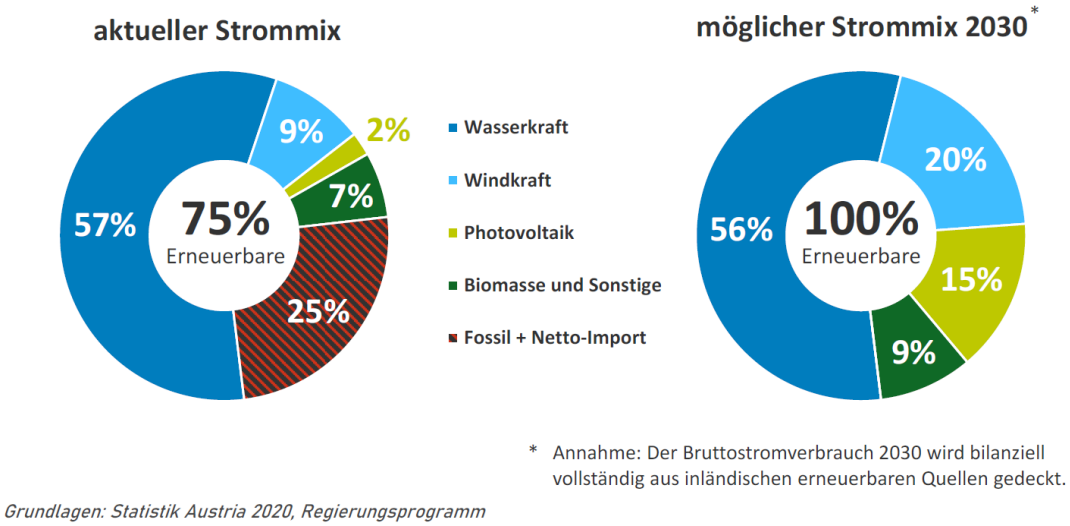

Figure 1: current and possible energy mix in Austria. Source: Austrian authorities.

(13) Austria has translated this into yearly quantities of supported capacities across the different technologies (Table 1), whereby flexibility is foreseen (further discussed below).

market premiums: contracting in MW

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	SUMME
Hydropower and Wind	-	20,0	20,0	20,0	20,0	20,0	20,0	20,0	20,0	20,0	180
Hydropower (up to 25 MW)	-	100,0	100,0	100,0	100,0	110,0	110,0	110,0	110,0	110,0	950
Wind	-	200,0	475,0	475,0	475,0	475,0	475,0	475,0	475,0	475,0	4.000
Photovoltaik	-	777,8	777,8	777,8	777,8	777,8	777,8	777,8	777,8	777,8	7.000
Biomass <0,5 MW	-	7,5	7,5	7,5	7,5	7,5	7,5	7,5	7,5	7,5	68
Biomass 0,5-5 MW	-	7,5	7,5	7,5	7,5	7,5	7,5	7,5	7,5	7,5	68
Biogas < 250 kW	-	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	14

Table 1: source: Austrian authorities.

(14) The measure consists in a market premium to be paid to RES producers either via tender or via administrative application. Support from the market premium is granted only if the installation is connected to the Austrian public electricity grid, can be remotely controlled for the purposes of the system and is equipped with a load profile meter or smart meter.

6 Article 4(2) to 4(4) EAG.

2.2 Granting authority

(15) The granting authority will be the EAG Funding Processing Office (*EAG-Förderabwicklungsstelle*)[7]. The Federal Minister for Climate Protection, the Environment, Energy, Mobility, Innovation and Technology ("the Ministry") is responsible for entrusting the EAG Funding Processing Office via a contract with the tasks indicated in Article 67 EAG. The Ministry will be supervising the EAG Funding Processing Office (Article 70 EAG).

(16) The tasks of the EAG Funding Processing Office are:

(a) the award, management and control of funding under the EAG;

(b) the publication on its website, by 22 January of each year, of the annual volume and funding of each technology;

(c) the maintenance of the EAG funding database[8].

(17) Within the limits of its capacity, the EAG Funding Processing Office is obliged to take all necessary measures to obtain the necessary financial resources, including borrowing funds. The inclusion of external funds requires the explicit approval of the Ministry.

2.3 Beneficiaries

(18) The beneficiaries of the notified scheme are the producers of electricity from RES, i.e. hydropower, photovoltaic, wind, biomass and biogas installations.

(19) In particular, the following electricity producing technologies will be eligible for the market premium via administrative application:

a) newly built and expanded hydropower installations with a congested capacity of up to 25 MW (after extension) and newly constructed and extended hydropower installations with a capacity exceeding 25 MW (after extension) for the first 25 MW; and revitalised hydropower plants with a capacity of up to 1 MW (after regeneration) and revitalised hydroelectric installations with a capacity exceeding 1 MW (after regeneration) for a maximum of the first additional 25 MW. If, in the event of a revitalisation[9], only the balancing capacity increases, the key factor in determining maximum support is the growth rate of congestion performance.
Support will not be granted for electrical energy obtained as a result of the pumping process for storage purposes and for:

a. new constructions, extensions and regeneration situated in environmentally valuable waters with a very good ecological status, as well as new constructions, extensions and regeneration in

[7] Article 66 EAG.

[8] Article 67 EAG.

[9] Regeneration or revitalization of hydropower power plants is a renovation process which leads to optimization of output, profitability and lifetime of the installation.

environmentally valuable waters with a continuous length of at least one kilometre of very good hydromorphological status;

b. new constructions, extensions and revitalisation of protected sites under Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora[10];

b) newly built wind turbines and extensions of wind turbines (only in 2022 and the total capacity supported in 2022 will be limited to up to 200 MW);

c) newly built plants based on biogas with a bottleneck capacity of up to 250 kW if the plant: (a) achieves a fuel efficiency of over 65%; (b) uses only biomass in the form of biodegradable waste and residues, of which at least 30% is manure and a maximum of 30% is catch crops and residual grassland, as fuel; (c) is more than 10 km from the nearest connection point to the gas network; (d) has a state-of-the-art heat meter; and (e) has a concept of raw material supply[11] at least for the first five years of operation;

d) new and repowered biomass installations with a congested capacity of less than 0.5 MW.

(20) The following electricity producing technologies will be eligible for the market premium via tender procedures:

a) newly built PV systems with a bottleneck capacity of more than 10 kW and extensions of more than 10 kW;

b) newly built and repowered biomass installations with a capacity of between 0.5 MW and 5 MW, as well as newly built and repowered biomass installations with a congested power exceeding 5 MW for the first 5 MW;

c) newly built wind turbines and extensions of wind turbines.

(21) In addition, mixed tenders for wind and hydropower installations will be organised as of 1 January 2023. Revitalised hydropower plants with a bottleneck capacity of up to 1 MW (after revitalization) and a degree of revitalization of up to 60% will be excluded from those mixed tenders.

2.4 Form and level of support

(22) The notified scheme provides for a market premium aimed at compensating in whole or in part the difference between the production costs of electricity from RES and the average market price for electricity for a certain period of time. It is granted as a subsidy for the marketed electricity from RES that was actually fed into the public electricity grid and for which guarantees of origin have been issued (Article 9(2) EAG).

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[10] OJ L 206, 22.7.1992, p. 7.

[11] Austria explained that this is intended to provide evidence for biomass CHP-plants that these systems are resource-efficient and have a secure supply.

(23) In order to ensure this, the network operators must notify the EAG Funding Processing Office of the quantities injected into the public network by the installation concerned (Article 11(8) EAG). The market premium is then paid to the operator on the basis of that data (Article 14 EAG).

(24) The support from the market premium is limited to 20 years from the start of operation of the plant (Article 16 EAG), which, according to Austria, is below the years until the plant's full depreciation according to normal accounting rules. An exception is provided for the successor premium for biomass and biogas installations (until the 30th year of operation of the plant) (Article 52(2) EAG for biomass installations and Article 53(2) for some biogas installations[12]).

(25) All beneficiaries benefitting from the notified scheme are subject to standard balancing responsibilities. The standard balancing responsibility for all generators is laid down in Article 5 of the Electricity Market Regulation (Regulation (EU) 2019/943[13]) and Sections 85 to 87 of the Austrian Electricity Act (Federal Act Providing New Rules for the Organisation of the Electricity Sector (Electricity Act 2010 – ElWOG 2010[14]).

(26) Furthermore, Article 15 EAG provides that, in the event of a negative market price for at least six consecutive hours, no market premium is to be paid for the whole period in which the hourly price is negative.

(27) Austria confirmed that with the exception of photovoltaic systems (10 kW), the EAG does not provide for a minimum size for eligibility for the market premium. The general conditions for obtaining a market premium (sale of electricity generated on the electricity market, assumption of standard balancing responsibilities, six-hour rule in case of negative prices) also apply to installations with a capacity of less than 500 kW.

(28) Austria explained that since the self-marketing obligation[15] (beneficiaries must sell their electricity directly in the market) may constitute a barrier for smaller plant operators, Article 97 EAG provides for the possibility of assigning an electricity trader to operators of installations with a capacity below 500 kW. This possibility exists in the event that, despite efforts, the operator of the installation is unable to find an electricity trader for the marketing of its electricity. In such case, the regulatory authority will select an electricity trader on the basis of objective, non-discriminatory and transparent criteria and will require it to conclude a contract for the installation in question.

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12 For biogas-based installations with a capacity of more than 250 kW, which are not more than 10 km of pipeline length from the next connection point to the gas network, the support will be granted for 24 months, with a one-off extension of a further 24 months being granted upon application if the beneficiary can credibly demonstrate that the installation cannot be connected to the gas network within the original duration of the successor premium for reasons beyond its control.

13 OJ L 158, 14.6.2019, p. 54.

14 Available here.

15 Obligation deriving from point 124 of the EEAG.

2.4.1 Calculation of market premium

(29) The amount of the market premium will be expressed in cents per kWh and will be determined by the difference between the costs ("value to be applied") expressed in cents per kWh, determined in the context of a call for tenders or determined by regulation (see section 2.4.1.1) at the time of submission of the application, and the respective reference market value ("RMV") – for wind, hydropower and PV - or reference market price ("RMP") (see section 2.4.1.2) – for biomass and biogas and for the mixed tenders - in cents per kWh. Austria submitted that it will apply the reference market price to mixed tenders to allow a uniform calculation against the value to be applied, in order not to advantage one or the other technology.

(30) The reference market price for mixed tenders will be determined per month (instead the determination per year for biomass and biogas) because the mixed tenders include the more volatile technologies wind and hydropower (the technology specific reference market values for those technologies are determined per month as well).

(31) The market premium will be calculated in accordance with the amount of electricity generated by the installation and fed into the public electricity system, provided that the generation has not exceeded the congestion capacity agreed in the respective support contract. In the event of bottleneck performance being exceeded, the excess volumes will not be taken into account in the calculation of the market premium.

(32) If the calculation referred to in paragraph (29) results in a value of less than zero, the market premium will be set to zero.

(33) In addition, for wind turbines with a bottleneck capacity of 20 MW or more, hydropower plants with a bottleneck capacity of 20 MW or more and photovoltaic systems with a bottleneck capacity of 5 MW or more, if the RMV exceeds the AzW by more than 40%, the beneficiaries will pay 66% of the excess part to the EAG Funding Processing Office. The amount to be paid to the EAG funding agency is to be deducted when the market premium is paid.[16]

2.4.1.1 Calculation of the maximum price / value to be applied in administrative requests

(34) As regards the maximum price for tenders, the Ministry will issue a separate decree which will establish for each technology the maximum prices in cents per kWh, up to which bids are accepted in tenders. The calculation will be carried out on the basis of one or more expert opinions (Article 18 EAG).

(35) For tenders, the calculation will be carried out on the basis of the following criteria:

(a) the maximum prices will be based on the costs necessary for the operation of a cost-efficient, state-of-the-art installation;

[16] Article 11(6) EAG.

(b) the costs must include depreciation and an appropriate interest rate on equity and debt financing for the investment. A financing cost rate is to be applied, which is determined by the weighted average cost of capital for equity and debt on the basis of a standard capital structure including income tax. A market-adequate risk premium for equity and debt, the financial conditions on the capital market and a risk-free interest rate must be taken into account;

(c) in the case of biomass-based installations, the maximum price will not be fixed in such a way as to deprive biomass of its material use or to deprive food and feed of its original intended use;

(d) a distinction must be made between newly built and repowered plants; for plants based on biomass, differentiation according to the use of raw materials is permitted.

(36) Maximum prices will be determined separately for each calendar year, subject to adjustments against the end of the year. Until the entry into force of a new decree, the latest maximum prices will continue to apply.

(37) For the calculation of the market premium granted on application, the amount of the value to be applied (Anzulegender Wert, "AzW") in cents per kWh will be determined by administrative regulation on the basis of one or more expert opinions, in accordance with the following principles (Article 47 EAG):

(a) the AzW will be based on the costs necessary for the operation of a cost-efficient, state-of-the-art installation;

(b) the costs must include depreciation and an appropriate interest rate on equity and debt financing for the investment. A financing cost rate is to be applied, which is determined by the weighted average cost of capital for equity and debt on the basis of a standard capital structure including income tax. A market-adequate risk premium for equity and debt, the financial conditions on the capital market and a risk-free interest rate must be taken into account;

(c) revenues from the market sale of heat and of guarantees of origin must be taken into account;

(d) for wind turbines in 2022, a differentiation according to location-related different electricity yields is permissible[17];

(e) for hydropower plants, a differentiation is permitted between new construction, new construction using a transverse structure, expansion and revitalisation, as well as according to the annual electricity production and the degree of revitalisation of the subsidized plant;

[17] As explained in section 2.6.5, the differentiation is aimed at allowing a balanced development of wind installations, as the risk is otherwise that installations in the eastern, windier, part of the country would always win the auctions in view of their better yield/lower costs. For the reasons explained in section 2.5.2, the distribution of wind installations should be balanced.

(f) in the case of biomass-based installations, the definition of the AzW will ensure that biomass is not deprived of its material use or food and feed is withdrawn from its original intended use;

(g) for plants based on biomass, a distinction must be made between newly built and repowered plants; differentiation according to the use of raw materials is permissible.

(38) The AzW will be determined separately for each calendar year, with adjustments permitted during the year. Until the entry into force of a new regulation, the latest AzW will continue to apply.

2.4.1.2 Calculation of Reference market value and Reference market price

(39) Austria submitted that the distinction between the RMV and RMP is necessary to ensure that the market price considered takes into account the volatility of the former in comparison to the more stable nature of the latter.

(40) The RMP is calculated by the Austrian Regulatory Authority from the average of all hourly electricity prices in a calendar year.

(41) The RMV for wind, hydropower and PV plants is calculated separately for each technology. Specifically, it: (i) multiplies the hourly electricity price by the power volume generated by the specific technology in that hour; (ii) sums up those hourly values over a month; and (iii) divides that monthly value by the power volume generated by the specific technology over the entire month. The market value aims to establish to what extent intermittent RES technologies actually benefitted from each hourly price. It does so by looking, for each hourly price, how much relevant electricity was produced and therefore sold and remunerated at that hourly level.

(42) Austria submitted that intermittent technologies face limitations in deciding how much to produce as a function of the market price, simply because they depend on a fuel they cannot perfectly control and store. The consistently lower “market value” than “market price” derives from the fact that often prices are high when there is no wind and sun, but production based on wind and sun cannot take advantage of those prices. This also applies for hydropower, where the generation of electricity varies with the (seasonal) changes of the water levels of rivers. Austria has demonstrated that run-of-river production is the main source of electricity production in the country (see Figure 2 and following).

(43) According to Austria, when using reference market values, the operator’s revenue from the direct marketing of electricity is more realistic than the use of reference market prices, which tend to overestimate the achievable revenues and underestimate the required market premium.

(44) The following table shows that fictitious retrospective yearly electricity market revenues would be for PV 4.1% and for wind 6.4% higher, if based on a monthly reference market price instead of the more suitable monthly reference market value.

	MONATSMITTELWERTE (Strompreis vs. Marktwert)					Erzeugung je Monat			Strommarkterlöse (Referenzwerte auf Basis der Marktwerte im Monatsmittel)		Fiktive Strommarkterlöse (Referenzwerte auf Basis der Marktpreise im Monatsmittel)	
	Day-ahead Preis	PV-Marktwert	WiOn-Marktwert	PV-MW-Faktor	WiOn-MW-Faktor	Last	PV-Erzeugung	WiOn-Erzeugung	PV-Erlöse	WiOn-Erlöse	PV-Erlöse	WiOn-Erlöse
	[EUR/MWh]	[EUR/MWh]	[EUR/MWh]	%	%	[TWh]	[TWh]	[TWh]	[Mio.EUR]	[Mio.EUR]	[Mio.EUR]	[Mio.EUR]
1	58,1	61,8	52,2	106%	90%	6,22	0,03	0,95	1,8	49,5	1,7	55,1
2	47,1	47,4	46,2	101%	98%	5,42	0,06	0,76	3,0	35,1	3,0	35,8
3	34,3	32,2	32,2	94%	94%	5,58	0,09	0,78	3,0	25,0	3,2	26,7
4	38,8	34,2	38,0	88%	98%	4,88	0,13	0,86	4,6	32,6	5,2	33,2
5	39,0	36,7	37,0	94%	95%	5,11	0,14	0,87	5,3	32,0	5,6	33,8
6	35,8	33,2	34,3	93%	96%	4,74	0,21	0,43	7,1	14,9	7,6	15,6
7	40,8	40,4	38,2	99%	94%	4,97	0,19	0,36	7,7	13,9	7,8	14,9
8	38,7	36,3	37,2	94%	96%	4,85	0,17	0,34	6,0	12,6	6,4	13,1
9	39,3	38,2	37,2	97%	95%	4,84	0,14	0,44	5,2	16,2	5,4	17,1
10	40,5	40,3	38,8	99%	96%	5,26	0,09	0,53	3,8	20,7	3,8	21,7
11	44,4	45,8	40,8	103%	92%	5,46	0,05	0,78	2,2	31,7	2,1	34,5
12	40,1	43,0	36,5	107%	91%	5,77	0,03	0,87	1,2	31,8	1,2	34,9
Summe (lastgewichtetes Mittel)	41,7	37,9	39,7	**90,9%**	**95,1%**	63,09	1,34	7,97	50,8	316,1	52,9	336,3
Summe (arithmetisches Mittel)	40,1	37,9	39,7	**94,7%**	**99,1%**							
										Abweichung:	2,1	20,2
										Abweichung%:	**4,1%**	**6,4%**

Table 2: Comparison of revenue monthly averages. Source: Austrian authorities (TU Wien/Energy Economic Group, expert consultancy EAG, presentation to BMK on 3.6.2020, based on generation data from ENTSO-E Transparency Platform and monthly average values of the 2019 day-ahead electricity prices).

(45) The following table shows the differences of average yearly reference market values to the yearly arithmetic mean of the overall day-ahead prices. For example: the yearly weighted average for wind in 2020 was 4.5% lower than the overall market price (yearly arithmetic mean).

Preise vom 03.09.2021	Relativer Lastprofilwert Y-1 (2020) *Faktor*	Relativer Lastprofilwert Y-2 (2019) *Faktor*	Relativer Marktwert (2019-2020) *Faktor*
Windkraft	0,955	0,994	0,974
Photovoltaik	0,896	0,954	0,925
Kleinwasserkraft	0,980	0,988	0,984
Biomasse	0,998	1,009	1,003

Table 3: Comparison of average yearly differences to the overall market price 2020, 2019 and average 2019/2020 by technologies. Source: Austrian authorities (Inercomp, Electricity price forecast 03.09.2021, based on generation data from APG (Austrian Power Grid AG) and day-ahead electricity prices from EPEX)

2.5 Reasons for technology specific approach in EAG

(46) Austria explains that the deviation of the notified scheme from the technology neutrality principle is linked in particular to:

(a) the need for diversification of sources of renewable energy;

(b) network stability and security, linked to the geographic distribution of the installations (wind is predominant in the north-east, hydro is predominant in the west);

(c) the different costs of the production technologies, which means that non-technology-specific development would lead to sequential deployment of the respective technology potential. This would affect the planning capability of companies and authorities.

2.5.1 Diversification

(47) On diversification, Austria submitted that the annual cycle shows that in Austria electricity demand is higher in winter than in summer, while renewable electricity generation in late spring/summer is significantly higher than in winter. For this reason, electricity is being produced from fossil fuels and imported in winter. With high hydropower generation in Austria in summer, some months can achieve net electricity exports. Austria provided data on electricity generation and consumption. The following tables show how the demand is met by the different sources of generation in the years 2018-2020.

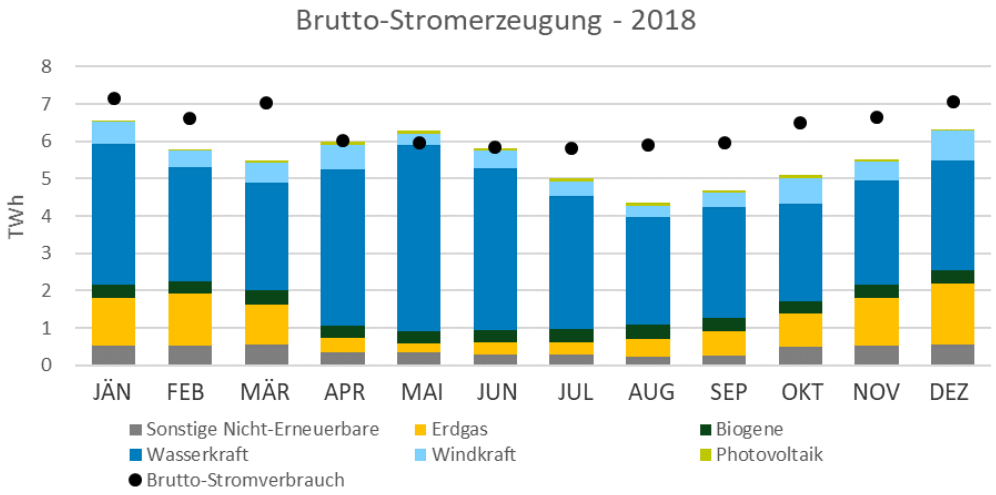


Figure 2: Gross electricity generation — 2018; Source: E-Control; Graph: AEAS

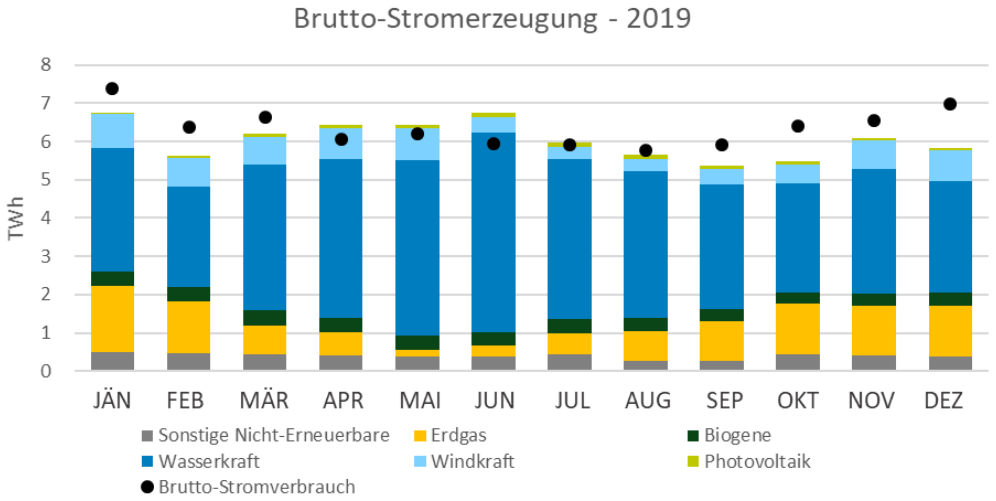
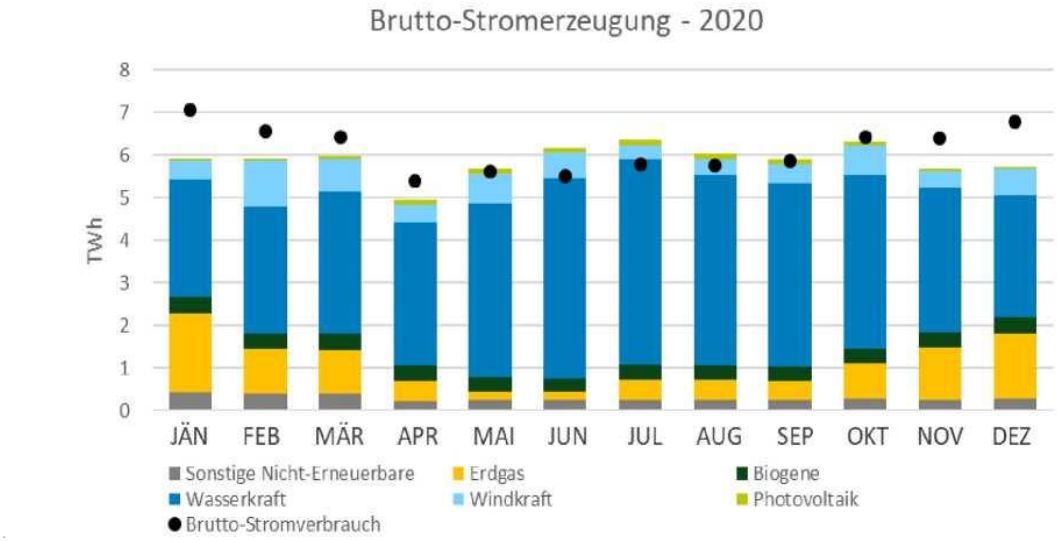
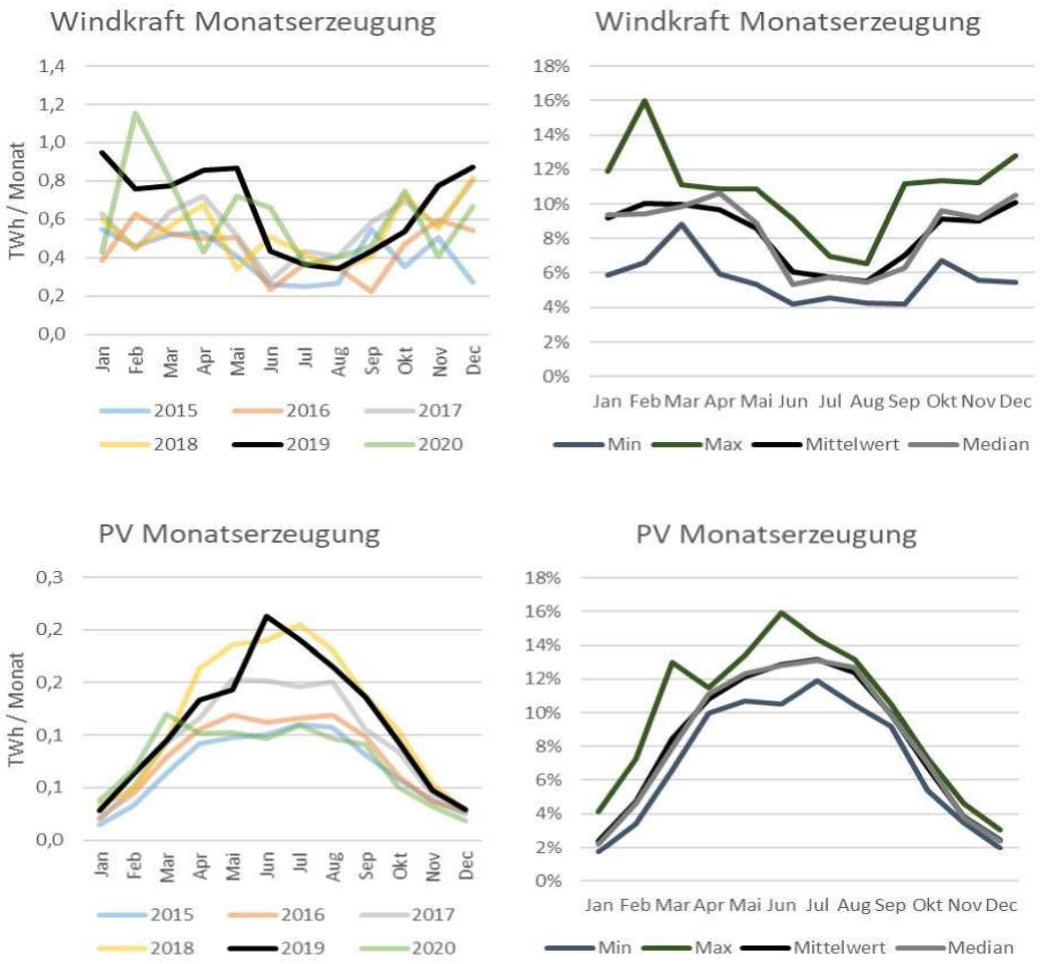


Figure 3: Gross electricity generation — 2019; Source: E-Control; Graph: AEAS



Figures 2-3-4: gross electricity production and consumption in Austria. Source: Austrian authorities.

(48) The higher winter demand cannot be met by all renewable sources since photovoltaic production is much lower in winter than in summer, whereas wind generation is much stronger in winter, as shown by the graphs below.



Figures 5-6: wind and PV monthly production. Source: Austrian authorities.

(49) The projections of generation in 2030 according to the development based on the EAG targets would result in an aggregate monthly production of general equilibrium of the production curves, as shown by the graph below.

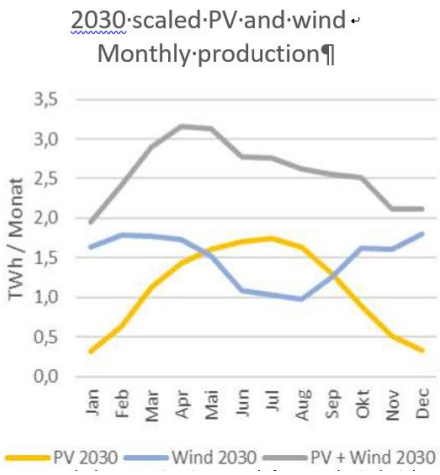


Figure 7: scaled PV and wind production in 2030 – projection. Source: Austrian authorities.

(50) Austria submitted different scenarios based on "maximum photovoltaic" or "maximum wind" expansion, as compared to the expected balanced development envisaged with the EAG based scheme. The "maximum photovoltaic" scenario is the one which would entail the highest variability. The "maximum wind" scenario" would entail sudden generation gaps, while the EAG scenario shows that such development would lead to least deviations between electricity generation and electricity consumption.

(51) Therefore, an unbalanced development of one technology would lead to excess production in certain periods, increased dependence on imports in other periods and overall a very unstable generation pattern.

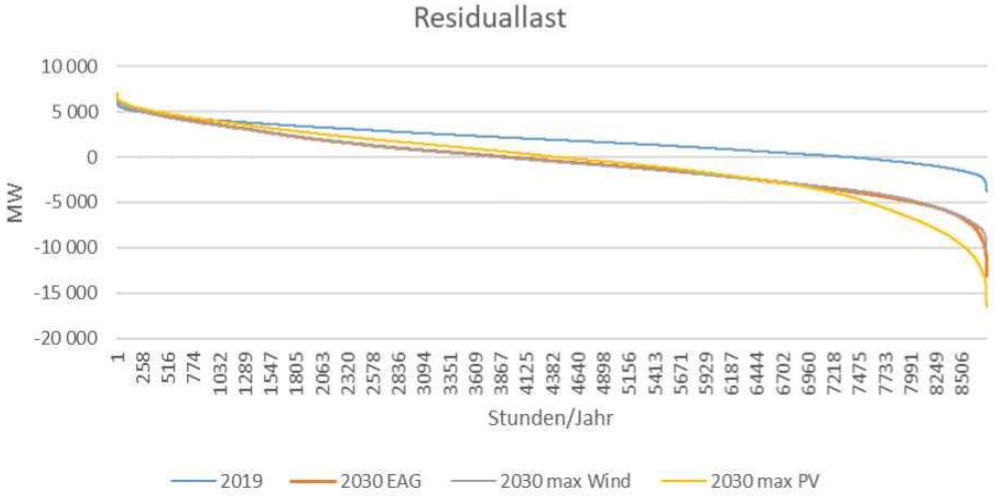


Figure 8: Permanent line Residual load in 2019 and scenarios EAG, 'Maximum wind' and 'Maximum photovoltaic'. Source: Austrian authorities.

(52) Furthermore, Austria submitted that the generation from biomass is stable and independent on weather conditions, and biomass plants can react more flexibly to signals from the electricity market than wind power or

photovoltaic installations. The stable nature of biomass generation in Austria is shown by the graphs below.

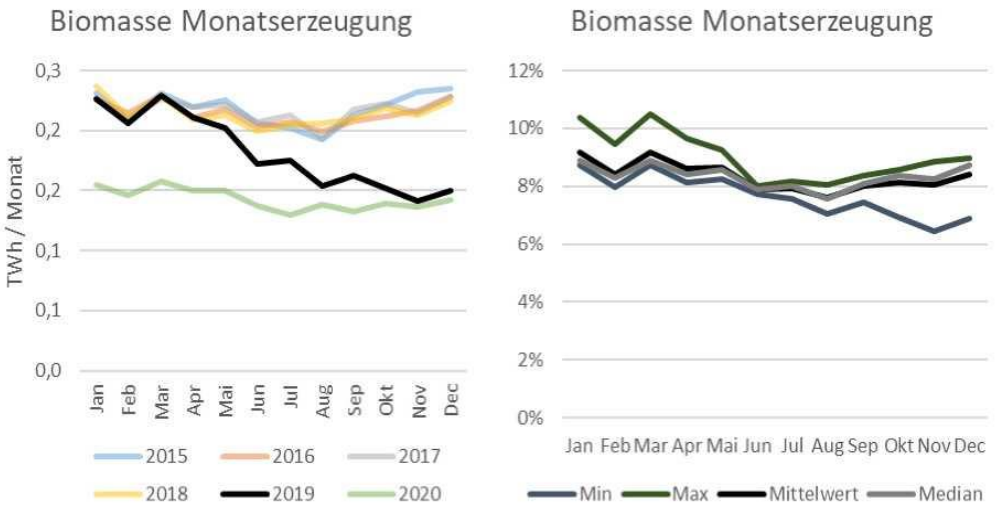


Figure 9: monthly biomass generation in Austria. Source: Austrian authorities.

(53) While the territory of Austria has a high potential for biomass production, Austria submitted that much of the available wood is used for industrial (wood processing, paper) or energy use (heating, district heating, and electricity).

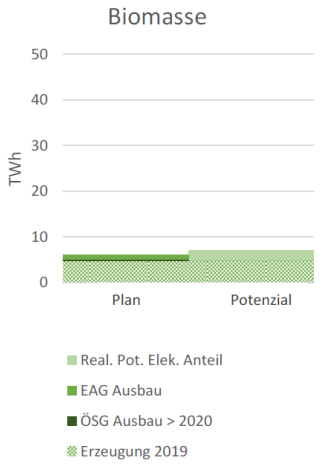


Figure 10: potential versus realizable biomass generation under EAG in 2030. Source: Austrian authorities.

(54) Therefore, a limited expansion of biomass generation is envisaged, while more generation capacity is envisaged for PV and wind.

(55) In view of the above, Austria submitted that the need for diversification of the renewables sources justifies a separate technology specific support.

2.5.2 Network stability and security

(56) On network stability and security, Austria submitted that, at present, there are in some cases significant restrictions on the Austrian transmission network

both on national lines and at interconnection points with neighbouring countries.

(57) In particular, the Austrian transmission system has interconnectors with six neighbouring countries (Germany, Czech Republic, Hungary, Slovenia, Italy, Switzerland). At national level, Austria has a transmission network which still consists of 220 kV lines to a significant extent and therefore cannot be operated consistently at 380 kV. The map below, submitted by Austria, shows the current status of the Austrian national grid.

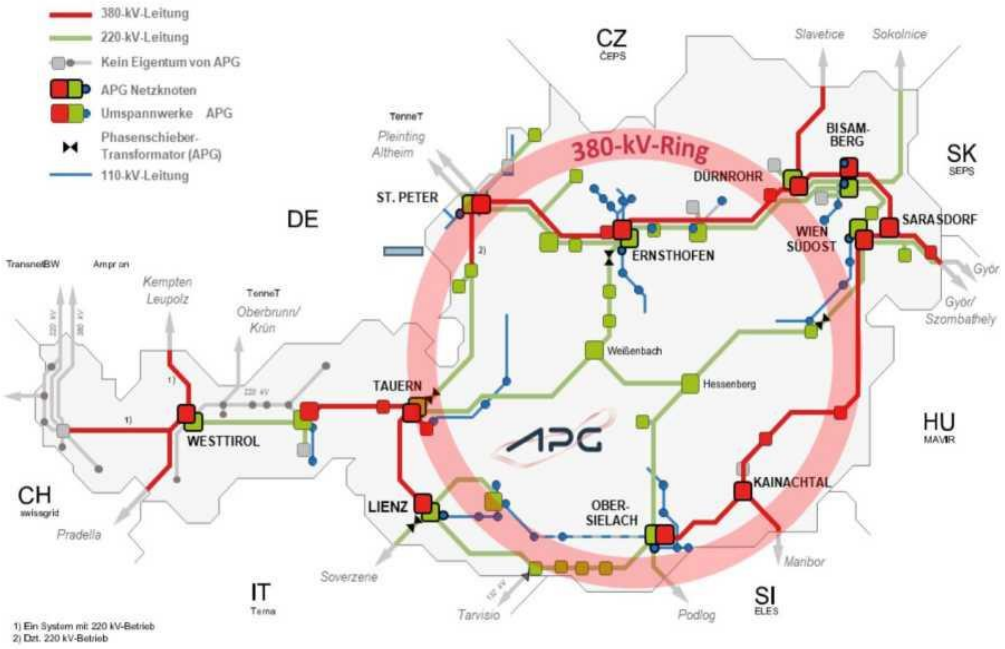


Figure 11: Austrian transmission system. Source: Austrian authorities.

(58) Austria submitted that the transmission system operator, APG, is planning to have a 380 kV ring within Austria. The closure of this ring, in conjunction with further expansion projects, is expected to lead to more efficient connection at high voltage between the East and the West of the country, and to guarantee safe and reliable connection for instance between the wind rich areas in the East and the hydro-pumped storage power plants in the Alps.

(59) The increased integration of volatile renewable electricity generation from wind and photovoltaics are expected to increase volatility in the Austrian transmission system and in the downstream distribution networks. APG elaborated a model of possible development of the wind and PV sources (without taking into account the system to be set up by the EAG), which shows a strong regional concentration of wind and PV in the north east of the country in 2030:

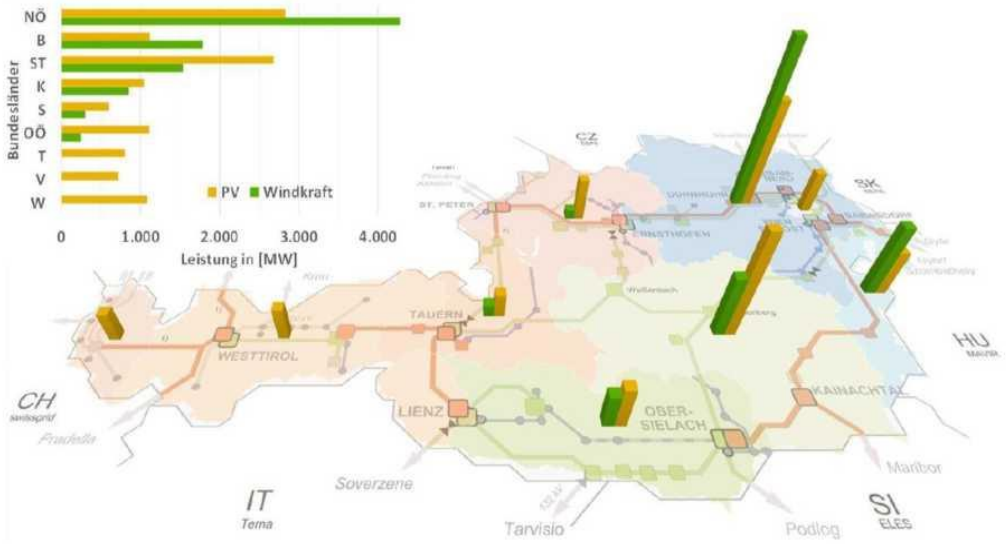


Figure 12: projected development of wind and PV in 2030. Source: Austrian authorities.

(60) Due to the geographically different distribution, correspondingly higher transport capacities would be needed in order to be able to transfer the quantities of electricity injected to the consumption centres or pumped storage plants (which are mainly located in the western alpine region). The renewables sources increase require time and space balancing of regional electricity generation as well as its storage (or temporal shift).

(61) In this respect, Austria submitted that network operation critical supply bottlenecks can be reduced also by diversified generation profiles, as different renewable energy sources would complement each other and would stabilise the combined renewable feed-in capacity. Through parallel and technology specific development, the networks could be gradually developed and prepared for the increased loads and changing load profiles in some areas.

(62) Austria submitted that APG has already in place plans to expand its network congestion capacities, taking into account the possible future expansion of renewables and the current location of wind installations and hydro pumping stations.

(63) The large number of expansion projects planned by APG is intended to reduce internal network bottlenecks and bottlenecks at interconnection points with neighbouring countries. From APG's point of view, the structural bottlenecks in the Austrian transmission system will in the long term only be resolved by network expansion in response to the projects listed in the 2021 NDP[18]. Austria submitted that experience with previous network

[18] APG's Network Development Plan for 2021. The NDP is a statutory requirement for APG under Section 37 of the 2010 Austrian Electricity Industry and Organisation Act (Elektrizitätswirtschafts- und -organisationsgesetz, ElWOG 2010). It provides information on the main development and infrastructure projects relevant to the APG transmission grid. The NDP includes a list of investments that have already been decided on as well as the projects required to be implemented within the next three years. In addition, the network development plan depicts the system plan for the next ten years, taking account of forecast developments in the energy market. The projects included in the plan are

development projects in Austria shows that they are often faced with very long delays resulting from the extensive and time-consuming authorisation procedures combined with a lack of social acceptance.

(64) Therefore, considering the pace of grid expansion, the expected renewable energy development and regional conditions, Austria expects that some of the existing network restrictions will in any event also be present in the longer term.

(65) As a result, Austria submits that, in order to increase the share of renewable energy sources in electricity supply from around 75 % to 100 % in 2030, a controlled expansion of the various technologies is necessary in order to achieve a balanced production mix, to ensure grid stability and overall high security of supply in Austria also in the long term.

2.5.3 Different costs for the technologies

(66) Austria submitted that, because of the different costs ("LCOE") of the various technologies, a technology neutral tendering system will lead to a sequential exploitation of the different technologies (from the cheapest), which will create imbalances and congestion problems for the network, as well as security of supply issues linked to the seasonal variations between, for instance, wind and PV.

(67) Austria submitted a study indicating the LCOE costs for the different technologies, which identifies medium, upper and lower bound LCOEs for each technology.

(68) The results of the study are summarised as follows:

Levelized costs of electricity	Wind	PV (ab 10 kW)	Biomasse	Biogas	Wasser
Neuanlagen (Biogas/Biomasse auch Nachfolgeprämien) in Cent/kWh	5,4 - 9,2	8,1 - 10,7	10,3 - 22,2	20 - 27	7 - 11,6
Modernisierung/Revitaliserung			hoher Anteil Modernisierung	hoher Anteil Modernisierung	hoher Anteil Modernisierung
Eigenschaften					
Geplanter Ausbau Technologie bis 2030	10 TWh	11 TWh	1 TWh		5 TWh
Potential	hoch	hoch	niedrig	niedrig	mittel
Volllaststunden	2500	1050	6850	bis 8100	4000-5500
Dauer der Planungsphase in Jahren	3-6	0,2-1	1-3	1-3	5-10
Potential Kostensenkung	mittel	mittel	niedrig	niedrig	niedrig
Risiken Genehmigung	mittel	niedrig	mittel	mittel	hoch
Regionen Potential	eher im Osten	ganzes Land			eher im Westen
geplantes jährliches Ausschreibe-/Vergabevolumen Marktprämien (min. in MW)	390 MW	700 MW	15 MW	1,5 MW	90 MW

Table 4: LCOE calculations. Source: Austrian authorities.

(69) The differences in LCOE are linked to the different cost structures based on technologies and, within technologies, different capacities and efficiency levels. The significantly higher costs for biomass and biogas are linked to the high cost of the fuel material. Furthermore, Austria submitted that no reduction of LCOE for biomass and biogas is expected.

categorised into projects that are of national or European interest as well as transmission system network and grid connection projects. Source: www.apg.at .

(70) According to Austria, the different LCOEs would lead to a sequential exploitation of the different technologies (first, a deployment only of the cheapest one, then only the second cheapest etc.), if they were all put in competition with one another. Austria submitted that this would lead to an excessive deployment of PV first. Although the LCOE of PV seems to be higher than the wind, and partially of hydropower, Austria submitted that, in view of the expected learning rates (reduction of costs) until 2050 of 2-10% for wind and 10-23% of PV[19], the LCOE of PV will decrease significantly and, as a consequence, it would always win bids if there were joint PV/wind auctions. Furthermore, Austria submitted data showing that, when looking at the actual[20] award prices in Germany[21] for wind and PV in the years 2018 to 2020, the awards for PV were on average in the area of EUR 5 cents/kWh, whereas for the wind the awards were on average higher (i.e. in the area of EUR 6 cents/kWh). Austria expects a similar trend to verify also in its own tenders.

(71) As for hydropower, Austria submitted that, in view of the already high level of exploitation of the technology in the country, it expects that on average costs will increase by 4% in the next ten years and that therefore its LCOE will remain higher than PV, in particular.

(72) There is, however, an overlap in the cost structure[22] between certain categories of hydropower (newly constructed hydroelectric power plants using transverse structure installations) and wind installations. In view of this, Austria introduced in the draft EAG amendment law the possibility to organise mixed tenders between wind and certain types of hydropower installations. As the introduction of tenders is a novelty for the RES support system, the volume to be auctioned in mixed tenders is initially relatively small (20MW). Austria will verify the level of competitiveness of such tenders through the flexibility options described in Section 2.6.2.

2.6 Tenders

2.6.1 Target volumes per year

(73) The EAG establishes the minimum target volumes of capacity to be supported via tendering for each technology per year. Based on the draft revised EAG of 3 December 2021 submitted to the Commission, the supported volumes are the following:

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19 Austria submitted that these learning rates have been identified by the Fraunhofer Study in Germany and by the Joint Research Center in 2018.

20 For wind, the award prices are only referring to the reference sites. Austria submitted that approximately 93% of the turbines have a quality factor less than 100%, which means that the actual corrected award will be higher than the awarded price, according to the Referenzertragmodel.

21 Source of the data: AURES 2020.

22 The Expert Report (see fn.29) submitted by Austria identifies for wind installations a cost value between EUR 64,2/MWh and EUR 89,6/MWh considering the correction factor (see section 2.7.1), whereas for hydropower installations the costs change depending on the type of plant (newly built hydropower installations, standard or with transverse structure, revitalised power installations below 1MW, revitalised hydropower installations above 1MW). The values of new installations with transverse structure are between EUR 69,6/MWh and EUR 95,98/MWh (See Section 2.7.2).

(a) For PV, a minimum of 700 MW per year (Article 31(1) EAG),

(b) For wind, 190 MW in 2022 and a minimum of 390 MW as of 2023 per year (Article 41(1) EAG),

(c) For biomass based installations above 500 kW, a minimum of 7 500 kW per year (Article 36(1) EAG),

(d) For mixed wind and hydropower tenders, a minimum of 20 MW per year (Article 44(b)(1) EAG).

(74) The EAG Funding Processing Office will publish the call for tender on its website at least two months before the respective bidding date (Article 19 EAG). The notice will have to contain:

(a) the bidding date (date and time),

(b) the type of renewable energy source from which electricity is to be generated,

(c) the tender volume in kW,

(d) the respective maximum price,

(e) the form in which bids are submitted,

(f) the eligibility conditions and other conditions which are a prerequisite for the consideration of bids.

(75) The bids must contain the following information (Article 20 EAG):

(a) the name, address, telephone number and e-mail address of the tenderer; in the case of partnerships and legal persons, in addition, the registered office, where applicable, the commercial register number and the name of a natural person authorised to represent all acts under this Act,

(b) the renewable energy source for which the bid is made,

(c) the location or planned location of the installation, indicating the cadastral municipality and land number,

(d) a project description with information and evidence of compliance with the eligibility requirements and a cost, time and financing plan,

(e) the bid quantity in kW without decimal places,

(f) the bid value in cents per kWh with two decimal places,

(g) proof that all necessary permits and authorisations have been granted or are deemed to have been granted by the relevant competent authority for the construction, repowering or extension of the installation;

(h) proof of the payment of any required security;

(i) an explanation of how to provide measurement data in real time.

(76) Austria explained that, for wind tenders, the bid will have to contain the specific rotor area of the installation. The requirement will be indicated in each ordinance announcing the call for tender.

(77) The bids will have to be entered in the electronic tendering system to be set up by the EAG Funding Processing Office. Tenderers may submit several bids for different installations in each call for tender, but multiple bids for one installations are prohibited (Article 21 EAG).

(78) A guarantee will have to be submitted if the bid quantity is in excess of 100 kW (Article 22 EAG).

(79) The EAG Funding Processing Office will open the bids after the end of the bidding date and will check in detail for the admissibility of the individual bids. Such review will be documented. Bids will be ranked in ascending order according to the amount of the bid value, starting with the lowest. The tender volume established for each technology, or for the mixed tender, will not be exceeded (Article 23 EAG). Information about the outcome of the bidding procedure will be published by the EAG Funding Processing Office (Article 26 EAG).

2.6.2 Measures to ensure effective competitive bidding

(80) The EAG provides for different ways to ensure competitive bidding. In particular:

(a) If the tender volume available for a given bidding date is not exhausted, the unused tender volume will be added to the tender volume of subsequent bidding dated of the same year, unless the reductions provided for by the law apply (Articles 31, 36 and 41 EAG)[23];

(b) Article 7(2) EAG provides for the possibility to reduce the annual tender or award volume by 30% if the technology is also supported by investment grants[24], provided that the support by the other type of aid is increased proportionally.

(c) Article 7(3) provides that, if the target volume identified in recital (12) are reached, the annual volume of tenders may be reduced in the following year;

[23] The EAG (Article 100(5)) provides for a specific reduction of volumes of auction for the year of entry into force of the rules on tenders. The tender volume shall be reduced in proportion to the time in the year lapsed before the entry into force takes place. In addition, for PV and wind it is possible to carry out only one tender instead of the minimum two in the year of entry into force of the rules.

[24] Part 3 of the EAG includes provisions for investment grants, for the conversion of existing biogas plants, for installations to be set up for the production of renewable gas and for installations for the conversion of electricity into hydrogen or synthetic gas, which will be granted on the basis of Article 41 of the General Block Exemption Regulation. This decision does not cover that part of the EAG.

(d) The draft Article 7(3a)[25] provides that, in order to ensure effective competitive bidding, the Ministry may, after the publication of the Network Infrastructure Plan pursuant to Article 94 EAG[26], reduce the annual tender volume of a given technology to a maximum of 50% for the following year or years, if (i) the total volume of bids submitted in a bidding date was smaller than the tender volume; and (ii) a shortfall in the bidding volume is to be expected in the future, taking into account results of the EAEC monitoring report pursuant to Article 90 EAG, the evaluation pursuant to Article 91 EAG, the reports on the calls for tenders pursuant to Article 92 EAG, the state of development of the integrated network infrastructure plan pursuant to Article 94 EAG and the results of the previous bidding dates for this technology. The extent of the reduction will be added to future tender volume of the same technology or of other technologies, and the reduction must not jeopardize the achievement of the targets set out in section 4 of the EAG.

2.6.3 The Network Infrastructure Plan

(81) Austria submitted that, in order to achieve the ambitious targets of +27 TWh of renewable energy generation in 2030, a significant expansion of zones to be made available for building of installations is necessary. In this respect, the EAG introduces in Article 94 the obligation for the Ministry to adopt an Integrated Network Infrastructure Plan ("NIP"), whose aim is to establish a new planning tool designed to identify high-potential regions for new generation facilities and help extend designated sites for generation facilities.

(82) In particular, Austria submitted that the Ministry will be required to include in the NIP projections on future infrastructure development including the provision of renewable energy. Furthermore, the NIP shall include the list of regions which have high potential for the generation, storage and conversions as well as for the transport of energy sources. Austria explained that this identification will take place in cooperation with the regions. The outcome of the process should allow for a broadening of the zones eligible for the construction of renewables installations.

(83) Austria showed that the identification of high-potential regions will also include the indication of public interest in the development of infrastructure, with the aim of accelerating the permit adoption procedures at Länder level, as lengthy permit granting procedures are currently limiting the project pipeline.[27]

(84) Austria has also submitted that it will introduce measures to speed-up permits currently being developed through the establishment of one-stop shops, common manual of procedures, improved cooperation between regional

[25] See recital (8) of this decision.

[26] See Section 2.6.3.

[27] See Clarifications to the EAG, page 24, available at fname_933186.pdf (parlament.gv.at).

authorities (through national legislation being prepared aimed at implementing Articles 15 and 16 of the "RED II" Directive[28]).

2.6.4 Specific provisions for photovoltaic tenders

(85) The PV auctions will be organised at least twice a year.

(86) In order to promote the "goal of equipping one million roofs with photovoltaics" (Article 4(4) EAG) by 2030, the amount of the premium for photovoltaic installations on a utilised agricultural area or an area in grassland will be reduced by 25%. Exceptions are provided for if the ground mounted PV installations do not insist upon land effectively used for agriculture (Article 33(3) EAG).

(87) The time limit for putting each installation into service is, respectively, six months for photovoltaic systems with a bottleneck output of up to 100 kW and extensions of photovoltaic systems by a bottleneck power of up to 100 kW, and 12 months for photovoltaic systems with a bottleneck output of more than 100 kW and extensions of photovoltaic systems by a bottleneck power of more than 100 kW, from the publication of the award on the website of the EAG Funding Processing Office.

(88) The period of six months may be extended by the EAG Funding Processing Office once by up to three months, the period of 12 months once by up to 12 months, if the bidder credibly demonstrates that the causes of the non-timely commissioning are not within the bidder's sphere of influence.

(89) The current maximum price for the PV is, according to the Expert Report[29] submitted by Austria, 8,44 cents/kWh.[30] As mentioned in recital (36) above, the calculation will be revised each calendar year.

(90) Austria submitted the following table showing the PV installations currently in place as well as the pipeline of PV projects in April 2021:

[28] See footnote 4.

[29] Austria commissioned a consortium led by the Technical University of Vienna to carry out an expert report on the determination of the production costs for each technology to be supported by the notified scheme. Austria submitted the expert report on 20 September 2021 and on 16 November 2011 an updated version of the expert report (the "Expert Report").

[30] EAG Gutachten Endbericht 15 November 2021, chapter 9.1 page 257.

Bundesland	In Genehmigung > 1 MW	Genehmigte PV-Projekte				
		Genehmigte Projekte > 1 MW	Genehmigte und bei OeMAG beantragte Projekte < 1 MW ohne Vertrag	Genehmigte und bei OeMAG beantragte Projekte < 1 MW Tarifförderung mit Fördervertrag (noch nicht in Betrieb)	Anlagen > 1 MW in Betrieb	Anlagen < 1 MW in Betrieb
Burgenland	41 Anlagen	5 Anlagen	5,3 MW 116 Anlagen	9,0 MW 149 Anlagen	0	51,0 MW 4.658 Anlagen
Kärnten	13 Anlagen	4 Anlagen	13,2 MW 136 Anlagen	16,1 MW 165 Anlagen	4,2 MW 3 Anlagen	108,8 MW 3.773 Anlagen
Niederösterreich	75 Anlagen	8 Anlagen	68,6 MW 874 Anlagen	109,1 MW 1.801 Anlagen	8,5 MW 6 Anlagen	397,2 MW 38.771 Anlagen
Oberösterreich	62 Anlagen	6 Anlagen	57,1 MW 1.162 Anlagen	127,1 MW 3.039 Anlagen	2,4 MW 2 Anlagen	364,3 MW 29.149 Anlagen
Salzburg	28 Anlagen	5 Anlagen	5,3 MW 79 Anlagen	14,7 MW 269 Anlagen	1,2 MW 1 Anlagen	61,0 MW 3.210 Anlagen
Steiermark	58 Anlagen	8 Anlagen	42,6 MW 707 Anlagen	86,9 MW 1.399 Anlagen	15,9 MW 8 Anlagen	301,2 MW 16.269 Anlagen
Tirol	24 Anlagen	3 Anlagen	7,8 MW 124 Anlagen	17,9 MW 359 Anlagen	0	90,9 MW 4.554 Anlagen
Vorarlberg	0	0	3,3 MW 62 Anlagen	15,1 MW 408 Anlagen	0	94,8 8.556 Anlagen
Wien	18 Anlagen	6 Anlagen	12,1 MW 110 Anlagen	8,5 MW 88 Anlagen	1,0 MW 1 Anlagen	43,0 2.595 Anlagen
Summe	**ca. 960 MW 319 Anlagen**	**ca.135MW 45 Anlagen**	**215,5 MW 3.370 Anlagen**	**386,4 MW 7.677 Anlagen**	**33,2 MW 21 Anlagen**	**1523,2 MW 111.535 Anlagen**

Tabelle 6: PV-Anlagen in Betrieb bzw. OeMAG-Tarifförderung beantragt/erhalten und noch nicht in Betrieb April 2021

Table 5: PV pipeline. Source: Austrian authorities (quoting E-Control Auswertung aus Stromnachweisdatenbank, April 2021); genehmigte und zur Förderung bei OeMAG eingereichte Projekte in Bau (OeMAG, 14.04.2021); Projekte in Genehmigung bzw. genehmigte Projekte > 1 MW (PV Austria, April 2021).

(91) Austria submitted that the already approved 45 projects above 1 MW can expected to be implemented. To a lesser extent, this also applies to the 319 projects under development consent > 1 MW, which also have a high likelihood of realisation. According to PV Austria, an average of 3 MW per project can be assumed, with a total output of around 1.095 MW resulting from the projects above 1 MW.

2.6.5 Specific provisions for wind tenders

(92) The wind auctions will be organised as of 2023 at least twice a year. The annual tendered volume as of 2023 will be targeted at 400 MW. Exceptionally, in 2022, in case of tenders for wind, the volume will be up to 190 MW.

(93) The maximum price for wind is, according to the Expert Report submitted by Austria, is 7,47 cents/kWh.[31]

(94) Installations of up to 20 MW and Renewable Energy Communities and Citizen Energy Communities (within the meaning of Article 16(b) of the Electricity Act 2010) will participate in the auction with the exception that

[31] EAG Gutachten Endbericht 15 November 2021, chapter 9.1 page 258.

they will be awarded pay-as-clear instead of pay-as-bid, in order to compensate for the fact that they may have a less clear view of the costs in the market in comparison to bigger players (Article 43(a) EAG). In practice, these installations will receive the highest award price (the one beyond which no more awards will be granted) even if their bid based on their real costs was lower. This should constitute an incentive for smaller players to participate in the auctioning process and, therefore, for the auctions to be overall more populated.

(95) A correction factor can be applied to the premium value for wind turbines, which reflects the rotor area, specific different electricity yields of a wind turbine. The correction factor is to be determined as a uniform surcharge or discount on the AzW for a standard installation by ordinance of the Austrian authorities. The standard installation must reflect the average electricity yield of a state-of-the-art wind turbine built in Austria on the basis of the rotor area, annual wind speed and altitude profile in a given location. The correction factor can also take into account the further use of existing plant components, existing infrastructure or existing wind measurement at one location. Austria explained that a differentiation of funding rates depending on the quality of the electricity yield (high quality of site usually implies lower LCOE, whereas lower quality implies higher LCOE), so that lower quality sites receive higher funding rates than higher quality sites. The differentiation is aimed at allowing a more balanced development of wind installations, including also less windy regions. For the reasons explained in section 2.5.2, Austria considers that the distribution of wind installations should be more balanced across the Austrian territory.

(96) Austria submitted the Expert Report, which constitutes the basis for that ordinance, in which the standard location is identified, as well as the calculations leading to the (positive and negative) correction factors which will allow an increase (up to 20%) or a decrease (up to -14%) of the premium if the location of the installation is, respectively, disadvantaged or advantaged in relation to the standard location. According to the Expert Report, the highest cap with coefficient factor of 20% would be 8,96 cents/kWh and the lowest (-14%) would be 6,42 cents/kWh.

(97) In the case of wind turbines, the deadline for commissioning is 36 months from the publication of the contract on the website of the EAG Funding Processing Office processing office. This period may be extended by the EAG Funding Processing Office processing office once by up to 12 months if the tenderer credibly demonstrates that the reasons for the non-timely commissioning are not within his sphere of influence.

(98) Austria submitted the following table showing the wind installations in place as well as the pipeline of wind projects in May 2021.

Bundesland	Noch nicht genehmigte Projekte		Genehmigte Projekte			
	Genehmigungen nach UVP-Gesetz	Genehmigungen nach Elektrizitäts-Recht	Genehmigte und bei OeMAG beantragte Projekte ohne Vertrag	Genehmigte und bei OeMAG beantragte Projekte mit Fördervertrag (in Bau)	Projekte > 6 MW in Betrieb	Projekte < 6 MW in Betrieb
Niederösterreich	194,3 MW in 7 Projekten	0	31,65 MW in 4 Projekten	492 MW in 66 Projekten	1480,91 MW in 91 Projekten	265,537 MW in 186 Projekten
Burgenland	0	0	16,20 MW in 7 Projekten	483 MW in 127 Projekten	373,70 MW in 27 Projekten	786,392 MW in 270 Projekten
Steiermark	102,6 MW in 2 Projekten	0	3,00 MW in 1 Projekt	118 MW in 13 Projekten	245,10 MW in 15 Projekten	16,441 MW in 13 Projekten
Oberösterreich	0	0	0	3,5 MW in 1 Projekt	26,90 MW in 2 Projekten	20,412 MW in 12 Projekten
Kärnten	27,6 MW in 1 Projekt	0	0	46 MW in 4 Projekten	0	1,363 MW in 3 Projekten
Wien	0	0	5,60 MW in 1 Projekt	0	0	8,575 MW in 7 Projekten
Gesamt	**324,5 MW in 10 Projekten**	**0**	**56,45 MW**	**1142,5 MW in 211 Projekten**	**2126,61 MW in 135 Projekten**	**1098,72 MW in 496 Projekten**

Tabelle 2: Übersicht Windkraftprojekte Österreich

Table 6: wind pipeline. Source: Austrian authorities.

(99) Austria explained that the 13 projects without public support contract and the 10 projects awaiting the environmental impact assessment evaluation are currently the pipeline of wind projects.

2.6.6 Specific provisions for biomass tenders (between 500 kW and 5 MW and for the first 5 MW of newly built and repowered installations above 5 MW)

(100) The biomass auctions will be organised once a year.

(101) For repowered plants based on biomass, the Austrian authorities have to set their own maximum price by ordinance, which is at least 1% below the maximum price for new built plants based on biomass.

(102) The current maximum price for biomass is, according to the Expert Report submitted by Austria, 16,76 cents/kWh for new installations and 16,12 cents/kWh for repowered installations.[32]

(103) In the case of plants based on biomass, the deadline for commissioning will be 36 months from the publication of the contract on the website of the EAG Funding Processing Office agency. This period may be extended by the EAG Funding Processing Office agency once by up to 12 months if the tenderer

32 EAG Gutachten Endbericht 15 November 2021, chapter 9.1 page 257.

credibly demonstrates that the reasons for the non-timely commissioning are not within his sphere of influence.

(104) Austria submitted the following table showing the biomass installations in operation, as well as projects which have already received a support contract from OeMAG but are not yet in operation, as well as the projects currently on the OeMAG waiting list for operating support. In addition, projects which are only in the development or approval phase are presented.

(105) A total of approximately 75 projects are currently being planned/approved, 36 projects have already submitted an application for funding to OeMAG (a building permit should therefore already be available) and a further 35 plants already have a pre-contract, but are not yet in operation.

Bundesland	**In Genehmigung oder in Planung**		**Genehmigte Biomasse-Projekte**				
	Projekte > 1 MW in Genehmigung oder in Planung	Projekte < 1 MW in Genehmigung oder in Planung	Genehmigte und bei OeMAG beantragte Projekte > 1 MW ohne Vertrag	Genehmigte und bei OeMAG beantragte Projekte < 1 MW ohne Vertrag	Genehmigte und bei OeMAG beantragte Projekte mit Fördervertrag (noch nicht in Betrieb)	Anlagen > 1 MW in Betrieb	Anlagen < 1 MW in Betrieb
Burgenland	1 Anlage	1 Anlage	0	0	0	47,9 MW 12 Anlagen	0,8 MW 4 Anlagen
Kärnten	4 Anlagen	15 Anlagen	0	2,5 MW 8 Anlagen	0,5 MW 2 Anlagen	71,9 MW 16 Anlagen	4,2 MW 19 Anlagen
Niederösterreich	10 Anlagen	13 Anlagen	0	1,3 MW 5 Anlagen	12,6 MW 5 Anlagen	76,0 MW 24 Anlagen	4,5 MW 42 Anlagen
Oberösterreich	5 Anlagen	8 Anlagen	0	1,5 MW 7 Anlagen	2,6 MW 11 Anlagen	48,0 MW 6 Anlagen	2,9 MW 20 Anlagen
Salzburg	2 Anlagen	4 Anlagen	0	1,4 MW 4 Anlagen	4,7 MW 2 Anlagen	19,2 MW 6 Anlagen	3,2 MW 13 Anlagen
Steiermark	3 Anlagen	8 Anlagen	5,0 MW 1 Anlagen	0,5 MW 6 Anlagen	6,8 MW 10 Anlagen	16,7 MW 9 Anlagen	10,8 MW 66 Anlagen
Tirol	0	1 Anlage	0	0,5 MW 1 Anlagen	8,3 MW 3 Anlagen	31,8 MW 13 Anlagen	1,9 MW 9 Anlagen
Vorarlberg	0	0	0	0,4 MW 3 Anlagen	0,7 MW 2 Anlagen	11,4 MW 6 Anlagen	2,3 MW 12 Anlagen
Wien	0	0	6,6 MW 1 Anlagen	0	0	24,4 MW 1 Anlagen	0
Summe	**ca. 100 MW 25 Anlagen**	**ca. 20 MW 50 Anlagen**	**11,6 MW 2 Anlagen**	**8,1 MW 34 Anlagen**	**36,2 MW 35 Anlagen**	**347,3 MW 93 Anlagen**	**30,5 MW 185 Anlagen**

Tabelle 7: Übersicht bestehende Anlagen und Projekte Biomasse, April 2021

Table 7: biomass pipeline. Source: Austrian authorities.

2.6.7 Specific provisions for mixed tenders

(106) The draft amendment to the EAG envisages the requirement for the EAG Funding Processing Office to invite for tender once a year wind power installations and hydroelectric power installations – which meet the general eligibility criteria - jointly, for a minimum of 20 MW per year.

(107) The Austrian authorities will set a separate maximum price in cents per kWh for joint tenders by ordinance according to the criteria described in recital (35) above on the basis of one or more expert opinions. The maximum price will be based on the overlapping LCOEs of wind and hydropower and is to

be determined yearly on the basis of an expert opinion. This determination of the maximum price will take into account a surcharge to the LCOE in order to compensate for the use of the (higher) market reference price instead of the (lower) market reference value for the calculation of market premiums and for the need to submit a guarantee upfront (Article 44(c) EAG) (e.g. the security deposit) for hydropower in comparison to administratively awarded market premiums. Austria explained that the surcharge will be calculated in the Expert Report on the basis of objective criteria such as, for instance, the difference between RMP and RMV. Austria submitted that the maximum price and the calculation it is based on will be published in advance of each tender.

(108) Austria explained that bids for revitalised hydropower installations with a capacity of up to 1 MW (after revitalisation) and a degree of revitalisation of up to 60% shall be excluded from the mixed tenders, due to the big difference in the LCOE.

(109) Austria submitted that, on the basis of the current LCOE calculations comparison (on the basis of the Expert Report values) between hydroelectric and wind installations, the LCOE of wind overlaps with the final production stage for newly constructed hydroelectric power plants using a transverse structure.

(110) For wind power plants, a correction factor may be applied to the surcharge value as in the case of technology specific auctions. As explained in recital (29), in the mixed auction, the premium will be calculated in relation to the reference market price (Article 11(3a) of the draft amended EAG)[33] determined from the arithmetic average of all hourly prices of a month (Article 12(2) and 14(3a) of the draft amended EAG).

(111) The period for commissioning wind power plants and hydroelectric power plants will be 36 months from the date of publication of the award on the website of the EAG Funding Processing Office. The period may be extended by the EAG Funding Processing Office (i) once by up to 12 months in the case of wind power installations and (ii) twice by up to 12 months in the case of hydroelectric power stations if the bidder credibly demonstrates that the reasons for the untimely commissioning are beyond its control.

2.6.8 Cross-border tenders

(112) Austria committed to open the tenders for market premium under the notified scheme to producers located in other Member States, subject to the conclusion of bilateral or multilateral cooperation agreements. Austria intends to establish such agreements in accordance with Article 5 of the RED II Directive[34] on the basis of reciprocal participation, fulfilment of the criteria laid down in the EAG as applicable to domestic producers, and mutual agreement on the allocation of renewable electricity produced from projects covered.

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33 See recital (8) of this decision.

34 See footnote 4.

(113) Austria plans to start discussions on such general agreements, extending beyond project-specific cooperation, in 2022. Austria has already been in discussions to support a cross-border project developed jointly by an Austrian and a Hungarian electricity undertaking.

2.7 Administrative premium

(114) The EAG sets out that the following technologies, to the extent they meet the general eligibility requirements in recital (19), may be supported by a market premium on application. The EAG establishes the volume of capacity to be supported through an administrative set premium for each technology per year. The supported volumes are the following:

(a) For wind, in 2022, 200 MW (Article 48(2) EAG);

(b) For hydropower, 90 MW per year (Article 49(2) EAG);

(c) For biomass based installations up to 500 kW, 7 500 kW per year (Article 50(2) EAG);

(d) For biogas based installations up to 250 kW, 1 500 kW per year (Article 51(2) EAG).

(115) Applications for support by means of a market premium must be submitted to the EAG Funding Processing Office via the electronic application system it will set up[35]. The application will have to identify the contact details of the applicant, as well as the energy source to be used, the installed capacity of the installation and the expected annual production volume; the location or planned location of the plant, with an indication of the cadastral municipality and the number of the plot of land; a description of the project, including information and evidence of compliance with the eligibility conditions and a cost, time and financing plan; evidence that all necessary permits and authorisations have been or are deemed to have been issued by the relevant competent authority for the construction of the new installation.[36]

(116) Applications will be classified according to the date of their receipt by the EAG Funding Processing Office and will be dealt with in the order in which they are received. Incomplete applications will be excluded.

(117) Market premium support will be granted on the basis of the annual award volume available for each technology. If the annual award volume is not exhausted, the unused award volume will be added to the award volume of the following year, unless the award volume is shifted in favour of the investment grants or reduced pursuant to Article 7 EAG. If the award volume is not exhausted for three consecutive years, the Ministry, in agreement with the Federal Minister of Agriculture, Regions and Tourism, may allocate, by ordinance, the unused award volume to other technologies or to other types

35 Article 46 EAG and following.

36 Article 45 EAG.

of funding[37], taking into account the results of the EAG monitoring report in accordance with Article 90 EAG.

(118) The EAG sets out that if the plant is not put into operation within 36 months of acceptance of the application for funding, the application for support by market premium will be deemed to have been withdrawn and the funding contract will be deemed to have been terminated. The deadline for commissioning may be extended twice by up to 12 months by the EAG Funding Processing Office Agency if the applicant credibly demonstrates that the reasons for the non-timely commissioning are not within his sphere of influence. The award volume released by the termination of the contract is to be attributed to the award volume in the current calendar year.

(119) For the technologies and/or sub-groups of installations set out in recital (114), Austria plans to provide support based on premiums through reference values to be set by law, as they are small in size, demonstration projects and/or there are not enough projects expected for those technologies that would allow the organization of a competitive tender (see recitals (127), (140), (144)).

(120) In order to calculate the market premium to be granted on application, the amount of the AzW in cents per kWh will be determined according to the principles described in recitals (36) to (38).

(121) Austria confirmed that it will determine the AzW for each technology based on the Expert Report.

(122) The production costs taken into account in the Expert Report include investment costs, a normal rate of return and operating costs, and have been determined on the basis of the LCOE methodology using the following formula:

$$LCOE = \frac{I_0 + \sum_{t=1}^{n} \frac{A_t}{(1+i)^t}}{\sum_{t=1}^{n} \frac{M_{el}}{(1+i)^t}}$$

LCOE	Stromgestehungskosten in €/MWh
I_0	Investitionskosten in €
A_t	Gesamtkosten (und ggf. Erlöse) im Jahr t in €
M_{el}	Stromerzeugung im Jahr t in MWh
I	kalkulatorischer Zinssatz bzw. WACC in %
n	Nutzungs- bzw. Betrachtungsdauer in Jahren
t	Spezifisches Jahr im Nutzungs-/Betrachtungszeitraum (1, 2, ...n)

(123) Typically, operating costs cover variable costs depending on the use of the installation, like fuel costs and variable maintenance costs; running costs necessary for the operating of the installations, like labour costs, fixed

[37] Other types of funding such as the investment grants under the EAG are not covered by the present decision.

maintenance costs and other costs like insurances. Certain installations (e.g. certain biomass and biogas plants) may function in combined heat and power ("CHP") mode. For those installations, the revenues generated by the sale of heat are deducted from the production costs. Any revenues from the sale of guarantees of origin are also deducted from the production costs.

(124) The return on equity and debt on the investment is included in the analysis through the weighted average cost of capital ("WACC"). The discount factor depends on the amount of equity, the return on equity over the useful life, the cost of borrowing and the proportion of the debt contributed. More specifically, a nominal WACC before tax of 3.3 % was taken into account for the calculation of the production costs for all the supported technologies.[38] Based on the Expert Report, this WACC was calculated based on a number of sources, including recent surveys on the status quo of financing conditions for renewable energy in EU Member States (such as a survey in the context of the EU research project AURES II), as well as other general financial market parameters (such as SWAP rate for long-term loans, EURIBOR indices and interviews with the Austrian banking sector).

(125) The future inflation rate was assumed to be 1.6 % per year.[39] Based on the Expert Report, this in line with current and historical developments. More specifically, this inflation rate reflects the average of the last five calendar years (2016-2020) according to data from the Austrian national bank.

2.7.1 Wind (Article 48(2) EAG)

(126) As an exception to the tenders envisaged for wind power for the whole duration of the scheme, Austria intends to support in 2022 up to 200 MW of wind power installations through a market premium on application.

(127) Austria explained that this period is needed in order to set up the auction system for wind with its novel elements such as the correction factor. Austria confirmed that the projects that will be granted the premium on application are projects that have already obtained a permit or will do so in the course of 2022 ahead of the application for support under the notified scheme. To the extent the auction system for wind tenders is already set up in 2022, and following the granting of support through administrative premium, Austria plans to carry out an auction for wind projects already in 2022 for a maximum total capacity of 190 MW.

(128) The Expert Report initially in the September 2021 version recommended an AzW of 67.5 EUR/MWh. The site differentiation was based on the rotor-specific yield of a standard installation at the standard site. The reference basis was a specific annual electricity output of 694.0 kWh/m². This was determined based on the following LCOE calculations:

[38] See also recital (129) of this decision.

[39] See also recital (129) of this decision.

Technologiefeld:		Wind	Wind	Wind	Wind	Wind	Wind	Wind
Windenergie	WKA-Type:	Normanlage, mittlere Nabenhöhe	mittlerer bis kleiner Rotor	kleiner Rotor & kleiner Generator	großer Rotor	großer Rotor & großer Generator	Normanlage, große Nabenhöhe	Normanlage, kleine Nabenhöhe
Anlagenspezifikation:								
Leistung Windpark	MW	25,2	25,2	20,7	25,2	36,0	25,2	25,2
Stromerzeugung Windpark	MWh	63.288	61.518	52.117	69.132	91.751	63.288	63.288
Volllaststunden	h/a	2.511	2.441	2.518	2.743	2.549	2.511	2.511
Anzahl WKA	1	6	6	6	6	6	6	6
Leistung je WKA	MW	4,20	4,20	3,45	4,20	6,00	4,20	4,20
Standortspezifikation:								
Standort-Güteklasse		B	B	B	B	B	B	B
Nabenhöhe	m	135	135	135	135	135	150	120
Rotordurchmesser	m	139	136	126	150	162	139	139
Vmed auf 100m	m/s	6,0	6,0	6,0	6,0	6,0	5,9	6,2
Vmed in Nabenhöhe	**m/s**	**6,5**	**6,5**	**6,5**	**6,5**	**6,5**	**6,5**	**6,5**
Parkwirkungsgrad (inkl. Verluste, EV)	%	82%	82%	82%	82%	82%	82%	82%
Spezifischer Ertrag je m² Rotorkreis	**kWh/m2**	**694**	**706**	**697**	**652**	**742**	**694**	**694**
Kostenparameter:								
Investitionskosten GESAMT	€/kW	1.520	1.505	1.520	1.565	1.503	1.597	1.466
Betriebskosten GESAMT	€/MWh	21,1	21,4	21,1	20,1	20,9	21,1	21,1
Finanzierungsbedingungen								
WACC Standard	%	**3,30%**	**3,30%**	**3,30%**	**3,30%**	**3,30%**	**3,30%**	**3,30%**
Inflation	%	1,60%	1,60%	1,60%	1,60%	1,60%	1,60%	1,60%
Levelised Cost of Electricity								
$LCOE_{20\ ohne\ Anlagenrestwert}$	€/MWh	**67,5**	**68,7**	**67,3**	**63,9**	**66,2**	**69,6**	**66,0**
(azW) Korrekturfaktor, gedeckelt	%	0,0%	-1,3%	-0,3%	5,1%	-4,7%	0,0%	0,0%
azW	€/MWh	**67,5**	**66,6**	**67,3**	**70,9**	**64,4**	**67,5**	**67,5**
Indikator:								
Flächenleistung (Generatorleistung je m^2 Rotorkreisfläche)		276	289	277	238	291	276	276

Table 8: LCOE for wind power installations. Source: Austrian authorities.

(129) The updated version of the Expert Report of November 2021 notes that the AzW recommendations made in the report are generally based on comprehensive data on the operation, investment and operating costs of historically constructed RES electricity generation plants. At the same time the report notes that the recent price increases in commodity and energy markets are different from past trends, which also have an impact on domestic inflation and construction costs in the next years. In this light, the experts updated their estimate of inflation from 1.6% to 3.2%, of investment cost by 10% and, due to heightened uncertainty, of the WACC from 3.3% to 3.8%. These updated assumptions are used for all technologies.

(130) This leads the experts to recommend setting the upper limit for the AzW at 74.7 EUR/MWh for wind, which corresponds to an increase of 10.7% compared to the previously recommended standard level (67.5 EUR/MWh) and expresses the required total remuneration of an average wind site representative for Austria.

(131) Applying the proposed correction factor with upper limit max. 20% surcharge and lower limit max. 14% discount (see recital (95)) to the 74.7 EUR/MWh limit, this results in an upper limit of 89.6 EUR/MWh for the premium for comparatively low-yield sites and a lower limit of 64.2 EUR/MWh for the premium for comparatively high-yield sites.

2.7.2 Hydropower (Article 49(2) EAG)

(132) Hydropower is the biggest source of energy in Austria, representing approximately 62% of its total electricity production in 2020[40]. Hydropower is thus already highly developed in Austria. The total hydro capacity to be deployed during the implementation of the notified scheme represents (based on the target of 5 TWh) approximately 1 100 MW, which equals almost a 20% increase compared to the current level of capacity of run-of-river hydropower (2019: 5 795 MW)[41] and a 7.6% increase compared to the currently installed overall hydro capacity (including water storage power plants). The actual needed capacity to reach the 5 TWh target depends on the future development of full load hours, and therefore can change in the future. Austria submitted that the potential for the installation of new hydropower installations or the modernisation of existing installations is limited, but that these installations are useful as a complement to other more highly intermittent RES sources like wind and PV.

(133) Austria provided the below data demonstrating that in the past five years the bulk of the hydropower projects that were supported under the tariff scheme were small installations below 1 MW, and that the number of hydro projects above 1 MW has been low, on average 5 or 6 projects per year.

TARIFFÖRDERUNG Wasserkraft (0-2 MW)		NEUBAU				REVITALISIERUNG 15-50% *)				REVITALISIERUNG >50% *)			
Antragsjahr	Stück	Stück	< 1 MW EPL Gesamt [kW]	Stück	1 - 2 MW EPL Gesamt [kW]	Stück	< 1 MW EPL Gesamt [kW]	Stück	1 - 2 MW EPL Gesamt [kW] **)	Stück	< 1 MW EPL Gesamt [kW]	Stück	1 - 2 MW EPL Gesamt [kW] **)
2016	106	46	7.469	7	9.913	29	6.087	4	5.830	19	1.030	1	1.970
2017	72	25	5.974	2	3.965	29	6.135	2	2.462	14	2.633	0	0
2018	91	31	7.381	2	2.549	35	10.896	2	2.335	21	1.364	0	0
2019	46	17	4.119	1	1.670	15	3.123	1	1.256	12	2.171	0	0
2020	75	21	4.052	0	0	24	4.794	4	6.534	25	3.097	1	1.570
2021	*52*	*5*	*622*	*1*	*1.999*	*23*	*4.807*	*1*	*1.625*	*21*	*2.629*	*1*	*1.315*
SUMME 5,7J	*442*	*145*	*29.616*	*13*	*20.096*	*155*	*35.841*	*14*	*20.041*	*112*	*12.924*	*3*	*4.855*
SUMME 5J (2016 - 2020)	**390**	**140**	**28.994**	**12**	**18.097**	**132**	**31.034**	**13**	**18.417**	**91**	**10.295**	**2**	**3.540**
Durchschnitt 5J (2016 - 2020)	**78,0**	**28,0**	**5.799**	**2,4**	**3.619**	**26,4**	**6.207**	**2,6**	**3.683**	**18,2**	**2.059**	**0,4**	**708**

Table 7: hydro installations supported with the feed-in-tariffs. Source: Austrian authorities.

(134) According to the Austrian authorities, the potential further development of hydro power is more limited when compared to the potential development for wind or PV power. The 5 TWh increase set for 2030 is an ambitious but realistic target. Austria intends to amend its national procedures in order to provide clearer incentives and speedy administrative procedures and thereby increase the number of projects needed in order to achieve the target, either by frontloading projects that are expected to be completed after 2030, or by bringing existing plans into concrete implementation more quickly, by 2030.

(135) Austria provided the below estimates with the potential eligible projects for support under the scheme until 2030:

40 Source: Austrian authorities.

41 Source: Austrian authorities.

Gruppe	Anzahl	Art	zusätzl. Leistung (MW) akkum	Status	Einspeisung möglich bis	Kategorie
Gruppe N1a	1	Neubau	2,6	in Planung	bis 2027	1 - 5 MW
Gruppe N1b	7	Neubau	13	in Planung/Konzept	bis 2030	1 - 5 MW
Gruppe N2a	1	Neubau	10	Konzept	bis 2030	5 – 10 MW
Gruppe N3a	2	Neubau	44,5	in Planung	bis 2025	10 - 20 MW
Gruppe N3b	1	Neubau	11	in Planung/gefördert	bis 2025	10 - 20 MW
Gruppe N3c	1	Neubau	15	in Planung	bis 2027	10 - 20 MW
Gruppe N3d	2	Neubau	28	in Planung	bis 2030	10 - 20 MW
Gruppe N4a	2	Neubau	170	in Planung/Konzept	bis 2025	+ 20 MW
Gruppe N4b	1	Neubau	27	in Planung/Konzept	bis 2027	+ 20 MW
Gruppe N4c	3	Neubau	104	in Planung/Konzept	bis 2030	+ 20 MW
GruppeR1a	1	Revitalisierung	0,3	in Planung	bis 2027	1 - 5 MW
Gruppe R1b	10	Revitalisierung	< 5	in Planung	bis 2030	1 - 5 MW
Gruppe R2a	1	Revitalisierung	7	in Planung/Konzept	bis 2025	5 – 10 MW
Gruppe R3a	6	Revitalisierung	47	in Planung	bis 2025	10 - 20 MW
Gruppe R3b	1	Revitalisierung	6,3	in Genehmigung	bis 2025	10 - 20 MW
Gruppe R3c	3	Revitalisierung	0	in Planung/Konzept	bis 2030	10 - 20 MW
Gruppe R4a	11	Revitalisierung	113,5	in Planung/Konzept	bis 2030	+ 20 MW

Table 8: Potentially eligible hydropower projects > 1 MW. Source: Austrian authorities.

(136) The current potential is restricted by the strict environmental criteria set out in the EAG that hydropower plants would need to fulfil in order to be eligible for support under the notified scheme (see table above). Austria submitted that, when applying the environmental criteria, the number of potential projects decreases to 54 eligible projects in total above 1 MW that would be eligible for aid under the notified scheme, i.e. in average five or six projects every year until 2030. Due to the long project lead-time required for hydropower plants, Austria does not expect a significant change in the number of eligible projects above 1 MW by 2030. Therefore, Austria considers that overall a tender process for hydro projects would not be appropriate due to the lack of competition.

(137) The Expert Report (based on which Austria will set the AzW) initially in September 2021 recommended the following LCOE ranges for each category: i) for newly built hydro: between 102,64 and 74,44 EUR/MWh (depending on the annual electricity production); ii) for newly built with transverse structure: between 95,98 and 69,61 EUR/MWh (depending on the annual electricity production); iii) for revitalised with capacity below 1 MW: varying between 89,21 and 19,43 EUR/MWh (depending on the percentage of revitalisation and the annual electricity production); and iv) for revitalised with capacity above 1 MW, between 92,23 and 66,58 EUR/MWh (depending on the annual electricity production). The LCOE, and thus the market premium that will be paid out, was calculated on a staggered basis depending on the annual electricity production. In order to determine the size of the corresponding reference plants for each category, the Expert Report used the average full load hours of the new or revitalised hydropower plants.

(138) Those AzW ranges for each category were determined based on the following LCOE calculations:

a) Newly built hydropower installations (standard)

Technologiefeld:		Neuerrichtung	Wasserkraft	Wasserkraft	Wasserkraft	Wasserkraft	Wasserkraft
Wasserkraft	Beispielfall:		Stufe bis 500 MWh	Stufe bis 1.000 MWh	Stufe bis 2.500 MWh	Stufe bis 5.000 MWh	Stufe über 5.000 MWh
Anlagenspezifikation:							
Engpassleistung	MW		0,109	0,219	0,548	1,097	25,000
Stromerzeugung (netto)	MWh		500	1.000	2.500	5.000	109.665
Volllaststunden	h/a		4.568	4.567	4.564	4.558	4.387
Kostenparameter:							
Investitionskosten GESAMT	€/kW		7.246	6.781	5.870	4.005	5.102
hiervon:							
Netzanschluss	€/kW		95	95	115	115	130
Sonstiges	€/kW		7.151	6.686	5.755	3.890	4.972
Betriebskosten GESAMT	€/MWh		15,4	14,4	13,7	13,0	10,6
hiervon:							
Sonstiges	€/MWh		15,8	14,8	14,1	13,4	11,0
Herkunftsnachweise	€/MWh		-0,4	-0,4	-0,4	-0,4	-0,4
Finanzierungsbedingungen							
WACC Standard	%		**3,30%**	**3,30%**	**3,30%**	**3,30%**	**3,30%**
WACC Risiko	%		4,78%	4,78%	4,78%	4,78%	4,78%
Inflation	%		1,60%	1,60%	1,60%	1,60%	1,60%
Mittlere Abschreibdauer (mAd)	a		53,7	53,7	53,7	53,7	53,7
Levelised Cost of Electricity							
$LCOE_{20}$	€/MWh		**102,64**	**96,11**	**84,65**	**62,16**	**74,44**

Table 9: LCOE for newly built hydropower installations

b) Newly built hydropower installations (with transverse structure)

Technologiefeld:		Neuerrichtung (Verwendung Querbauwerk)	Wasserkraft	Wasserkraft	Wasserkraft	Wasserkraft	Wasserkraft
Wasserkraft	Beispielfall:		Stufe bis 500 MWh	Stufe bis 1.000 MWh	Stufe bis 2.500 MWh	Stufe bis 5.000 MWh	Stufe über 5.000 MWh
Anlagenspezifikation:							
Engpassleistung	MW		0,109	0,219	0,548	1,097	25,000
Stromerzeugung (netto)	MWh		500	1.000	2.500	5.000	109.665
Volllaststunden	h/a		4.568	4.567	4.564	4.558	4.387
Kostenparameter:							
Investitionskosten GESAMT	€/kW		6.674	6.246	5.410	3.694	4.704
hiervon:							
Netzanschluss	€/kW		95	95	115	115	130
Sonstiges	€/kW		6.579	6.151	5.295	3.579	4.574
Betriebskosten GESAMT	€/MWh		15,4	14,4	13,7	13,0	10,6
hiervon:							
Sonstiges	€/MWh		15,8	14,8	14,1	13,4	11,0
Herkunftsnachweise	€/MWh		-0,4	-0,4	-0,4	-0,4	-0,4
Finanzierungsbedingungen							
WACC Standard	%		**3,30%**	**3,30%**	**3,30%**	**3,30%**	**3,30%**
WACC Risiko	%		4,78%	4,78%	4,78%	4,78%	4,78%
Inflation	%		1,60%	1,60%	1,60%	1,60%	1,60%
Mittlere Abschreibdauer (mAd)	a		53,7	53,7	53,7	53,7	53,7
Levelised Cost of Electricity							
$LCOE_{20}$	€/MWh		**95,98**	**89,87**	**79,28**	**58,53**	**69,61**

Table 10: LCOE for newly built hydropower installations (with transverse structure)

c) Revitalised hydropower installations with capacity below 1 MW

Technologiefeld:		revitalisiert bis 1 MW ≤60%	Wasserkraft	Wasserkraft	Wasserkraft	Wasserkraft
Wasserkraft	Beispielfall:		Stufe bis 500 MWh	Stufe bis 1.000 MWh	Stufe bis 2.500 MWh	Stufe über 2.500 MWh
Anlagenspezifikation:						
Engpassleistung	MW		0,090	0,182	0,468	0,986
Stromerzeugung (netto)	MWh		500	1.000	2.500	5.000
Volllaststunden	h/a		5.550	5.480	5.343	5.071
Kostenparameter:						
Investitionskosten GESAMT	€/kW		2.935	2.725	2.298	1.374
hiervon:						
Netzanschluss	€/kW		37	37	45	45
Sonstiges	€/kW		2.898	2.688	2.253	1.329
Betriebskosten GESAMT	€/MWh		17,1	16,5	15,2	12,5
hiervon:						
Sonstiges	€/MWh		17,5	16,9	15,6	12,9
Herkunftsnachweise	€/MWh		-0,4	-0,4	-0,4	-0,4
Finanzierungsbedingungen						
WACC Standard	%		**3,30%**	**3,30%**	**3,30%**	**3,30%**
Inflation	%		1,60%	1,60%	1,60%	1,60%
Levelised Cost of Electricity						
$LCOE_{20\ ohne\ Anlagenrestwert}$	€/MWh		**57,07**	**54,15**	**47,98**	**33,71**

Technologiefeld:		revitalisiert bis 1 MW 61-200%	Wasserkraft	Wasserkraft	Wasserkraft	Wasserkraft
Wasserkraft	Beispielfall:		Stufe bis 500 MWh	Stufe bis 1.000 MWh	Stufe bis 2.500 MWh	Stufe über 2.500 MWh
Anlagenspezifikation:						
Engpassleistung	MW		0,090	0,182	0,468	0,986
Stromerzeugung (netto)	MWh		500	1.000	2.500	5.000
Volllaststunden	h/a		5.550	5.480	5.343	5.071
Kostenparameter:						
Investitionskosten GESAMT	€/kW		4.149	3.997	3.691	3.024
hiervon:						
Netzanschluss	€/kW		37	37	45	45
Sonstiges	€/kW		4.112	3.960	3.646	2.979
Betriebskosten GESAMT	€/MWh		17,1	16,5	15,2	12,5
hiervon:						
Sonstiges	€/MWh		17,5	16,9	15,6	12,9
Herkunftsnachweise	€/MWh		-0,4	-0,4	-0,4	-0,4
Finanzierungsbedingungen						
WACC Standard	%		**3,30%**	**3,30%**	**3,30%**	**3,30%**
Inflation	%		1,60%	1,60%	1,60%	1,60%
Levelised Cost of Electricity						
$LCOE_{20\ ohne\ Anlagenrestwert}$	€/MWh		**72,30**	**70,32**	**66,13**	**56,37**

Technologiefeld:		revitalisiert bis 1 MW >200%	Wasserkraft	Wasserkraft	Wasserkraft	Wasserkraft
Wasserkraft	Beispielfall:		Stufe bis 500 MWh	Stufe bis 1.000 MWh	Stufe bis 2.500 MWh	Stufe über 2.500 MWh
Anlagenspezifikation:						
Engpassleistung	MW		0,090	0,182	0,468	0,986
Stromerzeugung (netto)	MWh		500	1.000	2.500	5.000
Volllaststunden	h/a		5.550	5.480	5.343	5.071
Kostenparameter:						
Investitionskosten GESAMT	€/kW		5.496	5.151	4.444	2.924
hiervon:						
Netzanschluss	€/kW		37	37	45	45
Sonstiges	€/kW		5.459	5.114	4.400	2.880
Betriebskosten GESAMT	€/MWh		17,1	16,5	15,2	12,5
hiervon:						
Sonstiges	€/MWh		17,5	16,9	15,6	12,9
Herkunftsnachweise	€/MWh		-0,4	-0,4	-0,4	-0,4
Finanzierungsbedingungen						
WACC Standard	%		**3,30%**	**3,30%**	**3,30%**	**3,30%**
Inflation	%		1,60%	1,60%	1,60%	1,60%
Levelised Cost of Electricity						
$LCOE_{20\ ohne\ Anlagenrestwert}$	€/MWh		**89,21**	**84,98**	**75,94**	**55,00**

Table 11: revitalised hydropower installations under 1 MW

d) Revitalised hydropower installations with capacity above 1 MW

Technologiefeld:		revitalisiert >1 MW	Wasserkraft	Wasserkraft	Wasserkraft
Wasserkraft	Beispielfall:		Stufe bis 5.000 MWh	Stufe bis 25.000 MWh	Stufe über 25.000 MWh
Anlagenspezifikation:					
Engpassleistung	MW		1,088	5,441	9,793
Stromerzeugung (netto)	MWh		5.000	25.000	45.000
Volllaststunden	h/a		4.595	4.595	4.595
Kostenparameter:					
Investitionskosten GESAMT	€/kW		5.084	4.811	4.274
hiervon:					
Netzanschluss	€/kW		45	51	51
Sonstiges	€/kW		5.039	4.760	4.223
Betriebskosten GESAMT	€/MWh		12,8	11,8	11,0
hiervon:					
Sonstiges	€/MWh		13,2	12,2	11,4
Herkunftsnachweise	€/MWh		-0,4	-0,4	-0,4
Finanzierungsbedingungen					
WACC Standard	%		**3,30%**	**3,30%**	**3,30%**
Inflation	%		1,60%	1,60%	1,60%
Levelised Cost of Electricity					
$LCOE_{20\ ohne\ Anlagenrestwert}$	€/MWh		**92,23**	**86,86**	**77,84**

Table 12: Revitalised hydropower installations above 1 MW

(139) However, as mentioned above (see recital (129)), in order to take into account recent developments in the energy market prices, the Expert Report of November 2021 revised the AzW to be determined as shown in the tables below.

a) Newly built hydropower installations (standard)

Jährliche Stromproduktion in MWh, Wasserkraft neu errichtet	azW in €/MWh
die ersten 500	116,19
die nächsten 500	101,39
die nächsten 1.500	86,87
die nächsten 2.500	73,10
Über 5.000	84,37

b) Newly built hydropower installations (with transverse structure)

Jährliche Stromproduktion in MWh, Wasserkraft neu errichtet unter Verwendung eines Querbauwerkes	azW in €/MWh
die ersten 500	108,46
die nächsten 500	94,66
die nächsten 1.500	81,31
die nächsten 2.500	68,13
Über 5.000	78,77

c) Revitalised hydropower installations with capacity below 1 MW

Jährliche Stromproduktion in MWh, bis 60% Revitalisierungsgrad, EPL bis 1 MW nach Revitalisierung	azW in €/MWh
die ersten 500	63,01
die nächsten 500	54,46
die nächsten 1.500	48,19 (bzw. Untergrenze von 48,19-50,00)
über 2.500	20,70 (bzw. Untergrenze von 40,00-50,00)

Jährliche Stromproduktion in MWh, 61-200% Revitalisierungsgrad, EPL bis 1 MW nach Revitalisierung	azW in €/MWh
die ersten 500	80,67
die nächsten 500	76,30
die nächsten 1.500	70,78
über 2.500	52,22

Jährliche Stromproduktion in MWh, >200% Revitalisierungsgrad, EPL bis 1 MW nach Revitalisierung	azW in €/MWh
die ersten 500	100,28
die nächsten 500	90,71
die nächsten 1.500	78,41
über 2.500	37,66 (bzw. Untergrenze von 40,00-50,00)

d) Revitalised hydropower installations with capacity above 1 MW

Stromproduktion in MWh, EPL>1 MW nach Revitalisierung	azW in €/MWh
die ersten 5.000	104,59
die nächsten 20.000	97,04
über 25.000	75,34

2.7.3 Biomass installations up to 500 kW (Article 50(2) EAG)

(140) Biomass represented approximately 3.5% in Austria's total electricity production in 2020[42]. According to the Expert Report, the number of biomass plants increased almost steadily in the last years, reaching 151 plants in 2020. Based on the report, the increase in the number of installations in recent years is mainly due to smaller plants, while larger plants were built before 2010. Austria submitted that the potential for further development of biomass plants is low.

(141) The Expert Report, based on which Austria will set the AzW, initially recommended an AzW of EUR 210,6/MWh for newly constructed biomass plants in the standard case, i.e. using conventional biomass as fuel, and an AzW of EUR 197,9/MWh for small repowering installations using conventional biomass as a fuel. In case of use of SN17 waste as raw materials under the Waste List Ordinance (*Abfallverzeichnisverordnung*), a -15 % reduction was recommended.

VO zur Festlegung des anzulegenden Wertes für die Berechnung der Marktprämie für Biomasse & Biogas

Technologiefeld:	Feste Biomasse		Biogas
Unterkategorie:	Basiswert (<0,5 MW)	Rohstoffkategorie SN17 Reststoffe (-15%)	<0,5 MW
AzW in Cent/kWh	**21,06**	**17,90**	**25,83**
AzW in Cent/kWh bei Repowering	**19,79**	**16,82**	

Table 13: AzW for Biomass under 500 kW

(142) These recommendations were made based on the following LCOE calculations:

[42] Source: Austrian authorities.

Tabelle 71: Berechnete azWs für das Technologiefeld feste Biomasse

Technologiefeld:		Biomasse fest	Biomasse fest	Biomasse fest	Biomasse fest
		administrativ	Ausschreibung	Nachfolgeprämie	Nachfolgeprämie
Biomasse KWK	Beispielfall:	(<0,5MW)	(>0,5MW)	(<0,5MW)	(>0,5MW)
Anlagenspezifikation:					
Engpassleistung Strom	MW_e	0,15	5,00	0,15	5,00
Stromerzeugung	MWh_e	1.023	34.113	1.023	34.113
Wärmenutzung	MWh_h	1.535	61.403	1.842	54.580
Wärmeerzeugung	MWh_h	1.706	61.403	2.047	61.403
Brennstoffeinsatz	MWh_f	3.411	136.450	4.094	136.450
Volllaststunden	h/a	6.823	6.823	6.823	6.823
Brennstoffnutzungsgrad	%	75%	70%	70%	65%
el. Wirkungsgrad	%	30%	25%	25%	25%
th. Wirkungsgrad	%	50%	45%	50%	45%
Kostenparameter:					
Investitionskosten GESAMT	€/kW_e	6.630	4.673	0	0
Betriebskosten GESAMT	€/MWh_e	78	44	94	52
Brennstoffkosten	€/MWh_f	19,7-46,0	17,0-39,8	19,7-34,8	17,0-30,1
Wärmeerlöse	€/MWh_h	25,0-58,6	21,3-49,8	25,0-44,3	21,3-37,6
WACC	%	3,3	3,3	3,3	3,3
Inflation	%	1,6	1,6	1,6	1,6
Berechnete azW:					
$LCOE_{20\ ohne\ Anlagenrestwert}$	€/MWh	**210,58**	**152,38**	**147,24**	**103,36**
Höchstwertaufschlag (+10%)			**167,62**		
Reststoffabschlag (-15%)		**178,99**		**125,16**	**87,85**

Table 14: LCOE calculations for Biomass installations

(143) In order to take into account the impact and consequences of the recent price increases (see recital (129)), the Expert Report recommends that for small biomass installations (i.e. below 500kW), the upper range of AzW to be determined administratively is 222,1 EUR/MWh, which is equivalent to a 4.7% increase compared to previously recommended upper of 210,6 MWh.

2.7.4 Biogas installations up to 250 kW (Article 51(2) EAG)

(144) Biogas represents only a small percentage in Austria's energy mix (less than 1% of the total electricity production in 2020[43]). The Expert Report demonstrates that the construction of new biogas plants has been very limited (close to zero since 2015). Austria submitted that the potential for further development of biogas plants is low.

(145) The Expert Report (based on which Austria will set the AzW) initially recommended an AzW of 258 EUR/MWh. However, as mentioned above (see recital (129)), in order to take into account recent developments in the energy market prices, the Expert Report revised the upper of the AzW to be determined at 267.3 EUR/MWh, which corresponds to a 3.5% increase compared to the standard case.

43 Source: Austrian authorities.

VO zur Festlegung des anzulegenden Wertes für die Berechnung der Marktprämie für Biomasse & Biogas

Technologiefeld:	Feste Biomasse		Biogas
Unterkategorie:	Basiswert (<0,5 MW)	Rohstoffkategorie SN17 Reststoffe (-15%)	<0,5 MW
AzW in Cent/kWh	**21,06**	**17,90**	**25,83**
AzW in Cent/kWh bei Repowering	**19,79**	**16,82**	

Table 15: AzW for Biogas under 500 kW

(146) These recommendations were made based on the following LCOE calculations:

Tabelle 77: Berechnete azWs für das Technologiefeld Biogas

Technologiefeld:		Biogas	Biogas
Biogas KWK	Beispielfall:	**administrativ (<0,25 MW)**	**Nachfolgeprämie**
Anlagenspezifikation:			
Engpassleistung Strom	MW_e	0,25	0,25
Stromerzeugung (netto)	MWh_e	1.822	1.822
Stromerzeugung (brutto)	MWh_e	2.024	2.024
Wärmenutzung	MWh_h	1.494	1.438
Wärmeerzeugung	MWh_h	2.265	2.451
Biogaseinsatz	MWh_f	4.820	5.327
Volllaststunden	h/a	8.098	8.098
Brennstoffnutzungsgrad	%	73%	65%
el. Wirkungsgrad	%	42%	38%
th. Wirkungsgrad	%	47%	46%
Kostenparameter:			
Investitionskosten GESAMT	€/kW_e	5.696	0
Betriebskosten GESAMT	€/MWh_e	79,6	91,6
Substratkosten	€/MWh_f	31,0-72,6	31,0-54,9
Wärmeerlöse	€/MWh_h	25,0-58,6	25,0-44,3
WACC Standard	%	3,30	3,30
Inflation	%	1,60	1,60
Berechnete azW:			
$LCOE_{20\ ohne\ Anlagenrestwert}$	€/MWh	**258,31**	**196,92**

Table 16: LCOE calculations for biogas

2.8 Successor premium for biomass and biogas installations

(147) The EAG provides for "successor" administrative premium for existing biomass and biogas installations which benefitted from the previous feed-in-tariff based support scheme (Article 52 and 53 EAG).

(148) The 2012 Green Electricity Act (ÖSG 2012) provided for the possibility of support for installations dependent on raw materials based on solid biomass after the expiry of the general contractual obligation ('successor tariffs' under Section 17 of the 2012 Green Electricity Act). The successor tariffs were approved by the Commission with the decision in case SA.33384[44], as Austria had demonstrated that the submitted detailed calculation showing that even after full depreciation of the power plant (15 years), the production costs remain higher than market prices.

(149) Unlike the premium for new plants based on biomass or biomass installations (see sections 2.63 and 2.6.4), the successor tariffs do not include depreciation or remuneration for investment (Article 52(3) and 53(3)), but are based exclusively on the running costs necessary for the operation of these plants. The AzW is based on the LCOE calculations shown in recital (142) above for biomass and table (146) above for biogas.

(150) The Expert Report, based on which Austria will set the AzW, initially recommended an AzW of EUR 103,4 MWh for existing biomass plants above 500 KW and 147,2/MWh for existing biomass under 500 kW. The updates linked to the increase of fuel prices would lead to an increase of successor premia by 0.3%. The AzW for successor premia is set at EUR 196,92/MWh for biogas installations, with a possible increase of 0.2%.

(151) The market premiums for existing installations are determined and fixed administratively by regulation on the basis of a technical report. The technical report will be updated every year. The successor premium is fixed in the Expert Report at 14,72 cents/kWh for solid biomass installations under 500 kWh, 10,34 cents/kWh for solid biomass installations above 500 kWh and 19,69/kWh for biogas installations. The successor premia will be granted until end of the 30th year of operation of the plant. Funding is only eligible after the end of the funding period according to the 2012 Green Electricity Act (ÖSG 2012) (Article 10 (1) 6 of EAG).

2.9 Duration

(152) Austria has notified the scheme with a duration until 31 December 2030. Austria has committed to submit to the Commission:

(a) a First Methodological Interim Evaluation Report within 9 to 12 months after the adoption of the Commission decision;

(b) a Second Interim Evaluation Report by 30 June 2025;

(c) the Final Evaluation Report by 30 June 2030; and

(d) an Additional Report by the end of 2034.

[44] Commission decision of 8 February 2012 in State aid SA.33384 (2011/N) – Austria Ökostromgesetz 2012 (Green Electricity Act 2012).

2.10 Budget and financing

(153) Austria submitted the projected evolution of the annual budget for the notified market premium support for the years 2022 to 2032[45] as shown in the graph below:

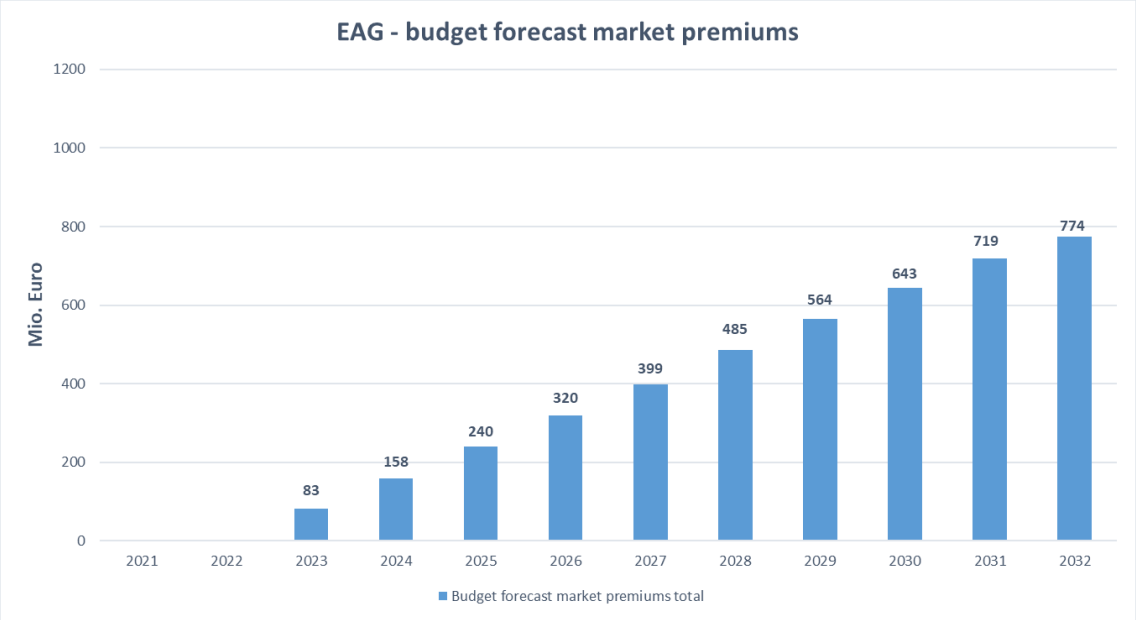

Figure 13: budget projections. Source: final Evaluation Plan submitted by the Austrian authorities.

(154) In the forecast evolution of the volume of support, different assumptions were made, depending on the technology, regarding a time lag between the annual volume of tenders and the start-up of the installations. A one-year delay was assumed for photovoltaic installations and two years for all other technologies. This results in a gradual increase in the annual budget for the market premium, for photovoltaic installations from 2022 and from 2023 also for all other technologies. In 2032, the forecast budget for the market premium amounts to around EUR 774 million. Austria explained that the level of support in 2032, in view of the lead time for starting the operating of the installations, will be the indicatively the maximum level of overall yearly aid possible. Therefore, Austria assumes at the present time that the funds required for market premia will not exceed an annual financing volume of EUR 1 billion, even at the peak of the volumes contracted by the scheme.

(155) For the financing of the notified scheme, the mechanism established by the 2012 Green Electricity Act will be continued. The mechanism is described in the 2012 Commission Decision in Section 2.2. The financing sources also include penalties to be imposed on bidders pursuant to Article 28 EAG and according to the 2012 Green Electricity Act, and the Electricity Industry and

[45] Contracting under the aid scheme is planned until 31 December 2030. Unless special regulations exist, market premia are granted for a period of 20 years from the date on which proof of commissioning of the installation is submitted to the EAG Funding Processing Office. In the case of expansions and revitalisations, from the date on which proof of commissioning of the expanded or revitalised plant is submitted to the funding administration agency.

Organisation Act 2010[46]. The mechanism of financing also includes the revenues from the payback mechanism as described in recital (33), whereby certain larger scale producers have to share their excess profits with the State.

(156) Articles 71 to 78 EAG establish the rules on allocation and management of funding. The financing mechanism of the 2012 Green Electricity Act is continued in the EAG with some modifications. The scheme is financed by the 'renewable support rate' (*Erneuerbare Förderpauschale*, Article 73 EAG) – called Ökostrompauschale in the 2012 Commission Decision - and the 'renewable subsidy' (per network level) (*Erneuerbarer Förderbeitrag*, Article 75 EAG) – called Ökostromförderbeitrag in the 2012 Commission Decision. The renewable support rate and the renewable subsidy constitute the main components of the financing mechanism. Both are charged on top of the network charges.

(157) The renewable support rate consists in a lump sum payment to be paid by all final consumers connected to the public network and is calculated in euro per metering point, which will be invoiced by the system operators and charged to the final consumers connected to their networks together with the respective network usage charge. It is differentiated by network level, the fixed payment falls with the voltage of the network level, to which the consumer is connected.

(158) The network operators collect the lump sums from the end customers. The flat rates are charged to network operators on a quarterly basis by the EAG Funding Processing Office on the basis of the most recently known price. After the end of the financial year, a final settlement will be made per network operator to ensure that the level of collection by the network operator is in line with the requirements of the EAG Funding Processing Office.

(159) The renewable subsidy is charged to all users in order to cover the funds required to finance the scheme and the 2012 Green Electricity Act as well as the proportionate coverage of the funds required for investment grants under Part 3 of the EAG, less the funds collected by the renewable subsidy rate. All end consumers connected to the public electricity grid will pay the renewable subsidy contribution in proportion to the respective maximum allowed grid usage.[47] Austria submitted that in 2022 no levies will be raised.[48] The renewable subsidy will be determined annually in advance by ordinance. A nationwide uniform burden on end customers per network level must be taken into account when calculating the surcharges.

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[46] Federal law regulating the organisation in the field of the electricity industry (Electricity Industry and Organisation Act 2010 – ElWOG 2010) StF: Federal Law Gazette I No. 110/2010, available here.

[47] The EAG foresees in Articles 73 and 75 certain reductions and exemptions, which will be subject to a separate assessment, where necessary, in 2022. Austria submitted that Article 73(1) and 75(1) EAG will be amended so that potential reductions and exemptions are to be regulated in an ordinance.

[48] Regarding the Erneuerbare Förderpauschale, see nr.47 and 48 in the draft amendments introduced to the Austrian Parliament on 16 December 2021: https://www.parlament.gv.at/PAKT/VHG/XXVII/A/A_02184/index.shtml. Regarding the Erneuerbarer Förderbeitrag, see RIS – BEGUT_55105D46_B4EA_410C_A64A_0C5236D2D257 – Begutachtungsentwürfe (bka.gv.at).

2.11 Cumulation, transparency & other commitments

(160) Austria submitted that the general funding conditions pursuant to Article 17 EAG will ensure the respect of the State aid rules on cumulation, including the principles in point 81 and 131(b) of the EEAG for any type of aid. Austria confirmed that cumulation between the notified operating aid (i.e. the market premium) with investment grants under the EAG is not possible (Article 24(1)(8), Article 46(5) and 55(9) EAG). This applies regardless whether the market premium is granted through tenders or on administrative application. The same cumulation rule applies also to renewable and citizen energy communities that may benefit from the notified scheme (Article 80(1) EAG; Article 16(4) ElWOG 2010).

(161) Cumulation with other investment aid is possible but has to be in line with EU State aid rules (Article 10(6) EAG). In particular with regard to hydropower installations with transverse structure, which may get separate funding for fish ladders, Austria explained that such additional funding was already taken into account and deducted when calculating the LCOE on the basis of which the AzW will be set.

(162) Regarding transparency, Austria informed that the legal basis for the scheme has been published[49] and it committed to comply with the transparency requirements. In particular, Article 93 EAG sets out that the EAG Funding Processing Office will publish all support granted on the basis of the EAG, when it exceeds EUR 100 000 per beneficiary, along with the following information:

a) the name of the operator,

b) the region in which the installation is located,

c) the form of support,

d) the amount of support in its entirety,

e) the date of conclusion of the contract,

f) the aim of the funding,

g) the granting authority,

h) in so far as the operator of the plant is an undertaking, the nature of the undertaking and its main economic sector, and

i) the legal basis on which the funding was granted.

(163) According to the EAG, the EAG Funding Processing Office will publish the aforementioned information in a website[50] and will keep the information

[49] RIS - BGBLA_2021_I_150 - Bundesgesetzblatt authentisch ab 2004 (bka.gv.at).

[50] Austria submitted that, at the time of adoption of the present decision, the tender procedure for the EAG Funding Processing Office is still ongoing and therefore the website is not yet available.

publicly accessible for at least ten years without restrictions. Austria also confirmed that it will comply with the requirements in section 3.2.7 of the Guidelines on State aid for Environmental Protection and Energy 2014-2020 (EEAG)[51].

(164) The Austrian authorities have also committed not to award aid to undertakings in difficulty, as defined by the applicable Guidelines on State aid for rescuing and restructuring undertakings in difficulty[52]. Austria submitted that the "General Funding Conditions" (*Allgemeine Förderbedingungen*) to be established by the EAG Processing Funding Office, in line with Article 17(3) EAG, will include the exclusion of the granting of subsidies to companies in difficulty. This will be verified by the submission of self-declarations and the matching with insolvency databases.

(165) Austria also committed to suspend the payment of the notified aid, if the beneficiary still has at its disposal an earlier unlawful aid that was declared incompatible by a Commission Decision (either concerning an individual aid or an aid scheme), until that beneficiary has reimbursed or paid into a blocked account the total amount of unlawful and incompatible aid and the corresponding recovery interest.

(166) Finally, Austria has committed to respect both the waste hierarchy[53], as well as the Water Framework Directive[54].

2.12 Evaluation

(167) Austria has submitted an evaluation plan for the measure. The main elements of the evaluation plan are described below. For efficiency purposes, the evaluation for the European Commission will rely as much as possible on the EAG evaluation provisions.

(168) The EAG includes milestones for data collection, reports and the possible involvement of stakeholders (Articles 90-92 EAG):

(a) The EAG Funding Processing Office has to submit short term reports after each funding call (providing data on the projects which applied for funding and the results of funding calls);

(b) Yearly reports ("EAG monitoring reports") by the regulatory authority (based in part on data provided by the agents responsible for processing the old and new funding scheme but also on data concerning the total development of the market);

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51 OJ C 200, 28.06.2014, p. 1.

52 Communication from the Commission – Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty (OJ C 249, 31.7.2014, p. 1).

53 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 of 22.11.2008, p. 3).

54 Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1).

(c) Yearly studies on the development of LCOE according to the different technologies;

(d) An evaluation report three years after the funding system enters into force (the first report is planned for December 2024, followed by additional evaluation reports every five years). Those evaluation reports already collect and analyse data to provide information on the following aspects:

- Status and development of target achievement;
- Analysis of the intensity of competition, diversity of actors, regional distribution of the subsidized systems as well as the degree of realization of the existing potentials;
- Appropriateness of the tender volume and allocation of funds, maximum prices, funding rates and the number of tenders and funding calls;
- bidding behaviour;
- Effects of the exemption regulation in accordance with Art.73(5) EAG;
- Potential for improvement and need for adjustment.

(169) In addition to the above, Article 94 EAG foresees a report on the Integrated Network Infrastructure Plan ("NIP") which shall provide essential additional information for the evaluation, e.g. on areas with high potential for development. The report will be published by the end of June 2023 and be updated every five years.

(170) Austria intends to include to these reports some questions from the overall Evaluation Plan prepared for the Commission.

(171) The Evaluation Plan notified by Austria for the EAG includes around 50 evaluation questions aiming at assessing different aspects of the aid scheme, including its direct effects on the beneficiaries, its indirect effects, as well as the proportionality of the aid and the appropriateness of the chosen aid instrument.

(172) The evaluation will provide general information, in particular, on the following broad range of topics for both installations awarded through tenders and through administrative premium:

(a) Development of the number of installations, investments and capacity built for the production of energy from renewable energy technologies (solar PV, wind, biomass, biogas and hydropower), compared to a counterfactual of no aid; to measure the direct impact of the aid scheme on these developments, the projects developed with EAG funding ("treatment group") are compared with the projects developed without EAG funding ("control group"), projects that participated in the auction process / administrative process but were unsuccessful, as well as projects that were developed without participating in the auction / administrative process;

(b) Simulation of the impact on the costs of the EAG scheme, when increasing or reducing the tendered volumes (based on the analysis of all bids received in the tender ('supply curve analysis'));

(c) Contribution of each technology to the reduction of CO_2 emissions in the electricity sector and to the achievement of the overall objectives;

(d) Impact on competition in energy markets (development of market concentration, wholesale prices, consumer prices);

(e) Comparing the costs of the EAG-results with the LCOE estimates of renewable energy generation per technology type in order to assess the necessity and proportionality of the aid;

(f) Assessment whether the tenders have been competitive;

(g) Development of the amounts of aid granted over time, regardless of whether they are awarded in the context of tenders or in the administrative area;

(h) Evaluation on differences and interactions between technology-specific and cross-technology auction/administrative awards;

(i) Evaluation of the location differentiation model based on rotor area-specific production yields for wind auctions.

(173) To specify the methodology used in the evaluation in more detail, a methodology report will be submitted to the Commission within 9 to 12 months after the adoption of the Commission decision. A central component of the evaluation is the analysis of the EAG's impact chains, with regard to the objectives that are to be achieved with this policy instrument. Due to the special features of the funding system and data availability, the counterfactual impact evaluation will be supplemented by the approach of the theory-based evaluation. For this purpose it is planned to develop the "Theory of Change" on which the EAG is based and test the identified mechanisms, i.e. examine the causation behind the observed results.

(174) The evaluation questions related to the general outputs of the scheme will be primarily answered by providing quantitative evidence, while other questions by qualitative assessment which requires expert knowledge.

(175) In order to perform the evaluation, Austria confirmed that most of the data on auction, funding schemes, bids, awards, realized projects will be collected by the EAG Funding Processing Office continuously with each round of auction, funding and in the scope of its responsibilities after realization. In addition, some regularly publicly provided data from Statistic Austria will be used. Specifically, for evaluation purposes a special analysis on total number and capacity of installations (to derive the number and capacity of installations without aid) will be requested from Statistic Austria. Finally, information regarding aid disbursements on the basis of previous funding schemes (ÖSG) is available from E-Control.

(176) Austria has committed to submit a First Methodological Interim Evaluation Report to the Commission within 9 to 12 months after adoption of the Commission decision. This report shall specify the methodology used in the evaluation. It shall describe in detail the methodology that will be used to address each of the proposed evaluation question, the indicators that will be

used and their characteristics, as well as the assumptions on which the implementation of the methodology is based. The final decision on the methodology for the evaluation will be taken in agreement with the Commission.

(177) In order to keep the Commission updated about the progress of the evaluation in terms of data collection and methodologies (including potential difficulties encountered), Austria committed to submit a Second Interim Evaluation Report to the Commission in the first half of 2025. The report will be based on evidence from the first years of the functioning of the notified scheme and will address questions about the benefitting projects (e.g. amount of aid, types of projects), the development of the project pipeline for each supported technology, the functioning of the administrative pricing procedure, as well as about the functioning of the tenders, including, among others, an assessment of:

(a) the competitiveness of the tenders (technology specific and mixed for wind with hydro) and any transfer of volumes to other technologies or years, including the limitation to 20 MW of the mixed tender;

(b) the impact of the use of the pay-as-clear rule for projects below 20 MW and for communities in the wind tenders;

(c) the impact of the correction factor in the wind tenders.

(178) Furthermore, Austria committed to deliver the Final Evaluation Report to the Commission 6 months before the end of the scheme, i.e. by 30 June 2030. An Additional Report to the Commission which will analyse the overall impact of the scheme is scheduled for 2034.

(179) The final evaluation will be conducted by an external independent evaluator to be selected through an open tender procedure. Austria has committed to duly consider the relevant experience of the tender applicants in the field of quantitative evaluation methods and experience with conducting studies concerning the electricity generation in Austria.

(180) The Final Evaluation Report will be published on the website of the Ministry. Austria will take the evaluation results of the evaluation duly into account for future policy-making.

3. ASSESSMENT OF THE MEASURE

3.1 Existence of State aid

(181) 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.

(182) In order to constitute State aid within the meaning of Article 107(1) of the Treaty, the measure must: (i) confer an advantage on certain undertakings or

certain sectors (selective advantage), (ii) be imputable to the State and involve State resources, (iii) distort or threaten to distort competition, and (iv) be liable to affect trade between Member States.

3.1.1 Selective advantage

(183) Under the notified scheme, RES producers receive an advantage because they obtain additional support in the form of a premium on top of the market price (see section 2.4 Form and level of support). Those payments guarantee producers of electricity from the supported RES technologies revenues higher than what they would obtain on the market.

(184) Moreover, the aid is selective since it favours only producers of renewable electricity and the aid is not accessible to other electricity producers.

(185) It follows that the measure at issue confers a selective advantage within the meaning of Article 107(1) TFEU.

(186) As regards the financing by levies, the Commission notes that the principles by which the levies are determined has remained unchanged from the predecessor scheme, see recitals (156)-(159).[55] In this regard, the Commission refers to its assessment made in the 2012 decision[56] (see section 2.10), which concluded that the financing mechanism did not entail a selective advantage.

3.1.2 Imputability and existence of State resources

(187) 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. It is established by the case-law 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 private or public entities separate from the public authorities. The Union Courts have recently confirmed[57] that the fact that the financing of a measure comes from a compulsory levy is sufficient to establish the existence of State resources.

(188) The notified scheme is established by law, namely the EAG.

(189) According to the EAG, the notified scheme is financed mainly by funds that are collected from: (i) the "lump sum" renewable support rate, (ii) the renewables subsidies, (iii) the State budget, (iv) various penalties established by the EAG, and (v) interests on those amounts.

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55 Notably footnotes 47 and 48.

56 Commission Decision of 8 February 2002, SA.33384 (2011/N) – Austria.

57 Judgment of 28 March 2019, C-405/16 P, *Germany v Commission*, EU:C:2019:268, paragraphs 57-60 and 70. See, also, judgment of 21 September 2021, *FVE Holýšov I s. r. o. and Others* v *Commission*, C-850/19 P, EU:C:2021:740, paragraph 46.

(190) In particular, the Commission notes that the two main levies are established by law (see recital (156)). The network operators are obliged to charge the levies to the final consumers. On the one hand, the EAG provides that the EAG Funding Processing Office is obliged to collect the levies. On the other hand, operators on which the surcharge is levied have to pay it (see recital (96)). This surcharge therefore qualifies as a compulsory levy, imposed by law, whose purpose is to fund, in particular, the notified scheme.

(191) Moreover, the Commission observes that the State controls, directs and influences the administration of the funds at stake.

(192) The granting authority, the EAG Funding Processing Office, is under the supervision of the Ministry, see recital (15). Under the EAG, the granting authority is obliged to take all necessary measures to obtain the financial resources to support the scheme (listed in Article 71(1) EAG), including borrowing funds. The inclusion of funds not provided for by the EAG is subject to the explicit approval of the Ministry (Article 67(2) and (3) EAG).

(193) The national legislation sets the methodology by which the Government determines the annual level of the levies. In particular, the renewable support rate is established in Article 73(2) EAG and the renewable subsidy will be determined annually in advance by means of a regulation by the Ministry (Article 75(2) EAG). The other possible sources of financing are established by law (the penalties established by EAG). The levies are adjusted annually in order to cover the relevant expenditure. The law further determines for which purposes the revenues from the levies can be used and how any surpluses or deficits are corrected.

(194) In the light of the above, the Commission considers that the measure is granted through State resources and is imputable to the State within the meaning of Article 107(1) TFEU.

3.1.3 Impact on trade between Member States and on competition

(195) The electricity market has been liberalised and electricity producers are engaged in trade between Member States so that the advantage granted to the producers of renewable electricity is likely to distort competition and affect trade between Member States. The renewable electricity is generally sold on the spot market where it enters in competition with all sources of electricity.

(196) Therefore, the Commission notes that the advantage granted to the operators of RES installations is likely to distort competition and affect trade between Member States.

3.1.4 Conclusion on the existence of aid

(197) On the basis of the above-mentioned elements, the Commission considers that the measure constitutes State aid within the meaning of Article 107(1) TFEU.

3.2 Lawfulness of the aid

(198) The scheme was notified to the Commission before being implemented, as the EAG contains a suspension clause making the entry into force of the notified scheme subject to the Commission's approval. Austria has thus complied with the notification and standstill obligation of Article 108(3) TFEU.

3.3 Compatibility of the aid

(199) 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 activity[58]. Furthermore, the aid should not distort competition in a way contrary to the common interest.

(200) The Commission notes that the notified measure aims at the promotion of electricity generation from renewable energy sources. As such, the notified measure falls within the scope of the EEAG.

(201) The Commission has therefore assessed the compatibility of the notified 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 aid to energy from renewable sources (sections 3.3.1 and 3.3.2 of the EEAG).

3.3.1 Contribution to the development of an economic activity

(202) Pursuant to Article 107(3)(c) TFEU, compatible aid must contribute to the development of an economic activity[59].

(203) The scheme supports the generation of electricity from new RES installations, as well as for the modernisation of hydropower installations and for modernised biomass/biogas installations under certain conditions.

(204) According to point 19(5) EEAG, the following are renewable energy sources: wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases. According to point 19(11) EEAG, the definition of electricity generated from RES also includes renewable electricity used for filling storage systems, but excludes electricity produced as a result of storage systems.

(205) In view of the above, the Commission considers that the notified scheme contributes to the development of an economic activity, in particular, electricity production, as required by Article 107(3)(c) TFEU.

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58 Judgment of 22 September 2020, *Austria v Commission*, C-594/18 P, EU:C:2020:742, paragraphs 20 and 24.

59 Judgment of 22 September 2020, *Austria v Commission*, C-594/18 P, EU:C:2020:742, paragraphs 20 and 24.

3.3.2 Incentive effect

(206) State aid 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 the change in behaviour would not occur without the aid[60].

(207) In order to demonstrate the presence of an incentive effect, Member States must use an application form which includes all the information required to carry out the necessity assessment. However, the need for an application form in point 51 of the EEAG does not apply if the aid will be awarded on the basis of a competitive bidding process (point 52 of the EEAG). As mentioned in section 2, installations for PV (newly built photovoltaic systems with a bottleneck output of more than 10 kW as well as extensions of photovoltaic systems with a bottleneck power of more than 10 kW, wind as of 2023 and biomass (with a congestion capacity of 0,5 MW to 5 MW as well as newly built and repowered biomass-based plants with a bottleneck capacity of more than 5 MW for the first 5 MW) will be determined by tender. Therefore, Austria is not required to fulfil the requirements of point 51 of the EEAG for these installations.

(208) As regards the administrative premium, Austria submitted that in order to verify the incentive effect, it will use appropriate forms as required by point 51 EEAG. Austria submitted that the credibility of the documentation submitted will be verified by the EAG Funding Processing Office and that incorrect or incomplete information may lead to the cancellation of the support. As regards the tenders, pursuant to point 52 EEAG, the submission of the form will not be required. In any event, given the difference between the cost to produce the electricity based on the respective RES and the market price for electricity which is generally lower (50 EUR/MWh according to the Evaluation Plan (see recital (221)), the eligible projects would not be executed in the absence of the aid (and existing projects would be discontinued or not modernised for aided existing biomass and hydropower installations).

(209) The Commission therefore concludes that the aid has an incentive effect and facilitates the development of electricity generation from RES.

3.3.4 Compliance with other relevant provisions of EU law

(210) State aid that contravenes provisions or general principles of EU law cannot be declared compatible[61].

(211) As indicated in point 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.

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60 See in that sense points 49 and 144 of the EEAG, as well as Judgment of 22 September 2020, *Austria v Commission*, C-594/18 P, EU:C:2020:742.

61 Judgment of 22 September 2020, *Austria v Commission*, C-594/18 P, EU:C:2020:742, paragraph 44.

(212) According to case law, for a levy to be regarded as forming an integral part of an aid measure, it must be hypothecated to the aid under the relevant national rules, in the sense that the revenue from the charge is necessarily allocated for the financing of the aid and has a direct impact on the amount of the aid and, consequently, on the assessment of the compatibility of that aid with the common market[62]. In particular, the charge at issue must be levied specifically and solely for the purpose of financing the aid at issue[63].

(213) In the present case, the scheme is financed, to a large extent but not exclusively, through two levies (see recital (155)). As the Commission cannot exclude the existence of hypothecation between the levies and the aid awarded, the Commission has examined its compliance with Articles 30 and 110 TFEU.

(214) According to the case-law, a charge which is imposed on domestic and imported products according to the same criteria may nevertheless be prohibited by the Treaty if the revenue from such a charge is intended to support activities which specifically benefit the taxed domestic products. If the advantages that those products enjoy wholly offset the burden imposed on them, the effects of that charge are apparent only with regard to imported products and that charge constitutes a charge having equivalent effect to custom duties, contrary to Article 30 of the Treaty. If, on the other hand, those advantages only partly offset the burden borne by domestic products, the charge in question constitutes discriminatory taxation for the purposes of Article 110 of the Treaty and will be contrary to of that provision as regards the proportion used to offset the burden borne by the domestic products[64].

(215) When domestic electricity production is supported by aid that is financed through a charge on all electricity consumption (including consumption of imported electricity), then the method of financing – which imposes a burden on imported electricity not benefitting from this financing – risks having a discriminatory effect on imported electricity and thereby violating Article 30 or 110 of the Treaty[65].

(216) As set out in recital (112), Austria committed to open the competitive bidding process to RES producers established in other Member States, subject to the conclusion of bilateral or multilateral cooperation agreements. Foreign projects would be allowed to bid for capacity allocated within the tenders of the present scheme, subject to the same criteria laid down in the EAG as applicable to domestic producers. Austria plans to launch discussions on such agreements in 2022 and is already in discussions for a cross-border project with Hungary.

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62 See judgment of 22 December 2008, *Régie Networks v Rhone Alpes Bourgogne*, C-333/07, EU:C:2008:764, paragraph 99 and case law cited.

63 See judgment of 22 December 2008, *Régie Networks v Rhone Alpes Bourgogne*, C-333/07, EU:C:2008:764, paragraphs 100 and 104.

64 Judgment of 14 April 2005, Joined Cases C-128/03 and C-129/03, *AEM* and *AEM Torino*, EU:C:2005:224, paragraphs 44 to 47; Judgment of 17 July 2008, C-206/06, Essent Netwerk Noord and Others, EU:C:2008:413, paragraph 42.

65 Judgment of 25 June 1970, 47/69, *France v Commission*, EU:C:1970:60, paragraph 20. See also Case SA.38632 (2014/N) Germany – EEG 2014 – Reform of the Renewable Energy Law.

(217) In line with its case practice[66] under the EEAG, the Commission considers this opening of the competitive bidding process to remedy any potential discrimination against RES producers in other Member States, under Articles 30 and 110 TFEU.

(218) As set out in recital (166), Austria has also confirmed that it will comply with the Water Framework Directive and the waste hierarchy, in line with points 117 and 118 of the EEAG.

(219) In light of the above, the Commission considers that the notified aid measure does not infringe other relevant provisions of EU law.

3.3.5 The aid is designed in order to limit its effects on competition and trade

3.3.5.1 Need for State intervention

(220) Point 34 of the EEAG explains that State aid should be targeted towards situations where aid can bring about a material improvement that the market alone cannot deliver. Point 35 of the EEAG invites Member States to identify the market failures hampering an increased level of environmental protection. In the case of renewable electricity production, the Commission presumes that a residual market failure remains, which can be addressed through aid for renewable energy, for the reasons set out in point 115 of the EEAG.

(221) According to the LCOE calculations provided by Austria (see section 2.6), the cost of electricity generation from RES is higher than the market price for electricity observed in recent years, although the market price has recently increased considerably, which also impacts on the revenues of electricity producers. The LCOE calculations in sections 2.6.1 to 2.6.4, which is based on standard assumptions and calculations, show that costs are above the market price observed in the past. As mentioned in recitals (36) and (38), the LCOE calculations, which are the basis for the establishment of the maximum market price in tenders or the value to be applied in administrative premium, will be updated yearly during the whole duration of the scheme on the basis of the same methodology and this is set against the prevailing market price. The yearly update of the costs of generation from RES generation will ensure that the premium will be granted only if the LCOE remains above the market price of electricity.

(222) Against this background, it is unlikely that, absent the aid, the development of the economic activity of generation of electricity from RES in Austria would occur, or would occur to the same extent. The Commission therefore considers that the notified scheme is necessary.

[66] Commission Decision of 29 April 2021 in State Aid SA.57779 (2020/N) – Germany - EEG 2021, section 3.3.1.3; Commission Decision of 24 November 2021 in State aid SA.60064 (2021/N) – Greece - Greek RES and CHP scheme 2021-2025, section 3.3.12; Commission decision of 23 April 2019 in State Aid SA.50199 (2019/N) – Lithuania Support to power plants producing electricity from renewable energy sources, section 3.4.1; Commission decision of 29 March 2019, in Aide d'État SA.48601 (2018/N) – Luxembourg Production d'électricité basée sur les sources d'énergie renouvelables, modification du régime de soutien pour les énergies renouvelables au Luxembourg, section 3.3.8; Commission decision of 24 October 2014 in State aid No SA.36204 (2013/N) – Denmark Aid to photovoltaic installations and other renewable energy installations, section 3.4.

3.3.5.2 Appropriateness of the aid

(223) Point 40 of the EEAG explains that aid measures must be appropriate and that an aid measure will not be considered compatible with the internal market if the same outcome is achievable through other less distortive policies or aid instruments.

(224) Point 116 of the EEAG states that the Commission presumes the appropriateness of aid for renewable energy sources provided all other conditions of section 3.3.2 of the EEAG are met. According to point 107 of the EEAG, under certain conditions State aid for renewable energy sources can be an appropriate instrument to increase renewable electricity production.

(225) As mentioned in recital (12), the notified measure aims at significantly increasing the electricity produced from RES (plus 27 TWh in 2030) and therefore the installed RES capacity in order to further reduce CO2 emissions in the future.

(226) The notified measure is therefore deemed appropriate provided that the other compatibility conditions are met. As explained in sections 3.3.1 to 3.3.5.1 above and as will be shown in the sections below, those other compatibility conditions are met. Therefore, the Commission considers the aid to be appropriate.

3.3.5.3 Proportionality of the aid

(227) According to point 69 of the EEAG, environmental aid is considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed.

(228) The aid supports electricity production from renewable sources, for which the EEAG include specific rules, in particular in points 124, 126 and 129.

3.3.5.3.1 Aid granted as premium and market integration

(229) The notified scheme complies with point 124 of the EEAG. This point requires aid to be paid as a premium in addition to direct selling in the market, balancing responsibilities and no incentive to produce in hours of negative prices. Point 125 of the EEAG establishes that these conditions do not apply to installations with an installed electricity capacity of less than 500 kW or demonstration projects, except for electricity from wind energy where an installed electricity capacity of 3 MW or 3 generation units applies.

(230) As explained in section 2.4, the aid to RES producers is provided in the form of a variable premium, taking into account revenues from the sale of electricity. Installations also have an obligation to sell their produced electricity directly on the market. The Commission notes that the possibility established in Article 97 EAG to use an electricity trader in case they are unable to sell their electricity directly on the market is limited to installations with a capacity below 500 kW and thus is in line with point 124 of the EEAG.

(231) Furthermore, Austria has confirmed that all beneficiaries selling their electricity on the market will have standard balancing responsibilities (see recital (25)).

(232) In addition, no subsidy will be paid for hours in which the market price is negative, whenever negative prices persist for at least six consecutive hours (see recital (26)). Austria has thus put a measure in place to ensure that generators do not have an incentive to generate electricity under negative prices.

(233) As described in recitals (33) and (155), the Commission also notes positively that Austria envisages a mechanism whereby producers are required to pay back to the State (as a deduction from the premium) a percentage of their revenues when the price of electricity is higher than the costs incurred for production.

3.3.5.3.2 Competitive bidding process (Tendering)

(234) According to point 126 of the EEAG, the aid is presumed to be proportionate if it is granted in a competitive bidding process open to all generators producing electricity from renewable energy sources on a non-discriminatory basis, unless a) Member States demonstrate that only one or a very limited number of projects or sites could be eligible; or b) Member States demonstrate that a competitive bidding process would lead to higher support levels (for example to avoid strategic bidding); or c) Member States demonstrate that a competitive bidding process would result in low project realisation rates (avoid underbidding).

(235) The bidding process should in principle be open to all technologies. It can be limited to certain technologies in certain circumstances (point 126, fifth subparagraph, EEAG), where a process open to all generators would lead to suboptimal results which cannot be addressed in the process design in view of (a) the longer-term potential of a given new and innovative technology, (b) the need to achieve diversification, (c) network constraints and grid stability, (d) system (integration) costs, or (e) the need to avoid distortions on the raw material markets from biomass support.

(236) The requirement to conduct a competitive bidding process is not mandatory for installations with less than 1 MW of capacity (all technologies except wind energy), of not more than 6 MW or 6 generation units for wind energy, and demonstration projects.

(237) If installations are not supported in the framework of a competitive bidding process, they need to comply with the conditions set out in point 131 of the EEAG (see point 128 of the EEAG), which are:

(a) The aid per unit of energy does not exceed the difference between the total LCOE from the particular technology in question and the market price of the form of energy concerned.

(b) The LCOE may include a normal return on capital. Investment aid is deducted from the total investment amount in calculating the LCOE.

(c) The production costs are updated regularly, at least every year.

(d) Aid is granted until the plant has been fully depreciated according to normal accounting rules in order to avoid that operating aid based on LCOE exceeds the depreciation of the investment.

(238) In the following, the Commission has thus first examined whether the aid would be granted based on a competitive bidding process open to all or several technologies and whether departures from this principle are justified. On that basis, for aid to specific RES technologies granted within a technology specific process (in the absence of competition between several technologies), the Commission assessed whether there were reasons for a departure from the bidding process in light of point 126, fifth subparagraph EEAG.

(239) For all RES technologies to which aid would be granted based on a competitive bidding process, the Commission examined whether the bidding process would be competitive and based on clear, transparent and non-discriminatory criteria (see also point 19(43) EEAG). The Commission also verified whether the volume or budget available is a binding constraint leading to a situation where not all bidders can receive aid.

(240) For those RES technologies to which aid would be granted without competitive bidding process, the Commission examined the proportionality of the aid based on point 131 of the EEAG in the following section.

Technological neutrality

(241) To a very large extent, Austria has devised aid award procedures that are technology specific. It is therefore necessary to assess Austria's justification for this approach. In addition, Austria plans to carry out mixed tenders for hydro and wind power with a small annual volume in its baseline planning.

(242) Austria has presented the following three arguments for the justification.

(243) Austria sufficiently demonstrated that the need for specific technology tenders are linked to the necessity to diversify its sources of renewable energy (see section 2.5.1) and to the necessity to ensure network stability and security (see section 2.5.2).

(244) Furthermore, as explained in recitals (69) and following, Austria has demonstrated that a joint tender procedure would likely lead to a sequential exploitation of the technologies, in particular because PV is expected to win (versus wind) in view of its lower costs, biomass and biogas installations have significantly higher LCOEs, and hydropower overlaps partially with wind (recital (72)) and PV (see table at recital (68)).

(245) The Commission notes positively that Austria is including the possibility of mixed tenders into its framework between hydro and wind power, though this is for a limited volume in the baseline planning, considering the overlap in the LCOE of wind installations and some range of hydropower installations (see recital (108) and following). While a limited volume (20MW) is foreseen in the baseline projections, Austria has put a credible mechanism in

place that provides flexibility over time and over technologies in the allocation of funds (see section 2.6.2) and an interim evaluation after three years of the scheme (see recital (177)), which is suitable to inform the process after initial experience has been gained and should enable Austria to exploit further possibilities of putting these technologies in competition.

(246) In view of the above, the Commission concludes that the recourse by Austria to technology specific award processes is justified, on the basis of point 126 EEAG.

Tenders

(247) The tenders are organised by EAG Processing Funding Office, which publishes all relevant information in advance (see recital (74)). The eligibility criteria are clear and determined by the law (see recital (19)). The information to be submitted with the bid are also clear and non-discriminatory (see recital (75)). The selection is in general based on the bid[67] and the award process is transparent (see recital (79)).

(248) The level of subsidy paid to the beneficiaries of the aid is established via a bidding process whereby successful participants will receive the level of support (premium on top of the electricity market price) for which they bid (pay-as-bid). In addition, to keep the aid budget limited, maximum bid prices (bid caps) are established for each technology, on the basis of an Expert Report which will be updated yearly (see recital (36)).

(249) Finally, to avoid that awarded projects are not implemented within a reasonable time, project owners have to take commitments to realise the projects within a specific period (recital (103)).

(250) As a general point regarding the proportionality of the aid that is awarded via tenders, the Commission positively notes Austria's explicit commitment to "ensure effective competitive bidding" processes, and that it provides for tools to ensure this in Article 7(3a) as described in recital (80)(d). This allows the authorities the ex-ante re-allocation of tender volumes to future tenders of the same technology or tenders of other renewable energy technologies, if an auction in the past has been undersubscribed and it can be expected that the available supply in the next auction is insufficient to ensure effective competition. Further, the Commission takes positively into account that, as a complementary measure, Austria develops the infrastructure plan (NIP) to increase the predictability of the project pipeline by mid-2023, which in turn should inform the tender process and possible volume adjustments as regards expected supply. At the start of the scheme, there may be some uncertainty regarding the expected bidding, and those safeguards allow adaptation over time to ensure effective competitive bidding in the tenders. Taken together, the Commission considers that those safeguards will ensure the proportionality of the aid.

[67] See below the exception for energy communities and wind installations up to 20MW.

(251) The Commission therefore considers that Austria has demonstrated that the bidding process would be competitive and based on clear, transparent and non-discriminatory criteria.

(252) The Commission will analyse in the following the specific features of the various technology specific auctions.

a) PV

(253) Austria maintains that, for the reasons indicated in section 2.5 above, a technology specific auction would be necessary to avoid suboptimal results that cannot be addressed through auction design.

(254) Austria has demonstrated (see section 2.5.1 and 2.5.2) that an unbalanced development of wind or photovoltaic generation would lead to important grid constraints, with higher congestion management costs and system integration costs. This is the result of the conjunction of factors: high number of wind installations in eastern Austria in particular, grid constraints in the east-west transmission network, expected delays in grid expansion. Those constraints call for a deployment of a mix of technologies.

(255) Given that most of the future renewable deployment will be realised through wind and solar energy, the fact that wind installations tend to run when solar installations are not and conversely (see section 2.5.1), Austria has sufficiently demonstrated that it needs to have a balanced wind and solar production. This balance is needed to improve grid stability, limit system integration costs (see section 2.5.2) and more generally in order to have a complementary renewable energy mix.

(256) As indicated in recital (86), PV auctions rules provide that the premium will be reduced by 25% for installations on grassland or agricultural territory, in order to avoid the displacement of agricultural or green areas.

(257) The differentiation is justified, first, by the fact that the LCOE of "surface" installations is slightly lower than the average rooftop PV installations (EUR 81/MWh for the former and an average of EUR 84,4/MWh for the latter).

(258) Second, Austria submitted that the public acceptance of surface photovoltaics is currently very low and risks jeopardising the uptake of renewable energy technologies[68]. The discount does not apply in full or in part for surface PV if for example agricultural use is not jeopardised or PV is installed on sealed land such as waste dumps.

(259) In view of the above, the Commission accepts the Austrian argument that the discount on the premium for PV installations on grassland or agricultural territory as opposed to rooftop or sealed area PV follows public policy considerations to discourage the suppression of agricultural or green areas. The discounts are publicly known before the bidding process.

[68] Technology Specific Calls for Tenders in Austria, chapter 7.2, Beilage III.

(260) The Commission notes that Austria has demonstrated that it has sufficient potential to expect each tender to be competitive (see recital (90)).[69]

b) Wind

(261) As set out and assessed above, the notified scheme organises a separate tender for wind installations, which the Commission finds in line with point 126 of the EEAG.

(262) The Commission has assessed whether the auction conditions for wind installations would ensure a competitive bidding process in line with point 19(43) of the EEAG, which is based on clear, transparent and non-discriminatory criteria.

(263) The Commission notes that the ambitious target of minimum 400 MW of volume tendered per year may be excessively high to ensure a competitive bidding procedure, in view of the currently limited volume of wind pipeline (see recital (98), Table 6) and territorial expansion constraints described by Austria. Indeed, the volume tendered should not exceed the capacity of the bids (i.e. the volume is a binding constraint), which avoids undersubscription since not all tender participants will be awarded aid. Austria submitted notably that current restrictions in the possibility to designate new land for wind installations constitutes the biggest obstacle to a substantial increase of the development of wind installations.

(264) In this respect, the Commission notes that Article 7(3a) EAG clearly requires the Austrian authorities to reach the objective of "ensuring effective competitive bidding". With regard to this objective, the remainder of that Article provides for several measures to ensure that the budget or volume related to the bidding process is a binding constraint leading to a situation where not all bidders can receive aid (recital 19(43) EEAG). The measures provide for alleviating possible constraints on the supply side (see section 2.6.3), for adjusting volume to reflect the likely available supply at a given point in time and for reallocating volume between years and technologies as a function of expected supply (see section 2.6.2).

(265) Furthermore, the Commission notes that competitive bidding is a new instrument in Austria for awarding support to renewables and therefore welcomes that Austria intends to carry out an Interim Evaluation of the effective competition in the tenders, which will further inform possible modifications of tendered volumes should Austria experience occurrences of undersubscription in the first years (see Section 2.6.2).

[69] Austria submitted that in a recent study (H. Fechner 2020), the PV potentials for different types of land were commissioned by Oesterder Energie in view of the 11 TWh-extension target by 2030. The results of this study show a saturable potential of 4 TWh in the building sector, 1 TWh in transport (including car parks over roofing and noise barriers) and 0,3 TWh in the landfill area by 2030. It is also stated that, in order to produce 11 TWh of PV electricity generation, the installation of solar PV installations with an annual production of 5,7 TWh will be necessary.

(266) The level of subsidy paid to the beneficiaries of the aid is established via a bidding process whereby successful participants will receive the level of support (premium on top of the electricity market price) for which they bid (pay-as-bid), except for wind projects of maximum 20 MW and for energy and citizen energy communities, for which a pay-as-clear rule applies. The Commission considers that this configuration is justified in view of the fact that smaller installations and energy and citizen communities may not have the same level of market knowledge as larger and more experienced bidders. A pay-as-clear award could help to reveal the costs of smaller players participating in the auction. The Commission notes that Austria will assess the impact of this auction design as part of the Second Interim Evaluation Report in 2025 (see recital (177)(b)).

(267) Austria explained that participants in the wind auctions will submit bids based on the reference installation costs, and they will have to indicate the relevant rotor area. Once their bids are ranked, selected operators values are adjusted (upwards or downwards) on the basis of their rotor specific production yield relative to the standard installation (based on a formula published beforehand). Austria submitted that it will add a small surcharge to installations belonging to better quality locations than the standard installation, in order not to completely remove the incentive to invest in the most cost efficient locations. Yet, this methodology advantages operators of sites with lower wind quality, which thus have an improved probability to receive a tender award despite their higher actual cost. Austria submitted that the criteria to calculate the reference installation and the possible correction factors will be published and therefore known to potential bidders.

(268) In view of the novelty of this mechanism, and considering the uncertainty about its application, this specific rule will be subject to the Interim Evaluation (see recital (177)(c)).

(269) Austria is committed to ensure effective competitive bidding. It has provided for measures to this effect, both on the supply side and on the demand side and will evaluate the experience gained by 2025. All bidders are subject to the same methodology, as the conditions for the consideration of bids are requirements for the public notice announcing the bid. Taken together, under these premises, the Commission considers that it can conclude that a priori the wind auctions will constitute a competitive bidding process based on clear, transparent and non-discriminatory criteria.

c) New and repowered biomass installations between 500 kW and 5MW and above 5MW for the first 5MW

(270) The aid scheme organises a separate tender for new and repowered biomass installations with capacity above 500kW and below 5MW, and for the first 5MW of new and repowered installations above 5MW.

(271) Austria has submitted that putting biomass installations in competition with other technologies would lead to suboptimal results. In particular, if faced with wind installations and solar installations, biomass installations would not be able to submit winning bids given the rather high wind and solar potential and their LCOE being (significantly) lower than biomass LCOE (see section 2.5.3).

(272) Biomass installations can, however, make important contributions to grid stability through their ability to offer non-intermittent production and their ability to provide flexible production (and thus reduce grid balancing costs) (see section 2.5.1).

(273) Given the expected grid stability issues which can be caused by the complementary development of wind and PV, Austria has an interest in maintaining its biomass production and to still expand it. The possibility for existing installations to take part in the auctions is closely linked to that objective.

(274) The Commission therefore agrees that, in Austria, auctions in which biomass installations would compete with wind and solar installations are unlikely to maintain the necessary deployment of biomass installations.

(275) The Commission therefore concludes that Austria has sufficiently demonstrated that the limitation of the auction to biomass installations was justified as per point 126 of the EEAG.

(276) The Commission has also verified that the auction conditions for biomass installations ensure a competitive bidding process.

(277) Considering the current pipeline indicated in recital (105), and the volume of auctions to be tendered per year (see recital (100)) the Commission considers that it is likely that the auctions will not be undersubscribed. In any case, considering the novelty of the introduction of auctions for this technology, the competitiveness of those auctions will be the subject of the Interim Evaluation Report.

(278) The level of subsidy paid to the beneficiaries of the aid is established generally via the pay-as-bid system. In addition, a different price cap is established for newly built and for repowered installations (cap must be at least 1% less for the latter), to provide a signal of higher support for new, more cost-efficient, installations. Austria also submitted that repowered installations are more likely to bid lower in auctions as their LCOE is lower than new installations[70] (see section 2.7.3). The Commission therefore concludes that the slightly lower maximum price for repowered biomass installations is justified and non discriminatory.

(279) Finally, to avoid that awarded projects are not implemented within a reasonable time period, project owners have to take commitments to realise or modernise the biomass project within a specific period (see recital (103)).

d) Mixed tenders

(280) Austria will also carry out mixed tenders, as described in section 2.6.7.

(281) The main elements of the mixed tenders are similar to the dedicated tenders. In particular, they award a fixed premium and foresee no remuneration at

[70] See Expert Report, section 5.4.2.

negative prices (up to six hours). All those elements are in line with point 124 of the EEAG.

(282) Those tenders have a technology neutral element, as eligible hydropower and wind installations can participate in them. However, installations with disproportionately low production cost are excluded to ensure a competitive outcome of the bidding process.

(283) In this regard, the Commission first notes that hydropower and wind RES installations already are eligible for support under tenders or through administratively set premiums and tariffs. Second, the Commission also finds that the objective of the mixed tenders is to verify the possible competitive dynamics between two technologies. The Commission therefore considers that the limitation to specific technologies is coherent with the need to ensure diversification of RES generation while verifying the actual dynamics of the market.

(284) The Commission therefore finds the delimitation of the mixed tenders to be in line with point 126 of the EEAG.

(285) The Commission has also verified that the auction conditions of the mixed tenders would ensure a competitive bidding process in line with point 19(43) of the EEAG, which is based on clear, transparent and non-discriminatory criteria.

(286) As regards the correction factor for wind, the same analysis as indicated in recital (267) and following above applies. Also in this case, the correction factor would encourage the installations which can be located in less favourable (less windy) location to participate in the auction and bid against hydropower installations, thus leading to a more populated, and hence competitive, auction.

(287) The future mixed tenders will likely be competitive, as the limited amount of volume available (20MW/year) will ensure that hydropower installations which have not obtained an administrative premium and wind installations which have not participated in the technology specific tenders (for instance because they will not have received a permit in time for the application) would have an incentive to participate.

(288) As mentioned in section 2.6.2, Austria has envisaged a number of measures aimed at verifying and adapting the tenders in order to ensure their competitiveness. Furthermore, due to the novel features of this type of bidding process, the mixed tenders will be reviewed in the Interim Evaluation (see recital (172)(h)).

Cumulation

(289) The market premium cannot be cumulated with investment grants under the EAG. This applies to all installations, regardless whether they were subject to tenders or whether they obtained the premium on application. Austria also confirmed that any investment aid or any other support will be deducted from the support under the notified scheme.

3.3.5.3.3 Exemption from competitive bidding

Compliance with point 126 EEAG

(290) As mentioned above, the following are not subject to a competitive bidding procedure:

(a) Hydropower installations

(b) Wind power installations in 2022 for up to 200 MW

(c) Biomass installations below 500 kW / biogas installations below 250 kW

(d) Successor premium for existing biomass and biogas installations

a) Hydropower

(291) Austria has submitted that tenders for hydropower installations above 1 MW would be uncompetitive. As set out in recital (135)-(136) above, the remaining potential for hydropower installations in Austria is limited. This is confirmed by the observed project realisation in the past years, which was limited to 5-6 projects per year on average, combining new and modernised installations.

(292) Austria has demonstrated that only a limited number of projects can be expected until 2030 due to the lack of appropriate sites for construction of new large hydro power plants. As explained in recital (136) only a maximum of 54 hydro power projects are foreseen for the whole duration of the notified scheme, including new and modernised installations. The limited possibilities for deployment of new hydropower plants (see recital (132)) are noted.

(293) A tender putting hydropower installations with installed capacity above 1 MW in competition with biomass installations with an installed capacity of above 500 kW would lead to suboptimal results. As the cost curves almost do not overlap (hydropower installations have production costs between 7 and 11,6 ct/kWh, while biomass is in the range of 10,3-22,2 ct/kWh – see recital (68)), biomass installations would not exert any competitive pressure on hydropower projects, while hydropower projects would probably all outbid biomass projects. The vast majority, if not all hydropower projects would be selected, even if they submit bids higher than real costs given the magnitude of the cost advantage compared to biomass installations.

(294) The Commission notes that Austria will carry out a mixed tender once a year, for a limited volume (20 MW), for wind and hydropower. The Commission welcomes that Austria introduced mixed tenders including hydro power, which could potentially lead to cost savings. Austria has submitted that the project pipeline for hydro installations until 2030 is essentially known already. As the dispersion in LCOE for hydro installations is rather high, not all hydro projects would have an incentive to participate such a mixed tender. To the extent that the administrative process does not exhaust the hydro project pipeline in a given year, such a mixed tender could in principle have the effect of exerting competitive pressure on some hydro installations for support. The competitive pressure could increase if wind projects would enter

the mixed bidding process as well. As Austria is introducing competitive tendering for the first time, the interaction between the administrative award process and the mixed tender needs to be seen in practice. Therefore, the Commission positively notes that this will be evaluated already in the Second Interim Evaluation Report in 2025, allowing Austria to adjust the design where necessary to ensure competitive outcomes.

(295) Finally, Austria explained that it has a particular interest to support the remaining project potential in this renewable technology, as it is a useful complement to other more highly intermittent RES sources like wind and PV (see recital (132)).

(296) The Commission therefore considers that the exemption from tenders for installations producing electricity from hydropower above 1 MW is in line with paragraph 126 of the EEAG, while welcoming the introduction of mixed tenders including hydro power. For those hydro installations with a capacity below 1 MW, aid may be granted without a tender in any case, in line with point 127 of the EEAG.

b) Wind power in 2022

(297) Austria will grant support to a limited amount of wind power installations through an administrative premium on application (see recital (127)). The total capacity to be supported through an administrative premium is limited in time to 2022 and to a maximum 200 MW. The Commission accepts Austria's argument that it needs time to set up the auction process for wind and, in view of their potential to reduce costs, welcomes that auctions could in principle already be held in 2022.

c) Biomass installations up to 500 kW / Biogas installations up to 250 kW

(298) The scheme establishes that an administrative premium may be granted to these two categories based on an application.

(299) The Commission notes that the capacity of these installations is below the 1 MW threshold set out in point 127 of the EEAG. Hence, aid to those installations can be granted without a competitive bidding process, in line with point 127 of the EEAG.

Compliance with point 131 EEAG

(300) The market premium is intended to compensate, in whole or in part, the difference between the production costs of electricity produced from renewable sources and the average market price of electricity for a given period (Article 9(2) EAG). The total cost of an installation is therefore to be covered by the marketing revenue obtained and the market premiums based thereon.

(301) The production costs were calculated in accordance with the LCOE methodology in the Expert Report. Austria has provided production costs for reference installations (see section 2.7). Austria will introduce reference values for different types of fuels in order to take into account the different LCOEs for individual technologies and to avoid overcompensation.

(302) Austria has also provided historical data about the market price in Austria and expected projections of electricity prices until 2030. The cost of electricity generation from RES, according to the LCOE calculations provided by Austria based on the Expert Report (see section 2.7), is higher than the market price for electricity observed in recent years (approx. 50 EUR/MWh) and is expected to remain higher throughout the duration of the notified scheme.

(303) In the case of the administrative premium and successor premium, the aid corresponds to a top up calculated as the difference between the AzW and the RMP (for biomass and biogas) or RMV (for hydropower and wind). The AzW is based on the production costs relating to the technology concerned (investment costs, operating costs and marketing costs given that in that scenario, the electricity must be directly sold on the market). While for steerable energies the average market price (RMP) is used, for more intermittent energies the reference market value (RMV) is calculated by reference to the market price that could be obtained at the market in the hours where the electricity was produced. This ensures that the producer of renewable electricity does not obtain more than the difference between the reference value and the market price that the producer effectively obtained on the market.

(304) Austria has thus demonstrated that the aid will not exceed the difference between the total LCOE from the particular technology in question and the market price of the electricity, in line with 131(a) of the EEAG.

(305) Austria has detailed the return on capital used to determine the production costs for each technology. It corresponds to the WACC, i.e. the weighted average costs of capital. It takes into account the amount of equity, the return on equity over the useful life, the cost of borrowing and the proportion of the debt contributed. A nominal WACC before tax of 3.8% was taken into account for the calculation of the production costs for all the supported technologies, which can be considered a normal return on capital within the meaning of point 131(b) of the EEAG[71]. The Commission also notes that the return of a repowered installation can be very similar to a new installation[72].

(306) Cumulation of aid under the present scheme with investment grants under the EAG is not possible. Austria also confirmed that any investment aid or any other support will be deducted from the support under the notified scheme. For the case of hydropower installations with transverse structure, the Commission notes that any additional funding obtained for fish ladders was deducted when calculating the LCOE, which is line with point 131(b) of the EEAG.

(307) The Commission notes that based on Article 46(3) EAG, the AzW will be determined separately for each calendar year for each technology, with adjustments permitted during the year. This ensures that production costs are

[71] See, for instance, SA.57779, rec.130 and SA.55453, rec.38.

[72] See SA.56831, rec.91.

updated annually. The Commission thus considers that point 131(c) is being complied with.

(308) As regards depreciation, the Commission notes that the aid will be granted for maximum 20 years, until the plant has been fully depreciated, as required by point 131(d) of the EEAG. Austria has provided LCOE calculations assuming that the aid is granted for 20 years (see tables in section 2.7).

(309) As for the biomass and biogas installations, Austria has demonstrated that the operating costs of the existing installations are still higher than the price of electricity. The cost analysis will be updated every year. Therefore the Commission considers that the granting of the successor premium to existing biomass and biogas installations is respecting point 132 of the EEAG.

(310) Austria has demonstrated that the successor premium will be paid only to installations which produce energy from renewable sources, as the only eligible installations will have had to submit information on the sources of energy used pursuant to Article 8(2) of the Ökostrom Gesetz in order to qualify for the feed-in-tariff. Furthermore, the successor premium compensates the difference in operating costs borne by the beneficiary and the market price (see calculation of market premium in section 2.4.1). Finally, there is a monitoring mechanism which allows a yearly check that the costs borne by the installations are higher than the market price (see the explanation of the calculation of the value to be invested in recital (38)). Therefore the Commission concludes that the granting of the successor premia to existing biomass and biogas installations is respecting point 133 of the EEAG.

3.3.5.3.4 No aid beyond depreciation period

(311) The scheme also complies with point 129 of the EEAG because the market premium will not be paid beyond the point at which the benefitting plants have been fully depreciated according to normal accounting rules. As mentioned in recital (24), beneficiaries are granted support for a period of 20 years, which is below the normal depreciation period of the respective plants.

(312) The existing biomass and biogas installations which will be able to obtain the successor premium will be able to obtain the payment until the 30th year from the operation of the plant, in view of the fact that for those specific technologies the operating costs are still high after normal depreciation. This is in line with point 132 EEAG.

3.3.5.3.5 Conclusion on proportionality

(313) Based on the above, and in view of the fact that the scheme will be in force for less than 10 years, the Commission considers that the aid granted to RES installations under the notified measure is proportionate.

3.3.5.4 Distortion of competition and balancing test

(314) 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 aid is intended to support and the negative effects that the aid may have on the internal market[73].

3.3.5.4.1 Positive effects

(315) On the positive side of the balance, the Commission notes that the scheme can be expected to have a range of positive effects because the eligible activities contribute directly to renewable energy production and to environmental protection.

(316) On 30 June 2021, the European Climate law[74] was adopted, which sets the objective of an at least 55% reduction in net GHG emissions by 2030 (compared to 1990 levels) and climate neutrality into EU law.

(317) The renewable energy generation technologies eligible for support under the EAG meet the EEAG definition of 'renewable energy sources' (see points 19(5) and 19(11) of the EEAG).

(318) The Commission therefore concludes that the notified aid scheme for the generation of renewable electricity will not only contribute to the development of that economic activity, but moreover it will do so in a manner that creates incentives for emissions reductions and therefore it has also positive environmental effects.

3.3.5.4.2 Negative effects

(319) On the negative side of the balance, support to the production of renewable electricity can distort competition and trade in the electricity market, as well as between undertakings receiving the support and their competitors in the same sector.

(320) Point 97 of the EEAG explains that, when assessing the negative effects of an aid measure, the Commission assesses the impact on competition between undertakings in the product markets affected and on the location of economic activity. Point 98 adds that, where aid is proportionate, its negative impact is in principle softened. Point 99 explains that the Commission will place great emphasis on the selection process, which should not exclude companies and projects that may compete to address the environmental or energy objective. The selection process should lead to the selection of beneficiaries that can address the objectives using the least amount of aid or in the most cost effective way.

(321) In line with point 97 of the EEAG, the aid scheme is well targeted to the market failure it aims to address (see section 3.3.5.1), so that the risk that the aid will unduly distort competition is limited.

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73 Judgment of 22 September 2020, *Austria v Commission*, C-594/18 P, EU:C:2020:742, paragraph 101.

74 Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law').

(322) In line with point 98 of the EEAG, since the aid is proportionate (see section 3.3.5.3), the negative impact of the aid on competition and trade is softened.

(323) As explained in section 2.5, and in line with point 99 of the EEAG, an important part of the aid is attributed through tenders, which are non-discriminatory, transparent and open. As well as supporting a reduction in the costs of achieving the targeted environmental protection objectives, this approach is appropriate to help to ensure possible distortions to competition are minimised. The Commission also considers that the notified scheme is in line with point 116 EEAG (see recitals (224) and (225)).

3.3.5.4.3 Conclusions on distortion of competition and balancing test

(324) In light of the above, the Commission considers that the aid to generation of electricity from RES as described in section 2 is in line with the relevant provisions of the EEAG. The Commission considers that the negative effects on competition and trade are limited by the use of a competitive bidding process, where possible, and are outweighed by the positive effects of the measure in terms of facilitating the development of an economic activity, and having regard also to the environmental benefit that the promotion of RES brings in comparison with more environmentally-harming technologies in the electricity generation market.

(325) Therefore, the aid at issue facilitates the development of certain economic activities, while not adversely affecting trading conditions to an extent contrary to the common interest, as required by Article 107(3)(c) TFEU.

3.3.6 Transparency of the aid and firms in difficulty or subject to an outstanding recovery order

(326) According to point 104 of the EEAG, Member States must ensure the transparency of aid granted by publishing certain information on a comprehensive website. Austria informed that legal basis has been published and it committed to comply with the transparency requirements in EEAG points 104-106, and indicated that this information will be published and will be available on a website.

(327) Austria confirmed that no aid can be granted to undertakings in difficulty, in line with point 16 of the EEAG. This will be verified by the submission of self-declarations by the potential beneficiaries and the matching with insolvency databases.

(328) Austria has committed that no aid can be granted to undertakings subject to an outstanding recovery order following a previous Commission decision declaring aid illegal and incompatible with the internal market. The Commission therefore considers that the scheme is in line with point 17 of the EEAG.

3.3.7 Evaluation

(329) The EEAG (point 28 and Chapter 4) state that the Commission may require that certain aid schemes are subject to an ex post evaluation where the

potential distortion of competition is particularly high, that is to say when the measure may risk significantly restricting or distorting competition if their implementation is not reviewed in due time. Given its objectives, evaluation only applies for aid schemes with large aid budgets, containing novel characteristics or when significant market, technology or regulatory changes are foreseen.

(330) The notified scheme fulfils the criteria of being a scheme with a large aid budget and containing novel characteristics; therefore, it will be subject to an evaluation.

(331) The scope and modalities of the evaluation have been defined, taking into account the Commission Staff Working Document on Common methodology for State aid evaluation, in an evaluation plan that Austria notified together with the aid scheme and whose main elements are described in Section 2.12 above.

(332) The Commission considers that the notified evaluation plan contains all the necessary elements: the objectives of the aid scheme to be evaluated, the evaluation questions, the result indicators, the envisaged methodology to conduct the evaluation, the data collection requirements, the proposed timing of the evaluation including the date of submission of the final evaluation report, the description of the independent body conducting the evaluation and the criteria that will be used for its selection and the modalities for ensuring the publicity of the evaluation (recitals (152), (177), (178)).

(333) The Commission notes that the scope of the evaluation is defined in an appropriate way. It comprises a list of evaluation questions with matched result indicators. Moreover, the evaluation plan sets out and explains the main methods that will be used in order to identify the impacts of the scheme.

(334) The Commission acknowledges the commitments made by the Austrian authorities, pursuant to the Commission requirements, that the evaluation will be conducted according to the notified evaluation plan by an independent evaluation body. The procedures envisaged for selecting such evaluation body are appropriate in terms of independence and skills. Moreover, the proposed modalities for the publication of the evaluation results are adequate to ensure transparency.

(335) The Commission notes the commitment made by Austria to submit to the Commission a first interim report 9 to 12 months after the adoption of this decision, a second interim report by the end of June 2025, a final evaluation report by the end of June 2030 and an additional evaluation report in 2034. The Commission notes that the evaluation method might be further fine-tuned in common accord between the Austrian authorities and the Commission, and it will be described in the first interim report.

(336) The Commission notes the commitment made by Austria to communicate to the European Commission any difficulty that could significantly affect the agreed evaluation in order to work out possible solutions.

(337) The Commission notes that the scheme should be suspended if the final evaluation report were not submitted in good time and sufficient quality.

3.3.8 Overall conclusion with regard to the compatibility of the support

(338) The Commission concludes that the aid granted under the above mentioned scheme 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 the EEAG.

4. AUTHENTIC LANGUAGE

(339) As mentioned in recital (5) above, the Austrian authorities have accepted to have the decision adopted and notified in English. The authentic language will therefore be English.

5. CONCLUSION

The Commission has accordingly decided 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.

Yours faithfully,

For the Commission

Margrethe VESTAGER
Executive Vice-President