

EUROPEAN COMMISSION

Brussels, 22.8.2016 C(2016)5482 final

In the published version of this decision, some information has been omitted, pursuant to articles 30 and 31 of Council Regulation (EU) 2015/1589 of 13 July 2015 laying down detailed rules for the application of Article 108 of the Treaty on the Functioning of the European Union, concerning non-disclosure of information covered by professional secrecy. The omissions are shown thus [...]

PUBLIC VERSION

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Subject: State Aid SA.43451 (2015/N) – Czech Republic Operating support for small scale biogas installations with capacity of up to 500 kW

Sir, /Madam,

1. **PROCEDURE**

(1) By electronic notification of 30 October 2015, the Czech Republic notified, pursuant to Article 108(3) of the Treaty on the Functioning of the European Union (TFEU), the above-mentioned measure. The Commission requested additional information on 23 November 2015 to which the Czech Republic replied on 21 January 2015; the Commission requested a second time additional information on 4 April 2016, to which the Czech replublic replied by two communications dated 3 May 2016 and 27 June 2016.

Lubomír ZAORÁLEK ministr zahraničních věcí Ministerstvo zahraničních věcí České republiky Loretánské náměstí 5 118 00 Praha 1 Česká Republika (2) On 20 June 2016 the Czech authorities provided a language waiver and agreed that the decision will be adopted in English as authentic language.

2. DETAILED DESCRIPTION OF THE MEASURE

2.1. Objective and scope

- (3) The primary objective of the notified measure is environmental protection through the promotion of heat production from renewable sources.
- (4) The notified measure covers operating aid in the form of feed-in premiums to small scale installations (up to 500 kW) burning biogas, of which at least 70% is derived from from animal by-products, barnyard manure or biodegradable waste.
- (5) According to the Czech authorities, the notified measure will contribute to achieving the mandatory renewable national target established in Directive $2009/28/\text{EC}^1$ on the promotion of the use of energy from renewable sources.
- (6) Moreover, the notified scheme will also contribute to achieving the targets on restricting landfilling of biodegradable waste as set out by Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste² (the Landfill of Waste Directive).
- (7) The Czech authorities explained that the high investment costs involved in the construction of biogas plants coupled with low electricity and heat prices hinder the deployment of biogas installations by making the construction of such plants economically unviable. Furthermore the low fees for landfilling of waste hamper the development of energy recovery from biodegradable waste, making it difficult for the Czech Republic to achieve the set targets under the Landfill of Waste Directive. Thus there are clear indications of the existance of a market failure, which could impede the Czech Republic's achieving of the mandatory environmental targets, established by EU legislation.
- (8) The Czech Republic sees the operating aid under the notified measure as the only possible way to enable the development of biogas installations processing biodegradable waste. The Czech authorities explained that they had considered other measures to support the deployment of biogas installations such as tax relieves and soft loans. The analysis carried out showed that these forms of aid would lead to suboptimal results and that direct aid in the form of feed-in premiums is the most effective option ensuring the achievement of the renewables and landfilling targets.

2.2. Legal basis

(9) The legal basis for the notified measure is the Act No. 165/2012 Coll. on Promoted Energy Sources as amended, complemented by a number of

¹ OJ L 140, 5.6.2009, p. 16–62

² OJ L 182, 16.7.1999, p. 1–19

secondary law provisions³ and the annual price decisions, issued by the Czech Energy Regulatory Office (ERO).

2.3. Duration

(10) The duration of the notified measure is from 1 January 2016 until 31 December 2020.

2.4. Granting authority

- (11) The granting authority is the Czech Ministry of Industry and Trade.
- (12) The administration of the support scheme is entrusted to the Czech Heat and Gas Market Operator OTE a.s. that actually grants the payments.
- (13) OTE is a State owned joint-stock company performing obligations and duties of the market operator, as stipulated by Act No. 458/2000 Coll., the Energy Act. OTE acts as a clearing centre which operates the entire system of state support under the notified measure. OTE administers the registration data system for the purpose of the notified scheme, including, for instance, information about identification of beneficiaries and forms of support. The Czech authorities have explained that OTE does not enter into contractual relationships with energy producers and that this means that claims for support originate directly from Act No. 165/2012.
- (14) The level of the support is set annually by ERO by means of the so-called price decisions.

2.5. Beneficiaries

- (15) Beneficiaries of the notified measure are operators of heat production installations with installed capacity of up to 500 kW fulfilling the following requirements:
 - (a) burning biogas, of which at least 70% is derived from animal by-products, barnyard manure and or biodegradable waste;
 - (b) commissioned in the period 1 January 2016 31 December 2020; and

³ Decree No. 436/2013 Coll. on price regulation and price control procedures in the sectors of power and heat, amending Decree No. 140/2009 Coll. on price regulation in the energy sector, and price control procedures, as amended, Decree No. 194/2015 Coll. on price regulation and price control procedures in the sectors of power and heat, Decree No. 408/2015 Coll. on the electricity market rules, Decree No. 296/2015 Coll. on technical and economic parameters for determining feed-in-tariffs for generation of electricity and green bonuses for heat and establishing the life cycle of installations producing power and heat from renewable energy sources (decree on technical and economic parameters), Decree No. 8/2016 Coll. on details of granting business licenses in energy sectors, Decree No. 9/2016 Coll. on procedures for support registration with the market operator and the implementation of certain provisions of the Act on Supported Energy Sources (registration decree), Decree No. 145/2016 Coll. on reporting and recording of electricity and heat from supported sources and implementation of certain provisions of the Act on promoted energy resources (decree on reporting and recording of energy from supported sources), Decree No. 193/2014 Coll. on the methods and dates of billing and reimbursing the price for the payment of costs associated with the support of electricity and implementation of certain provisions of the Act on promoted energy resources.

- (c) located on the territory of the Czech Republic.
- (16) In order to be eligible, beneficiaries must submit to OTE two application forms as established by Act No. 165/2012. OTE performs an assessment to ensure all eligibility criteria are met before authorising the granting of aid.

2.6. Source of financing

(17) The support scheme is financed from the State budget of the Czech Republic.

2.7. Budget

(18) The estimated total budget of the scheme is CZK 8.1 billion (EUR 0.3 billion).

2.8. Form of aid

- (19) Support under the notified measure is granted in the form of fixed feed-in premiums the so-called 'green bonus for heat'.
- (20) Support is granted for the lifetime of installations, which equals the depreciation period, established by Czech law for such type of installations.
- (21) The fixed feed-in premiums are calculated for the economic lifetime of installations on the basis of the following formula:

$$\sum_{t=0}^{T_{nav}} CF_t = \sum_{t=0}^{T_{nav}} (c_{min,t} \cdot Q_t + P_t - V_{prov,t} - V_{d,t} - INV_t + DOT_t) = 0$$

where

 $V_{prov,t} = V_{prov,1} \cdot (1 + i_{prov})^{(t-1)}$

T _{nav}	is the simple payback period (15 years)
CFt	is annual cash flow (after taxes)
c _{min,t}	is reference yearly feed-in- premium
Q_t	is the annual amount of heat produced [GJ]
$\mathbf{P}_{\mathbf{t}}$	is other operating gains [CZK]
DOT _t	is the investment aid received [CZK]
V _{prov,t}	is the annual operating cost [CZK]
INVt	is the capital expenditure for plant construction [CZK]
V _{d,t}	is the annual income tax [CZK]
c _{min,1}	is the feed-in- premium in the first year of heat production [CZK /GJ]
V _{prov,1}	is the operating cost in the first year of heat production [CZK/GJ]
i _{prov}	is operating costs growth rate

- (22) The main technical and economic input parameters used in the formula for the calculation of the fixed feed-in premiums include investment costs, operating costs, fuel costs and annual utilisation rate of the installations. The level of operating costs is set as a percentage of the sum of the investment costs (~3%).
- (23) The level of investment costs, the utilisation rate and the fuel acquisition costs are established annually on the basis of market studies commissioned by ERO.

- (24) The level of the fixed feed-in premiums as established by the formula outlined in recital (21) provides for a fifteen-year simple payback period on the investment, calculated on the basis of the net cashflows over the lifetime of biogas projects. This allows beneficiaries to recover the nominal value of the total production costs, which include the initial investment, within a period of 15 years. That methodology does not guarantee the beneficiaries a certain rate of return. The rate of return that could be achieved is the one resulting from the fifteen-year simple payback period. On the basis of the sample calculations provided by the Czech authorities the resulting rate of return is approximately 3.04% after tax.
- (25) The fixed feed-in premiums are not subject to indexation. Once granted they are fixed for the duration of the aid.
- (26) Without the support provided the resulting net cashflows for the lifetime of biogas projects would be negative leading to a negative net present value, which will make the investment economically unviable.
- (27) The calculations⁴ provided by the Czech authorities also show that the levelised cost of energy, including the rate of return, resulting from the 15 year simple payback period is higher than the level of the fixed feed-in premiums.

2.9. Cumulation

2.9.1. Investment aid

- (28) Aid under the notified measure can be cumulated with investment aid. 5
- (29) The formula used for the setting of the level of the fixed feed-in premiums incorporates a parameter for investment aid see formula outlined in recital (21).
- (30) The Czech authorities have explained that when calculating the level of the feed-in premiums for the purposes of the price decisions the ERO sets the value of the input parameter for investment subsidies to zero. The reasoning behind this approach is that ERO lacks the complete information on the levels of investment aid granted to individual beneficiaries at the time of issuing of price decisions.
- (31) Cumulation of investment aid with operating aid under the notified scheme is tackled by applying a different formula for the calculation of the amount (in CZK/GJ) by which the applicable fixed feed-in premiums should be reduced in order to take into account any investment aid granted.
- (32) The formula for calculating the reduction amount reads as follows:

$$RF = (IS \times AF)/YEP$$

where:

⁴ See sample calculation in Annex 1.

⁵ Any investment aid granted to the beneficiaries of the notified aid measure is outside the scope of the present decision.

$$AF = \frac{IRR}{1 - \frac{1}{(1 + IRR)^{SP}}}$$

YEP = Pinst x UF

- RF is the reduction amount (in CZK/GJ)
- IS is the total investment aid granted to the project (in CZK)
- AF is the annuity factor for the project

SP is period of granting operating aid / lifetime period of the plant according to ordinance No. 296/2015 Coll. – Subsidy Period.

IRR is the rate of return of the project (in %)

YEP is the yearly expected energy production (GJ)

Pinst is installed capacity of the plant (in MW)

UF is utilization of capacity per year (h) – Utilization Factor

- (33) The reduction amount will be calculated and applied by the market operator OTE the entity responsible for administering the operating aid under the notified scheme. OTE will calculate the applicable fixed feed-in premiums for biogas heat installations having received investment aid on the basis of the information provided by the latter in the respective aid application forms.
- (34) The reduction formula allows for full deduction of investment aid received by beneficiaries under the notified scheme.

2.9.2. Other operating aid

- (35) The Czech authorities have confirmed that any installations eligible for support under the notified measure will be ineligible for any other form of operational support including measures providing support for high-efficiency CHP.
- (36) The Czech authorities have also confirmed that no aid will be granted to undertakings in difficulty⁶ or to undertakings subject to an outstanding recovery order following a previous Commission decision declaring an aid illegal and incompatible with the internal market.

2.10. Reporting and Transparency

(37) The Czech authorities will ensure that detailed records regarding all measures involving the granting of aid are maintained. These records will be kept for the

⁶ As defined for theby the applicable Guidelines on State aid for rescuing and restructuring firms in difficulty as amended or replaced, OJ C 244, 1.10.2004, p.2

duration of the scheme plus an additional period of ten years, including all information relevant to demonstrating that the terms of the proposed scheme have been complied with.

(38) The Czech authorities further explained that detailed information about the projects funded will be published on a publicly available website.

3. Assessment of the measure

3.1. Presence of State aid

- (39) Article 107(1) TFEU provides that "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, shall, in so far as it affects trade between Member States, be incompatible with the common market".
- (40) The notified measure is financed from the State budget of the Czech Republic i.e. directly from State resources. The fixed feed-in premiums amount to an economic advantage to the beneficiaries of the scheme, which they would not obtain under normal market conditions. The notified measure solely benefits producers of heat from biogas plants and is thus selective in nature. Granting of aid to the Czech producers of renewable heat strengthens their position on the relevant market *vis-à-vis* other heat producers from conventional energy sources. Heat is traded on regional and national market basis. Thus the effects of the measure on trade and competition cannot be excluded.
- (41) Taking the above into consideration, the Commission concludes that the notified measure involves State aid within the meaning of Article 107(1) TFEU.

3.2. Legality

(42) The Czech authorities confirmed that the notified measure will not be implemented before the approval of the Commission. The Czech Republic has therefore complied with its obligations under Article 108(3) TFEU.

3.3. Compatibility

- (43) Considering the clear environmental objective of the scheme promoting heat generation from renewable sources, in particular from biogas the Commission has assessed the compatibility of the measure at hand according to Article 107(3)(c) TFEU and in the light of the EEAG in particular section 3.1 Common Assessment Priciples, section 3.2. General compatibility provision and section 3.3 Aid to energy from renewable sources.
- (44) The EEAG provides that the Commission will consider a State aid measure compatible with the internal market where it satisfies a set of common assessment principles detailed in Point 27(a)-(e) thereof. Compliance with each of those principles is considered below.

3.3.1. Objective of common interest

- (45) Point 27(a) of the EEAG establishes that aid measures must contribute to a welldefined objective of common interest in accordance with Section 3.2.1 of the EEAG.
- (46) The aim of the notified measure is to help the Czech Republic to achieve the renewable energy targets set by the EU as part of its 2020 strategy as well as the targets on restricting landfilling of biodegradable waste set by Landfill of Waste Directive; see recitals (5) and (6) above. In line with Points 30 and 31 of the EEAG, the Czech Republic has defined the objective of the measure and explained that the measure will contribute towards reaching the European energy policy goals.
- (47) The Commission thus considers that the notified scheme is clearly aimed at an objective of common interest in accordance with Article 107(3) of the Treaty.

3.3.2. Need for State intervention

- (48) Under Point 27(b) of the EEAG, State aid may only be deemed compatible with the internal market if the Member State has demonstrated a need for State intervention, i.e. that the State aid measure is targeted towards a situation where aid can bring about a material improvement that the market cannot deliver, assessed per Section 3.2.2. of the EEAG.
- (49) As indicated in recital (7) the Czech authorities have submitted evidence to the Commission for the existance of a market failure, which hinders the development of biogas installations and could result in the Czech Republic's failure to achieve its mandatory environmental targets under EU legislation.
- (50) The Commission is therefore satisfied that the Czech Republic has adduced sufficient evidence that in the absence of support projects supported under the scheme would not be financially viable; the Czech Republic has demonstrated that the State aid is aimed at addressing that residual market failure, as provided for by point 37 of the EEAG. As such, the Czech Republic has demonstrated that there is a need for State intervention.

3.3.3. Appropriate instrument

- (51) Point 27(c) of the EEAG stipulates that the proposed measures should be an appropriate policy instrument to address the objective of common interest in accordance with Section 3.2.3. of the EEAG. The Commission will also verify compliance with those parts of Section 3.3 of the EEAG which are relevant in determining the appropriateness.
- (52) In order to allow Member States to achieve their renewable energy targets in line with EU 2020 objectives the Commission will presume the appropriateness and limited distortive effects of aid provided that it complies with all other applicable conditions in accordance with Point 116 of the EEAG.
- (53) Per recital (74), below, the Commission is satisfied that this requirement is met in the present case and thus presumes that the measure is being realised via an appropriate instrument.

3.3.4. Incentive effect of the aid

- (54) Point 27(d) of the EEAG provides aid must have an incentive effect in accordance with Section 3.2.4 of the EEAG in order to be deemed compatible with the internal market.
- (55) In line with point 49 of the EEAG, the incentive effect occurs if the aid induces the beneficiary to change its behaviour towards reaching the objective of common interest; something which it would not do without the aid. As stated in recital (26) above, biogas projects would not be economically viable without the support under the notified scheme. Thus, in the absence of aid biogas installation would not be constructed. The aid therefore has an incentive effect, since it causes the beneficiaries to change their behaviour and invest in biogas projects.
- (56) As indicated in recital (16) above the Czech authorities have demonstrated that the beneficiaries have to fill in an application form to receive support. Thus the Commission considers that the aid scheme complies with the obligation to use an application form for obtaining aid set out in point 51 of the EEAG.
 - *3.3.5. Proportionality of the aid*
- (57) Point 27 (e) stipulates that for the aid to be proportionate it should be limited to the minimum needed to incentivise the additional investment necessary.
- (58) Per recital (63), below, the Commission is satisfied that this requirement is met in the present case as the aid results in a level of return which is deemed reasonable for the business risks involved. Moreover as explained in section 2.9.2. above the beneficiaries under the notified aid scheme are not allowed to receive any other types of operating aid in addition to the currently notified one.

3.3.6. Specific compatibility requirements

- (59) According to the EEAG provisions on energy from renewable sources other than electricity, operating aid is considered compatible with the internal market provided that the four cumulative conditions outlined in point 131 (a) to (d) are met.
- (60) According to point 131 (a) of the EEAG, aid per unit of energy should not exceed the difference between the total levelised costs of producing energy (LCOE) from the particular technology in question and the market price of the form of energy concerned. Point 131 (b) allows the LCOE to include a normal return on capital. Furthermore, point 131 (b) requires any investment aid to be deducted from the total investment amount factored in in the LCOE calculation.
- (61) In the case at hand, the condition under point 131 (a) is met provided the feedin premiums are equal to or less than the LCOE, which includes a normal rate of return.
- (62) The Czech authorities provided sample calculations for the fixed feed-in premiums applicable to biogas installations. The submitted calculations demonstrate that the fixed feed-in premiums under the notified support scheme do not exceed the production costs (LCOE) of the relevant installations, which

incorporate the rate of return resulting from the fifteen years simple payback period.

- (63) The resulting rate of return from the 15 year simple payback period is estimated to be approximately 3%, which can be deemed reasonable taking into account the business risks involved. Moreover, as explained in recitals (31) to (34) above the Czech authorities have demonstrated that investment aid is taken into account when setting the level of support under the notified scheme.
- (64) On the basis of recitals (61) to (63), it can be concluded that the requirements of point 131 (a) and (b) are complied with.
- (65) In line with the requirements of point 131 (c) of the EEAG, the imput parameters of the fixed feed-in premiums, which also form part of the input parameters of the LCOE calculations, are updated on a yearly basis by ERO, see recital (23) above. Thus it can be concluded that the requirements of point 131 (c) of the EEAG are complied with.
- (66) In line with the requirements of point 131 (d) of the EEAG aid is only granted to biogas installations which are not fully depreciated, see recital (20) above.
- (67) In light of the above, the Commission concludes that the aid under the notified scheme satisfies the conditions of point 131 of the EEAG and is, therefore, compatible with the specific compatibility conditions set out in the EEAG for energy from renewable sources other than electricity.

3.3.7. Distortion of competition and balancing test

- (68) According to point 90 of the EEAG, the Commission considers that aid for environmental purposes will by its very nature tend to favour environmentally friendly products and technologies at the expense of others, more polluting ones. Moreover, the effect of the aid will in principle not be viewed as an undue distortion of competition since it is inherently linked to its very objective.
- (69) In line with the requirements of point 118 of EEAG, the Czech authorities have confirmed that the principles of the waste hierarchy⁷ are respected.
- (70) According to point 116 of the EEAG, the Commission presumes aid to energy from renewable sources to have limited distortive effects provided all other

⁷ The waste hierarchy consists of (a) prevention, (b) preparing for re-use, (c) recycling, (d) other recovery, for instance energy recovery, and (e) disposal. See Article 4(1) of Directive 2008/98/EC of the European Parliament and of the Council 19 November 2008 on waste and repealing certain Directives (Waste Framework Directive) (OJ L 312, 22.11.2008, p. 3).

compatibility conditions are met. The Commission considers that the aid to renewable energy under assessment does not have undue distortive effects on competition and trade because the applicable conditions laid out in Section 3.3.2.2 of the EEAG are fulfilled, as described above.

(71) Consequently, the Commission concludes that the distortion of competition caused by the scheme under assessment is limited.

3.3.8. Transparency

- (72) Under Point 104 of the EEAG, Member States have the obligation to ensure the transparency of the aid granted, by publishing certain information on a comprehensive State aid website. In line with point 106 of the EEAG, Member States are requested to comply with this obligation as of 1 July 2016.
- (73) The Czech Republic committed to comply with the transparency requirements in Points 104 106 of the EEAG (see recital (38) above).

3.3.9. Conclusion with regard to the compatibility of the measure

(74) In light of the above assessment, the Commission considers that the notified scheme pursues an objective of common interest in a necessary and proportionate way without unduly affecting competition and trade, and that therefore the aid is compatible with the internal market on the basis of the EEAG.

4. AUTHENTIC LANGUAGE

(75) As mentioned under section 1 of this decision, the Czech Republic has waived its right to have the decision adopted in Czech. 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.

If any parts of this letter are covered by the obligation of professional secrecy according to the Commission communication on professional secrecy and should not be published, please inform the Commission within fifteen working days of notification of this letter. If the Commission does not receive a reasoned request by that deadline, the Czech Republic will be deemed to agree to the publication of the full text of this letter. If the Czech Republic wishes certain information to be covered by the obligation of professional secrecy, please indicate the parts and provide a justification in respect of each part for which non-disclosure is requested.

Your request should be sent electronically in accordance with Article 3(4) of Commission Regulation (EC) No 794/2004,

Yours faithfully For the Commission

Margrethe VESTAGER Member of the Commission

Annex 1

Levelised cost of energy for small biogas installations (</= 500 kW)

[...]

Source: Czech authorities