



EUROPEAN COMMISSION

Brussels, 23.07.2014  
C(2014) 5081 final

PUBLIC VERSION

This document is made available for information purposes only.

**Subject: State aid SA.38632 (2014/N) – Germany**  
**EEG 2014 – Reform of the Renewable Energy Law**

Sir,

**1. PROCEDURE**

- (1) By an electronic notification validated on 17 April 2014, registered at the Commission on the same date, the German authorities have notified a planned support scheme for the promotion of the production of electricity from renewable energy sources (“RES electricity”) and from mining gas, as well as a planned reduction from renewable surcharges (“the EEG surcharge”) for energy-intensive undertakings (“the EEG-Act 2014”). The notification was complemented on 7 May 2014 as far as the reduction from renewable surcharges for energy-intensive undertakings was concerned. On 25 June 2014 Germany communicated an amended version of the EEG-Act 2014.
- (2) On 8 May 2014, Germany notified the reduced EEG-surcharge for railways that is granted under §63 N°2 EEG-Act 2014 and §65 EEG-Act 2014. This is part of a separate procedure SA.38728 (2014/N) and will not be examined in the framework of this decision.
- (3) Further to requests from the Commission, the German authorities provided additional information on 19 May 2014, 13, 20 and 24 June 2014. Additional information and commitments were provided on 7 July 2014. Meetings have been held on 28 April 2014 and on 17 June 2014.

Seiner Exzellenz Herrn Frank-Walter STEINMEIER  
Bundesminister des Auswärtigen  
Werderscher Markt 1  
D - 10117 Berlin

- (4) On 9 July 2014, Germany has waived its right under Article 342 TFEU in conjunction with Article 3 of Regulation (EEC) No 1/1958 to have the decision adopted in German and agreed that the decision be adopted in English.
- (5) The measures were notified for legal certainty as Germany considers that they do not constitute State aid.

## **2. DETAILED DESCRIPTION OF THE MEASURES CONCERNED**

### **2.1. Objective of the EEG-Act 2014 and main characteristics of the EEG-Act 2014**

- (6) The EEG-Act 2014 aims at ensuring that the share of RES electricity in electricity supplied to German final customers rises to 40-45 per cent by 2025 and to 55-60 per cent by 2035. At the same time, it aims at achieving an affordable and secure supply of electricity for private households and industry.
- (7) The EEG-Act 2014 sets out a binding corridor for the deployment of technologies.
- Generation capacity from offshore wind energy is to reach 6.5 gigawatts of capacity by 2020 and 15 gigawatts by 2030.
  - Generation capacity from onshore wind energy is to increase by up to 2,500 megawatts per year (net, i.e. taking into account that old onshore wind may reach the end of its lifetime).
  - Generation capacity from solar energy is to increase by up to 2,500 megawatts per year (gross, i.e. not taking into account that old solar may reach the end of its lifetime).
  - Generation capacity from bioenergy is to increase it by 100 megawatts annually (gross, i.e. not taking into account that old solar may reach the end of its lifetime).
- (8) For the period 2014 to 2016, the EEG-Act 2014 continues – albeit with several changes mentioned below - to organise the support to the production of RES electricity and electricity from mine gas around feed-in tariffs and market premiums which are currently in place in Germany and the object of the formal investigation procedure in case SA.33995, Support of renewable electricity and reduced EEG surcharge for energy-intensive users<sup>1</sup>. Support under the EEG-Act 2014 will be available to installations entering into operation as of 1 August 2014. Installations that entered into operation before that date continue to obtain the support provided for under previous versions of the EEG. In order to improve integration of RES electricity into the free market for electricity, installations exceeding a certain capacity are obliged to sell their production on the free market for electricity (“direct selling”), and do no longer benefit from a purchase obligation imposed by law on operators of the distribution and

---

<sup>1</sup> OJ 2014 C 37/73.

transmission network. Hence, while under the Renewable Energy Act<sup>2</sup> in the version that entered into force on 1 January 2012 ("EEG-Act 2012") direct selling was essentially a possibility; it will become the rule under the EEG- Act 2014. In order to compensate for additional costs resulting from direct selling, these installations are entitled to a so-called market premium, the level of which is set by the EEG-Act 2014.

- (9) At the latest by 2017, Germany intends to choose the beneficiaries of support by way of tenders. Those tenders would then also determine the level of support. Already prior to 2017, the tender concept will be tested for solar energy on the ground (i.e. other than on buildings). The pilot tenders will be organised on the basis of a governmental decree to be adopted on the basis of §88 of the EEG-Act 2014. Pending the adoption of the decree, solar installations on the ground will continue to be eligible for feed-in tariffs/Market premiums. The Government will have to report on the experience gained at the latest by 30 June 2016 (§99 of the EEG-Act 2014). Based on this report, a new Act would be adopted to extent tenders to other technologies<sup>3</sup>. As details of the tenders are not yet known, the notification, and therefore the scope of the present decision in so far as State aid for RES electricity is concerned, is limited to the period 2014 to 2016.
- (10) The EEG-Act 2014 provides that the tenders expected to take place as of 2017 for all technologies and the pilot tenders referred to above in recital 9 should be opened for at least 5% of the installed new capacity for operators established in other Member States. That opening is subject to three conditions:
- A cooperation agreement within the meaning of Article 5-8 or 11 of Directive 2009/28 has been concluded with the Member State in question;
  - The support occurs under the principle of reciprocity;
  - The physical import of the electricity concerned can be proven.
- (11) The financing of the State aid for RES electricity is based on the polluter pays principle ("Verursacherprinzip", §2(4) EEG-Act 2014). The financial burden will be shared among all electricity consumers<sup>4</sup> on the basis of their electricity consumption through the EEG surcharge. In order not to endanger the international competitiveness of electricity-intensive industries, the EEG-Act 2014 foresees reductions from the EEG-surcharge for energy-intensive users.

---

<sup>2</sup> Gesetz für den Vorrang Erneuerbarer Energien (Erneuerbare-Energien-Gesetz-EEG), as amended by the law „Gesetz zur Neuregelung des Rechtsrahmens für die Förderung der Stromerzeugung aus erneuerbaren Energien“, Bundesgesetzblatt, Teil I, Nr. 42, Seite 1634, 4 August 2011.

<sup>3</sup> Gesetzentwurf der Bundesregierung, Entwurf eines Gesetzes zur grundlegenden Reform des Erneuerbare-Energien-Gesetzes und zur Änderung weiterer Bestimmungen des Energiewirtschaftsrechts, Vorblatt, B.

<sup>4</sup> Gesetzentwurf der Bundesregierung, Entwurf eines Gesetzes zur grundlegenden Reform des Erneuerbare-Energien-Gesetzes und zur Änderung weiterer Bestimmungen des Energiewirtschaftsrechts, Vorblatt, B

2.1.1. *Market premium and feed-in tariffs for electricity from renewable sources and from mining gas*

- (12) Operators of renewable power installations and of power installations fuelled by mine gas (“EEG electricity operators”) have the right to require support for the renewable electricity produced in their installations from the network operator (§19 EEG-Act 2014). They can either require:
- a) the market premium ("*subsidized direct marketing*", §32 EEG-Act 2014). In that case, they will not be entitled to obtain guarantees of origin..
  - b) a feed-in tariff if they transfer the electricity to the network operator and are allowed to obtain support in the form of feed-in tariff for small installations (§37 EEG-Act 2014)
  - c) a feed-in tariff if they transfer the electricity to the network operator and ask for a feed-in tariff in accordance with §38 EEG-Act 2014. This feed-in tariff is actually a feed-in tariff that is reduced by 20% compared to the rates defined in the law ("*fall-back feed-in tariffs*").
- (13) Operators of renewable power installations also have the possibility to sell their electricity directly on the market without requesting any support under the EEG-Act 2014. In that case, they will obtain a guarantee of origin for the electricity concerned and will be able to sell the electricity as RES electricity ("*other direct marketing*").
- (14) The feed-in tariffs for small installations are available for:
- Electricity produced in installations that have been in operation before 1 January 2016 and that have an installed capacity of maximum 500 kW.
  - Electricity produced in installations that entered in operation after 31 December 2015 and that have an installed capacity of maximum 100 kW.
- (15) At the beginning of each month, EEG electricity operators can change the way they sell their electricity (subsidized or other direct marketing, feed-in tariffs for small installations or fall-back feed-in tariffs).
- (16) The electricity eligible for support is on the one hand RES electricity: hydropower, including wave power, tidal power, salt gradient and flow energy, wind energy, solar radiation, geothermal energy, energy from biomass, including biogas, bio-methane, landfill gas and sewage treatment gas, as well as the biodegradable fraction of municipal waste and industrial waste. On the other hand, also electricity produced from mining gas is eligible for support. RES electricity and electricity from mine gas eligible for support under the EEG 2014 are hereinafter designed collectively as “EEG electricity”.
- (17) EEG electricity that has been stored before being fed into the grid is also eligible for support.

- (18) Network operators<sup>5</sup> (in most cases the Distribution System Operator<sup>6</sup>, "DSO") are obliged to pay the market premium to producers of EEG electricity established within their network area or to purchase the EEG electricity at feed-in tariffs.
- (19) The feed-in tariffs are fixed by law. They differ for the various energy sources or technologies used and vary according to the capacity of the power plant.
- (20) The methodology to determine the market premium is established in Annex 1 to the EEG 2014. The premium corresponds to the difference between the applicable reference value ("anzulegender Wert") and the market price. However, for operators of solar installations established on the ground, the level of the market premium will be determined following the bidding process referred to above in recitals 7 and 9. Operators that do not win in the bidding process will not be eligible for support. Feed-in tariffs and market premiums will not be available for operators of solar installations on the ground that enter into operation 7 days after the first tender procedure is publicly announced (§55 (3) EEG-Act 2014).
- (21) Operators of biogas installations are entitled to obtain a so-called flexibility premium under certain conditions, if they provide balancing services.

*2.1.2. TSOs are obliged to purchase the EEG electricity from DSOs*

- (22) DSOs have to immediately transfer the EEG electricity to their respective Transmission System Operators<sup>7</sup> ("TSO") as well as the entitlement to label the electricity as EEG electricity.
- (23) TSOs are under the obligation to compensate the DSOs in their network area for payments for feed-in tariffs, market premiums and flexibility premiums ("the financial burden") that DSOs have paid to producers of EEG electricity.

*2.1.3. Equalisation system between TSOs*

- (24) The EEG-Act 2014 establishes further an equalisation mechanism whereby the financial burden is spread between TSOs so that ultimately every TSO covers the costs of a quantity of electricity that corresponds to the average share of EEG electricity compared to the total electricity delivered to the final consumers in each area served by the individual TSO in the previous calendar year (§56 EEG-Act 2014).

---

<sup>5</sup> Network operators are defined in the EEG-Act as the operators of grid systems of all voltages for general electricity supply (§3(8) of the EEG-Act 2012).

<sup>6</sup> A distribution system operator is a natural or legal person responsible for operating, ensuring the maintenance of and, if necessary, developing the distribution system in a given area and, where applicable, its interconnections with other systems and for ensuring the long-term ability of the system to meet reasonable demands for the distribution of electricity (see Article 2(6) of Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, OJ L 211, 14.08.2009).

<sup>7</sup> The transmission system operator is the system balancing grid operators of high-voltage and extra-high voltage grid systems which are used for the supraregional transmission of electricity to downstream grid systems (see §2(11) of the EEG-Act 2012).

*2.1.4. Marketing of the EEG electricity on the spot market and establishment of the EEG-surcharge*

- (25) TSOs are obliged to sell the EEG electricity for which they paid feed-in tariffs on the spot market. They can do so alone or together.
- (26) If the price obtained on the spot market is not sufficient to cover the financial burden, TSOs have the right to require from electricity suppliers<sup>8</sup> to pay a share of the financial burden proportionate to the respective quantity of electricity delivered by the electricity suppliers to their final consumers. The share must be determined in such a way that each electricity supplier bears the same costs for each kilowatt-hour of electricity delivered by it to a final consumer. Monthly advance payments must be made for payment of that surcharge. The EEG-Act 2014 explicitly designates that surcharge as "EEG-Umlage" ("EEG-surcharge") (see §60 (1) EEG-Act 2014). The methodologies and elements that TSOs have to take into account when determining the EEG-surcharge are further detailed in the *Ausgleichsmechanismusverordnung* (AusglMechV) and in the *Ausgleichsmechanismus-Ausführungsverordnung* (AusglMechAV).
- (27) In particular, §3 AusglMechV states the following:

*“§ 3 EEG-Surcharge*

*(1) The transmission system operators calculate the EEG-Surcharge according to § 57 paragraph 2 of the Renewable Energy Act [i.e. the EEG-Act] in a transparent manner as:*

- 1. the difference between the projected revenues referred to in paragraph 3, point 1 and 3 for the following Calendar year and the forecast expenditure referred to in paragraph 4 for the following calendar year and*
- 2. the difference between the actual income referred to in paragraph 3 and the actual expenditure referred to in paragraph 4 at the time of calculation.*

*(2) The EEG-surcharge for the following calendar year has to be published before 15 October of each calendar year on the website of the transmission system operator in aggregated form and must be indicated in cent per kilowatt-hour delivered to consumers; § 63 paragraph 4 of the Renewable Energy Act shall apply accordingly.*

*(3) Revenues are:*

- 1. Income from the day-ahead and intraday marketing pursuant to § 2*
- 2. Income from the EEG-surcharge*
  - 2a. Income from payments according to § 55 paragraph 3 of the Renewable Energy Sources Act provided that the balancing exercise according to § 55*

---

<sup>8</sup> An electricity supplier is defined as any natural or legal person that delivers electricity to final consumers (§5(13) of the EEG 201).

*paragraph 4 of the Renewable Energy Act presents a positive balance for the transmission system operator*

*3. Income from interests referred to in paragraph 5,*

*4. Income from the settlement of balancing energy for the EEG balance group,*

*5. Income under § 55 paragraph 5 or § 59 of the Renewable Energy Act and paragraph 6 and*

*6. Revenues from payments under §17d paragraph 4 Sentence 5 of the Energy Policy Act.*

*(4) Expenditures are:*

*1. Financial support according to § 19, 50, 55 paragraph 1 and 96 to 98 of the Renewable Energy Act,*

*1b. Payments according to § 55 paragraph 2 of the Renewable Energy Act,*

*2. Repayments under paragraph 6,*

*3. Payments for interest referred to in paragraph 5,*

*4. costs necessary for the settlement of day-ahead transactions,*

*5. costs necessary for the settlement of balancing energy for the EEG balance group,*

*6. costs necessary for the preparation of day-ahead and intraday forecasts*

*(5) Differences between revenue and expenditure are subject to an interest. The interest rate for one calendar month amounts to 0.3 percentage points above the monthly average of the euro interbank offered rate set for the procurement of one-month money of the first addresses in the countries participating in the European Monetary Union (EURIBOR) for a period of one month.*

*(6) If there are entitlements as a result of discrepancies between the monthly payments according to § 57 paragraph 2 sentence 4 of the Renewable Energy Act and the final settlement pursuant to § 69 paragraph 2 of the Renewable Energy Act, they have to be compensated until 30 September of the year following the feeding-in.*

*(7) When forecasting the revenues and expenditures referred to in paragraph 1, point 1 to calculate the EEG-surcharge, transmission system operators are allowed to take into account a liquidity reserve. It may not exceed 10% of the difference referred to in paragraph 1, point first.*

(28) As a result of these implementing provisions, the TSOs jointly determine each year the EEG-surcharge for year X+1. on the basis of the forecasted financial needs for the financial burden, the forecasted revenues from the sale of the EEG electricity on the spot market and the forecasted consumption of electricity. In addition, a series of revenues and costs linked to the management of the EEG-surcharge have to be taken into account for its calculation. TSOs enjoy no discretion in that regard.

### 2.1.5. *Auto-supply*

- (29) TSOs also have the right to require the payment of the EEG-surcharge from producers of electricity using the electricity produced by installations operated by them for their own consumption (“auto-supply”: "Eigenversorgung") as well as from other end-consumers that are not supplied by an electricity supplier. The rules of the EEG-Act 2014 applicable to electricity suppliers are mutatis mutandis applicable to auto-suppliers.
- (30) Auto-supply is defined as the consumption of electricity by a natural or legal person in direct geographical relationship with the electricity producing installation when the electricity does not transit by a network and when the person is operating the installation itself. A network is defined as the totality of all technical installations that are linked to each other and that serve for the use, transmission and distributions of electricity to the public.

### 2.1.6. *Passing on to final consumers (Umlagepflichtige Verbraucher)*

- (31) The EEG-Act 2014 does not explicitly impose on electricity suppliers the obligation to pass on the EEG-surcharge to final customers. However, the EEG-Act 2014 also recognises that consumers are obliged to pay the EEG-surcharge in principle but that some of them enjoy a limitation of that obligation (see in particular §74 (5) EEG-Act 2014); The EEG-Act 2014 further establishes how the supplier has to indicate the EEG-surcharge on the electricity bill and which percentage it is allowed to be labelled as having been supported by the EEG-surcharge that the electricity supplier has paid.

### 2.1.7. *Reduced EEG-surcharge for energy-intensive undertakings (“privileged undertakings”)*

- (32) §63 in combination with §64 of the EEG-Act 2014 limit the amount of the surcharge that can be recovered from energy-intensive users ("EIU"): upon request, the BAFA<sup>9</sup> will limit the EEG-surcharge which can be passed on by the electricity suppliers to EIU<sup>10</sup>.
- (33) §63 of the EEG-Act 2014 states that that limitation aims at reducing the electricity costs for EIU, in order to maintain their international competitiveness, insofar as this is compatible with the goals of the EEG-Act and the limit imposed is still compatible with the interest of the electricity users as a whole.
- (34) §64 of the EEG-Act subjects the limitation of the EEG-surcharge to the following conditions:

---

<sup>9</sup> Bundesamt für Wirtschaft und Ausfuhrkontrolle.

<sup>10</sup> The cap is also granted to railway undertakings. This cap is not examined in the framework of this decision but subject matter of a separate procedure (SA.38728).



- a) the electricity that is subject to the EEG-surcharge and that has been used by the undertaking itself was at least 1 GWh in the last financial year at the consumption point concerned;
  - b) the undertaking concerned can be classified at the consumption point concerned in one of the sectors of Annex 4 to the EEG-Act 2014
  - c) the electro-intensity of the undertaking reaches:
    - 16% in 2015 for undertakings of list 1 of Annex 4 to the EEG-Act 2014
    - 17% as of 2016 for undertakings of list 1 of Annex 4 to the EEG-Act 2014
    - 20% for undertakings of list 2 of Annex 4 to the EEG-Act 2014
  - d) the undertaking must have a certified energy or environmental management system in place. If it consumes less than 5 GWh, it can use alternative systems of improvement of the energy-efficiency.
- (35) For an EIU, the EEG surcharge is capped as follows:
- consumption up to 1 GWh: no cap – full EEG-surcharge;
  - for the rest of the consumption: 15% of the full EEG surcharge;
- (36) However, the amount of the surcharge is limited in total for all consumption points benefitting from a reduction to the following percentages applied to the arithmetic mean of the gross added value ("GVA") of the undertaking over the last 3 closed accounting years to:
- 0.5% of the GVA for undertakings reaching at least 20% of electro-intensity
  - 4% of the GVA for undertakings having an electro-intensity below 20%
- (37) In any event, the reduction of the EEG surcharge resulting from the caps may not result in an amount that is lower than 0.1 ct/kWh for the electricity above 1 GWh. However, for the sectors of aluminium, zinc and copper, the reduction may not result in an amount that is lower than 0.05ct/kWh for the electricity above 1GWh.
- (38) The EEG Act 2014 uses GVA at factor costs, without deduction of costs for outsourced personnel.
- (39) Electro-intensity is defined as the ratio between the electricity costs and the arithmetic mean of the GVA over the 3 last closed accounting years. The relevant electricity costs include the electricity costs for own consumption that is subject to the EEG-surcharge in accordance with §61 EEG-Act 2014. The relevant electricity costs correspond to the undertaking's assumed electricity consumption multiplied by the assumed electricity price. The assumed electricity consumption corresponds to the arithmetic mean over the last 3 closed accounting years or the standardized electricity consumption measured

in accordance with a regulation adopted in accordance with §94 Point 1 of the EEG-Act 2014.

- (40) The assumed electricity price corresponds to the average retail electricity price applying to undertakings with a similar level of electricity consumption measured in accordance with a regulation adopted in accordance with under §94 Point 2 of the EEG-Act 2014..
- (41) For new undertakings, data for part of the first year of operation can be used subject to an ex-post assessment at the end of the first business year. In year 2 of operation, the data relating to the first year of operation will be used. In year 3 of operation the data relating to years 1 and 2 of operation will be used.
- (42) A transitional rule is provided for 2015 and 2016 for the determination of the GVA and the electro-intensity (§103(1) and §103(2) EEG-Act 2014). For requests introduced to obtain reductions in 2015 and 2016, EIU can rely on data of the last year or the last two years instead of the arithmetic mean of the gross value added of the last three years. A transitional rule is also provided for the determination of the electro-intensity of the undertaking. For 2015 and 2016, it can rely on real electricity costs instead of average electricity prices.
- (43) For undertakings that were entitled to a limited EEG-surcharge in 2014 on the basis of a valid BAFA decision, §103(3) of the EEG 2014 provides that for the years 2015 to 2018, the surcharge for one undertaking cannot be more than double the surcharge it paid in the previous year in accordance with a limitation order of the BAFA.
- (44) For undertakings that were entitled to a limited EEG-surcharge in 2014 on the basis of a valid BAFA decision and belonging to one of the two categories below, the surcharge will be capped at 20% of the EEG-surcharge for their consumption above 1 GWh, if their electro-intensity reaches 14% (§103(4) EEG-Act 2014):
- The undertakings do not belong to any sector listed in Annex 4 to the EEG 2014
  - The undertakings belong to List 2 of Annex 4 to the EEG-Act 2014 but do not reach 20% of electro-intensity
- (45) The decision of the BAFA is binding also upon the TSO. That means that where the BAFA has decided that an EIU only needs to pay a reduced EEG-surcharge to its electricity supplier, the EIU's electricity supplier's obligation to pay the EEG-surcharge to the TSO is in turn reduced accordingly. That will be taken into account when TSOs establish the EEG-surcharge.

*2.1.8. Reduced EEG-surcharge for autosupply (Eigenversorgung) and other final consumers.*

- (46) §61 EEG-Act 2014 provides for a certain number of exemptions from and reductions on the EEG surcharge to be paid by final consumers that are not supplied by an

electricity supplier, but produce their own electricity or purchase their electricity from an entity that does not qualify as electricity supplier.

- (47) No surcharge is due on electricity for the own consumption of the installation itself. Own consumption of the installation corresponds to the electricity that is technically consumed in secondary and auxiliary installations for the production of electricity (§61 (2) N°1 EEG-Act 2014).
- (48) No surcharge is due by auto-suppliers who are neither directly nor indirectly connected to a network, (§61 (2) N°2 EEG-Act 2014). Germany has explained that the total absence of connection of an installation with the network is rather rare. In concerns electricity production on small islands or in very remote areas.
- (49) No surcharge is due by auto-suppliers on the electricity that they consume themselves if they supply themselves entirely with electricity from renewable sources. If they sell part of their production to third parties, they are entitled to the exemption for their own consumption only if they do not ask for support under the EEG-Act 2014 for the part of the electricity produced in their installation that they do not consume themselves, but sell to third parties (§61 (2) N°3 EEG-Act 2014). The full EEC surcharge is due on the part of the electricity that is sold to third parties.
- (50) A reduced surcharge of 30% (August 2014 – December 2015), 35% (2016) and 40% (as of 2017) is due by auto-suppliers who are supplying themselves entirely with electricity from renewable sources for the part of the electricity that they consume themselves, but ask for support under the EEG-Act 2014 for the part of the electricity produced in their installation that they do not consume themselves, but sell to third parties. The reduced surcharge is levied on the auto-consumed part (§61 (1) EEG-Act 2014). The full surcharge applies to the part of electricity that is sold to third parties.
- (51) No surcharge is due for auto-consumption in small installations having a capacity of maximum 10 kW up to 10 MWh per year. Where those producers also sell electricity to third parties that share of the electricity is subject to the EEG surcharge. This exemption is valid during 20 years starting from the year after the year where the installation was put into operation (§61 (2) N°4 EEG-Act 2014)..
- (52) No surcharge is due on electricity produced in existing installations provided a) that the auto-supplier is running the installation as an auto-generator<sup>11</sup> and b) in so far as the auto-supplier is consuming the electricity himself and c) provided the electricity does not circulate through a network, except if the electricity is consumed in geographical relationship with the installation<sup>12</sup>. The last condition does not apply to installations that entered into operation already before 1 September 2011
- (53) An existing installation is:

---

<sup>11</sup> By contrast to situations where the operator is selling the electricity to a neighbouring plant.

<sup>12</sup> The power plant could be located in the adjacent building..

- a) an installation that has been in operation before 1 August 2014 and that has been used for auto-supply (§61(3) Satz 2 Nr. 1 EEG-Act 2014)
- Or b) an installation that has been authorized before 23 January 2014 in accordance with the Federal Emission protection law or has been authorized on the basis of other provisions of federal law and that has been in operation and used before 1 January 2015 for auto-supply (§61(3) Satz 2 Nr. 2 EEG-Act 2014)
- Or c) an installation that is renewed, increased or replaced at the same location provided the installed capacity after renewal, increase or replacement is not increased by more than 30% (§61(3) Satz 2 Nr. 3 EEG-Act 2014). For installations in operation before 1 September 2011, that provision applies only if the electricity concerned does not circulate through a network, except if the electricity is consumed in geographical relationship with the installation or if the entire installation concerned was belonging to the end-consumer asking for the privilege already by that date and the installation was located on the site of the final consumer concerned (§61(4) Absatz 2 EEG-Act 2014).
- (54) The exemption for existing installations will be granted until 31 December 2017. Germany commits to review the exemptions by 2017. The revised provision will be drafted in accordance with State aid rules and be notified to the Commission for prior approval.
- (55) A reduced surcharge of 30% (August 2014 – December 2015), 35% (2016) and 40% (as of 2017) is due by auto-suppliers who are supplying themselves entirely with electricity from highly efficient CHP plants having a monthly and annual capacity factor ("Jahresnutzungsgrad") of 70%. In 2017 the reductions for CHP plants will be reviewed. Although Germany has concerns that that review clause could have negative impacts on future investment decisions for high efficient CHP, Germany commits to re-notify the reductions granted to new CHP plants for the period after 2017 prior to their implementation and commits to ensure compliance with the EEAG.
- (56) Electricity consumed in auto-generation installations and in installations that are not supplied by an electricity supplier other than the installations benefiting from exemptions or reductions under §61(1) to (4) EEG 2014 are subject to the full EEG surcharge.

#### *2.1.9. Transparency, EEG-account and monitoring by the State*

- (57) EEG electricity operators, DSOs and TSOs, electricity suppliers, auto-suppliers and final consumers who are supplied with electricity from other parties than electricity suppliers are obliged to make available to each other the data required for the correct implementation of the EEG-system (§70 EEG-Act 2014 and §61 (1) last sentence EEG-Act 2014). The EEG-Act 2014 establishes exactly what type of information must be transmitted systematically to other operators and at what time of the year (§§71-74 EEG-Act 2014). DSOs, TSOs and electricity suppliers and auto-suppliers and final consumers who are supplied with electricity from other parties than electricity suppliers can require that the data be audited by an independent accountant.

- (58) The EEG-Act 2014 has established a dispute settlement body entrusted by the Federal Ministry for Economic Affairs and Energy with the task of clarifying questions and resolving disputes between electricity producers, network operators and electricity suppliers (Clearingstelle).
- (59) In addition, DSOs and TSOs are obliged, according to the EEG-Act 2014 and implementing decrees to publish a certain number of data on their websites (amount of EEG electricity purchased and at what price).
- (60) TSOs have to keep all transactions linked to the EEG separate from the rest of their activities. They are obliged to keep separate bookkeeping for all financial flows related to the EEG, and the expenses and revenues linked to the EEG must be made on a separate account (§5 AusglMechAV).
- (61) Finally, TSOs are under the obligation to publish (§77 EEG-Act 2014), on a common website designated as "EEG-account", monthly aggregated revenues resulting from the sale of EEG electricity on the spot market and from the EEG-surcharge and aggregated costs (compensation to DSOs and other costs related to the management of the system). They are also under the obligation to publish in advance the forecasted EEG-surcharge.
- (62) The law has established the obligation for EEG electricity operators to be registered in an installation register that is managed by the Bundesnetzagentur. The register serves to encourage the integration of the installations into the free electricity market, to verify the evolution of the new capacity deployment, to implement the reductions of feed-in tariffs and reference values in accordance with §§28, 29 and 31 EEG-Act 2014, to facilitate the functioning of the financial support and to facilitate reporting on the progress of renewable energy in the energy mix (§6 EEG-Act 2014).
- (63) The registration is a condition to be entitled to receive financial support under the EEG-Act 2014.
- (64) Network operators have to transmit to the BNetzA the details which they receive from the installation operators (installation location, production capacity, etc.), the network level at which installations are connected, aggregated and individual tariffs paid to installations, the final invoices sent to electricity suppliers and the data required to verify the accuracy of the figures thus provided. Electricity suppliers are obliged to communicate to the BNetzA the amount of electricity supplied to their customers and their final accounts (§76 EEG-Act 2014). Finally the BNetzA can establish standard forms for the communication of the information to be submitted to it and network operators and electricity suppliers then have to use those forms.
- (65) TSOs further have to transmit to the BNetzA detailed data relating to the establishment of the EEG-surcharge. In particular, they have to provide data related to the different revenues and expenditures entries that enter into the calculation of the EEG-surcharge, §7(2) AusglMechV.

- (66) Those benefiting from a capped EEG-surcharge must, upon request, provide the Federal Ministry for Economic Affairs and Energy and the BAFA with information about all the facts which are necessary in order to evaluate §§63-68 EEG-Act 2014.
- (67) The BNetzA has been entrusted with various monitoring tasks. It has *inter alia* to monitor that:
- a) TSOs sell on the spot market the electricity for which feed-in tariffs are paid in accordance with applicable rules (AusglMechV),
  - b) TSOs properly determine, set and publish the EEG surcharge,
  - c) TSOs properly charge electricity suppliers for the EEG-surcharge,
  - d) That feed-in tariffs and premiums are properly charged by DSOs to TSOs,
  - e) That the information that is due by the different operators to the BNetzA is indeed submitted to it
  - f) That the information that TSOs have to publish is indeed published.
  - g) That the way the EEG-electricity can be shown on the electricity bill is indicated in accordance with §78 EEG-Act 2014.
- (68) The BNetzA has audit powers towards EEG electricity operators, electricity suppliers and network operators in relationship with the monitoring tasks b) to d) and can organize controls at their premises.
- (69) As to the determination of the EEG-surcharge, the BNetzA has numerous monitoring powers and tasks related to the different cost and revenue items that TSOs are allowed to include in the calculation of the EEG-surcharge. First, the BNetzA has the power to establish, in agreement with the Ministry for Economic Affairs and Energy, the rules for the determination of items that are regarded as income or expenses in for the establishment of the EEG-surcharge and the applicable interest rate. On that basis, the BNetzA has further detailed in the AusglMechAV what types of costs could be taken into account. Second, the BNetzA is to be provided with all the relevant elements and documents pertaining to the determination of the EEG-surcharge. Third, the BNetzA can also request additional information, including account abstracts (§5(3) AusgleichAV). Finally, for certain cost items, the TSOs are under the obligation to demonstrate their accuracy and necessity before they can be taken into account for the calculation of the EEG-surcharge (see for instance §6(2) AusglMechAV).
- (70) Also the BNetzA has the power to establish, in agreement with the Ministry for Economic Affairs and Energy, requirements related to the marketing of the EEG electricity by the TSOs on the spot market and to establish the incentives for the best possible marketing of the electricity. These requirements are detailed in the AusglMechAV.

- (71) The BNetzA has enforcement powers with regard to its tasks. It can for instance issue administrative orders, which are immediately enforceable, when TSOs do not establish the EEG-surcharge in accordance with the rules (see §62(1) n°5 and §85 EEG-Act 2014).
- (72) The BNetzA can also impose fines (see §86 EEG-Act 2014).
- (73) The BNetzA itself is subject to certain reporting obligations and has to communicate certain data to the Ministry for Economy and Energy for statistical and evaluation purposes (§76 (2) and §97 EEG-Act 2014).

## **2.2. The feed-in tariffs and reference values, production costs, review mechanism**

- (74) The EEG-Act 2014 foresees that feed-in tariffs and market premiums are paid to the concerned installations for a period of 20 year after the year in which the concerned installation entered into operation. The legal basis for payments is not a contract or an administrative act, but the EEG-Act 2014 itself.
- (75) Feed-in tariffs vary according to the technology used, the size of the installation, the year in which the installation first went into operation, the location of the installation and other parameters, so as to take into account the elements that can impact on the production costs.

### *2.2.1. Feed-in tariffs and reference values*

- (76) The EEG-Act 2014 differentiates between feed-in tariffs and reference values ("anzulegender Wert").. For installations which received market premiums, the market premium is the difference between the reference value and the market price.
- (77) The feed-in tariffs correspond to the reference values minus 0.2 ct/kWh (for dispatchable renewable energies) or 0.4 ct/kWh for non-dispatchable renewable energies (wind and solar) (§35 (3)). In the framework of reference values, the 0.2ct/kWh or 0.4ct/kWh are covering marketing costs of non-dispatchable or dispatchable renewable energies. Marketing costs will arise for EEG electricity operators selling their electricity directly on the free market for electricity. EEG electricity operators that benefit from feed-in tariffs do not face these costs, as the sale is carried out by the TSOs.
- (78) The EEG-Act 2014 establishes reference values for installations that enter into operation as of 1August 2014. The reference values are differentiated per technology and often also per capacity of the installation and sometimes also per location (on-shore/offshore wind energy and location of wind energy installations on more or less windy sites or established further and deeper in the see).
- (79) Reference values are automatically decreased every year by a certain percentage that varies according to the technology concerned (§26 EEG-Act 2014). For on-shore wind, solar and biomass the reference values are not decreased in accordance with an automatic yearly percentage but with a percentage that depends on whether new

installed capacity has matched, undercut or exceeded the limits of the deployment corridor (§§27-29 EEG-Act 2014).

Hydropower (§40 EEG-Act 2014)

(80) For hydropower installations entering into operation as of 1 August 2014, the reference values are established as follows

bis 500 kW ct/kWh	bis 2 MW ct/kWh	bis 5 MW ct/kWh	bis 10 MW ct/kWh	bis 20 MW ct/kWh	bis 50 MW ct/kWh	ab 50 MW ct/kWh
12.52	8.25	6.31	5.54	5.34	4.28	3.50

(81) Automatic reduction per year, beginning as of 01.01.2016: 0.5%

Landfill gas (§41 EEG-Act 2014)

(82) For installations powered on the basis of landfill gas entering into operation in August 2014, the reference values are established as follows

bis 500 kW <sub>el</sub> in ct/kWh	bis 5 MW <sub>el</sub> in ct/kWh
8.42	5.83

(83) Automatic reduction per year, beginning as of 01.01.2016: 1.5 %

Sewage gas (§42 EEG-Act 2014)

(84) For installations powered on the basis of sewage gas entering into operation as of 1 August 2014, the reference values are established as follows

bis 500 kW <sub>el</sub> in ct/kWh	bis 5 MW <sub>el</sub> in ct/kWh
6.69	5.83

(85) Automatic reduction per year, beginning as of 01.01.2016: 1.5 %

Biomass (§44 EEG-Act 2014)

(86) For installations powered on the basis of biomass entering into operation as of 1 August 2014, the reference values are established as follows

bis 150 kW ct/kWh	bis 500 kW ct/kWh	bis 5 MW ct/kWh	bis 20 MW ct/kWh
13.66	11.78	10.55	5.85



- (87) No automatic reduction per year but variation of the tariff linked to evolution of the deployment of the technology. The target deployment is of maximum 100 MW of new capacity per year (§27 EEG-Act 2014).
- (88) As of 2015, on 1 January, 1 April, 1 July and 1 October of each year, the reference value is reviewed. It is decreased each time by 0.5% compared to the reference values that were applicable in the previous quarter. This percentage becomes 1.27 % if the installed new capacity in the previous reference period is above 100 MW.

Biogas (§45 EEG-Act 2014)

- (89) For installations powered on the basis of biogas entering into operation as of 1 August 2014, the reference values are established as follows

bis 500 kW ct/kWh	bis 20 MW ct/kWh
15.26	13.38

- (90) Installed capacity of biogas installations is taken together with the installed capacity of biomass installations to determine whether the maximum yearly target of 100 MW of new installed biomass capacity has been reached. Reference values for biogas installations will follow the same adaptations that are described in recital (88) and (86) of this decision. .

Biogas on the basis of liquid manure (§46 EEG-Act 2014) – small installations

- (91) For installations powered on the basis of liquid manure entering into operation as of 1 August 2014, the reference values are established as follows

Year of entering into operation	bis 75 kW ct/kWh
August 2014	23.73

- (92) Installed capacity of liquid manure installations is taken together with the installed capacity of biomass installations to determine whether the maximum yearly target of 100 MW of new installed biomass capacity has been reached. Reference values for biogas installations will follow the same adaptations that are described in recital (88) and (86) of this decision. .

Mine gas (§43 EEG-Act 2014)

(93) For installations powered on the basis of mine gas entering into operation as of 1 August 2014, the reference values are established as follows

	bis 1 MW <sub>el</sub> in ct/kWh	bis 5 MW <sub>el</sub> in ct/kWh	über 5 MW <sub>el</sub> in ct/kWh
August 2014	6.74	4.30	3.80

(94) Automatic reduction per year, beginning as of 01.01.2016: 1.5 %

Geothermal energy (§48 EEG-Act 2014)

(95) For installations powered on the basis of geothermal energy put into operation as of 1 August 2014, the reference value corresponds to 25.20 ct/kWh.

(96) The automatic reduction per year, beginning as of 01.01.2018 is 5%.

Wind energy onshore (§49 EEG-Act 2014):

(97) For on-shore wind power installations entering into operation as of 1 August 2014, the reference value corresponds to:

Jahr der Inbetriebnahme	Grundvergütung in ct/kWh	Anfangsvergütung in ct/kWh <sup>13</sup>
<b>August 2014</b>	<b>4.95</b>	<b>8.90</b>

(98) No automatic reduction per year but variation of the tariff linked to evolution of the deployment of the technology. The deployment corridor corresponds to 2 400 to 2 600 MW of new capacity per year.

(99) As of 2016, on 1 January, 1 April, 1 July and 1 October of each year, the reference value is reviewed. It is decreased each time by 0.4% compared to the reference values that were applicable in the previous quarter.

(100) This percentage of decrease is reviewed according to the following pattern:

- if new capacity exceeds the upper limit of the deployment corridor with up to 200 MW, the percentage of automatic decrease will be 0.5%.

- if new capacity exceeds the upper limit of the deployment corridor with more than 200 MW, the percentage of automatic decrease will be 0.6%.

---

<sup>13</sup> This compensation is paid only at the beginning of the support period. It is in principle a 5 year period. This period is increased depending on the technical parameters of the installation. The principle is that this duration will be longer for installations located at less windy places.

- if new capacity exceeds the upper limit of the deployment corridor with more than 400 MW, the percentage of automatic decrease will be 0.8%.
- if new capacity exceeds the upper limit of the deployment corridor with more than 600 MW, the percentage of automatic decrease will be 1%.
- if new capacity exceeds the upper limit of the deployment corridor with more than 800 MW, the percentage of automatic decrease will be 1.2%.
- if new capacity undercuts the lower limit of the deployment corridor with up to 200 MW, the percentage of automatic decrease will be 0.3%.
- if new capacity undercuts the lower limit of the deployment corridor with more than 200 MW, the percentage of automatic decrease will be 0.2%.
- if new capacity undercuts the lower limit of the deployment corridor with more than 400 MW, there will be no automatic decrease.
- if new capacity undercuts the lower limit of the deployment corridor with more than 600 MW, there will be an automatic increase of the reference values with 0.2%.
- if new capacity undercuts the lower limit of the deployment corridor with more than 800 MW, there will be an automatic increase of the reference values with 0.4%.

Wind energy offshore (§50 EEG-Act 2014):

(101) For offshore wind power installations entering into operation as of 1 August 2014, the reference value corresponds to:

Jahr der Inbetriebnahme	Grundvergütung in ct/kWh	Erhöhte Anfangsvergütung in ct/kWh <sup>14</sup>	Anfangsvergütung im Stauchungsmodell <sup>15</sup>
<b>August 2014</b>	<b>3.90</b>	<b>15.40</b>	<b>19.40</b>

(102) The automatic reduction per year of the "Grundvergütung", beginning as of 01.01.2018 is 0.5%. As of 01.01.2020 it will be 1% and as of 01.01.2021 it will be 0.5%. The automatic reduction per year of the "Anfangsvergütung", beginning as of 01.01.2018 will be 1%.

<sup>14</sup> This compensation is paid only at the beginning of the support period. It is in principle a 12 year period but can be longer when the installation is further away than 12 miles (prolongation with 0.5 month for each full mile beyond 12 miles) and deeper than 20 meters (prolongation with 1.7 month for each full meter beyond 20 meters).

<sup>15</sup> Market observations have shown that off-shore wind installation imply very important up-front investment costs.

Solar energy (§51 EEG-Act 2014):

(103) For installations powered on the basis of solar energy entering into operation as of 1 August 2014, the reference value corresponds to:

	Anlagen nach §51 Abs. 1.1 und §51 Abs. 2 und 3 EEG 2014 (Dachanlagen)				Anlagen nach § 51 Abs. 1.2 und Abs.1.3 EEG 2014 (Freiflächenanlagen)
	bis 10 kWp	bis 40 kWp	bis 1 MWp	bis 10 MWp	bis 10 MWp
Inbetriebnahme ab August 2014	13.15	12.80	11.49	9.23	9.23

(104) Until the first tender is publicly announced, solar installations on the ground will continue to benefit from feed-in tariffs or market premiums set in the EEG 2014. After that they will be subject to tenders and the tender will also determine the level of the premium (see §55 EEG-Act 2014). The tendering procedure will be defined in an implementing decree in accordance with §88 EEG-Act 2014. Projects selected in the tender are published.

(105) There is no automatic reduction per year but a variation of the tariff linked to evolution of the deployment of the technology. The deployment corridor corresponds to 2 400 to 2 600 MW of new capacity per year. Tariffs are decreased by 0.5% every month as of 1 September 2014. Then on 1 January, 1 April, 1 July and 1 October of each year, this percentage of decrease is reviewed according to the following pattern:

- if new capacity exceeds the upper limit of the deployment corridor with up to 900 MW, the percentage of automatic decrease will be 1%.

- if new capacity exceeds the upper limit of the deployment corridor with more than 900 MW, the percentage of automatic decrease will be 1.4%.

- if new capacity exceeds the upper limit of the deployment corridor with more than 1900 MW, the percentage of automatic decrease will be 1.8%.

- if new capacity exceeds the upper limit of the deployment corridor with more than 2900 MW, the percentage of automatic decrease will be 2.2%.

- if new capacity exceeds the upper limit of the deployment corridor with more than 3900 MW, the percentage of automatic decrease will be 2.5%.

- if new capacity exceeds the upper limit of the deployment corridor with more than 4900 MW, the percentage of automatic decrease will be 2.8%.

- if new capacity undercuts the lower limit of the deployment corridor with up to 900 MW, the percentage of automatic decrease will be 0.25%.

- if new capacity undercuts the lower limit of the deployment corridor with more than 900 MW, there will be no automatic decrease anymore.

- if new capacity undercuts the lower limit of the deployment corridor with more than 1400 MW, there will be an automatic increase of the reference values with 1.5%.

(106) Also, as of the moment that the total capacity of supported electricity from solar energy reaches 52 GW, no support will be granted anymore.

### 2.2.2. Production costs

(107) Germany has indicated that before the appropriate level of the reference value for the EEG-Act 2014 has been determined, studies and surveys take place so as to determine production costs for classes of technology and installations that are considered as representative based on the practice observed on the market. The determination of the production costs is made on the basis of data gathered from installation operators, installation producers, installing companies, completed by estimates of experts<sup>16</sup>.

(108) The production costs taken into account include investment costs, a normal rate of return and operating costs and have been determined on the basis of the Levelized Cost of Electricity (LCOE) methodology on the basis of the following formula:

$LCOE = \frac{I_0 + \sum_{t=1}^n \frac{A_t}{(1+i)^t}}{\sum_{t=1}^n \frac{M_{el,t}}{(1+i)^t}}$	<p>mit:</p> <p><math>I_0</math> Investitionsausgaben</p> <p><math>A_t</math> Auszahlungen/Kosten im Jahr <math>t</math></p> <p><math>M_{el,t}</math> produzierte Strommenge im Jahr <math>t</math></p> <p><math>i</math> Kalkulationszinssatz</p> <p><math>n</math> kalkulatorische Nutzungsdauer</p> <p><math>t</math> Jahr der Nutzungsperiode</p>
---	--

**Stromgestehungskosten (Levelized Cost of Electricity – LCOE)**

(109) Concerning the normal return on investment, the following rates of return were taken into account for the calculation of the production costs. They were determined on the basis of market observations<sup>17</sup>.

<sup>16</sup> Vorbereitung und Begleitung der Erstellung des Erfahrungsberichts 2014 gemäß § 65 EEG – Vorhaben I (Spartenübergreifende und integrierende Themen sowie Stromerzeugung aus Klär-, Deponie- und Grubengas, Sektion 4 "Arbeitspaket 5: Gemeinsame Analyseraster – Stromgestehungskosten und Wirtschaftlichkeit erneuerbarer Energien.

<sup>17</sup> Vorbereitung und Begleitung der Erstellung des Erfahrungsberichts 2014 gemäß § 65 EEG – Vorhaben I (Spartenübergreifende und integrierende Themen sowie Stromerzeugung aus Klär-, Deponie- und Grubengas, Sektion 4 "Arbeitspaket 5: Gemeinsame Analyseraster – Stromgestehungskosten und Wirtschaftlichkeit erneuerbarer Energien.

Zusammenstellung der für den EEG-Erfahrungsbericht 2014 verwendeten Kalkulationssätze nach Sparten

			Anteil	Zinssatz in %
<b>Wasserkraft</b>	Privatinvestor	Fremdkapital	65% - 75%	4% - 6%
		Eigenkapital	25% - 35%	3% - 7%
	Gewerblicher Investor	Fremdkapital	70% - 80%	4% - 7%
		Eigenkapital	20% - 30%	10% - 12%
<b>Deponie-, Klär-, Grubengas</b>	Gewerblicher/ Kommunalen Investor	Fremdkapital	70%	5%
		Eigenkapital	30%	8% - 10%
<b>Biomasse</b>	Kleinanlagen	Fremdkapital	80%	5%
		Eigenkapital	20%	6%
	Großanlagen	Fremdkapital	70%	5%
		Eigenkapital	30%	8%
<b>Geothermie</b>	Gewerblicher Investor	Fremdkapital	59%	6%
		Eigenkapital	41%	13,1%
<b>Windenergie an Land</b>	Gewerblicher Investor	Fremdkapital	70%	5,5%
		Eigenkapital	30%	12,5%
<b>Windenergie Offshore</b>	Gewerblicher Investor	Fremdkapital	65% - 70%	6%
		Eigenkapital	30% - 35%	15%
<b>Solare Strahlungsenergie bzw. Photovoltaik</b>	Privatinvestor	Fremdkapital	0-100%	1,8% - 3,5 %
		Eigenkapital	0-100%	5% - 7%
	Gewerblicher Investor	Fremdkapital	65% - 80%	2,5% - 3,5%
		Eigenkapital	20% - 35%	7% - 10%

- (110) 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 maintenance costs and other costs like insurances. Certain installations based on certain technology (biomass and biogas plants) are usually functioning in CHP mode. For those installations the revenues generated by the sale of heat are deducted from the production costs.
- (111) Germany has provided production costs calculation for the following installations starting operation as of 1 August 2014:

(112) Wind:

Stromerzeugungskosten der Windenergie an Land § 47 EEG			
<b>Eingangsparameter</b>			
Inbetriebnahmejahr	2014		
Kalkulatorische Nutzungsdauer	20 Jahre		
Nennleistung	2 - 3,5 MW		
Standortqualität in % des Referenzstandortes	80 %	100%	120%
Spezifischer Energieertrag (kWh/a/m <sup>2</sup> Rotorfläche)	844	977	1.211
<b>Finanzierungsparameter</b>			
Eigenkapitalanteil	20,0 %		
Fremdkapitalanteil	80,0 %		
Eigenkapitalzins	8,0 %		
Fremdkapitalzins	3,8 %		
Kalkulatorischer Mischzinssatz	4,6 %		
Spezifische Gesamtinvestition [€/kW]	1.544	1.362	1.319
<b>Betriebsgebundene Kosten inkl. Direktvermarktungskosten in Höhe von 0,4 ct/kWh</b>			
Jahr 1-10 [ct/kWh]	2,5	2,5	2,5
Jahr 11-20 [ct/kWh]	3,1	3,1	3,1
Inflation	2 %/a		
Mittlere Stromerzeugungskosten	8,4 ct/kWh	7,2 ct/kWh	6,5 ct/kWh
<b>Förderung ab 8/ 2014</b>			
Zeitraum Anfangswert	20,0 Jahre	11,9 Jahre	7,3 Jahre
Zeitraum Grundwert	0,0 Jahre	8,1 Jahre	12,7 Jahre
Anfangswert	8,90 ct/kWh	8,90 ct/kWh	8,90 ct/kWh
Grundwert	4,95 ct/kWh	4,95 ct/kWh	4,95 ct/kWh
Keine Vergütung, anzulegender Wert für Marktprämie	8,90 ct/kWh	7,31 ct/kWh	6,39 ct/kWh
Anzulegender Wert (annuitätisch)	8,90 ct/kWh	7,72 ct/kWh	6,82 ct/kWh

### Stromerzeugungskosten Windenergie auf See § 48 EEG

#### Eingangsparameter

Inbetriebnahmejahr	2014			
Kalkulatorische Nutzungsdauer	20 Jahre			
Nennleistung	unter 5 MW		größer/gleich 5 MW	
Wassertiefe	28 m	37 m	28 m	37 m
Küstenentfernung	31 sm	58 sm	31 sm	58 sm
Volllaststunden	4.100 h/a	4.300 h/a	4.100 h/a	4.300 h/a
Spezifischer Energieertrag (kWh/a/m <sup>2</sup> Rotorfläche)	1.642	1.722	1.644	1.724

#### Finanzierungsparameter

Eigenkapitalanteil	35%			
Fremdkapitalanteil	65%			
Eigenkapitalzins	12%			
Fremdkapitalzins	6 %			
Kalkulatorischer Mischzinssatz	8,1%			

Spezifische Gesamtinvestition [€/kW]	4.200	4.400	4.500	4.700
--------------------------------------	-------	-------	-------	-------

#### Betriebsgebundene Kosten inkl. Direktvermarktungskosten in Höhe von 0,4 ct/kWh

Jahr 1-10 (nominal) [ct/kWh]	3,7	3,8	3,7	3,8
Jahr 11-20 (nominal)[ct/kWh]	4,4	4,5	4,4	4,5
Inflation	2 %/a			
Mittlere Stromerzeugungskosten	15,08 ct/kWh	15,18 ct/kWh	15,83 ct/kWh	15,90 ct/kWh

#### Förderung ab 8/ 2014 (keine Vergütung, anzulegende Werte für Marktprämie)

Zeitraum erhöhter Anfangswert Stauchungsmodell	8 Jahre	8 Jahre	8 Jahre	8 Jahre
Zeitraum Anfangswert Basismodell	12 Jahre	12 Jahre	12 Jahre	12 Jahre
Zeitraum verlängerter Anfangswert (Berücksichtigung von Wassertiefe + Küstenentfernung)	1,9 Jahre	4,3 Jahre	1,9 Jahre	4,3 Jahre
Zeitraum Grundwert Stauchungsmodell	10,1 Jahre	7,7 Jahre	10,1 Jahre	7,7 Jahre
Zeitraum Grundwert Basismodell	6,1 Jahre	3,7 Jahre	6,1 Jahre	3,7 Jahre
Erhöhter Anfangswert	19,4 ct/kWh	19,4 ct/kWh	19,4 ct/kWh	19,4 ct/kWh
Anfangswert	15,4 ct/kWh	15,4 ct/kWh	15,4 ct/kWh	15,4 ct/kWh
Grundwert	3,9 ct/kWh	3,9 ct/kWh	3,9 ct/kWh	3,9 ct/kWh



(113) Water

<b>Stromerzeugungskosten der Wasserkraft (Neubau) § 38 EEG</b>	
<b>Eingangsparameter</b>	
Inbetriebnahmejahr	2014
Kalkulatorische Nutzungsdauer	20 Jahre
Lebensdauer der Anlage baulicher Teil (70%)	60 Jahre
Lebensdauer der Anlage maschineller Teil (30%)	30 Jahre
Nennleistung	2,0 MW
Bemessungsleistung	1,096 MW
Volllaststunden	4.800 h/a
<b>Kapitalkosten</b>	
Eigenkapitalanteil	30%
Fremdkapitalanteil	70%
Eigenkapitalzins	10%
Fremdkapitalzins	4,85%
Kalkulatorischer Mischzinssatz	6,4%
Spezifische Gesamtinvestition [€/kW]	5.000
<b>Betriebsgebundene Kosten</b>	
Instandhaltung	1,3% der Investitionssumme pro Jahr
Versicherung, Verwaltung, Pacht, etc.	0,77% der Investitionssumme pro Jahr
Personalkosten	90.000 €/a
Inflation	2 %/a
Strompreisänderungsrate	2,3 %/a
Mittlere Stromerzeugungskosten	9,56 -11,68 ct/kWh
<b>Vergütung (EEG 2014)</b>	
Keine Vergütung, anzulegender Wert zur Ermittlung der Marktprämie	10,2 ct/kWh

**Stromerzeugungskosten der Wasserkraft (Modernisierung) § 38 EEG****Eingangsparameter**

Inbetriebnahmejahr	2014
Kalkulatorische Nutzungsdauer	20 Jahre
Lebensdauer der Anlage	40 Jahre
Nennleistung	2,0 MW
Bemessungsleistung	1,1 MW
Volllaststunden	4.800 h/a

**Kapitalkosten**

Eigenkapitalanteil	30%
Fremdkapitalanteil	70%
Eigenkapitalzins	10%
Fremdkapitalzins	4,85%
Kalkulatorischer Mischzinssatz	6,4%
Spezifische Investition für Modernisierungsmaßnahmen	1.500 €/kW

**Betriebsgebundene Kosten**

Betrieb und Instandhaltung	2,1 % der Investitionssumme pro Jahr
Inflation	2 %/a
Strompreisänderungsrate	2,3 %
Mittlere Stromerzeugungskosten	10,04 – 10,69 ct/kWh

**Vergütung (EEG 2014)**

Keine Vergütung, anzulegender Wert zur Ermittlung der Marktprämie	10,2 ct/kWh
Vergütungsdegression für Neuanlagen (jeweils zum 01. Januar, beginnend 2016)	1,0% /a

(114) Solar:

Stromerzeugungskosten für Photovoltaik Freiflächen § 49 EEG	
<b>Eingangsparameter</b>	
Inbetriebnahmejahr	2014 (Oktober)
Kalkulatorische Nutzungsdauer	20 Jahre
Nennleistung	5 MW
Technologie	Aufständerung, optimale Südausrichtung und Winkelung ohne Nachführung
Spezifischer Jahresertrag	985 kWh/kW (1. Jahr), 0,4 % Ertragsminderung p.a.
<b>Kapitalkosten</b>	
Eigenkapitalanteil	25%
Fremdkapitalanteil	75%
Eigenkapitalzins	8%
Fremdkapitalzins	3,05%
Kalkulatorischer Mischzinssatz	4,29%
Spezifische Investition	960 [€/kW] (geschätzt)
Gesamtinvestition	4.800.000 €
Betriebskosten	1,5 % p.a. bezogen auf die Gesamtinvestition
Inflation	2%/a
mittlere Stromerzeugungskosten	9,39 ct/kWh (ohne Direktvermarktungskosten)
Keine Vergütung, anzulegender Wert zur Ermittlung der Marktprämie	9,23 ct/kWh Die Förderung von Photovoltaik-Freiflächenanlagen soll im Jahr 2015 auf Ausschreibungen umgestellt werden
Vergütungsdegression für Neuanlagen	Vierteljährliche Anpassung in Abhängigkeit vom Zubau

## Stromerzeugungskosten für Photovoltaik Dachanlagen § 49 EEG

### Eingangsparameter

<b>Inbetriebnahmejahr</b>	2014 (Oktober)
<b>Kalkulatorische Nutzungsdauer</b>	20 Jahre
<b>Nennleistung</b>	5 kW
<b>Technologie</b>	Dachmontage (Südausrichtung)
<b>Spezifischer Jahresertrag</b>	935 kWh/kW (1. Jahr), 0,4 % Ertragsminderung p.a.

### Kapitalkosten

<b>Eigenkapitalanteil</b>	42,5%
<b>Fremdkapitalanteil</b>	57,5%
<b>Eigenkapitalzins</b>	6,5%
<b>Fremdkapitalzins</b>	2,75%
<b>Kalkulatorischer Mischzinssatz</b>	4,34%
<b>Spezifische Investition</b>	1.600 [€/kW] (geschätzt)
<b>Gesamtinvestition</b>	8.000 €
<b>Betriebskosten</b>	1,5 % p.a. bezogen auf die Gesamtinvestition
<b>Inflation</b>	2%/a

<b>mittlere Stromerzeugungskosten</b>	16,54 ct/kWh
---------------------------------------	--------------

<b>Vergütung</b>	12,75 ct/kWh (13,15 ct./kWh anzulegender Wert abzüglich 0,4 ct./kWh für Vermarktungskosten)  Die Differenz zwischen mittleren Stromerzeugungskosten und Vergütungssatz können die Anlagenbetreiber über Eigenverbrauch kompensieren (ein Teil der produzierten Strommenge ersetzt die Strombezugskosten, die höher als die Vergütung sind).
------------------	---

<b>Vergütungsdegression für Neuanlagen</b>	Vierteljährliche Anpassung in Abhängigkeit vom Zubau
--	--

(115) Biomass:

Stromerzeugungskosten für feste Biomasse § 42 EEG	
<b>Eingangsparameter</b>	
Inbetriebnahmejahr	2014
Kalkulatorische Nutzungsdauer	20 Jahre
Nennleistung	4 MW <sub>e</sub>
Technologie	Dampfkraftprozess mit Kraft-Wärme-Kopplung
Wirkungsgrad elektrisch	20%
Wirkungsgrad thermisch	
Volllaststunden	6000h/a
Wärmeauskopplung	90%
Brennstoffart	Gemischtholz (Holzhackschnitzel)
Brennstoffkosten	85 €/t <sub>st</sub> (Durchschnittspreis aus Waldrest- und Altholz)
Inflation	2%/a
Anlegbare Wärmevergütung	3,0 ct/kWh <sub>th</sub>
<b>Kapitalkosten</b>	
Eigenkapitalanteil	20%
Fremdkapitalanteil	80%
Eigenkapitalzins	8%
Fremdkapitalzins	8%
Kalkulatorischer Mischzinssatz	8%
Spezifische Investition	5.250 [€/kW <sub>e</sub> ]
Kapitalgebundene Kosten	10,8 ct/kWh
Verbrauchsgeb. Kosten	11 ct/kWh
Betriebsgebundene Kosten	3,5ct/kWh
Sonstige Kosten	2 ct/kWh
Summe Kosten	27,4 ct/kWh
Erlöse aus dem Verkauf von Wärme	10,5 ct/kWh
mittlere Stromerzeugungskosten	16,9 ct/kWh
<b>Vergütung (EEG 2014)</b>	
Keine Vergütung, anzulegender Wert zur Ermittlung der Marktprämie	11,04 ct/kWh
Vergütungsdegression für Neuanlagen	2%/a auf die Grundvergütung
Quelle: Zwischenbericht Vorhaben Ila Seite 62-78	

(116) Biogas (Kleingülleanlage)

Stromerzeugungskosten für Biogas – 75 kW <sub>e</sub> Kleingülleanlage § 43 EEG	
<b>Eingangsparameter</b>	
Inbetriebnahmejahr	2014
Kalkulatorische Nutzungsdauer	20 Jahre
Nennleistung	75 kW <sub>e</sub> (68,5 kW Bemessungsleistung)
Technologie	Nassfermentation, Verbrennung inkl. Vor-Ort-Verstromung, Kraft-Wärme-Kopplung, Zündstrahl-BHKW
Wirkungsgrad elektrisch	35%
Wirkungsgrad thermisch	44%
Volllaststunden	8.000 h/a
Wärmeauskopplung	20% hiervon 60% Eigenwärmebedarf
Brennstoffart	Mischsubstrat (15% Maissilage, 85% Rindergülle)
Brennstoffkosten	33,00 €/t <sub>FM</sub> frei Anlage für Maissilage 1,00 €/t <sub>FM</sub> frei Anlage für Rindergülle
Inflation	2%/a
Anlegbare Wärmevergütung	3,0 ct/kWh <sub>th</sub>
<b>Kapitalkosten</b>	
Eigenkapitalanteil	20%
Fremdkapitalanteil	80%
Eigenkapitalzins	6%
Fremdkapitalzins	3,5%
Kalkulatorischer Mischzinssatz	4%
Spezifische Investition	6.550 [€/kW <sub>e</sub> ]
Kapitalgebundene Kosten	7,74 ct/kWh <sub>e</sub>
Verbrauchsgeb. Kosten	11,47 ct/kWh <sub>e</sub>
Betriebsgebundene Kosten	5,09 ct/kWh <sub>e</sub>
Sonstige Kosten	1,45 ct/kWh <sub>e</sub>
Summe Kosten	25,75 ct/kWh <sub>e</sub>
Erlöse Wärmeverkauf	0,36 ct/kWh <sub>e</sub>
mittlere Stromerzeugungskosten	25,39 ct/kWh <sub>e</sub>
Vergütung (EEG 2014)	
Vergütung insgesamt	23,73 ct/kWh <sub>e</sub>

(117) Biogas

Stromerzeugungskosten für Biogas – 500 kW <sub>el</sub> -NawaRo-BGA, flexibilisiert auf 1 MW <sub>el</sub> § 42-44 EEG	
<b>Eingangsparameter</b>	
Inbetriebnahmejahr	2014
Kalkulatorische Nutzungsdauer	20 Jahre
Nennleistung	1 MW <sub>el</sub> (456 kW Bemessungsleistung) Verdoppelung der installierten elektrischen Leistung zur Erfüllung der Flexibilitätsanforderungen
Technologie	Nassfermentation, Verbrennung inkl. Vor-Ort-Verstromung, Kraft-Wärme-Kopplung, Gas-Otto-Motor
Wirkungsgrad elektrisch	40%
Wirkungsgrad thermisch	44%
Volllaststunden	4.000 h/a;
Wärmeauskopplung	56% hiervon 20% Eigenwärmebedarf
Brennstoffart	Mischsubstrat (90% Nachwachsende Rohstoffe, 10% Rindergülle)
Brennstoffkosten	35,00 €/t <sub>FM</sub> für Maissilage, 32,00 €/t <sub>FM</sub> für Getreide-GPS
Inflation	2%/a
Anlegbare Wärmevergütung	3,0 ct/kWh <sub>th</sub>
<b>Kapitalkosten</b>	
Eigenkapitalanteil	20%
Fremdkapitalanteil	80%
Eigenkapitalzins	10%
Fremdkapitalzins	5%
Kalkulatorischer Mischzinssatz i (nominal)	6%
Spezifische Investition	5.500 €/kW <sub>el</sub> (inkl. Flexibilisierung)
Kapitalgebundene Kosten	7,82 ct/kWh <sub>el</sub>
Verbrauchsgeb. Kosten	11,58 ct/kWh <sub>el</sub>
Betriebsgebundene Kosten	2,50 ct/kWh <sub>el</sub>
Sonstige Kosten	0,80 ct/kWh <sub>el</sub>
Summe Kosten	22,70 ct/kWh <sub>el</sub>
Erlöse Wärmeverkauf	1,73 ct/kWh <sub>el</sub>
mittlere Stromerzeugungskosten	20,37 ct/kWh <sub>el</sub>
<b>Vergütung (EEG 2014)</b>	
Anlegbarer Wert	12,40 ct/kWh <sub>el</sub>
Kapazitätzuschlag für Neuanlagen	1,00 ct/kWh <sub>el</sub>
Summe Anlegbarer Wert + Kapazitätzuschlag	13,40 ct/kWh <sub>el</sub>

**Stromerzeugungskosten für Biogas – 600 kW<sub>el</sub> Bioabfallanlage, flexibilisiert auf 1,2 MW<sub>el</sub> § 44 EEG**

Eingangsparameter	
Inbetriebnahmejahr	2014
Kalkulatorische Nutzungsdauer	20 Jahre
Nennleistung	1,2 MW <sub>el</sub> (534 kW Bemessungsleistung); Verdoppelung der installierten elektrischen Leistung zur Erfüllung der Flexibilitätsanforderungen
Technologie	Trockenfermentation, Verbrennung inkl. Vor-Ort-Verstromung, Kraft-Wärme-Kopplung, Gas-Otto-Motor
Wirkungsgrad elektrisch	40%
Wirkungsgrad thermisch	44%
Volllaststunden	3.900 h/a
Wärmeauskopplung	60% hiervon 30% Eigenwärmebedarf
Brennstoffart	100% Bioabfall aus der Getrenntsammlung
Brennstoffkosten	-34,00 €/t <sub>FHM</sub> Bereitstellungskosten/Erlös für Bioabfall
Inflation	2%/a
Anlegbare Wärmevergütung	3,0 ct/kWh <sub>th</sub>
Kapitalkosten	
Eigenkapitalanteil	20%
Fremdkapitalanteil	80%
Eigenkapitalzins	10%
Fremdkapitalzins	5%
Kalkulatorischer Mischzinssatz i (nominal)	6%
Spezifische Investition	12.700 [€/kW <sub>el</sub> ] (inkl. Flexibilisierung)
Kapitalgebundene Kosten	20,62 ct/kWh <sub>el</sub>
Verbrauchsgeb. Kosten	-11,90 ct/kWh <sub>el</sub>
Betriebsgebundene Kosten	8,37 ct/kWh <sub>el</sub>
Sonstige Kosten	1,90 ct/kWh <sub>el</sub>
Summe Kosten	18,99 ct/kWh <sub>el</sub>
Erlöse Wärmeverkauf	1,62 ct/kWh <sub>el</sub>
mittlere Stromerzeugungskosten	16,77 ct/kWh <sub>el</sub>
Vergütung (EEG 2014)	
Anlegbarer Wert	15,17 ct/kWh <sub>el</sub>
Kapazitätzuschlag für Neuanlagen	1,00 ct/kWh <sub>el</sub>
Summe Anlegbarer Wert + Kapazitätzuschlag	16,17 ct/kWh <sub>el</sub>



(118) Geothermal energy:

<b>Stromerzeugungskosten der Geothermie § 46 EEG</b>	
<b>Eingangsparameter</b>	
Kapitalkosten	Durchschnittswerte auf Basis einer modellbasierten Auswertung (3 Anlagen).
Inbetriebnahmejahr	2014
Kalkulatorische Nutzungsdauer	20 Jahre
El. Nennleistung	ca. 3,3 MW
Th. Nennleistung (bei Kraft-Wärme-Kopplung)	ca. 7,3 MW
Volllaststunden	6.400 h/a (davon 4.400 h/a ausschließliche Strombereitstellung, 2.000 h/a kombinierte Strom- und Wärmebereitstellung bei KWK)
<b>Kapitalkosten</b>	
Durchschnittswerte	
Eigenkapitalanteil	41 %
Fremdkapitalanteil	59 %
Eigenkapitalzins	13,1 %
Fremdkapitalzins	6 %
Kalkulatorischer Mischzinssatz	9,3 % (Durchschnittswert über den gesamten Betrachtungszeitraum, da gleitender Übergang von Eigenkapital zu Fremdkapital nach der Bohrungsphase)
Spezifische Gesamtinvestition	13.000 €/kW
davon spezifische Kraftwerkskosten	ca. 3.500 €/kW
<b>Betriebsgebundene Kosten</b>	
Durchschnittswerte	
Instandhaltung und Betriebsführung	800.000 €/a
Eigenstrombedarf	133 €/MWh
Zusatzeinnahmen aus Koppelprodukt (KWK, Wärme)	70 €/MWh
Versicherung, Verwaltung, Pacht, etc.	550.000 €/a
Inflation	2 %/a
Durchschnittliche Stromerzeugungskosten	ca. 25 ct/kWh
<b>Vergütung (EEG 2014)</b>	
Keine Vergütung, anzulegender Wert zur Ermittlung der Marktprämie	25,20 ct/kWh

(119) Sewage gas and landfill gas

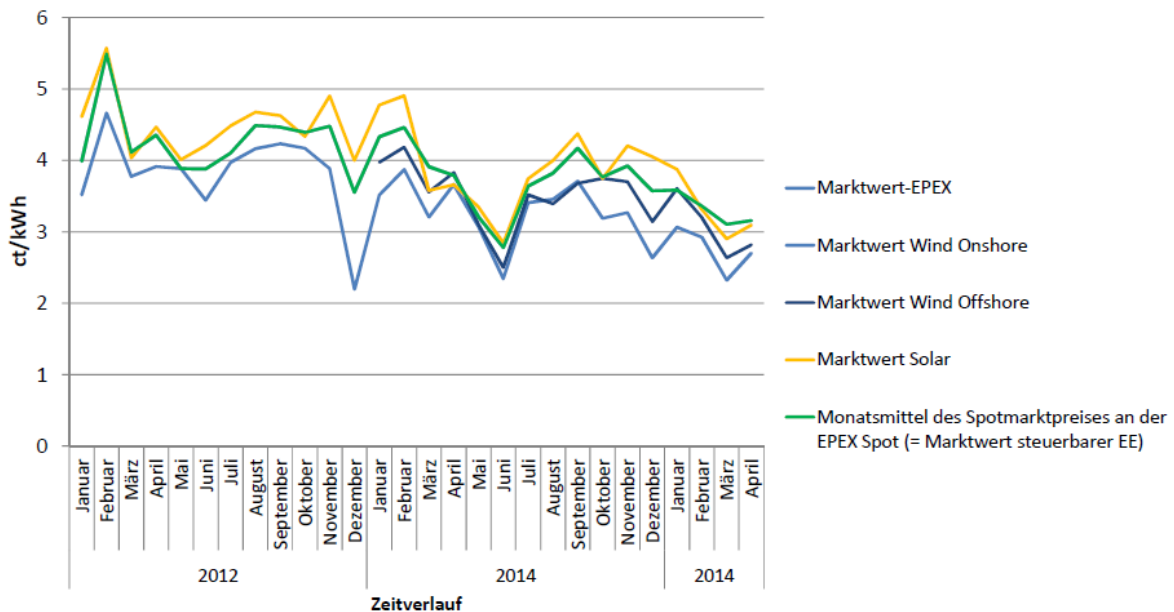
	Klär gas	Deponie gas
<b>Eingangsparameter</b>		
Inbetriebnahmejahr	2014	2014
Kalkulatorische Nutzungsdauer	20 Jahre	20 Jahre
Nennleistung	200 kW <sub>el</sub>	500 kW <sub>el</sub>
Technologie	1 Gasmotor à 200 kW <sub>el</sub>	2 Gasmotoren à 250 kW <sub>el</sub>
Volllaststunden	7.000 h/a	5.500 h/a
Preisänderungsrate (inkl. Strompreisänderungsrate)	3%/a	3%/a
<b>Kapitalkosten</b>		
Eigenkapitalanteil	30%	30%
Fremdkapitalanteil	70%	70%
Eigenkapitalzins	10%	10%
Fremdkapitalzins	5%	5%
Kalkulatorischer Mischzinssatz	6,5%	6,5%
<b>Betriebskosten (in Prozent der Anfangsinvestition)</b>		
jährl. Versicherungskosten	1,2%/a	1,2%/a
jährl. Verwaltungskosten	1,0%/a	1,0%/a
sonstige laufende Kosten	2,0%/a	2,0%/a
Strombezug (4% der Stromerzeugung)	13 ct/kWh	13 ct/kWh
Rückgang der Gasproduktion	-	3%/a
mittlere Stromerzeugungskosten	6,8 ct/kWh	8,7 ct/kWh
Vergütung (EEG 2014)	6,69 ct/kWh	8,42 ct/kWh
Vergütungsdegression für Neuanlagen (jeweils ab dem 01. Januar, beginnend 2016)	1,5%/a	1,5%/a
Quelle: Zwischenbericht Vorhaben I	S.50-56	S. 58-66

(120) Mine gas

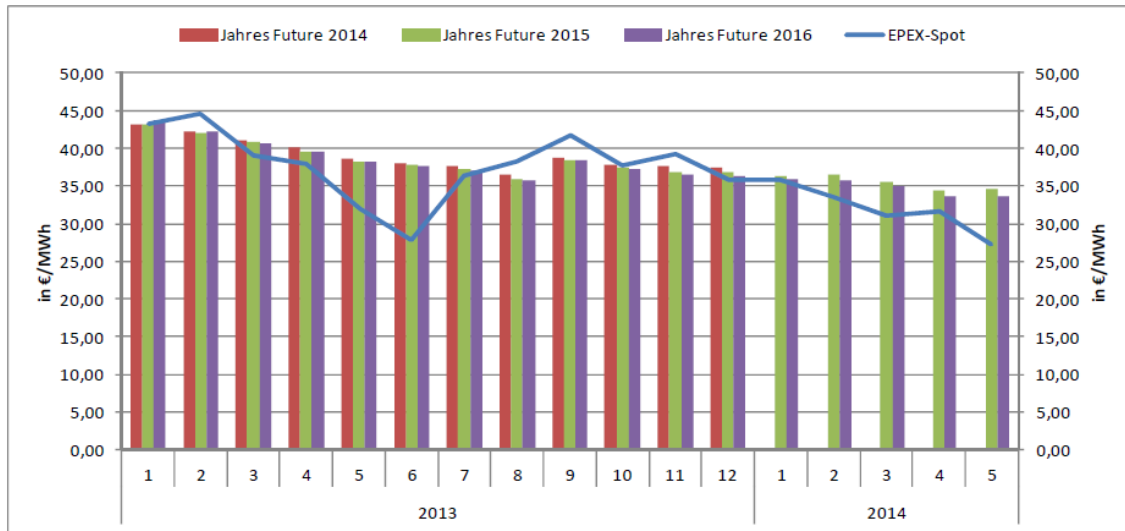
	Grubengas
Nennleistung	500 kWel
Technologie	Standard Gasmotor BHKW (2x250)
Volllaststunden	5 600/a-8400/a
Stromerzeugungskosten von - bis	5.5 ct/kWh –7.9 ct/kWh
Grundvergütung	6,74 ct/kWh

2.2.3. Market price

(121) For the market price, the German authorities refer to the price observed on the power exchange EPEX. Between 2012 and April 2014, the average price EPEX Spot per month was as indicated in the graph below. The green curve is the average monthly spot price observed. The two blue curves are the average market spot price observed at times where wind electricity was generated and the yellow curve is the average spot price observed at times where solar electricity was generated:



Quelle: [www.netztransparenz.de](http://www.netztransparenz.de)



Quelle: EEX und EPEX Spot

#### Base Jahresfuture an der EEX für 2014, 2015 und 2016

##### 2.2.4. Subsidized direct marketing and market premium

- (122) EEG electricity operators may claim a market premium from the network operator for EEG electricity which they directly sell in accordance with §19(1)(1) EEG-Act 2014.
- (123) The market premium is paid only for electricity which has been fed into the network and has been purchased by a third party. It is calculated each calendar month according to the following formula:  $MP = AW - MW$  where "MP" corresponds to the amount of the market premium in ct/kWh, "AW" to the reference value applying to the installation concerned and "MW" to the monthly market value of electricity (see below) that serves as reference for the specific energy source concerned.
- (124) Annex 1 to the EEG-Act 2014 determines how the monthly market value has to be determined. It cannot be lower than zero (see Annex 1 to the EEG-Act 2014).
- (125) The reference market value is calculated differently depending on whether the electricity production can be steered (hydropower, landfill gas, sewage treatment gas, mine gas, biomass and geothermal energy) or is intermittent (wind, solar).
- (126) For steerable energy sources, the reference market value " $MW_{EPEX}$ " corresponds to the actual monthly average of hour contracts for the price zone Germany/Austria on the spot market of the EPEX Spot SE energy exchange in Paris in ct/kWh.

- (127) For onshore wind, offshore wind and solar, the respective reference market value  $MW_{Wind\ an\ Land}$ ,  $MW_{Wind\ auf\ See}$  and  $MW_{Solar}$  are calculated as follows:
- For each hour in a given calendar month, the average value of hour contracts on the spot market of the EPEX Spot SE energy exchange in Paris (price zone Germany/Austria) is multiplied by the quantity of onshore wind, offshore or solar electricity actually generated in that hour.
  - The results for all hours in that calendar month are then aggregated.
  - This total is divided by the quantity of onshore wind electricity, offshore or solar electricity generated in the entire calendar month.
- (128) The TSOs have to publish on a common website the quantities of on-shore wind, offshore wind and solar electricity produced per hour. They also have to publish on a common website the value of hour contracts for the price zone Germany/Austria on the spot market of the EPEX Spot SE energy exchange in Paris in ct/kWh as well as the monthly  $MW_{EPEX}$ ,  $MW_{Wind\ an\ Land}$ ,  $MW_{Wind\ auf\ See}$  and  $MW_{Solar}$ .
- (129) The market premium is paid per kWh sold. In certain cases, no market premium is paid when certain formal conditions are not met (for instance the operator has not yet submitted the information he is under the obligation to provide to network operators, §25 EEG-Act).
- (130) Also, no market premium is paid when prices are negative for at least 6 hours in a row. §24 EEG-Act 2014 provides that if prices are negative at the EPEX Spot SE exchange in Paris for at least 6 hours in a row, the reference value will be reduced to zero. As a result, no market premium will be paid out for the renewable energy produced during those 6 hours. This provision will start to apply to EEG electricity operators entering into operation as of 1 January 2016. It does not apply to installations with a capacity of less than 500 kW. For wind installations it does not apply to installations with a capacity of less than 3 MW. It does not apply to demonstration projects<sup>18</sup>.

#### 2.2.5. Flexibility premium

- (131) In addition to the market premium, producers of electricity from biogas are also entitled to a flexibility premium when they have invested in a flexible installation. Provided the necessary equipment is installed, the production of electricity from biogas can to a certain extent be adapted to the needs of the demand-side. In general, biogas installations are operated so as to maximize production, which results in a constant output. A flexible installation allows that for a same amount of electricity produced over the year, the major part of the electricity is produced during peak demand hours. Germany would like to promote this type of technology given that it can make a

---

<sup>18</sup> Germany has in §24(3) EEG-Act 2014 applied paragraph 125 EEAG. Demonstration projects mentioned in paragraph 127 EEAG are defined as projects demonstrating a technology as a first of its kind in the Union and representing a significant innovation that goes well beyond the state of the art (paragraph 19(45) EEAG).

valuable contribution to system and integration of renewable energies into the free market for electricity.

- (132) While the flexibility allows producers to steer production of electricity so as to produce it in particular when demand and thus market prices are high, the additional revenues that can be achieved on the market when the electricity is produced during peak demand times are however not sufficient to cover the additional costs resulting from installing the flexibility equipment. The flexibility premium serves to cover this part of the additional costs that cannot be recouped thanks to higher market prices.
- (133) The EEG-Act 2014 differentiates between new biogas installations and existing biogas installations.
- (134) For existing installations that invest in additional capacity in order to make the installation flexible, the flexibility premium is calculated individually for each installation and depends on the technical parameters of the installations. In order to incentivize a flexible and demand-driven production, the more the installation is flexible, the higher the premium. The premium will be highest when installation can allow for a 12-hour shift in production (from low peak demand to high peak demand).
- (135) The flexibility premium ("FP") is calculated as follows:

$$FP = \frac{P_{Zusatz} \times KK \times 100 \frac{Cent}{Euro}}{P_{Bem} \times 8760h}$$

- (136) KK (capacity component) is currently established at 130€/MW.  $P_{Bem}$  is the rated output and  $P_{Zusatz}$ <sup>19</sup> is the additional installed capacity provided to generate electricity on a demand-basis in kilowatts and in the respective calendar year.
- (137) The capacity component was determined on the basis of a typical biogas installation having an electrical installed capacity of 570 kW (kW<sub>el</sub>) (corresponding to approximately 500 kW<sub>el</sub> of rated output). This capacity is extended by a further 570 kW<sub>el</sub> and which allows for a 12-hour shift in production. The revenues of the installation will be maximized by doubling production in peak hours and producing on the basis of one 570kW<sub>el</sub> block the rest of the time. The annual electricity production of about 4 400 MWh/a remains the same in comparison to a 570 kW<sub>el</sub> installation.
- (138) The additional costs taken into account are the costs linked to the installation of additional capacity and the operation of the extra capacity. Also taken into account are additional revenues generated by the flexible production. The costs are taken into account over a period of 10 years. The flexibility premium is paid during 10 years as

---

<sup>19</sup>  $P_{zusatz} = P_{inst} - (f_{kor} \times P_{Bem})$ .  $F_{kor}$  is a correction factor (1.6 for bio methane) and 1.1 for biogas that takes into account the different ways installations based on bio methane and on biogas (that is no bio methane) operate.

well. The additional income on the spot market are assumed to be 12.5 EUR/MWh<sup>20</sup>. For the financing of investments an interest rate of 5.4 % is used. Marketing costs were not specifically considered as these are covered by the market premium.

#### Kosten Erweiterung BHKW (einmalig)

Genehmigungsanpassung	€	8000
<b>Investitionen:</b>		
BHKW (Zusatz-BHKW: 570 kWel)	€	441.034
Aufstellraum für zusätzliches BHKW	€	8.000
Vergrößerung Netzanschluss	€	20.643
Übergeordnete Steuerungs	€	13.231
Gasspeicher	€	96.000
Wärmespeicher (nicht berücksichtigt)	€	0
= Summe Investitionen	€	586.908

#### Wiederkehrend (Betriebskosten)

Versicherung (0.5 % v. d. Investition)	€/a	2.900
Personalkosten (30 €/h. 1 Stunde am Tag)	€/a	10.950
Instandsetzung 1% auf Gesamtinvestition.	€/a	5.789
zusätzliche Wartungskosten durch flexiblen Betrieb (1 % der	€/a	4.410
= Summe Betriebskosten	€/a	24.049

Die betriebswirtschaftliche Kalkulation wurde angelehnt nach VDI 2067 durchgeführt.

#### Daraus ergeben sich folgende jährliche zusätzliche Gesamtkosten

<b>Gesamtkosten</b>		
jährliche Gesamtkosten pro Modellanlage	€/a	101.540
jährliche Gesamtkosten pro Leistungserweiterung	€/kW/a	178
jährliche Gesamtkosten pro Energieerzeugung	ct/kWh/a	2,3

<sup>20</sup> Germany indicated that currently the price spread between peak and off peak amounts to approximately 10.71 EUR/MWh.

Mögliche zusätzliche Erlöse am Strommarkt mit unterstellter Preisdifferenz (Preisspread zwischen Peak und OffPeak, angenähert an Durchschnittswert 2010/11) von 12,5 €/MWh:

<b>Zusätzliche Erlöse</b>		
jährliche Erlöse pro Modellanlage	€/a	27.431
jährliche Erlöse pro Leistungserweiterung	€/kW/a	48,1
jährliche Erlöse pro Energieerzeugung	ct/kWh/a	0,625

Daraus ergibt sich der Fehlbetrag bzw. die Notwendigkeit der Förderung von:

<b>Förderbedarf</b>		
restliche jährliche Kosten pro Modellanlage	€/a	74.109
<b>restliche jährlich Kosten pro Leistungserweiterung (entspricht der Kapazitätskomponente KK)</b>	<b>€/kW/a</b>	<b>130,0</b>
restliche jährliche Kosten pro Energieerzeugung	ct/kWh/a	1,7

- (139) For new biogas installations (having a capacity of at least 100 kW), the EEG-Act 2014 strongly incentivize that new installations are flexible. The reference value is designed in such a way that without a flexible use of the installation, the reference value for calculation of the market premium will not allow for an economically sound operation of the installation. Indeed the market premium/feed-in tariffs are paid only for half of the capacity of the installation.
- (140) In addition, a capacity bonus of 40 EUR/kW per year is paid out on the installed capacity of the installation for the entire period that the installation owner is entitled to obtain a feed-in tariff or market premium if it receives the flexibility premium.
- (141) The flexibility premium serves to cover the average expected costs of constructing and maintaining additional flexible generation capacity and where necessary, gas and heat storage. The amount of the flexibility bonus has been calculated so as to cover the average additional costs incurred for the provision of flexible generation capacity of up to 50 per cent of installed power taking during the 20 years that the installation can also obtain market premium/feed-in tariff. The flexibility bonus is granted on the entire installed capacity and has been calculated by taking into account additional revenues that can be obtained thanks to a flexible operation of the installation.



## 2.3. Other elements

### 2.3.1. Cumulation

- (142) The German authorities have committed that the aid under the EEG-Act 2014 cannot be cumulated with other types of aid, including investment aid under investment aid schemes of the Länder). An administrative notice will be sent around to reiterate this principle vis-à-vis the different authorities concerned.

### 2.3.2. No new aid as long as past incompatible aid has not been recovered.

- (143) The German authorities have 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.

### 2.3.3. Annual evaluation of production costs

- (144) The German authorities have committed to annually verify as of 2015 the production costs of typical installations on the basis of samples. This will occur in particular for the technologies covered by the EEG-Act 2014 that are reaching deployment levels that allow for a statistically reliable evaluation and for choosing samples of typical projects. The evaluation will take place in the framework of the studies accompanying the experience report to the EEG ("*Forschungsvorhaben zum Erfahrungsbericht des EEG*") and will be added as interim reports.
- (145) Once a year, new installed capacity, costs and prices for the different renewable energy sources will be examined. If within a certain technology no new capacity was installed or only a handful of new installations, the German Government considers that this does not allow for a statistically reliable evaluation. The German Government considers that that the regular survey will concern photovoltaic, wind power at sea and on land, as well as those segments of the biomass based technology where sufficient additional capacity is installed. The determination of costs and prices are normally carried out through questions sent to craftsmen, project promoters or producers and on the basis of raw material or agricultural prices evolutions and evolution of financing conditions and on the basis of analysing trading platforms. The exact methodology varies according to the technology concerned.
- (146) If the German Government observes that overcompensation may occur for future installations, it will engage the legislative process to review the tariffs in order to avoid any overcompensation.

### 3. ASSESSMENT OF THE MEASURE

#### 3.1. Existence of aid within the meaning of Article 107 (1) of the TFEU

(147) 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, in so far as it affects trade between Member States, is incompatible with the internal market.

##### *3.1.1. Existence of a selective advantage and impact on competition and trade*

(148) The current EEG-system contains advantages at different levels:

##### **a) Advantage for the producers of EEG electricity:**

(149) Producers of EEG electricity are advantaged because, through the feed-in tariffs, market premiums and flexibility premiums, they obtain more than what they would obtain on the market. Indeed those payments guarantee the producers of EEG electricity that they will obtain a price for their electricity that is higher than the market price. They are thus advantaged by the EEG-system. While the average market price was between 30 and 35 €/MWh between January and April 2014 on the Epex Spot the reference values range from 35€/MWh to 240 €/MWh.

(150) In 2013, around EUR 19 billion were paid out to EEG electricity operators under the predecessor of the EEG-Act 2014, while TSOs could sell the purchased EEG electricity on the wholesale market only for around EUR 2 billion. The top up compared to market prices thus amounted to EUR 17 billion. For 2014, the difference between payments made under the EEG-Act 2014 and its predecessor and market price was estimated at around EUR 19 billion.

(151) The measure is selective because it favours only producers of EEG electricity.

(152) 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 EEG electricity is likely to distort competition and affect trade between Member States. The EEG electricity is generally sold on the spot market where it enters in competition with all sources of electricity. The German spot market is interconnected with other markets.

##### **b) Advantage to EIU**

(153) Measures which, in various forms, mitigate the charges which are normally included in the budget of an undertaking and which, without therefore being subsidies in the strict meaning of the word, are similar in character and have the same effect are considered to constitute aid<sup>21</sup>.

---

<sup>21</sup> Case C-387/92 *Banco Exterior de España* [1994] ECR I-877, paragraph 13, and Case C-75/97 *Belgium v Commission* [1999] ECR I-3671, paragraph 23.

- (154) The Court has also ruled that in the case of exemptions from charges, in order to prove that an advantage is selective, the Commission has to prove that the measure at stake creates differences between undertakings which, with regard to the objective of the measure in question, are in a comparable factual and legal situation. The concept of aid does not encompass measures creating different treatment of undertakings in relation to charges where that difference is attributable to the nature and general scheme of the system of charges in question<sup>22</sup>. The burden of proof for that latter part of the test is on the Member State.
- (155) EIUs are advantaged because the EEG-surcharge that can be charged to them is capped. §§60-61 EEG-Act 2014 therefore relieve them from a burden that they would normally have to bear. As set out in §60(1) EEG-Act 2014, the normal rule is that energy suppliers have to pay a surcharge that is uniform per kWh of electricity consumed by the end consumers. In principle, this is the cost that electricity suppliers are allowed to pass on to their customers. However, §§60-61 EEG-Act 2014<sup>23</sup> prevent electricity suppliers from recovering the entire EEG surcharge from EIU. They also prevent TSOs from recovering the full EEG surcharge from electricity suppliers which supply to EIU (§63(3) and (4) EEG-Act 2014). Only a reduced EEG surcharge can be imposed on electricity consumed by privileged companies. The limitation of the EEG surcharge is meant to provide them with an advantage as it serves to ensure their international competitiveness (§61 EEG-Act 2014).
- (156) According to estimates made by the BNetzA for the year 2011, as a result of the cap, the EIUs concerned only pay 0.3% of the EEG-surcharge while they account for 18% of electricity transmitted through the grid. The total advantage for EIU resulting from the cap is calculated at amounting to EUR 2.5 billion in 2011 when the number of undertakings eligible for a reduced EEG-surcharge was still smaller<sup>24</sup>. For 2014, the TSOs have estimated the privileged quantity of electricity to amount to 95 875 105 MWh (Privileged quantity for EIU without the railways), which corresponds to an advantage of 5.8 billion EUR (with reductions based on the EEG-Act 2012). For 2014 the TSOs have estimated the amount of electricity subject to the full EEG surcharge) was estimated at 370 260 447 MWh. The amount of surcharge paid by privileged consumption points will amount according to the same estimates to EUR 300 million (while the TSOs need to raise EUR 23 579 000 000). In 2014 thus, the privileged consumption by EIU is expected to represent 20,6% of the total electricity consumption but the contributions expected to be paid on the privileged consumption represented only 1.3% of the total requested contributions.

---

<sup>22</sup> Case C-159/01 *Netherlands v Commission* [2004] ECR I-4461, paragraph 42; Case C -279/08 P, *NOx emission trading scheme*, paragraph 62.

<sup>23</sup> §60 in combination with §62 provides for a reduction for railway undertakings. This reduction is not examined in the framework of this decision but subject matter of a separate procedure (SA.38728).

<sup>24</sup> [http://www.erneuerbare-energien.de/fileadmin/ee-import/files/pdfs/allgemein/application/pdf/eeg\\_hintergrundpapier\\_besar\\_bf.pdf](http://www.erneuerbare-energien.de/fileadmin/ee-import/files/pdfs/allgemein/application/pdf/eeg_hintergrundpapier_besar_bf.pdf). See p. 6 in particular. This figure also includes railways, which are not examined under this decision.

- (157) In order for a measure to fall under Article 107(1) TFEU, a national measure must be selective, i.e. favour certain undertakings or the production of certain goods. Neither the large number of eligible undertakings nor the diversity and size of the sectors to which those undertakings belong provide any grounds for concluding that a State initiative constitutes a general measure of economic policy if not all sectors can benefit from it<sup>25</sup>.
- (158) The measure is selective because only EIU can benefit from it. In addition only undertakings from the sectors listed in the Annex to the EEG-2014 qualify for it. The vast majority of the sectors concerned are mining and manufacturing sectors. Finally, it is also selective because only undertakings reaching 1 GWh of consumption qualify for the reduction.
- (159) For 2014 2 026<sup>26</sup> undertakings of the manufacturing sector with 2 707<sup>27</sup> consumption points obtained a limitation order and were declared eligible for a reduced EEG-surcharge in 2014.
- (160) The potential beneficiaries are producers of energy-intensive goods (e.g. ferrous and non-ferrous metal producers, paper industries, chemical industry, cement producers) and are active in sectors in which trade between Member States takes place. The measure is therefore liable to distort competition and affect trade between Member States.

### 3.1.2. *Granted by the State or through State resources*

#### **c) Advantage for auto-suppliers and other end-consumers not supplied by electricity suppliers**

- (161) Measures which, in various forms, mitigate the charges which are normally included in the budget of an undertaking and which, without therefore being subsidies in the strict meaning of the word, are similar in character and have the same effect are considered to constitute aid<sup>28</sup>.
- (162) The Court has also ruled in respect of exemptions from charges that in order to prove that an advantage is selective, the Commission has to prove that the measure at stake creates differences between undertakings which, with regard to the objective of the measure in question, are in a comparable factual and legal situation. The concept of aid does not encompass measures creating different treatment of undertakings in relation to

<sup>25</sup> See e.g. case C-143/99, *Adria-Wien Pipeline and Wietersdorfer & Peggauer Zementwerke*, [2001] ECR I-8365, paragraph 48.

<sup>26</sup> See Statistics published by the BAFA on the BesAr 2014 (Statistische Auswertungen zur „Besonderen Ausgleichsregelung“ des Bundesamtes für Wirtschaft und Ausfuhrkontrolle -BAFA), available under [http://www.bafa.de/bafa/de/energie/besondere\\_ausgleichsregelung\\_eeg/publikationen/statistische\\_auswertungen/index.html](http://www.bafa.de/bafa/de/energie/besondere_ausgleichsregelung_eeg/publikationen/statistische_auswertungen/index.html).

<sup>27</sup> I.e. 2779 privileged consumption points in total minus 72 consumption points for railway companies.

<sup>28</sup> Case C-387/92 *Banco Exterior de España* [1994] ECR I-877, paragraph 13, and Case C-75/97 *Belgium v Commission* [1999] ECR I-3671, paragraph 23.

charges where that difference is attributable to the nature and general scheme of the system of charges in question<sup>29</sup>. The burden of proof for that latter part of the test is on the Member State.

- (163) As results from §60(12) EEG-Act 2014 (read in conjunction with §61(1) last sentence EEG-Act 2014), the normal rule is that the EEG-surcharge is uniform per kWh of electricity consumed by the end consumers. It serves to cover the difference between the costs resulting from the support for EEG-electricity and the revenues generated by the sale of the EEG electricity on the free market. §61 of the EEG 2014 gives the TSOs the right to claim the EEG-surcharge directly from end-consumers on the electricity that is not supplied to them by electricity suppliers.
- (164) However, for certain categories of final consumers reductions or exemptions are provided for. They constitute at first sight an advantage for them, as normally they would have been subjected to the full EEG-surcharge.
- (165) Germany has argued that the EEG does not have one reference EEG-surcharge but several reference surcharges for several groups of consumers (consumers supplied by electricity suppliers, auto-suppliers using RES electricity, auto-suppliers using high efficient CHP with efficiency factor above 70%, existing installations). According to Germany, the different surcharge levels cannot be conceived as reductions or exemptions because each group constitutes its own reference framework.
- (166) The Commission cannot share this view, except for auto-producers of EEG electricity which do not request any support. It notes that the EEG rests on the principle that the EEG surcharge is levied on all electricity consumed in Germany, including EEG electricity, and that its proceeds are used to finance the production of EEG electricity. The Commission does not consider that the different groups of consumers identified by Germany would be in a different legal and factual situation in the light of the purpose of the surcharge system. They all benefit in the same way from CO2 emission reductions induced by the production of EEG electricity. The Commission further notes that the surcharge for the various groups of end-consumers identified in §61 of the EEG-Act 2014 is defined by reference to the full EEG-surcharge and does not seem to constitute another kind of surcharge, which further confirms that the full EEG-surcharge constitutes the rule and the point of reference. Also, the various groups of end-consumers identified in §61 of the EEG-Act 2014 are assimilated to electricity suppliers for the purpose of the EEG 2014 (§61(1) last sentence EEG-Act 2014).
- (167) The Commission considers, however, that Germany has duly demonstrated that some of the exemptions and reductions provided under §61 of the EEG 2014 are justified by the logic and nature of the system:

*a) exemption for the electricity that is autogenerated and used for the own supply of electricity provided the electricity is entirely produced on the basis of renewable energy sources and provided that for the part of the electricity produced that is not*

---

<sup>29</sup> Case C-159/01 *Netherlands v Commission* [2004] ECR I-4461, paragraph 42; Case C -279/08 P, *NOx emission trading scheme*, paragraph 62.

*auto-consumed, no support has been requested under the EEG and reduction for the electricity that is autogenerated and used for the own supply of electricity provided the electricity is entirely produced on the basis of renewable energy sources.*

- (168) For electricity produced by EEG electricity operators, the net charge levied on EEG electricity is either completely compensated by support or at least partially compensated by support. Auto-generators falling under exemption a) forego their right to be supported, but still contribute to the objective of the EEG-Act 2014, that is increasing the consumption of EEG electricity. Therefore, it can be accepted that it is within the logic of the system that no surcharge or only a reduced surcharge is levied on electricity produced from renewable energy sources that did not benefit from support under the EEG.

*b) Exemption for autogenerated electricity that is used in order to generate electricity<sup>30</sup>.*

- (169) This exemption is in line with the logic generally underpinning charges raised on the consumption of electricity. It corresponds for instance to the logic underlying Article 14(1)(a) of Directive 2003/96/EC restructuring the Community framework for the taxation of energy products and electricity.<sup>31</sup> The Commission therefore considers that it is within the nature and the logic of the charge system concerned.

*c) Exemption for auto-generated electricity that is used by an auto-supplier that is not connected to a network, be it directly or indirectly.*

- (170) As the transmission system operators are the entities managing the EEG-surcharge system, it is inherent to the logic of the charge system that the end-consumers having to pay the surcharge be at least indirectly connected to a grid. Otherwise they will not have any relationship to the TSO and the TSO will have no mean to even to aware of their existence.

*d) Exemption for installations having a capacity of maximum 10 kW and for a maximum of 10 MWh/year.*

- (171) Germany has explained that with very small installations, the surcharge amount would be lower than the administrative burden resulting from an exact calculation of the surcharge. Therefore, simplified rules have been adopted. Indeed with a surcharge of 62.4 €/MWh, the exemption would concern an annual amount of 624 €

- (172) The Commission considers that the advantage provided for by those simplified rules is in any event far below the *de minimis* threshold; it is therefore not necessary to take a view whether it is also within the nature and scheme of the system.

---

<sup>30</sup> In Joined Cases C-78/08 to C-80/08, *Paint Graphos and others* [2011], the Court referred to the possibility of relying on the nature or general scheme of the national tax system as a justification for the fact that cooperative societies which distribute all their profits to their members are not taxed themselves as cooperatives, provided that tax is levied on the individual members (paragraph 71).

<sup>31</sup> Official Journal L 283 , 31/10/2003 P. 0051 - 0070

(173) As far as the other reductions and exemptions are concerned (reductions for high efficient CHP autogeneration installations that are not fuelled on the basis of renewable energy sources or mine gas and exemptions for existing autogeneration installations that are not fuelled on the basis of renewable energy sources or mine gas, the Commission considers that the reductions/exemptions constitute an advantage for the operators of those installations. As mentioned above the EEG rests on the principle that the EEG surcharge is levied on all electricity consumed in Germany, including EEG electricity, and that its proceeds are used to finance the production of EEG electricity. The Commission does not consider that operators of CHP autogeneration installations that are not fuelled on the basis of renewable energy sources or mine gas and operators of existing autogeneration installations that are not fuelled on the basis of renewable energy sources or mine gas would be in a different legal and factual situation in the light of the purpose of the surcharge system. They use fossil fuels and not renewable energy sources or mine gas and they benefit from CO<sub>2</sub> emission reductions induced by the production of EEG electricity in the same way as other final consumers which will need to pay the full surcharge, in particular auto-generators using fossil fuels as energy source and which are subject to a 100% surcharge. Also, as already mentioned the surcharge for the various groups of end-consumers identified in §61 of the EEG-Act 2014 is defined by reference to the full EEG-surcharge and does not seem to constitute another kind of surcharge, which further confirms that the full EEG-surcharge constitutes the rule and the point of reference.

### 3.1.2. *Imputability*

(174) The financing of support for EEG electricity, the capped EEG-surcharge for EIU and the reductions and exemptions for certain end-consumers not supplied by electricity suppliers are imputable to the State, as they are established by law and implementing decrees. In addition, it is the State (through the BAFA) that grants the entitlements to a capped EEG-surcharge for EIU and (through BNetzA) that monitors the correct implementation.

### 3.1.3. *Existence of State resources*

(175) For advantages to be capable of being categorised as aid within the meaning of Article 107 TFEU, they must be granted directly or indirectly through State resources. The concept of "intervention through State resources" is intended to cover not only advantages which are granted directly by the State but also "those granted through a public or private body appointed or established by that State to administer the aid"<sup>32</sup>. In this sense, Article 107(1) TFEU covers all the financial means by which the public

---

<sup>32</sup> Case 76/78 *Steinike & Weinlig v Germany* [1977] ECR 595, paragraph 21; Case C-379/98 *PreussenElektra* [2001] ECR I-2099, paragraph 58; Case C-677/11 *Doux Elevage and Cooperative agricole UKL-ARREE*, not yet published, paragraph 26; Case C-262/12, *Vent de Colère*, not yet published, paragraph 20; *Sloman Neptune*, paragraph 19.

authorities may actually support undertakings, irrespective of whether or not those means are permanent assets of the public sector<sup>33</sup>.

- (176) Germany has notified the EEG-Act 2014 for legal certainty and considers that the EEG-Act 2014 does not entail State resources as it is allegedly financed through private means only.
- (177) It seems that Germany considers that State resources are involved only when aid is paid out directly from the budget or when it is paid out by a public entity.
- (178) However, the mere fact that the advantage is not financed directly from the State budget is not sufficient to exclude that State resources are involved. It results from the case-law of the Court that it is not necessary to establish in every case that there has been a transfer of money from the budget or from a public entity for the advantage granted to one or more undertakings to be capable of being regarded as a State aid within the meaning of Article 107(1) TFEU<sup>34</sup>.
- (179) The private nature of the resources does not prevent them from being regarded as State resources within the meaning of Article 107(1) TFEU<sup>35</sup>. This was also recalled in the *France v Commission*<sup>36</sup> ruling where the General Court concluded that the relevant criterion in order to assess whether the resources are public, whatever their initial origin, is that of the degree of intervention of the public authority in the definition of the measures in question and their methods of financing. Hence, the mere fact that a subsidy scheme benefiting certain economic operators in a given sector is wholly or partially financed by contributions imposed by the public authority and levied on certain undertakings is not sufficient to take away from that scheme its status of aid granted by the State within the meaning of Article 107(1) TFEU<sup>37</sup>. Equally, the fact that the resources would at no moment be the property of the State does not prevent that the resources might constitute State resources, if they are under the control of the State<sup>38</sup>. In fact the distinction between aid granted by the State and aid granted through State resources serves to bring within the definition of aid not only aid granted directly by the State, but also aid granted by public or private bodies designated or established by the State<sup>39</sup>.

---

<sup>33</sup> Case C-677/11 *Doux Elevage*, not yet published, paragraph 34, Case T-139/09 *France v Commission*, not yet published, paragraph 36, Case C-262/12, *Vent de Colère*, not yet published, paragraph 21.

<sup>34</sup> *Doux Elevage*, cited above in footnote 25, paragraph 34, *France v Commission*, cited in footnote 25, paragraph 36; joined cases C-399/10 P et C-401/10 P *Bouygues Telecom v Commission*, not yet published, paragraph 100; Case C-262/12, *Vent de Colère*, not yet published, paragraph 19.

<sup>35</sup> Case T-358/94 *Air France v Commission* [1996] ECR I-2109, paragraphs 63 to 65.

<sup>36</sup> Case T-139/09, not yet published, point 63 and 64.

<sup>37</sup> Case T-139/09 *France v Commission*, not yet published, paragraph 61.

<sup>38</sup> Case T-358/94 *Compagnie nationale Air France v Commission* paragraphs 65 to 67; Case C-482/99 *France v Commission* [2002] ECR I-4397, paragraph 37; Case C-677/11 *Doux Elevage SNC*, paragraph 35.

<sup>39</sup> Case C-72/91 and C-73/91 *Sloman Neptun*, [1993] ECR I-97, paragraph 19.



- (180) In this connection, the Court has stated in *Steinike*, a case that concerned a fund set up for the promotion of products of the German agricultural, forestry and food industry and financed *inter alia* by contributions from undertakings in the agricultural, forestry and food sector that<sup>40</sup>:

*"The prohibition contained in Article 92 (1) covers all aid granted by a Member State or through State resources without its being necessary to make a distinction whether the aid is granted directly by the State or by public or private bodies established or appointed by it to administer the aid".*

- (181) The same line was followed in the *Italy v Commission* Court case. It concerned contributions paid by employers to funds providing for unemployment and family allowances; Italy had argued that no State resources were involved because the contributions were not paid by the community as a whole. The Court ruled that<sup>41</sup>:

*"As the funds in question are financed through compulsory contributions imposed by State legislation and as, as this case shows, they are managed and apportioned in accordance with the provisions of that legislation, they must be regarded as State resources within the meaning of Article 92, even if they are administered by institutions distinct from the public authorities."*

- (182) Also, the Court indicated in its 1985 *France v Commission* case that<sup>42</sup>:

*"(...) the mere fact that a system of subsidies which benefits certain traders in a specific sector is financed by a parafiscal charge levied on every supply of national goods in that sector is not sufficient to divest the system of its character as aid granted by a Member State".*

- (183) This line of reasoning was also applied in *Essent*<sup>43</sup>. In that case, the Court had to assess a law which provided that the operators of the Dutch electricity network had to collect a price surcharge on electricity consumed by private electricity clients and pass on the proceeds of that charge to SEP, a joint subsidiary of the four electricity generators, in order to compensate the latter for so-called "stranded costs". The Court found that the Dutch system involved State resources<sup>44</sup>.

- (184) This surcharge had to be transmitted by network operators to SEP which had to collect the proceeds and use them up to a certain amount defined in the law in order to cover stranded costs. In this connection, the Court observed that SEP had been appointed by the law to manage a State resource<sup>45</sup>:

---

<sup>40</sup> Case 76/78 *Steinike & Weinlig v Germany* [1977] ECR 595, paragraph 21.

<sup>41</sup> Case 173/73 *Italy v Commission* [1974] ECR 709, paragraph 16.

<sup>42</sup> Case 259/85 *France v Commission*, paragraph 23.

<sup>43</sup> Case C-206/06 *Essent* [2008] ECR I-5497.

<sup>44</sup> Case C-206/06 *Essent* [2008] ECR I-5497, point 66.

<sup>45</sup> Case C-206/06 *Essent* [2008] ECR I-5497, point 74

*"Likewise, the measure in question differs from that referred to in Case C-379/98 PreussenElektra [2001] ECR I-2099, in which the Court held, at paragraph 59, that the obligation imposed on private electricity supply undertakings to purchase electricity produced from renewable energy sources at fixed minimum prices did not involve any direct or indirect transfer of State resources to undertakings which produced that type of electricity. In the latter case, the undertakings had not been appointed by the State to manage a State resource, but were bound by an obligation to purchase by means of their own financial resources.*

- (185) Hence on the basis of this case-law it can be concluded that subsidies financed through parafiscal charges or contributions imposed by the State and managed and apportioned in accordance with the provisions of the legislation imply a transfer of State resources, even if not administered by the public authorities but by private entities designated by the State that are separate from the public authorities.
- (186) This has recently been confirmed by the Court in the Vent de Colère case where the Court in particular observed that the fact that part of the monies collected were not channelled to the Caisse des Dépôts et Consignations but were retained by the undertakings subject to the obligation to purchase renewable electricity at feed-in tariffs was not sufficient to exclude there being an intervention through State resources.
- (187) In addition, the Court has also ruled that a mechanism for offsetting in full the additional costs imposed on undertakings because of an obligation to purchase wind-generated electricity at a price higher than the market price that is financed by all final consumers of electricity in the national territory, such as the mechanism that is used in France, constitutes an intervention through State resources.
- (188) The Court excluded the transfer of State resources in only very specific circumstances: For instance the Court<sup>46</sup> considered that a decision by which a national authority extends to all traders in a certain sector an agreement which introduces the levying of a contribution in an inter-trade organisation recognised by that national authority, thus rendering that contribution compulsory, in order to make it possible to implement certain promotional and public relations activities, does not constitute State aid. The Court noted in this respect that the measure was not financed from State resources since it was not the State but the inter-trade organisation that decided how to use the resources stemming from the levy. Those resources were entirely dedicated to pursuing objectives determined by that organisation. Hence the resources were not constantly under public control and were not available to State authorities.
- (189) In *PreussenElektra*, the Court found that the *Stromeinspeisungsgesetz* (Electricity feed-in Act), in its version of 1998, did not involve a public or private body established or appointed to administer the aid<sup>47</sup>. This conclusion was based on the observation that the *Stromeinspeisungsgesetz* put in place a mechanism that was limited at directly obliging

---

<sup>46</sup> Case C-677/11, *Doux Elevage*, not yet published; C-345/02, *Pearle and Others* [2004] ECR I-07139.

<sup>47</sup> Case C-379/98 *PreussenElektra* [2001] ECR I-2099, point 58 and 59.

electricity supply undertakings and upstream electricity network operators to purchase renewable electricity at a fixed price, without any body administering the stream of payments.<sup>48</sup> The situation under the *Stromeinspeisungsgesetz* was characterized by a multitude of bilateral relationships between renewable electricity generators and electricity suppliers. There was no surcharge established by the State to compensate the electricity suppliers for the financial burden resulting from the supply obligation, and therefore, nobody had been appointed to administer such a surcharge and the corresponding financial flows.

- (190) By contrast, the Court indicated in *The Vent de Colère* case that the French support system was different from the situation examined in the *PreussenElektra* case in two respects: In *PreussenElektra* the private undertakings concerned had not been appointed by the Member State concerned to manage a State resource, but were bound by an obligation to purchase by means of their own financial resources. In addition in *PreussenElektra* there was no mechanism established and regulated by the State for offsetting additional costs arising from the purchase obligation and through which the State offered the private operators bound by the obligation to purchase the certain prospect that the additional costs would be covered in full<sup>49</sup>.
- (191) In the light of those principles, the Commission has examined whether the financing of the feed-in tariffs and the reduced EEG-surcharge, as resulting from the EEG-Act 2014, involves State resources.
- (192) As will be shown more in detail below, the Commission observes that the State has established a special surcharge, called EEG-surcharge in order to finance the difference between the revenues stemming from the sale of EEG electricity and the feed-in tariffs and premiums. In other words, the EEG surcharge serves to finance the support of RES electricity under the EEG-Act. In addition, the Commission observes that the State has entrusted the TSOs with the task to centralise and administer all financial flows related to the feed-in tariffs and the EEG-surcharge. Also, the State has established very detailed rules governing the determination of the EEG-surcharge and its use and destination. The Commission notes that there are extensive control mechanisms in place that allow the State to monitor the financial flows. Finally, the Commission notes that the mechanism put in place by Germany offsets in full the additional costs arising from the obligation for the network operators to purchase renewable electricity at a price higher than the market price or to pay a premium to generators of renewable electricity on top of the market price. This mechanism offers the network operators the certain prospect that the additional costs arising from the purchase obligation will be covered in full.

---

<sup>48</sup> Case C-379/98 *PreussenElektra* [2001] ECR I-2099, point 56. See also Case C-206/06 *Essent* [2008] ECR I-5497, point 74, where the Court notes that in *PreussenElektra*, the undertakings had not been appointed by the State to manage a State resource.

<sup>49</sup> Case C-262/12, *Vent de Colère*, paragraphs 34-36

3.1.3.1. The so-called "Bundesweiter Ausgleichmechanismus" and the EEG-surcharge: the State has established a mechanism that guarantees that TSOs are compensated for all the costs.

- (193) In a first step, the State has provided that DSOs have to transfer the entire EEG electricity to the TSOs (§54 EEG 2014). The DSOs are then reimbursed the feed-in tariffs they paid for this electricity (§55 EEG-2014). TSOs also have to compensate DSOs for premiums that DSOs have paid in accordance with §19 EEG-2014. As a result, the purchase obligation as well as the costs resulting from the obligation to pay market and flexibility premiums are entirely transferred to the four TSOs.
- (194) The TSOs, however, do not have to bear the financial burden resulting from the purchase obligation. Indeed, the State has devised a special surcharge, which is explicitly designated in the EEG-Act 2014 as the "*EEG-surcharge*" (§60 and §61 EEG-Act 2014).
- (195) The purpose of this surcharge is defined in the law: it serves to finance the difference between the revenues resulting from the sale of the EEG electricity by the TSOs and the costs they bear resulting from the obligation to pay the feed-in tariffs pursuant to §§35-36, the obligation to pay a premium pursuant to §32 and the obligation to compensate DSO's for the feed-in tariffs and premiums that they paid. In other words, this surcharge serves to offset in full the additional costs resulting from the economic advantage that renewable electricity producers can obtain under the EEG-Act 2014 (i.e. a feed-in tariff above the market price or a market premium in addition to the market price). The exact methodology of the calculation of the EEG-surcharge is laid down in implementing provisions. As a result of those provisions, TSOs are not free to establish the level of the surcharge. The level of the surcharge will result automatically from the methodology established by the EEG-Act and its implementing provisions.
- (196) The EEG-surcharge must be the same for each kWh of electricity consumed by end consumers (see §60 (1) 3<sup>rd</sup> sentence EEG-2014 and §61 (1) last sentence).
- (197) Given that the EEG-surcharge in year x is calculated based on forecasts, the implementing regulations have also established a correction mechanism, whereby deficits or surpluses are corrected the following year. This ensures that TSOs do not have to bear any financial burden for the purchase obligation but it ensures as well that they cannot raise funds through the surcharge that would serve other purposes than the support of renewables as decided by the State.
- (198) On this basis, the Commission concludes that contrary to what was the situation in the *PreussenElektra* case, the undertakings on which the purchase obligation rests have been provided by the State with a surcharge that provides them with the required financial resources to finance the support to RES electricity. It leads, as in *Vent de Colère*, to a full compensation. Contrary to what was the case in *PreussenElektra*, there is a mechanism in place that has been established and is regulated by Germany for offsetting the additional costs arising from the obligation to purchase and through which the State offers the private operators concerned (the TSO's in particular) the certain prospect that the additional costs would be covered in full.

- (199) For the sake of completeness, the Commission notes that the fact that the EEG-Act 2014 gives the TSOs the right to claim the EEG-surcharge but not the obligation to do so does not alter the conclusion that the surcharge has been imposed by the State. In addition, as has been clarified by the Court, even voluntary payments can constitute State resources<sup>50</sup>.
- (200) The Commission notes that the EEG-surcharge is mandatory for all electricity suppliers and for end-consumers assimilated to electricity suppliers. They are under the obligation, to pay the surcharge to their respective TSO for each kWh of electricity that they have supplied to final consumers or for each kWh they have consumed (in the case of end-consumers assimilated to electricity suppliers) when TSO requires the surcharge from them. This obligation results from the law. The EEG-2014 clearly establishes a right ("*Anspruch*<sup>51</sup>") for TSOs to levy the EEG-Surcharge and an obligation for electricity suppliers and end-consumers assimilated to electricity suppliers to pay the EEG-surcharge ("*Pflicht, Umlagepflichtige Strommenge*<sup>52</sup>").
- (201) The fact that the obligation to pay the surcharge rests on the supplier and certain end-consumers assimilated to electricity suppliers rather than on the electricity consumers directly does not alter the conclusion that the surcharge is a State resource. A surcharge that is imposed on undertakings rather than on consumers can also constitute a State resource<sup>53</sup>.
- (202) In addition, the Commission notes that the whole system has been conceived by the State as a surcharge that will necessarily be passed on to final consumers. This results from the structure of the surcharge (calculated on each kWh supplied to final consumers), from the fact that even when they are not supplied by an electricity supplier but by another third party or are consuming their own electricity final consumers have to pay the surcharge directly themselves to the TSOs (they are then designated as "*Umlagepflichtig*", from the fact that the State felt it necessary to cap the surcharge that would be passed on to certain undertakings (see §60 EEG-Act 2012), from the existence of provisions imposing how the EEG-surcharge can be indicated on the electricity bill. Finally, the very fact that Germany extended the monitoring powers of the BNetzA for consumer protection also confirms that the whole system is conceived as a surcharge that will ultimately be paid by the final consumer. Finally the EEG-2014 itself opposes end-consumers that benefit from a cap or reduction to other consumers and qualifies them as privileged consumers ("*nach dem Erneuerbare-Energien-Gesetz privilegierte Unternehmen*", see §74 (5) EEG 2014) or beneficiaries

---

<sup>50</sup> Case T-139/09, not yet published, paragraphs 63 and 64.

<sup>51</sup> §60(3) EEG-2014

<sup>52</sup> §60(4), §61 (1) last sentence, §64 (1) (1)

<sup>53</sup> Case 76/78 *Steinike & Weinlig v Germany* [1977] ECR 595, Case 173/73 *Italy v Commission* [1974] ECR 709. Case T-139/09, *France v Commission*, not yet published.

("begünstigte Person", §66(5)) while the others are designated as having an "Umlagepflicht" (see for instance explanatory memorandum on §103 EEG 2014)<sup>54</sup>.

### 3.1.3.2. TSOs have been designated to administer the EEG-surcharge

(203) The TSOs constitute the central point of the entire mechanism designed to finance the support to the producers of RES electricity. Given the numerous tasks entrusted to them by the EEG-Act 2014 and its implementing regulations, the Commission can only conclude that TSOs have been appointed by the State to administer the EEG-surcharge.

(204) They have to :

- purchase EEG electricity produced in their area either directly from the producer when he is directly connected to the transmission line or from DSOs at feed-in tariffs, or pay the market and flexibility premiums. As a result the EEG electricity is centralised at the level of each of the four TSOs, as well as the financial burden of the support provided for by the EEG-Act 2014.
- equalise between themselves the amount of EEG electricity that they had to purchase or that they have to pay a market premium on<sup>55</sup> so that each of them has the same proportion of EEG electricity .
- sell the EEG electricity on the spot market according to rules defined in the law. They can sell it jointly.
- jointly calculate the EEG-surcharge, which has to be the same for each kWh consumed in Germany, as the difference between revenues from the sale of EEG electricity and expenditures linked to the purchase of EEG electricity.
- jointly publish the EEG-surcharge in a specific format on a joint website.
- publish also aggregate information on the supported renewable electricity.
- compare the forecasted EEG-surcharge with what it should really have been in a given year and adapt the surcharge for the following year.

---

<sup>54</sup>

"Zu Absatz 3

*Mit der Neuregelung der Besonderen Ausgleichsregelung nach den §§ 63 bis 69 EEG 2014 ändert sich der Begrenzungsumfang der Unternehmen und selbständigen Unternehmensteile, die die Besondere Ausgleichsregelung schon bisher in Anspruch nehmen können, teilweise stark. Um einen sprunghaften Anstieg der Umlagezahlungen für Unternehmen vom Jahr 2014 auf das Jahr 2015 zu vermeiden, sieht Absatz 3 Satz 1 eine Übergangsregelung für die Jahre 2015 bis einschließlich 2018 vor: Der Umlagebetrag in Cent pro Kilowattstunde der im Jahr 2014 begünstigten Unternehmen darf sich in einem Jahr gegenüber dem Vorjahr jeweils maximal verdoppeln. Dadurch soll vermieden werden, dass Unternehmen durch einen kurzfristig starken Anstieg ihrer Umlagepflicht in wirtschaftliche Schwierigkeiten geraten."*

<sup>55</sup>

In that case they have actually not purchased any electricity but hold a right to label a certain quantity of electricity as renewable or produced from mining gas (§54 sentence 1 no 2).

- publish forecasts for several years in advance.
  - collect the EEG-surcharge from electricity suppliers and end consumers assimilated to electricity suppliers
  - (each) keep all financial flows (expenditures and revenues) linked to the EEG in separate accounts.
- (205) They are entitled to take into account costs linked to the management of the EEG-surcharge and sale of the EEG electricity and incorporate those costs into the calculation of the EEG-surcharge. They are also entitled to secure a liquidity reserve into the EEG-surcharge.
- (206) As a result, the four German TSOs centralise each for their area all the EEG electricity for which feed-in tariffs were paid and all the costs resulting from the acquisition of EEG electricity and the payment of market and flexibility premiums, and the costs resulting from the administration of the EEG-surcharge. Also, they centralise each for their area the proceeds of the EEG-surcharge. In fact each of them is a body designated by the State to administer the financial flows relating to the EEG. In that connection, the Commission notes that they have to keep all revenues and expenses related to the EEG (payment of feed-in tariffs and market premiums) and revenues (sale of EEG electricity, EEG-surcharge) on separate accounts.
- (207) In addition, TSOs have to coordinate a certain number of tasks: uniform determination and application of the EEG-surcharge; joint website where all financial flows related to the EEG-surcharge have to be published; joint forecast of EEG in following years.
- (208) Finally, the Commission notes that the TSOs are not free to use the monies collected through the EEG-surcharge. All the revenues stemming from the EEG-surcharge need to be used for the support mechanism only. In case of surpluses, they have to be reported on the EEG-account for the following year and will be taken into account when calculating the EEG-surcharge (they will actually reduce the level of the EEG-surcharge to be raised). Even the interests generated by any surpluses constitutes revenues within the meaning of §3(3) AusglMechV and serve to determine the EEG-surcharge.
- (209) On the basis of those elements, the Commission considers that the TSOs are administering the EEG-surcharge and that they have been entrusted with specific task and all related operations by the State. This distinguishes the situation in the EEG-2014 from the situation examined by the Court in the PreussenElektra case.

#### 3.1.3.3. TSO are strictly monitored in their administration of the EEG-surcharge

- (210) The Commission notes in addition that the State is monitoring the TSOs in their administration of the EEG-surcharge.

- (211) As mentioned under recital (67) of this decision, the BNetzA among others monitors that:
- a) TSOs sell on the spot market the electricity for which feed-in tariffs are paid in accordance with applicable rules (AusglMechV),
  - b) TSOs properly determine, set and publish the EEG surcharge,
  - c) TSOs properly charge electricity suppliers for the EEG-surcharge,
  - d) That feed-in tariffs and premiums are properly charged by DSOs to TSOs,
  - e) That the information that is due by the different operators to the BNetzA is indeed submitted to it
  - f) That the information that TSOs have to publish is indeed published.
- (212) Network operators have to transmit to the BNetzA the details which they receive from the installation operators (installation location, production capacity, etc.), the network level at which installations are connected, aggregated and individual tariffs paid to installations, the final invoices sent to electricity suppliers and the data required to verify the accuracy of the figures thus provided.
- (213) Finally, the BNetzA can also adopt decisions and fines or set the level of the EEG-surcharge.
- (214) The monitoring powers of the BNetzA are thus extensive and correspond at least to the monitoring powers that the State had in respect of the levy at stake in the *Essent* case. Also, the BNetzA has enforcement powers: It can issue orders and impose fines.

3.1.3.4. The EEG-surcharge is a price-surcharge; it is not the remuneration for a good.

- (215) The EEG-surcharge is a charge imposed on the consumption of electricity. It does not correspond to a price for a good.
- (216) Indeed, as the TSOs sell the EEG-electricity on the spot market, the surcharge paid by electricity suppliers and end-consumers assimilated to electricity suppliers does not correspond to the price for RES electricity that they would buy from the TSOs. The electricity suppliers do not buy any electricity from the TSOs. In that sense, the EEG-surcharge corresponds to a surcharge in the same way as the levy at stake in the *Essent* file.
- (217) Suppliers obtain the right to indicate on the bill that part of the electricity in the energy mix of the supplier corresponds to renewable electricity supported under the EEG. However, this right actually allows them to show that they have paid the surcharge and thereby ultimately contributed to finance the support to renewable energy. This right, however, does not constitute a good in the sense that it is not tradable. It is not possible for suppliers to isolate the "EEG part" of their electricity portfolio and sell only this



part to a customer as renewable electricity. In order to sell only renewable electricity to a customer, the supplier needs to have the guarantees of origin corresponding to the amount of electricity supplied to the customer. Renewable electricity supported under the EEG cannot be marketed with guarantees of origin (§79-80 EEG 2014).

### 3.1.3.5. Conclusion

- (218) For all the reasons set out above, the Commission comes to the conclusion that the support for EEG electricity is financed from State resources. The Commission observes in particular that the State can control, direct and influence the administration of the funds at stake: the State intervenes at both the level of the advantage (feed-in tariffs and market and flexibility premiums) and its financing (the entire system of the EEG-surcharge). The State has defined to whom the advantage is to be granted, the eligibility criteria and the level of support, but it has also provided the financial resources to cover the costs of the support to EEG electricity. Contrary to what was the case in *Doux Elevage*, the EEG-Surcharge has been designed and decided by the State and is not a private initiative of the TSOs. The State has defined the purpose and destination of the surcharge: it serves to finance a support policy developed by the State and not an action that would have been decided by the TSOs. The TSOs are not free to establish the surcharge as they want and are strictly monitored in the way the surcharge is calculated, levied and managed. Also, the way they sell the EEG electricity is monitored by the State. The EEG-Act and its implementing provisions enable the State to "*direct and influence the administration of the funds*"<sup>56</sup>. The Commission also notes that the provisions governing the establishment of the EEG surcharge ensure that the surcharge provides a sufficient financial cover to pay for the support for RES electricity and electricity from mining gas as well as for the costs implied by the management of the system. It does not allow for more. The TSOs cannot use the EEG-surcharge to finance any other type of activity, and financial flows are to be kept on separate accounts. Finally, the Commission notes that the EEG-surcharge is a charge in the sense that it does not correspond to the price that electricity suppliers would pay to the network operators for a good they have received. Indeed they pay the surcharge without obtaining any electricity in return.
- (219) The system in place in the EEG 2014 is different from the PreussenElektra situation in two respects: first under the EEG 2014 the State has designated the TSOs to manage a State resource. Second, they are not bound by an obligation to purchase by means of their own financial resources. On the contrary a mechanism is in place that is established and regulated by Germany for offsetting the additional costs arising from the obligation to purchase the electricity for pay the market premium and through which the State offers the TSOs the certain prospect that the additional costs will be covered in full.
- (220) The Commission therefore concludes that the TSOs have been designated by the State with the task to administer the EEG-surcharge and that the revenues from the EEG-surcharge constitute a State resource.

---

<sup>56</sup> *Doux Elevage*, cited above, paragraph 38.

3.1.3.6. Also the reductions for EIU and auto-generators are financed from State resources

- (221) The Commission has come to the conclusion that the EEG-surcharge constitutes a State resource. Hence, a reduced EEG-surcharge or capped surcharge implies a renouncement to State resources.
- (222) The Commission notes in addition that the German State not only establishes the reductions and cap in the EEG-Act 2014 but also verifies eligibility of companies and delivers the administrative order that caps the surcharge that can be passed on to them. Indeed, the potential beneficiaries submit an application to BAFA, which is a State entity and which verifies the request, and finally grants the cap to EIU.
- (223) This decision is then opposable to electricity suppliers who are not allowed to charge EIU the full EEG-surcharge but only the EEG-surcharge up to the cap (§66(4) EEG-Act 2014). This decision is also opposable to the TSOs (see §66(4) EEG-Act 2014), so that according to §66(5) EEG-Act 2014 the surcharge that the TSOs can claim from electricity suppliers will be limited in accordance with the decision by the BAFA.
- (224) With regard to the transfer of resources it thus appears that the cap for EIU results in a decreased amount collected by EEG-surcharge for the TSOs. The cap therefore implies a renouncement to State resources.
- (225) In a second step, the cap and the corresponding decrease in EEG resources for the TSOs is set off at a later stage by a mechanism that compensates the foregone revenues by increasing the amounts raised by the EEG-surcharge from the remaining (non-capped) consumers. The cap for EIU results in the level of the surcharge being higher for the other electricity consumers. The loss of revenues induced by the cap is thus ultimately financed from the EEG-surcharge, which - as established above - has to be considered as a State resource.
- (226) The same conclusion is valid for auto-suppliers and end-consumers assimilated to electricity suppliers that benefit from an exemption or a reduced EEG-surcharge. This exemption or reduction implies a renouncement of State resources.

*3.1.4. Conclusion on the existence of aid*

- (227) The Commission concludes that the EEG-Act 2014 entails State aid in favour of producers of EEG electricity and that the reduced EEG-surcharge entails aid for EIU, auto-suppliers (except the categories examined under recitals (167) to (172) of the decision) and certain final consumers supplied in electricity from other entities than electricity suppliers (except the categories examined under recitals (167) to (172) of the decision). Therefore the Commission needs to examine their compatibility.

**3.2. Lawfulness of the aid**

- (228) The support scheme for renewables under the EEG-Act 2014 as well as the reduced surcharge for EIU was notified to the Commission on 17 April and on 7 May 2014

respectively. It has not been implemented before. Germany has complied with its obligations under Article 108 TFEU.

### 3.3. Compatibility

- (229) The Commission has assessed the notified aid scheme on the basis of the Guidelines on environmental and energy aid for 2014-2020<sup>57</sup> (EEAG), and in particular sections 3.3 (Aid to energy from renewable sources) and sections 3.7.2 and 3.7.3 (Aid in the form of reductions in the funding of support for energy from renewable sources and Transitional rules for aid in the form of reductions in the funding of support for energy from renewable sources). The EEAG entered into force on 1 July 2014 and apply to all on-going notifications (paragraph 247 EEAG).

#### 3.3.1. *Operating aid to the production of renewable electricity*

- (230) According to point 120 of the EEAG, for operating aid schemes the general provision of Section 3.2 will be applied as modified by the specific provisions as set in subsection 3.3.1.

##### 3.3.1.1. Objective of common interest

- (231) According to point 31 of the EEAG, Member States need to define precisely the objective of common interest pursued and explain the expected contribution of the scheme to that objective. The German authorities have indicated that the notified scheme is intended to incentivise production of EEG electricity so that the share of renewables in the German electricity supply rises to 40-45 per cent by 2025 and to 55-60 per cent by 2035. The promotion of the development of renewable energy is one of the aims of the Union's policy on energy pursuant to Article 194 TFEU. Also the scheme contributes to achieving the overall (all energy consumption types confounded) national target set out in the Renewable Energy Directive 2009/28/EC ("RED")<sup>58</sup> for Germany: reaching 18% of energy from renewable sources in gross final consumption of energy by 2020. The scheme is therefore directed at the objective of common interest of promoting the deployment of renewable energy.

##### 3.3.1.2. Need for State intervention

- (232) According to subsection 3.2.2 of the EEAG, Member State needs to demonstrate that there is a need for State intervention and in particular that the aid is necessary to remedy a market failure that otherwise would remain unaddressed. In the case of the production of RES electricity, 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. The preliminary investigation has not revealed any indication of the contrary.

---

<sup>57</sup> OJ C 200 of 28 June 2014, p. 1

<sup>58</sup> Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ L 140, 5.6.2009, p. 16

### 3.3.1.3. Appropriateness of the aid, incentive effect, proportionality and effect on competition

- (233) According to subsections 3.2.3 and 3.2.6 of the EEAG, Member States must show that the State aid is an appropriate instrument to reach the objective and that there are no undue negative effects on competition and trade. Point 116 EEAG considers that provided all specific conditions of subsection 3.3 are met, the Commission presumes that aid for renewable energy will be appropriate and the distortive effects of the aid will be limited.
- (234) As to the remaining conditions of Section 3.2, they apply to operating aid scheme as modified by the specific provisions of subsection 3.3.1.
- (235) According to point 124 of the EEAG, in order to incentivise the market integration of RES electricity, it is important that beneficiaries sell their electricity directly in the market and are subject to market obligations.
- (236) As of 1 January 2016, aid schemes must comply with the following:
- (a) The aid is granted as a premium in addition to the market price whereby the generators sell their electricity directly in the market.
  - (b) The beneficiaries are subject to standard balancing responsibilities (unless no liquid intraday balancing markets exist).
  - (c) Measures are put in place to ensure that generators have no incentive to generate electricity under negative prices.
- (237) However, conditions (a) to (c) do not apply in case of aid granted to installations with an installed electricity capacity of less than 500 kW (for all technologies except wind), of not more than 3 MW or 3 generation units (for wind energy) and demonstration projects (point 126). Those installations – if they are not supported in the framework of a competitive bidding process – need to comply with the conditions set out in point 132 of the EEAG (see point 129 of the EEAG).
- (238) They need to comply with the following conditions:
- (d) The aid per unit of energy does not exceed the difference between the total levelized costs of producing energy (LCOE) from the particular technology in question and the market price of the form of energy concerned.
  - (e) The LCOE may include a normal return on capital. Investment aid is deducted from the total investment amount in calculating the LCOE.
  - (f) The production costs are updated regularly, at least every year.
  - (g) 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.

- (239) In addition, during a transitional phase covering the years 2015 and 2016, aid for at least 5% of the planned new electricity capacity from renewable energy sources needs to be granted in a competitive bidding process on the basis of clear, transparent and non-discriminatory criteria (point 127 of the EEAG).
- (240) From 1 January 2017, aid must be granted in a (technology neutral) competitive bidding process on the basis of clear, transparent and non-discriminatory criteria (127 of the EEAG). The bidding process should in principle be opened to all technologies. It can be limited to certain technologies in certain circumstances (paragraph 127, 5<sup>th</sup> alinea, EEAG).
- (241) 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 of 6 generation units for wind energy, or demonstration projects. For those installations, in addition to the requirements set out in point 124 of the EEAG (direct selling into the market, balancing responsibilities, no incentive to produce in case of negative prices), they will have to meet the requirements of point 131 of the EEAG (aid does not exceed LCOE, investment aid is deducted, no aid beyond the depreciation of the investment and review of production costs every year).

#### 3.3.1.4. Competitive bidding as of 2017

- (242) It results from the EEG-Act 2014 that after 2017 there is in general an intention of granting the aid through competitive bidding processes; however, the EEG-Act 2014 provides for competitive bidding only for PV on the ground. For competitive bidding processes to be expanded to other technologies, a new law is required. For those reasons, the Commission has informed Germany during the meeting of 28 April 2014 that it could examine the compatibility of the aid scheme for the production of electricity from renewable energy for the period stretching to 31 December 2016 for installations other than small installations within the meaning of §37 EEG 2014 and that the examination of the support scheme for installations other than small installations within the meaning of §37 EEG 2014 would follow once Germany notifies the new law. Germany has not objected to that limitation in time of the present decision.

#### 3.3.1.5. Competitive bidding in 2015-2016 for 5% of new planned capacity:

- (243) Germany projects to support additional capacity of RES electricity of around 6 GW (2.5 GW for onshore wind, 2.5 GW for solar, 0.1 GW for biomass/biogas and 1 GWh for off-shore wind, see also recital (7) of this decision). It also intends to tender out as of 2015 the support for solar installations on the ground. Germany intends to tender out 400 MW of capacity, which corresponds to 6.6% of 6 GW. Germany therefore complies with the condition set out in point 126 EEAG.

### 3.3.1.6. Aid is granted as a premium

- (244) Producers of RES electricity are obliged to sell their electricity directly on the market under §2 EEG-Act 2014. Also the EEG-Act 2014 expresses the aim of promoting the integration of renewable electricity into the market and the aid is in the form of a premium that is paid on top of the market price (§34 EEG-Act 2014) in line with point 124 (a) EEAG.
- (245) There are two exceptions to that principle. The first exception concerns feed-in tariffs for small installations. As described under recital (14) of this decision the feed-in tariffs for small installations (§37 EEG-Act 2014) are available for installations having an installed capacity of maximum 500 kW (operation starting in 2015), 250 kW (operation starting in 2016), 100 kW (operation starting as of 2017). These capacity thresholds are lower than those established under point 125 EEAG and hence comply with it.
- (246) Feed-in tariffs are also available under §38 EEG–Act 2014. That provision is meant as a last resort clause and to be used in exceptional situations (“Einspeisevergütung in Ausnahmefällen). Germany has explained that in most cases producers of EEG electricity do not sell the electricity directly on the spot market but use intermediaries. §38 EEG–Act 2014 has been designed as a security net for cases where the intermediary would go bankrupt and as a result, for a specific period the producer does not have any buyer for the electricity and needs to find a new one. Germany further explained that this bankruptcy situation will be extremely rare. However the ultimate security net is factored in by banks and reduces the interest rate requested by bank. It reduces the costs of capital. This is also reflected in the WACC that was used to determine the level of the reference values.
- (247) In order to make sure that the emergency feed-in tariffs are used only in those emergency situations, the back-up feed-in tariffs are reduced by 20% compared to the normal feed-in tariffs and are thus lower than the level required to cover production costs and reasonable rate of return. Germany indicated that the 20% reduction would actually not allow the coverage of the interest rate on loans.
- (248) Given that as a rule producers are under the obligation to directly sell on the market, that through the 20% reduction §38 EEG 2014 does not incentivize producers to request for feed-in tariffs instead of selling their electricity directly on the market and given that §38 has been conceived as an emergency clause only, the Commission concludes that it is unlikely to undermine the incentive to directly sell into the market. The Commission further notes that as of 2017 Germany intends to amend the EEG so as to grant support through tenders on a more general basis and that the present decision is limited, as far as the support to installations other than those falling under §37 EEG-Act 2014, to the period up to 31 December 2016. The assessment of the commission is also limited in respect of §38 of the EEG-Act 2014 to the period up to 31 December 2016 as on the one hand §38 EEG-Act 2014 is likely to be amended in 2017 when the use of tenders is more widespread and as on the other hand it will be necessary to examine its interplay with tenders after 2017.

- (249) Based on the previous, the Commission concludes that §38 EEG-Act 2014 can be found compatible with paragraph 124 of the EEAG for the period up to 31 December 2016.

3.3.1.7. Beneficiaries are subject to standard balancing responsibilities

- (250) Germany has confirmed that RES electricity operators selling their electricity on the market are subject to standard balancing responsibilities. They have further explained that often the producers will not sell the electricity themselves but will engage into a contract with an intermediary that will buy the electricity from the producer and take over the balancing responsibilities. However in that case, additional costs resulting from balancing responsibilities will be factored in the price paid by the intermediary for the electricity. The price will be higher if the producer manages well his forecasted and actual production. Also in that case, the producer will be indirectly facing balancing responsibilities. The Commission therefore concludes that the notified aid scheme complies with point 124 (b) of the EEAG.

3.3.1.8. No incentive for negative prices

- (251) As described under recital (130) of this decision, §24 EEG-Act 2014 provides that no market premium will be paid during the hours where prices were negative when prices are negative for at least 6 hours in a row. This will further reduce incentives to generate electricity under negative prices.
- (252) Germany has further explained that the market premium itself reduces incentives for RES electricity operators to produce in times of negative prices, at least when the negative prices reach a certain level. As a rule, producers will stop producing once the negative prices are not compensated anymore by the market premium. If for instance the market premium of the previous month was of 40 €/MWh for onshore wind, the producer will tend to switch off the wind turbine or at least will stop feeding the electricity into the grid once negative prices reach around -40€/MWh. A producer of electricity from biomass or biogas will generally stop feeding electricity into the grid already earlier given that those producers have higher marginal costs than onshore wind electricity producers.
- (253) As a result of the combined effect of those two elements, the Commission observes that on the one hand Germany has put in place measures ensuring that generators have no incentive to generate electricity under negative prices while at the same time ensuring that not all plants are switched off at the same time (which could lead to grid stability issues) but progressively. On that basis the Commission concludes that the condition of paragraph 124 (c) of the EEAG is fulfilled.

3.3.1.9. The aid does not exceed the difference between the LCOE and the market price

- (254) Germany has provides historical data about the market price in Germany, as well as production costs for reference installations. The production costs were calculated in accordance of the LCOE methodology.

- (255) In the case of a feed-in tariff, the tariff will include the market price as well as the aid. It does not take into account any marketing costs as the electricity is not sold directly on the market by the producer.
- (256) In the case of the premium, the aid corresponds to a top up calculated as the difference between a reference value and the market price. The reference value 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). The reference market value is calculated differently for dispatchable technologies and for non-dispatchable technologies. While for steerable energies, the average market price is used, for intermittent energies, the reference market value is calculated by reference to the market price that could be obtained at the spot market in the hours where the solar electricity or wind electricity was produced. This ensures that that the producer of renewable electricity does not obtain more than the difference between the reference value and the market price he obtained effectively on the market. This is in particular the case for solar energy that tends to yield higher than average market prices because it is often produced at times of peak demand.
- (257) Germany has demonstrated that the reference values did not exceed the production costs of the installations concerned.
- (258) Germany has detailed the return on capital used to determine production costs. The rate of return has been determined for each technology on market observations. It corresponds to the WACC, i.e; the weighted average costs of capital. It takes into account the typical percentages of equity and loan financing of the projects concerned and has also surveyed the loan rates required by banks and the equity rates required by investors.
- (259) Based on the methodology used to define the rates and the information provided, the Commission concludes that those rates qualify as normal rate of return within the meaning of point 131(b) of the EEAG.
- (260) Germany has provided detailed calculation of LCOE showing that the aid is granted only until the plant has been fully depreciated. In particular the aid based on the LCOE methodology which is granted for a period of 20 years does not exceed the depreciation of the investment. In addition, when the depreciation period is actually longer than 20 years, a residual value of the installation has been deducted from the production costs in order to calculate the production costs on the basis of the LCOE methodology over the 20 year period of the support.
- (261) It results from the figures provided that the aid per unit of energy does not exceed the difference between the total levelized costs of producing energy from the particular technology in question and the market price of the form of energy concerned.
- (262) The German authorities have further indicated that it will not be possible to cumulate aid under the EEG 2014 with investment aid under other schemes (for instance investment aid schemes of the Länder). As no investment aid can be cumulated with the feed-in tariffs or the premium, the condition of para. 129 of the EEAG is fulfilled.



- (263) The German authorities make a general review of the EEG every 4 year. During this review production costs are surveyed in detail across the whole of Germany.
- (264) In addition, certain feed-in tariffs and reference values are subject to annual decreases that were based on projected reduction of production costs. Also, wind, solar and biomass feed-in tariffs and reference values are subject to reductions linked to the evolution of production costs in view of the deployment rate of the technology concerned (economies of scale).
- (265) Finally, Germany has committed to monitor production costs annually so as to verify that the automatic adjustment are adequate and do not lead to overcompensation. If Germany observes that automatic adjustment are not sufficient, it will launch the legislative process to adapt tariffs and reference values.
- (266) On the basis of those elements taken together, the Commission is satisfied that the condition of para. 131(c) of the EEAG is fulfilled.

#### 3.3.1.10. Hydropower

- (267) Point 117 of the EEAG requires that aid to hydropower has to comply with Directive 2000/60/EC<sup>59</sup> ("Water Framework Directive") and in particular Article 4(7) thereof. In this respect, Germany has confirmed that it has transposed the Water Framework Directive into the Federal Water Act (Wasserhaushaltsgesetz, "WHG"). Under this Act, construction of new hydropower plants is allowed only if the requirements of §§ 33-35 of the WHG are complied with. This implies that installations are required to have systems in place protecting the fish population; they also need to ensure a minimum water flow. Modernized power plant need to comply with those requirements as well.
- (268) In addition, §40(4) EEG-Act 2014 provides that a hydropower plant is eligible for support only if it is constructed in close vicinity with a pre-existing dam or a new dam that will serve primarily other purposes than the production of electrical power. The hydropower installation may not have a continued transversal structure.

#### 3.3.1.11. Hierarchy of waste

- (269) §45 of the EEG-Act 2014 provides for support for the fermentation of bio-waste (electricity produced from biogas). In accordance with the waste hierarchy principle set out in Directive 2008/98/EC<sup>60</sup> ("Waste Directive"), entitlement to funding under the EEG exists only if the facilities for the anaerobic digestion of bio-waste is directly connected with a device allowing the remaining solid waste parts to compost and if the

---

<sup>59</sup> 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. The Commission notes that there is currently an infringement procedure pending with Germany on the implementation of the Water Framework Directive. The Court of Justice has however not yet delivered its ruling. The dispute does not relate to Article 4(7) of the Water Framework Directive (obligation to preserve the good water status) but to Article 9 of the Water Framework Directive (recovery of costs for water use).

<sup>60</sup> 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.

resulting compost is recovered. The EEG-Act 2014 ensures therefore in accordance with Article 22 of the Waste Directive the separate collection of bio-waste with a view to the composting (recycling) and digestion of bio-waste (recovery through energetic use). §45 EEG-Act 2014 is thus in line with point 118 of the EEAG.

#### 3.3.1.12. Flexibility premium

- (270) This premium aims at promoting the production of electricity from biogas on the basis of a specific technology that allows for a demand-responsive production. Germany would like to promote the use of this technology in order to improve the system and market integration of the production of RES electricity.
- (271) The German Government has shown that while this technology allows for higher revenues given that production is higher at times of higher demand, the additional revenues do not cover the entire additional costs resulting from investing in and using this technology.
- (272) The calculations provided show that for both new biogas installations as for existing biogas installations that would be equipped with additional flexibility equipment after 1 August 2014 the premium has been calculated in such a way that it does not cover more than the difference between the additional costs of producing on the basis of that technology and the market price that can be expected when producing on the basis of that technology<sup>61</sup>. The data provided shows that the premium does not cover more than the difference between additional production costs resulting from the flexibility investment and the market price. Also, calculations provided show that Germany has taken into account the higher market price that can be obtained through a flexible use of the installation.

#### 3.3.2. Conclusion on compatibility

- (273) The Commission therefore finds that the aid scheme for RES electricity is compatible with the criteria set out in the EEAG.

#### 3.3.3. Aid to producers of electricity from mine gas

- (274) Mine gas is a mixture of gases that occurs naturally in coal production sites and contains a high proportion of methane. Mine gas has a high global warming potential when released into the atmosphere. Therefore, supporting mine gas utilization contributes to the efforts to reduce the release of greenhouse gases given that there is no provision in German law that requires undertakings exploiting mines to capture the gas or avoid that it would be released in the atmosphere.
- (275) Besides climate protection effects, using mine gas to produce electricity leads to primary energy savings, as this gas would otherwise simply be released into the

---

<sup>61</sup> See recital (139) for new installations showing that the reference value added to the flexibility premium remain below the production costs. See recital (138) for existing installations that are being flexibilised after 1 August 2014.

atmosphere and instead of this primary resource another primary resource would be used to produce electricity. These positive effects for the environment were already recognized by the Commission in the State aids SA.24642 (N 708/2007) – DE – State aid for the closure of hard coal mines and SA.33766 – notification of aid to coal for 2011 and in State aid decision of 18 December 2013 in State aid file SA.33995 (2013/C) – DE - Support of renewable electricity and reduced EEG surcharge for energy-intensive users.

- (276) Germany has indicated that by using mine gas to produce electricity instead of other fossil fuels, CO<sub>2</sub> emissions in the range of 0,8 -0,85 Mio.t CO<sub>2</sub> per year have been avoided during the period 2009-2011. In addition, the transformation of methane into CO<sub>2</sub> has an impact that is even more important for climate protection. Germany estimates that around 3 Mio. t CO<sub>2</sub> equivalent have been avoided per year. Finally, Germany indicated that in 2011 the production of electricity from mine gas (1.1 TWh) allowed to save primary energy of around 3 TWh/a (Source: AGEE-Stat).
- (277) As the aid for mine gas helps reducing consumption of primary energy and helps preserving natural resources, it can increase resource efficiency. The Commission has therefore examined the aid for the production of mine gas under Section 3.2 and 3.5 of the EEAG. The Commission notes in this respect that in file SA.33995 (2013/C) the aid to the production of electricity from mine gas had been examined directly under the Treaty. However, the EEAG contain a new section on resource efficiency under which the aid to the production of electricity from mine gas now falls.
- (278) The exploitation of mine gas is not viable without public incentives. Germany therefore encourages the utilization of mining gas through feed-in tariffs under the EEG-Act 2014.

#### 3.3.3.1. Well-defined objective of common interest,

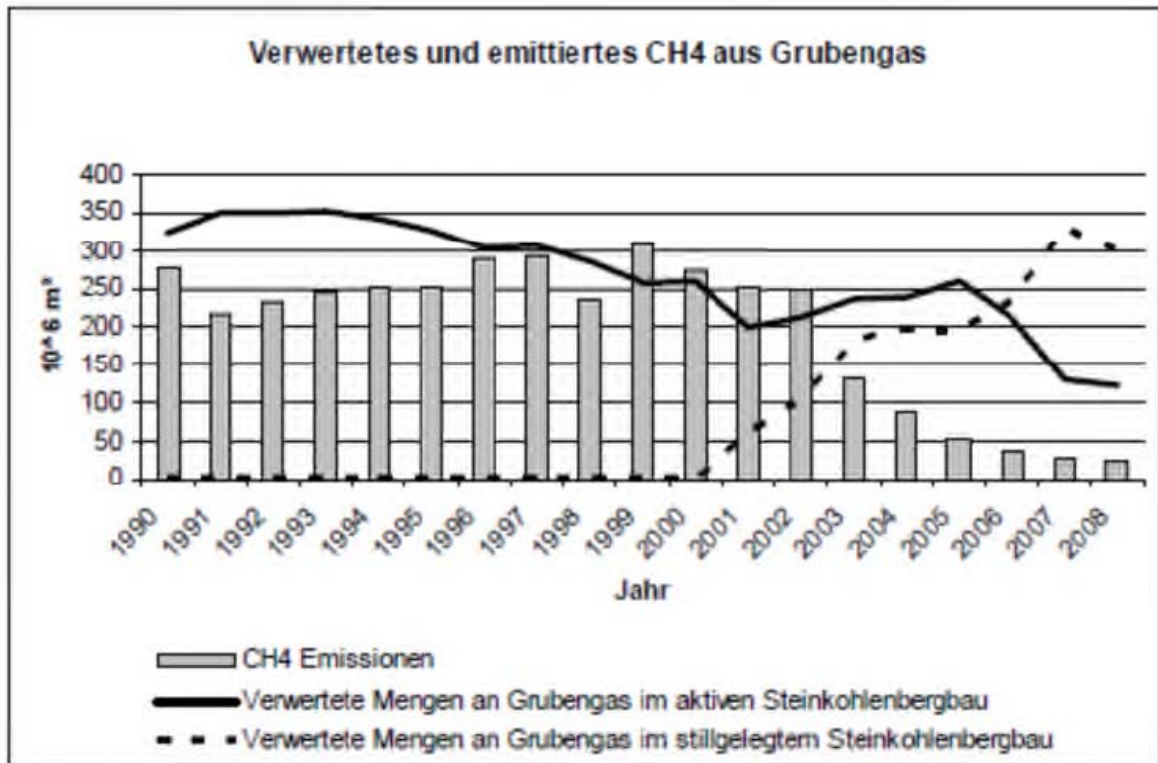
- (279) Based on the elements highlighted under recitals (274) to (276) above the Commission concludes that the scheme at hand aims at a well-defined objective of common interest, namely environmental protection, and more in particular, CO<sub>2</sub> emission savings and primary resource savings.

#### 3.3.3.2. Need for State intervention and appropriate instrument

- (280) Paragraph 153 of the EEAG recognises that market failures of the kind described in paragraph 35 of the EEAG are particularly relevant for resource efficiency. In addition market failures in that area are not often addressed by other policies and measures and State aid may in such case be necessary.
- (281) The positive impact for the environment of using mine gas for the production of electricity cannot be factored in the price of the electricity produced from mine gas. This is not addressed by other instruments than the EEG-Act 2014 in Germany. Germany has added that it cannot envisage another instrument that would be less distortive than the EEG-Act 2014 to ensure a stable and reliable basis for investments in the production of electricity from mine gas given that the production of electricity on

the basis of mine gas does not offer expansion potentials. The mine gas volume available is decreasing with the closure of mines.

(282) The following graph provided by Germany shows the decrease in mine gas.



(283) As a result, new investments are also steadily decreasing and generally only relate to the renewal of an outdated installation. Also in general the new installation will have a smaller capacity (around 500 kW) than the installation that is replaced. Given the decreasing quantities of mine gas and also the increasing risk of disruptions in the mine gas supply and gas quality also reinvestments need the legal certainty of obtaining support in the form of feed-in tariffs or market premiums to take place.

(284) The Commission therefore agrees that State aid for the production of electricity from mine gas may be needed to achieve the environmental benefits linked with the use of mine gas as energy source.

### 3.3.3.3. Incentive effect and proportionality

(285) State aid provides an incentive effect if the aid changes the recipient's behaviour towards achieving the objective of common interest.

(286) The German authorities have commissioned studies on the possibility to produce electricity from mine gas without subsidies. The study shows that without the support under the EEG installations of 500 kW cannot be exploited commercially<sup>62</sup>. This is

<sup>62</sup> Vorhaben I, S. 71 Abbildung 3-46.

notably due to localisation constraints leading to installations using mine gas being far away from sites where spare heat could be used and sold.

- (287) The study also shows that the reference values just cover production costs and thereby provide the incentive to (re)invest in an installation producing electricity from mine gas
- (288) The calculations provided by Germany (see also recital (120) above) show that the aid is proportionate in the sense that it is limited to the difference between market price and production costs and does not lead to overcompensation as the reference value does not cover more than the production costs..
- (289) In addition, the support is granted only for gas that results from mining activities in order to ensure that there is no specific drilling taking place for the sole purpose of finding mine gas.

3.3.3.4. Distorts competition and affects intra-EU trade at a limited extent, so that the overall balance is positive

- (290) The Commission notes that the distortion of compensation is rather limited in this case: first, the aid only compensates additional costs. Second, the aid concerns only a limited number of installations. Also, it is not expected that it will develop much more in the future since the mine gas supply is decreasing (see (282) above). New installations are generally more efficient than older installations and can produce more electricity with the same volume of gas. New installations are however of a smaller capacity than older ones. As a result, also the production of electricity from mine gas will remain stable or even decrease.
- (291) Finally, the Commission notes that as of 2016 new installations having a capacity of more than 100 kW will be subject to the obligation to sell their electricity directly on the market (see recital (14)).

On that basis, the Commission concludes that the overall balance of the aid is positive.

*3.3.4. Aid in the form of a reduced EEG-surcharge for energy-intensive undertakings*

*Reductions limited to the funding of the support for electricity from renewable energy sources*

- (292) Under §64 of the EEG-Act 2014 energy-intensive undertakings are granted a reduced EEG-surcharge. As the EEG-Act 2014 serves to finance the support for energy from renewable sources, the reductions have to be assessed under subsection 3.7.2 of the EEAG.
- (293) However, the EEG-surcharge also serves to finance the support for the production of electricity from mine gas. Mine gas is not a renewable source within the meaning of paragraph 19(5) of the EEAG. Reductions from surcharges aimed at financing the support to other sources of energy are not covered by subsection 3.7.2. of the EEAG.

- (294) However, Germany has indicated that there is actually no reduction granted on the funding of the support to electricity from mine gas given that energy-intensive undertakings need to pay the full levy for the first GWh of consumption at each concerned consumption point.
- (295) Germany has indicated that in 2012 the aid amount for mining gas was of around EUR 41.4 million (covering a production of 1.3 TWh). Compared to the overall amount of support for EEG electricity in 2012 (EUR 16.2 billion), the amount of support for mining gas represents 0.25%. Forecasts show that the volume of mining gas is likely to remain constant in the future or even decrease slightly.
- (296) The Commission notes that with 2707 consumption points for the year 2014, the payment of the full levy on the first GWh leads to a sum of EUR 168 916 800, which is higher than the amount of subsidy paid to electricity produced from mine gas. In addition, if examined at the level of the surcharge itself, 0.25% of 6.24 ct/kWh in 2014 amount to 0.016 ct/kWh. The EEG 2014 provides in addition that the applicable caps the reductions for EIU cannot lead to the surcharge paid per kWh to be below 0.1 ct/kWh or 0.05 ct/kWh on the consumption above 1 GWh.
- (297) On this basis the Commission concludes that if as forecasted the production volume of electricity from mining gas and the subsidy volume remains constant or decreases, the payment of the full levy on the first GWh as well as the minimum surcharge to be paid on the consumption above the first GWh will ensure that no reduction is granted to energy intensive from the financing of electricity from mine gas.

*Aid limited to sectors and undertakings that are electro-intensive and exposed to international trade*

- (298) Paragraphs 185-186 of the EEAG provide that the aid should be limited to sectors that are exposed to a risk to their competitive position due to the costs resulting from the funding of support to energy from renewable sources as a function of their electro-intensity and their exposure to international trade. Accordingly, the aid can only be granted if the undertaking belongs to the sectors listed in Annex 3. In addition, Member State can include an undertaking in their national scheme granting reductions from costs resulting from renewable support if the undertaking has an electro-intensity of at least 20 % and belongs to a sector with a trade intensity of at least 4 % at Union level, even if it does not belong to a sector listed in Annex 3 of the EEAG. Finally, paragraph 187 of the EEAG provides that Member States can impose additional eligibility criteria provided that within the eligible sectors the choice of beneficiaries is made on the basis of objective, non-discriminatory and transparent criteria and that the aid is granted in principle in the same way for all competitors in the same sector if they are in a similar factual situation.
- (299) Under §64(1)(2)(a) of the EEG-Act 2014, it is provided that undertakings belonging to List 1 of Annex 4 to the EEG-Act 2014 are eligible for a reduction provided they can demonstrate 16% of electro-intensity in 2015 and 17% of electro-intensity as of 2016.
- (300) List 1 of Annex 4 to the EEG-Act 2014 corresponds to Annex 3 to the EEAG.

- (301) The requirement that companies are eligible for support only if they demonstrate an electro-intensity of minimum 16% in 2015 and 17% as of 2017 as well as the requirement that the undertakings have a system in place to improve their energy-efficiency are additional eligibility requirements. They are objective and transparent and do not discriminate between undertakings in a similar factual situation.
- (302) Under §64(1)(2)(b) EEG-Act 2014, it is provided that undertakings belonging to List 2 of Annex 4 to the EEG 2014 are eligible for a reduction provided they can demonstrate an electro-intensity of 20%.
- (303) List 2 of Annex 4 to the EEG-Act 2014 contains the sectors for which the Commission has already observed that they have a trade exposure of 4% (see Annex 5 to the EEAG) but that do not belong to Annex 3 to the EEAG. As the undertakings belonging to those sectors are eligible for support only if they can demonstrate an electro-intensity of 20%, the reductions provided under §64(1)(2)(b) of the EEG-Act 2014 correspond to the possibility provided to Member States by paragraph 186 of the EEAG.
- (304) For both undertakings under §64(1)(2)(a) and (b) of the EEG-Act 2014, it is additionally required (§64(3) EEG-Act 2014) that undertakings put in place certified energy or environmental management systems. Undertakings consuming less than 5 GWh are subject to a somewhat lower requirement in terms of the energy management system required. This is justified by the fact that it would be disproportionate to require from undertakings having consumption below 5 GWh to undergo a certified energy or environment management system of the same magnitude as for undertakings having a higher consumption.
- (305) Finally, undertakings under §64(1)(2)(a) and (b) of the EEG-Act 2014 also have to demonstrate in accordance with §64(1)(1) of the EEG-Act 2014 that they have an annual minimum consumption of 1 GWh at the concerned consumption point.
- (306) The requirement that the undertaking consumes minimum 1 GWh at the concerned consumption point has been introduced for administrative simplification. Germany has explained that the application for a reduced surcharge also implies a certain amount of administrative costs for the undertakings concerned (gathering of the relevant information, preparation of the file, verification by an accountant), administrative fee for the submission of the application and costs linked to the energy-efficiency improvement system. Experience based on the past reduction systems have shown that the 1 GWh threshold is probably too conservative and that costs and benefit are in a balanced relationship for undertakings having a consumption of around 2.3 GWh per year. The Commission therefore concludes that the 1 GWh threshold is justified for reasons of administrative simplification and is in line with paragraph 187 EEAG, in particular given that undertakings with a consumption below 1 GWh would incur more costs from requesting the reduction than without it..

### *Proportionality*

- (307) Paragraphs 188-190 of the EEAG provide that the aid is considered as proportionate if the aid beneficiaries pay at least 15 % of the additional costs without reduction. Member States can however further limit the amount of the costs resulting from financing aid to renewable energy to be paid at undertaking level to 4 % of the gross value added of the undertaking concerned. For undertakings having an electro-intensity of at least 20 %, Member States can limit the overall amount to be paid to 0,5 % of the gross value added of the undertaking concerned. Finally, when Member States decide to adopt the limitations of respectively 4 % and 0,5 % of gross value added, these limitations must apply to all eligible undertakings.
- (308) Under §64 (2) EEG-Act 2014, in line with paragraphs 188-189 of the EEAG the surcharge to be paid for the electricity consumed above 1 GWh is in principle of 15% and is further capped at 4% or 0.5% of the gross value added depending on whether or not the undertaking concerned has an electro-intensity of at least 20% or not.
- (309) The reductions can however not lead to a surcharge lower than 0.1 ct/kWh, respectively 0.05 ct/kWh for undertakings belonging to the aluminium, zinc and copper sectors. This minimum surcharge is in line with the paragraph 189 of the EEAG as the Guidelines provide only for maximum reductions. Member States can grant less reduction provided the reductions are applied in a non-discriminatory way.
- (310) Germany has explained that the difference made between the majority of sectors having to pay at least 0.1 ct/kWh and certain sectors having to pay at least 0.05 ct/kWh is justified by the fact that aluminium, zinc and copper are sectors which are price takers on commodities markets and are not in a position to pass on any additional costs to their customers. This has been acknowledged by the Commission in file 30068 (C 33/2010) – DE - Aid to non-ferrous metals producers for CO<sub>2</sub> costs of electricity (see paragraph 85). The Commission agrees that this element can constitute an objective reason to distinguish those sectors from the remaining sectors providing aluminium, zinc and copper are the only sectors to be in that specific situation. In that respect Germany has explained that it had no knowledge of other sectors that would fulfil the same criteria but confirmed that if evidence is provided to it that other sectors are in the same situation, they would also be subject to the 0.05 ct/kWh limitation instead of the 0.1 ct/kWh.
- (311) For the calculation of the gross added value, §64 EEG-Act 2014 uses the gross added value at factor costs and refers to the arithmetic mean over the most recent last 3 years for which GVA data is available in accordance with Annex 4 of the EEAG. As described under recital (41) above the EEG-Act 2014 contains a specific rule for new undertaking. It corresponds to the rule provided under Footnote 3 of Annex 4 to the EEAG.
- (312) For an interim period of 2 years (applications for 2015 and 2016) undertakings can however rely on the GVA data on the last year or of the two last years (see recital (42) above). Germany has explained that previously reductions were granted by reference to GVA at market prices. GVA at factor costs is not a data that undertakings have readily



at their disposal. It needs to be calculated specifically and then verified by a certified accountant. The transitory rule in the EEG-Act 2014 allows companies to progressively gather the information required and to build their database. The commission concludes that this is in line with Paragraph 195 EEAG.

- (313) For the calculation of the electricity consumption, Germany uses either the standardized consumption that is defined by reference to efficiency benchmarks or the arithmetic mean over the last three years for which data on electricity consumption is available in accordance with Annex 4 to the EEAG. The standardized consumption has not yet been defined. §94(1) EEG-Act 2014 empowers the Ministry for Economy and Energy to establish energy efficiency benchmarks for the calculation of the standardized consumption. Germany underlined that currently efficiency benchmarks do not exist for all sectors and that those that exist are drafted per installation and are difficult to transpose to undertakings. There is thus a need to define energy efficiency benchmarks and standardized consumption. Germany believes that 2 years will be needed to draft them. In the meantime, as allowed by Annex 4 to the EEAG, the consumption will be defined by reference to the arithmetic mean over the last three years.
- (314) Finally, for the calculation of the electricity price, the EEG-Act 2014 uses average retail electricity prices. However, during a transitional period of 2 years, real electricity costs of the undertaking concerned will be used instead of average retail electricity prices. Germany has explained that average retail electricity prices of undertakings with a similar level of electricity consumption is an information that is not yet available, at least not for consumption band above 150 GWh. In addition the data available in Eurostat for instance does not necessarily include the relevant components (taxes, network charges and full cost of funding support for electricity from renewable sources). §94(2) of the EEG-Act 2014 empowers the Ministry for Economy and Energy to gather the relevant information and determine average retail electricity prices per group of undertakings with a similar level of electricity consumption. In view of the technical difficulties involved, in view of the fact that average retail electricity prices applying in the Member States concerned can be used to define electricity prices only if the information is actually available, given also that the transitional period will be limited to two years by virtue of §103 EEG-Act 2014 and given that during the transitional period, the data collection process will take place, the Commission considers that the transitional period of two years during which real electricity costs will be used pending the availability of data on average retail prices is in line with paragraph 195 of the EEAG.
- (315) As described under recital (43) above undertakings that were granted a reduction on the EEG-surcharge for the year 2014 and that belong to List 1 of Annex 4 to the EEG 2014 or that belong to List 2 of Annex 4 to the EEG 2014 and also reach 20% of electro-intensity will not have to pay a surcharge that is more than the double of what they had to pay in the previous year. The purpose of this rule is to avoid abrupt increases in the surcharge to be paid compared to the amount paid in 2014. This progressive adjustment is in line with paragraphs 194-195 EEAG.

- (316) As described under recital (44) undertakings that were eligible before but are not eligible anymore because they do not belong to the sectors listed in Annex 4 to the EEG 2014 or because they belong to list 2 but do not reach 20% of electro-intensity will have to pay 20% of the EEG-surcharge. This is in line with paragraph 197 of the EEAG.

#### *3.3.5. Transparency*

- (317) Member States are required under Section 3.2.7. of the EEAG to publish as of 1 July 2016 certain information related to beneficiaries of aid.
- (318) Germany has committed that it will comply with this condition and explained that part of the information is already available.
- (319) The Commission takes note of Germany's commitment that it will comply with the transparency requirements as of 1 July 2016.

#### *3.3.6. Reductions for auto-supply and for end-consumers assimilated to electricity suppliers*

- (320) As described under recital (52) no surcharge is due on existing installations.
- (321) Paragraph 197 of the EEAG provides that undertakings that benefitted from exemptions or reductions before the entry into force of the EEAG but would not be eligible anymore for reductions on renewable charges under subsection 3.7.2. can see their renewable surcharge being capped at 20% of the full surcharge.
- (322) Under the EEG-Act 2012 no surcharge was due on electricity consumed by existing installations within the meaning of §61(3) and (4) of the EEG-Act 2014. If those auto-generators do not qualify for reductions under subsection 3.7.2. of the EEAG and do not belong to the categories described under recitals (167) to (172), then they should be required to pay 20% of the surcharge by 2019. This level must be reached progressively.
- (323) Germany has indicated that this provision of the EEG-Act 2014 will be reviewed in 2017. A proposal for a future provision will be made then be made. §61(3) and (4) of the EEG 2014 is consequently only notified until 30 December 2017. The amendments will be subject to the notification obligation of Article 108 TFEU.
- (324) Paragraph 197 of the EEAG requires that the adaptation to 20% of the surcharge must be progressive, which would require a progression. Existing installations will however benefit from a full exemption until 2017. Germany has commitment that in 2017 the exemption will be reviewed and that the revised provision will be drafted in accordance with State aid rules.
- (325) The Commission notes that under the EEG 2012 the establishment of the EEG-surcharge followed a logic that was different from the logic followed under the EEG 2014. While under the EEG 2012 the surcharge was due on electricity supplied by electricity suppliers (which logically excluded autosupply), the EEG 2014 rests on the

principle that the costs of the support to renewables (i.e. the EEG surcharge) should be borne and allocated between electricity users. Under such logic existing autosupply installations should also be subject to the EEG-surcharge. Given this change in the logic of the system, the Commission agrees in this particular situation that the progressivity required by paragraph 197 of the EEAG is flat at the beginning of the adjustment period (1 August 2014 to possibly 31 December 2017) and steeper at the end of the adjustment period.

- (326) As described under recital (54) a reduced surcharge is due for auto-supply relying on new high efficient CHP plants. The reduction is progressively increased from 30% of the surcharge to 40% of the surcharge in 2017.
- (327) Paragraph 194 of the EEAG provides that aid granted to reduce the burden related to the funding of support to renewable electricity in respect of the years preceding 2019 can be declared compatible with the common market to the extent that it complies with an adjustment plan. In this respect the Commission notes that the surcharge to be paid by new high efficient CHP auto-supply plants will indeed progressively be increased from 30% to 40% in 2017. The measure has been notified for a period until 2017. After that date Germany has indicated that it will re-notify the measure and ensure compliance with the EEAG.
- (328) On that basis the Commission concludes that the reductions and exemptions provided for in §61 (1) first sentence and §61 (3) and (4) of the EEG 2014 can be found compatible with the EEAG for the period until 2017.

### *3.3.7. Compatibility with Articles 30 and 110 TFEU*

- (329) In accordance with paragraph 29 of the EEAG, as the EEG-surcharge has the aim of financing the support for EEG electricity, the Commission has examined its compliance with Articles 30 and 110 TFEU.
- (330) 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 which 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, contrary to Article 30 TFEU. 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 TFEU and will be contrary to this provision as regards the proportion used to offset the burden borne by the domestic products.<sup>63</sup> Where, on the other hand, Member States open their support schemes to producers of imported products, this may, depending on the conditions attached to such an opening, ensure compliance with Article 30/110 TFEU.

---

<sup>63</sup> Joined Cases C-128/03 and C-129/03 *AEM* [2005] ECR I-2886, paragraphs 44 to 47; Case C-206/06 *Essent* [2008] ECR I-0000, paragraph 42.

- (331) Germany considers that there is no issue under Article 30 or 110 TFEU because the EEG-surcharge does not constitute a charge unilaterally imposed by a Member State within the meaning of those articles. The Commission notes, however, that (i) the support to EEG electricity is financed through a surcharge imposed on electricity consumed in Germany<sup>64</sup>; (ii) the charge is calculated on the amount of electricity consumed, i.e. it is imposed on the product itself<sup>65</sup>; (iii) the obligation to pay that surcharge results from the law, i.e. it is a unilaterally imposed charge<sup>66</sup> and (iv) the charge does not correspond to the price paid for a good.
- (332) Germany has also argued that no discrimination could arise because, unlike for imported green electricity, RES electricity supported under the EEG 2014 cannot be sold to end consumers as green electricity given that the support under the EEG 2014 cannot be cumulated with guarantees of origin. Domestic RES electricity that is marketed as green does not benefit from any support under the EEG 2014. The Commission notes, however, that guarantees of origin can be and are traded separately from the RES electricity for which they have been delivered.<sup>67</sup> In addition, even in case of a parallel sale of the electricity and the guarantee of origin customers buying the electricity would pay the price for the electricity on the one hand and the price for the guarantee of origin on the other hand. There is indeed a distinct market for guarantees of origin. They constitute tradable assets and have actually a price of their own. Finally, the relevant level of comparison is the position of a producer of RES electricity and mine gas electricity operating installations that entered into operation after 31 July 2014. If such a producer is located in Germany, it has the choice between making use of one of the support mechanisms provided for by the EEG-Act 2014 or selling its electricity together with guarantees of origin. If such a producer is located in another Member State, it only has the option of selling its electricity together with guarantees of origin.
- (333) The financing mechanism of the support of EEG electricity, i.e. the EEG-surcharge, is imposed on domestic and imported products according to the same criteria. As a result of the aid, the burden resulting from the EEG-surcharge or a part thereof – depending on the level of the aid – is offset. Therefore, the Commission has assessed whether there could be discriminatory treatment with regard to imported products, to the extent that these are in a similar situation. In this regard, it should be noted that under the EEG-Act 2014 only producers of RES electricity and electricity from mine gas fulfilling certain conditions are eligible for support. Moreover, given the environmental aim of the EEG-Act 2014 to promote the development of additional capacities in the

---

<sup>64</sup> Electricity constitutes a product for the purposes of the provisions of the Treaty. See Case C-393/92 *Almelo* [1994] ECR I-1477, paragraph 28, and Case C-158/94 *Commission v Italy* [1997] ECR I-5789, paragraph 17, *Essent*, cited above, paragraph 43

<sup>65</sup> *Essent*, cited above, paragraph 44.

<sup>66</sup> Indeed, for the purposes of the application of Articles 30 TFEU and 110 TFEU, it is of little account that the financial charge is not levied by the State, but by the net operators. See Case 132/82 *Commission v Belgium* [1983] ECR 1649, paragraph 8; *Essent*, cited above, paragraph 46.

<sup>67</sup> Renewable electricity from other Member States that is sold in Germany on the spot market for instance is generally sold without or separately from the guarantees of origin.

production of RES electricity and electricity from mine gas, feed-in tariffs and premiums are only granted to installations entering into operation after 1 August 2014.<sup>68</sup>

- (334) The EEG-Act 2014 provides that the tenders expected to take place as of 2017 for all technologies and the pilot tenders before that date should be opened for operators established in other Member States (see recital (10)). As a result, the burden on imported RES electricity and electricity from mine gas produced in installations operating as of 1 August 2014 by way of the EEA surcharge will be offset as for domestic electricity. While the opening up of the tenders to producers located in other Member States is subject to the conclusion of reciprocal cooperation agreements<sup>69</sup>, the Commission accepts that this is necessary to ensure that non-domestic production that would qualify in the tender can count towards the national RES targets imposed by Directive 2009/28/EC. Furthermore, this condition is in line with paragraph 122 EEAG and Article 11 of Directive 2009/28 which provides that Member States can set up joint support schemes containing allocation rules between parties relating to the amount of renewable energy produced. Joint support schemes imply the conclusion of a reciprocal cooperation.
- (335) As regards the share of the new installed capacity for which producers located in other Member States will be allowed to bid (5%), this percentage has been established as a function of the total capacity of interconnectors connecting Germany to other Member States and EEA countries divided by the total electricity consumption in Germany and multiplied by the yearly new installed capacity (expressed in production volumes). The Commission considers that this is in line with Articles 30/110 TFEU given that the cumulated capacity of interconnectors in turn determines how much electricity can be imported.
- (336) Finally the opening of the tenders to producers located in other Member States will take place gradually as it will first be tested in the pilot tender for solar installations on the ground. The Commission notes, however, that the opening up of the tenders to operators located in other Member States cannot be implemented in a sensible manner under Directive 2009/28/EC without taking a number of preliminary and preparatory measures.<sup>70</sup>

---

<sup>68</sup> Also, the installations concerned must satisfy certain conditions for environmental protection reasons (see for instance the conditions imposed on hydropower described under recitals (267)-(268) of this decision).

<sup>69</sup> The participation in the tender is further subject to a physical import taking place. This condition is in line with Articles 30/110 TFEU as without imports, no Article 30/110 TFEU issue would occur in the first place. In addition, Germany needs to ensure that the electricity is indeed delivered to Germany.

<sup>70</sup> For the need to *ensure the proper functioning of the national support schemes*, see *Alands Vindkraft*, C-573/12, points 97 et seq. While the Court concludes that for that reason Directive 2009/28/EC preserves in principle the national and territorial nature of the existing support schemes, the Directive has nonetheless also established various mechanisms to enable Member States to cooperate for instance through joint support schemes under Article 11 of the Directive in order to achieve their mandatory targets under Directive 2009/28/EC. However, setting up these schemes requires time and preparation.

- (337) The Commission thus considers that in view of the opening of tenders to operators located in other Member States provided for under §2(6) EEG-Act 2014, the notified aid scheme, including its financing mechanism, complies with Articles 30/110 TFEU.

### 3.3.8. *Compatibility with article 34 TFEU*

- (338) In its *PreussenElektra*<sup>71</sup> judgment the Court has concluded that a law obliging economic operators to purchase part of their needs from domestic products contained an import restriction within the meaning of Article 34 TFEU. The Commission notes that the EEG-Act 2014 still contains purchase obligations limited to domestic renewable electricity that could potentially hinder imports. The Commission notes, however, that in *Alands Vindkraft*<sup>72</sup> the Court also ruled that restrictions to imports within the meaning of Article 34 TFEU can be justified for reasons of environmental protection, in particular when the restriction is necessary to ensure the promotion of renewable energy and the fulfilment of national RES targets under Directive 2009/28/EC. The Court has further ruled that the restrictions are proportionate when used is made of market based instruments and when the mandatory purchase of green certificates is not linked to the obligation to buy the electricity to which the green certificates relate.
- (339) In the present case, the Commission notes first that the support scheme aims at promoting the production of renewable energy. In addition, the purchase obligation is limited to situations where operators request for feed-in tariffs. These situations relate only to operators of small installations and emergency feed-in tariffs. For the other domestic renewable producers (they represent the major part of the capacity) the support is not linked to a purchase obligation but is organised around a market premium that is paid on top of the market price for the electricity. This favours market integration of the renewable electricity concerned. The electricity itself is sold directly on the market in competition with other electricity sources. Purchasers on the electricity market are not under the obligation to purchase the electricity concerned. Finally, the purchase obligation that applies for installations that can ask for feed-in tariffs is not imposed on suppliers as was the case in *PreussenElektra* but on network operators. As a result, the Commission concludes that import restriction, if any, is limited to the minimum necessary to achieve the environmental objective concerned and is thus compliant with Article 34 TFEU.

### 3.3.9. *Duration*

- (340) The Commission will authorise aid schemes for maximum periods of 10 years, after which a Member State can re-notify the measure (paragraph 121 EEAG). Germany has confirmed that it would re-notify the measure at the latest after 10 years. This concerns in particular the reduced EEG-surcharge for energy-intensive users and the support to EEG electricity in small installations within the meaning of §37 EEG 2014. Certain part of the aid scheme will be re-notified before the end of 2016 (support to RES

---

<sup>71</sup> Case C-379/98 *PreussenElektra* [2001] ECR I-2099, points 70-71.

<sup>72</sup> See *Alands Vindkraft*, C-573/12, points 77 and following.

electricity in the form of market and flexibility premiums and in the form of emergency feed-in tariffs other than small installations within the meaning of §37 EEG 2014) and before the end of 2017 (reduced EEG-surcharge in high efficient CHP plants and in existing plants).

#### **4. AUTHENTIC LANGUAGE**

(341) As mentioned under Section 1 of this decision, Germany has waived its right to have the decision adopted in German. 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.

The Commission observes that the decision is valid for the following periods:

- 31 December 2016 as far as support to EEG electricity under §§ 19, 38, 53 and 54 of the EEG-Act 2014 is concerned for installations other than small installations within the meaning of §37 EEG 2014.
- 31 December 2017 as far as reductions under §61(1) of the EEG-Act 2014 for high efficient CHPs and under §61(3) and (4) of the EEG-Act 2014 for existing installations is concerned.
- 10 years in respect of reduced EEG-surcharge for energy-intensive users and the support to EEG electricity in small installations within the meaning of §37 EEG 2014.

The Commission reminds the German authorities that, in accordance with article 108 (3) TFEU, any plans to refinance, alter or change this aid have to be notified to the Commission pursuant to provisions of the Commission Regulation (EC) No 794/2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 of the EC Treaty (now Article 108 TFEU).<sup>73</sup>

The Commission further reminds Germany that individual aid granted on the basis of the scheme remains subject to the notification obligation pursuant to Article 108(3) of the Treaty if the aid exceeds the notification thresholds of paragraph 20 of the EEAG and is not granted on the basis of a competitive bidding process.

---

<sup>73</sup> OJ L 140, 30.4.2004, p. 1.

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

<http://ec.europa.eu/competition/elojade/isef/index.cfm>.

Your request should be sent by registered letter or fax to:

European Commission  
Directorate-General for Competition  
Directorate for State Aid  
State Aid Greffe  
B-1049 Brussels  
Belgium  
Email: [stateaidgreffe@ec.europa.eu](mailto:stateaidgreffe@ec.europa.eu)  
Fax No: (0032) 2-296.12.42

Yours faithfully,

For the Commission

Joaquín ALMUNIA  
Vice-president