Subject: State aid SA.34411 (2012/N) – The Netherlands SDE +

Sir,

I am pleased to inform you that the European Commission has assessed the SDE + scheme and has decided not to raise objections to it on the ground that the measure constitutes State aid which is deemed to be compatible with the internal market within the meaning of Article 107(3)(c) of the Treaty on the Functioning of the European Union ("TFEU").

1. PROCEDURE

(1) After pre-notification contacts, by electronic notification of 27 February 2012, registered at the Commission on the same day, the Dutch authorities notified the above-mentioned measure pursuant to Article 108(3) of the TFEU.

(2) By letters of 27 April and 6 July 2012, the Commission requested additional information on the measure in question. The Dutch authorities submitted the requested information by letters of 8 May and 13 July 2012, registered at the Commission the same days.
2. DETAILED DESCRIPTION OF THE AID

2.1. Existing aid schemes N 707/02, N 708/02 and N 543/05

(3) In March 2003, the Commission authorised the existing schemes N 707/02 and N708/02 for 10 years under which aid is provided to stimulate the production of renewable and CHP electricity in the Netherlands, Milieukwaliteit van de ElektriciteitsProductie (hereinafter, the "MEP scheme"). Under this scheme, subsidies are granted to renewable and cogeneration of heat and electricity (hereinafter "CHP") producers for a fixed period of maximum 10 years. The subsidies for renewable and CHP electricity serve to compensate for the difference between the production costs of renewable and CHP electricity and the market price for conventional energy. The level of subsidy varied for the different forms of renewable electricity generation based on the difference of the production costs of the specific form of the renewable energy (wind, solar, etc.) and the electricity market price for conventional electricity. The amount of subsidy that was awarded for renewable and CHP electricity was related to the number of kWh produced. That level was determined annually by the Minister of Economic Affairs. The Minister could draw a distinction between different categories of producers and different categories of production plants.

(4) Although some existing installations could benefit from the MEP scheme, the aim of the subsidy system was to encourage investors to set up new renewable and CHP production. To create a stable investment climate it was necessary to provide guarantees about the amount and the duration of the stimulation. The economic lifetime for most types of renewable energy projects was at least 10 years. Therefore, the producers of renewable and CHP electricity would be awarded a fixed guarantee of operating aid for up to 10 years in order to stimulate actual investments. The level of fixed subsidy was determined by the difference between the cost price of renewable and CHP electricity and the market price of regular electricity at the time when they first participate in the subsidy system. The subsidy system was financed through a compulsory contribution by the electricity consumers, imposed by the legislation.

(5) The schemes were considered to constitute State aid within the meaning of Article 87(1) of the EC Treaty. The MEP subsidy for renewable was approved on the basis of Article 87(3)(c), since it was in line with the Environmental Aid Guidelines.

(6) The stimulation of CHP concerned a non-degressive aid which was approved for a period of five years (2001-2005) on the condition that the intensity did not exceed 50% of the extra costs (the difference between the production costs of the beneficiaries and the market price of electricity).

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2 For the year 2003 the fee was set at € 34 per connection but meanwhile the connection fee is abolished and the scheme is financed through the general budget.
At the request of the Dutch authorities, the Commission approved a two year prolongation of the scheme\(^3\).

### 2.2. Description of SDE\(^4\) scheme

On 21 December 2007, the Commission authorised the existing scheme N 478/07\(^5\), which introduced the following modifications to the previous schemes:

(i) **Introduction of Biogas.** The MEP schemes were solely oriented at the stimulation of renewable electricity production (including CHP), although biogas was supported indirectly.

(ii) **Budget ceiling.** The total available budget for the SDE scheme is determined on an annual basis. The various options for sustainable energy are put into distinctive categories, with a different base tariff for each category and for each of these various options for sustainable energy a budget ceiling is annually determined.

(iii) **Flexible base tariff.** Under the SDE scheme the subsidy is calculated on the basis of the following steps: first the basic tariff or the tender tariff is established. The basic tariff reflects the maximum average production costs per energy unit\(^6\) and the tender tariff is the maximum average production costs per energy unit specified by the applicant for subsidy in the tender procedure\(^7\).

Secondly, the reference electricity and reference gas price is established on the basis of expert advice and market participants. The reference energy price applies for the whole subsidy period of the power plant and is annually estimated on the basis of representative indications for the market price.

The method for the calculation of the base tariff in the SDE scheme is done in exactly the same way as in the MEP scheme.

Finally, the base tariff is annually corrected on the basis of the realized energy prices for that year. When the energy prices are going down there will be more subsidy granted and in the situation that energy prices are raising, less subsidy will be granted. In this way the beneficiary always received a base tariff\(^8\) which reflects the production costs of the renewable energy and the necessary revenues to cover a fair return on capital.

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4. Stimulering van duurzame energie.
6. On the basis of expert advice and consultations with market participants.
7. In this situation the government uses a maximum amount mentioned in the tender as a limitation.
8. There is an exception in the situation that the energy prices are higher than the total tariff, in this situation there is no subsidy given. The other situation is when the energy price is very low, for those situations a bottom line is established.
(iv) **Increased aid intensity for CHP.** Under the notified SDE scheme the aid intensity is maximised to 100% of the extra costs. New CHP installations or renovated CHP installations are eligible for the subsidy. The support is granted for the economic life time (depreciation period) of the CHP installation.

(v) **Subsidy term.** In the SDE scheme, the subsidy term is established taking into account the special characteristics of the different categories. The subsidy term will cover the expected economic life time of the production installation (depreciation period).

(vi) **Introduction of a tender mechanism.** In the SDE scheme there is also a tender mechanism introduced. Granting the subsidy in order of application is still used in situations where it is expected that a lot of small initiatives apply for a subsidy. A tender procedure will be used for bigger projects where there is more competition between the different projects.

2.3. The SDE+ scheme

(9) On 27 February 2012, the Dutch authorities notified the SDE+ scheme, whose main objective is to progress as cost effectively as possible towards the mandatory European renewable energy target in 2020, which for the Netherlands amounts to 14%. It gives priority to the least expensive projects, aiming at cost-effectiveness.

(10) The SDE+ scheme maintains the features of the existing schemes approved by the Commission in its decisions N 707/02, N 708/02 and N 478/07 and described in sections 2.1-2.3 above. However, in order to achieve the above-mentioned objective, it introduces the following modifications:

1. **The introduction of renewable heat.**

2. **The inclusion of osmosis as an eligible renewable energy source.**

3. **The possibility to carry over eligible production to subsequent years.**

4. **The introduction of a single ceiling base tariff for all technologies**

5. **The prioritisation of less expensive projects when the subsidy ceiling is exceeded.**

2.3.1. **The introduction of renewable heat**

(11) The Dutch authorities explain that renewable heat has significant potential to contribute cost effectively to reaching the mandatory European renewable energy target. Moreover, the inclusion of renewable heat within the SDE+ scheme increases competition between different renewable energy projects for the available budget, due to the modifications introduced by the SDE+ and which are explained in section 2.3.4.
Eligibility of renewable heat under the SDE+ scheme

(12) While the existing schemes are solely oriented at the stimulation of the renewable gas and electricity production (including CHP), the modified scheme SDE+ provides the possibility to stimulate the production of renewable heat exclusively (and not only in combination with the generation of renewable electricity), generated from renewable sources of biomass, solar energy, geothermal energy, ambient energy\(^9\), sewage gas and biogas.

(13) In particular, the SDE+ scheme allows subsidising renewable heat production in an installation that is dedicated to renewable heat production, on the condition that the heat is usefully deployed. Therefore, only the renewable heat produced which is usefully deployed can obtain aid\(^{10}\). Moreover, the SDE+ scheme also allows subsidising renewable heat that is released by the production of renewable electricity, on the condition that heat is usefully deployed. Therefore, the SDE+ allows the following installations to obtain aid:

(i) New installations for the production of renewable heat.
(ii) New installations for the production of renewable electricity and heat.
(iii) Existing installations for the production of renewable electricity which make some investments for renewable heat production, including existing waste incineration installations\(^{11}\), provided that the installation has not been granted aid before or that the installation has only obtained aid before under the SDE scheme but only for renewable electricity.

(14) As a consequence of the inclusion of renewable heat in the SDE+ scheme, combined generation of renewable electricity and heat will no longer be remunerated under the existing scheme, but will now be based on the energy-content in GigaJoules (GJ). In fact, the producer has some freedom to deviate from the heat to power ratio realized by the reference installation, that is to say, to produce more electricity and less heat or the other way round, without the risk that the surplus of electricity production would not be eligible for support\(^{12}\). Therefore, payments based on energy content are no longer (indirectly) prescribing the ratio between renewable electricity produced and renewable heat, so the producer can maximise this ratio and therefore its return. However, a minimum heat to power ratio legal requirement currently

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\(^9\) Ambient heat is introduced in the SDE + scheme as renewable energy source, and relates to heat present in the atmosphere or in surface water. Ambient heat is produced of solar energy. According to the Dutch authorities, Ambient energy refers to aero thermal (energy stored in the form of heat in the ambient air), shallow geothermal (energy stored in the form of heat beneath the surface of solid air) and/ or hydrothermal energy (energy stored in the form of heat in surface water) as covered by the Renewable Energy Directive\(^9\). Ambient energy may e.g. refer to heat pumps.

\(^{10}\) According to the Dutch authorities, the reason to limit aid to renewable heat produced and usefully deployed is preventing renewable heat which is wasted to obtain aid.

\(^{11}\) Only the biodegradable part of the waste is taken into account as renewable and therefore, only the equivalent part of the production is eligible for aid.

\(^{12}\) A minimum heat/power ratio applies to all new installations to ensure that installations which are dedicated to heat production exclusively cannot receive aid on the basis of the base tariff specific to combined electricity and heat production installations.
applicable and which is not modified by the SDE+ scheme limits the freedom
to deviate from heat to power ratio.

(15) The operating aid is aimed at production of renewable heat usefully deployed
regardless of whether the renewable heat is used in district heating (e.g.
biomass heating projects and geothermal projects), industrial processes, or
other applications, and covers also the connection to the heat distribution
network (for example, the district heating infrastructure), since the
connection is part of the production installation as is therefore necessary for
selling renewable heat on the market. However, heat infrastructure on the
demand side, as for example a heat grid, is not included within the eligible
costs.

(16) According to the Dutch authorities, typical projects for which operating aid
for renewable heat can be granted are:

a) Large scale biomass heating plant (>0.5 Megawatt) with solid biomass as
input material\(^\text{13}\);
b) large scale biomass heating plant (>0.5 Megawatt) with liquid biomass as
input material\(^\text{14}\);
c) geothermal heat production\(^\text{15}\);
d) biomass fermentation with heat as output (individual or hub\(^\text{16}\)
installation);\(^\text{17}\);
e) manure fermentation with heat as output (individual or hub installation);\(^\text{18}\);
f) large scale solar heating plant with a collector surface of more than 100
\(\text{m}^2\);\(^\text{19}\);
g) existing waste incineration plants to make practical use of the renewable
heat released by the production of renewable electricity instead of wasting it\(^\text{20}\);
h) existing biomass combustion and fermentation production plants which
want to make practical use of the renewable heat released by the production of
renewable electricity, instead of wasting it\(^\text{21}\);
i) Existing manure fermentation production plants which want to make
practical use of the renewable heat released by the production of renewable
electricity, instead of wasting it\(^\text{22}\).

\(^{13}\) For example, large scale boiler in industry with bearing wood (for example pruning and thinning
wood).
\(^{14}\) For example, large scale boiler in industry with animal fat.
\(^{15}\) For example, for the purpose of generating district heating.
\(^{16}\) A hub is a group of biogas production plants (biogas fermentation or manure fermentation)
connected to each other that use central production facilities to convert biogas into renewable
electricity and renewable heat or exclusively renewable heat. In a hub, the costs of the shared
facilities to produce renewable electricity and renewable heat out of biogas are shared by the
producers of the biogas. Therefore, in principle, the hub allows economies of scale.
\(^{17}\) For example, biogas production in a solo production plant or a group of production plants (hub).
\(^{18}\) Idem.
\(^{19}\) For example, solar heating plant on the roof of a calf husbandry.
\(^{20}\) For example, exporting the heat to an existing district heating network.
\(^{21}\) For example, biogas project exporting the renewable heat to a residential area. Specifically, the
following installations may apply for subsidy: (i) biomass combustion installations and (ii)
biomass fermentation installations.
\(^{22}\) These installations have a smaller scale and less possibility for heat supply (lower full load hours).
(17) Projects d) and e) mentioned above consist of two or more biogas production plants (fermentation or manure fermentation) which are connected through a network to a central production facility (a so called "hub"). The biogas in the hub may be used for renewable electricity and renewable heat or purely renewable heat production. In a "hub", biogas production plants share central production facilities for renewable energy production and their costs, according to the total amount of renewable energy produced by each of the producers.

(18) According to the Dutch authorities, in the coming years, new technological developments will become eligible for the SDE+ scheme, thus contributing to cost-effectively reaching the mandatory European renewable target by 2020. Broadening the scope of the SDE+ will contribute positively to the cost effectiveness of the SDE+ scheme.

(19) Certification will be developed in order to exclude heat from fossil sources to be subsidised. A law will be passed regarding measuring of the production of renewable heat usefully deployed, according to which CertiQ (a subsidiary of the network operator Tennet), will permanently certify the production of renewable heat that is usefully deployed. Furthermore, according to the Dutch authorities, physical inspections of renewable energy installations every five years will be mandatory.

(20) Finally, only the production of heat which is usefully deployed after the date of application for the SDE+ scheme is eligible under the notified scheme.

Operating aid for renewal heat under the SDE+ scheme

(21) Specific base tariffs for renewable heat are calculated within the SDE+ scheme, following the same methodology used in the SDE scheme for renewable electricity and gas and approved by the Commission in case N 487/07.

(22) Under the existing schemes, the eligible costs calculation does not take into account the additional costs for the production of renewable heat. On the contrary, the SDE+ scheme allows supplementing the provision under the existing scheme with operating aid to the production of renewable heat which is usefully deployed.

(23) However, for renewable heat, the SDE+ scheme eligible cost calculation only takes into account the additional new investment aimed at renewable heat production and the operational and maintenance costs required to produce the renewable heat. Previous investments are fully excluded from the calculation of eligible costs as well as costs related to the use of renewable heat. In particular:

(i) For new installations for the production of electricity and heat, the base tariff is based on the total investment and operation and maintenance costs, including fuel costs, required to extract and/or produce heat from the installation up to the point where the renewable heat is transferred to the distribution network (in case the heat is supplied to third parties) and/or is
usefully deployed on the site\(^{23}\) (in case the heat is used for own consumption) divided by the total amount of electricity and heat produced. The amount of the aid is the base tariff minus a corrective amount which is based on market prices of electricity and heat and the electricity and heat ratio of the reference installation.

(ii) For new installations for the production of renewable heat, the eligible cost calculation takes into account the total investment and operational and maintenance costs, including the costs of fuels.

(iii) For existing installations for the production of renewable electricity which make some investments for renewable heat production, including existing waste-incineration installations\(^{24}\), biomass combustion plants, biomass fermentation plants and manure fermentation plants, the base tariff is based only on the investment and operation and maintenance costs that are exclusively made for renewable heat production from the installation. The costs of the fuel are not taken into account, due to the fact that renewable heat is a by-product of renewable electricity production. Any investments already made for the production of renewable electricity are not eligible costs. The amount of the aid is the base tariff minus the market price of heat.

(24) A different base tariff applies to installations for the production of renewable heat for own consumption and to installations for the production of heat to be supplied to third parties\(^{25}\). Moreover, the market price of renewable heat for own consumption may be different from the market price of renewable heat to be supplied to third parties. If a particular installation produces renewable heat both for own consumption and to be supplied to third parties, different market prices are set.

(25) In particular, for geothermal heat production installations, the implementing body (Agentschap NL) verifies whether the main characteristics of the installation (for example the investment costs and output capacity) are reasonably similar to those of the geothermal heat production reference installation\(^{26}\). This verification step is specific for geothermal productions installations, because given a certain investment the production capacity

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\(^{23}\) The heat infrastructure on the demand side, for example district heating network, is not part of the eligible costs.

\(^{24}\) In waste-incineration plants, only the part of the heat which comes out of the biodegradable part of the waste is eligible for subsidy.

\(^{25}\) An assessment is carried out on whether the different types of projects is mainly used for own consumption or for supply to third parties. Regarding installations which typically supply to third parties, in the calculation of the base tariff costs required for the transport of the heat to the point where it is transferred to the distribution network or transferred directly to a third party are taken into account. For installations typically for own consumption, the above-mentioned costs are not taken into account in the calculation of the base tariff.

\(^{26}\) For example, if the output capacity deviates significantly from the main characteristics of the reference installation, the implementing body will require further information that proves the feasibility of the submitted project both economically and technically. If the later cannot be proved, there is the possibility to submit and adjusted project (for example, adjusting the power, the output capacity or the amount of the renewable heat that is usefully deployed), which would lead to lower investment costs. If finally the project is not correctly adjusted, the subsidy application will be rejected.
varies depending on the successfulness of the drilling process. The verification may lead to adjustments in order to be able to benefit from aid.

(26) The market price for renewable heat is based on the avoided amount of natural gas for the same heat amount\(^\text{27}\).

(27) Regarding the typical projects d) and e) mentioned above, the proposed aid would cover the individual production installations of biogas, the shared facilities and the connection\(^\text{28}\) to the shared facilities to convert biogas into renewable electricity and renewable heat or exclusively renewable heat. Therefore, there is no funding for transport infrastructure.

(28) The individual undertakings that jointly operate a hub are all beneficiaries of the operating aid, which is divided over the individual undertakings proportional to the amount of energy produced by each undertaking.

(29) Due to the fact that sharing facilities may be economically attractive, for these projects a separate hub installation category with a lower base tariff is determined\(^\text{29}\). However, in case expert calculations show that there are no obvious cost benefits of sharing energy production facilities, individual and hub projects would apply in the same category. In that case, the base tariff of the individual production installation would apply to both individual production installations and hub installations.

2.3.2. Introduction of Osmosis

(30) The modified SDE+ scheme includes osmosis as an eligible renewable energy source. Electricity from osmosis is generated by exploiting the difference in potential between salt and fresh water.

(31) Osmosis is a non-fossil maritime energy source, like wave and tidal energy.

(32) The Dutch authorities justify the introduction of osmosis on the fact that the SDE+ scheme is technology neutral.

(33) The Dutch authorities have calculated a base tariff for this technology, which is, according to the latest projections of 2012, 49.3 euro cents/kWh, based on

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\(^{27}\) According to the Dutch authorities, in the Netherlands, the linkage with the market price for natural gas is a common practice for heat delivery contracts (for both industrial and residential use).

\(^{28}\) According to the Dutch authorities, the connection is part of the production installation as it is inevitable for renewable energy production.

\(^{29}\) The base tariff covers the estimated costs. The base tariff is calculated per unit of energy and consists of two components. The first component includes the costs per GJ (or per Nm\(^3\) or per Kwh) to operate the individual biogas production facility. The second component includes the costs per GJ for processing the total of all the supplied biogas from the different beneficiaries in the shared facilities. The latter presumes that the costs of the shared facilities in a hub are distributed over the different biogas producers in proportion to their energy production.
a representative installation of 1 MW\textsuperscript{30}, for which the technology is already on the deployment stage\textsuperscript{31}.

(34) The base tariff is based on the eligible costs of a reference installation that is marketed on a commercial scale. The eligible costs calculations are repeated every year, which would allow the Dutch authorities to identify any improvement in the technology's cost effectiveness in a timely manner.

2.3.3. The possibility to carry over eligible production to the following years.

(35) Under the SDE scheme, a maximum number of kilowatt hours per year (eligible production) are eligible for operating aid. This maximum number of kilowatt hours, which can be set for each renewable energy category, is based on the capacity of the plant and the number of production hours. The annual eligible production is determined by multiplying the power of the installation by the maximum annual eligible full load hours. The maximum annual full load hours are equal to the full load hours used in the calculation for the relevant category. The maximum eligible production therefore is in accordance with the production for which the base tariff is calculated.

(36) If in one year the actual production is higher than the eligible production, subsidy is paid only for the eligible production. This has no effect on the eligible production in subsequent years. It is not possible to obtain aid for the production exceeding the eligible production. In any year, the total production for which subsidy is paid over the whole preceding subsidy period, is not allowed to exceed the total eligible production of the preceding subsidy period.

(37) The SDE+ scheme introduces the possibility for producers of all renewable energy, except from wind energy\textsuperscript{32}, to carry over to subsequent years eligible production not used and therefore, not having received any aid. Moreover, during one year after the end of the period in which producers may receive operating aid (the expected economic life time of the production installation (depreciation period)), producers can be compensated for the eligible production not used to obtain operating aid during the whole period during which aid could be obtained.

(38) According to the Dutch authorities, this modification aims at improving the eligibility of projects and at reducing risks. In fact, the base tariff is based on an average number of production hours per year. Once the producer completes all the eligible production hours, the plant is written off. If an

\textsuperscript{30} 1 MW installations are considered as representative installations within the time horizon of the SDE+ scheme. For the calculations, it is assumed that the technology is in its deployment stage, and therefore, costs of research and development are not included in the calculations.

\textsuperscript{31} Consequently, eligible costs of the representative installation do not include research and development costs.

\textsuperscript{32} Since they are still subject to the wind factor. Promotion of onshore wind energy is based on paying the base tariff applicable to a reference wind turbine on a relatively windy site (2,200 production hours). The subsidy for onshore wind is paid for 1,760 hours. The base tariff is adjusted upwards by a wind factor of 1.25. The operator does not receive subsidy for production in excess of 1760 hours. However, the operator does gain for this extra production by selling the electricity. This covers the producer against the risk of losing subsidy in years of low wind levels.
operator produces less in a year than the annual eligible quota, it is a financial setback and means the extra costs can no longer be totally covered. This in turn means that part of the installation cannot be written off. The new measure would allow the producer to make better use of his grant, and maintain the cost effectiveness of the project.

2.3.4. The introduction of a single ceiling base tariff

(39) The total available budget for the SDE+ scheme will be determined on an annual basis. A single subsidy ceiling is set for renewable electricity, combined generation of renewable electricity and heat, renewable heat and renewable gas.

(40) In the existing schemes, the various options for sustainable energy are put into distinctive categories, with a different base tariff for each category and for each of these various options for sustainable energy a budget ceiling is annually determined.

(41) However, under the modified SDE+ scheme, all technologies will compete for the available budget and cheaper projects get priority in the budget allocation. In order to achieve the above-mentioned objective, different stages for subsidy applications will be established in which specific technologies will be able to apply for their specific base tariffs provided their base tariff is lower than the so called "free-category", meanwhile all the other technologies will have to apply under the so called "free-category", which will also vary in the different stages, with a maximum of 15 eurocents per kWh\(^3\), as illustrated in the table below:

<table>
<thead>
<tr>
<th>Free category</th>
<th>Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>Electricity</td>
<td>EUR 0,07/kWh</td>
</tr>
<tr>
<td>Renewable gas(^3)</td>
<td>EUR 48.3 ct/Nm3</td>
</tr>
</tbody>
</table>

Free-category tariffs for 2012

\(^3\) Due to the fact that it has been determined that in the Netherlands, all renewable energy options with a base tariff of up to 15 eurocents is needed in order for the Netherlands to fulfil the mandatory European renewable target of 14%. New insights, for example more or less cost effective projects than expected, may lead to a review of the maximum free category amounting to 15 eurocents/kWh.

\(^3\) According to the Dutch authorities, for green gas, the maximum tariff per stage and the free category tariff are multiplied by 78.5%, because according to the Renewable Energy Directive, renewable gas can only account for 78.5% to the Dutch renewable energy target.
For example, for solar energy with an average estimated base tariff of 28 eurocents per kWh to obtain operating aid, it will have to apply under the so called "free-category" which will have a maximum base tariff of 15 eurocents per kWh.

No technology will be able to apply for a base tariff higher than its specific annually calculated base tariff in any of the different stages foreseen and that will be the case over the whole period of the implementation of the SDE+ scheme. In particular, under the free category, only technologies with a higher base tariff than the applicable free-category base tariff will be able to obtain compensation.

The SDE+ scheme will be carried out on an annual basis, so all the stages will be run in a yearly period. All the different stages will be approximately equal in time, taking into account holiday periods. Moreover, within a specific stage, the aid will be granted on the basis of the date of application.

The Dutch authorities explain that the SDE+ is a technology neutral instrument that is simply focused on deployment, and that under this scheme, all technologies compete for the available budget. Cheaper projects get priority in the budget allocation. For more expensive projects this method produces cost reductions. The Dutch authorities recognize that an individual project might have its specific cost profile. Therefore, individual projects are incentivised to apply for a lower base tariff in the so called "free category" than their specific base tariff. Applications for operating aid can be up to 15 eurocents per kWh, which is the current maximum base tariff in the SDE+ scheme.

2.3.5. Prioritising less expensive projects when the subsidy ceiling is exceeded.

According to the modified SDE+ scheme, if one single day the applications received exceed the available budget, the applications will be ranked according to the base tariff and less expensive projects will be given priority. Lots will be drawn among projects with the same base tariff.

According to the Dutch authorities, giving priority to the less expensive renewable energy category in the allocation of the available budget serves to achieve the main objective of the SDE+, which is the promotion of renewable energy in the most effective and less costly manner. This modification of the SDE scheme avoids the need to draw lots between all types of projects in case of over-subscription, irrespective of the base tariff.

The Dutch authorities note that the proposed modification at stake does not affect the non-discrimination, transparency and openness of the selection process carried out in the existing schemes, but that the amendments result in a better selection of beneficiaries in order to achieve the environmental targets with the least amount of aid.
2.4. Legal basis

(49) Framework Act for Economic Affairs Subsidies; Decision concerning the promotion of sustainable energy production.

2.5. Budget and duration

(50) The expected budgetary expenses for the period from March 13th 2012 up to and including March 12th 2018 are the following:

<table>
<thead>
<tr>
<th>Period</th>
<th>Expected budgetary expenses in million euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 13th 2012</td>
<td>107</td>
</tr>
<tr>
<td>2013</td>
<td>244</td>
</tr>
<tr>
<td>2014</td>
<td>350</td>
</tr>
<tr>
<td>2015</td>
<td>536</td>
</tr>
<tr>
<td>2016</td>
<td>678</td>
</tr>
<tr>
<td>2017</td>
<td>705</td>
</tr>
<tr>
<td>March 12th 2018</td>
<td>136</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,755</strong></td>
</tr>
</tbody>
</table>

2.6. Legality of the aid and standstill obligation

(51) The SDE+ scheme will enter into effect after the publication of the Royal Decree containing the legal basis mentioned in section 2.4 above, and call for applications will be opened on that same day with a standstill obligation on the authorisation by the European Commission. Therefore, the decisions on the granting of aid will come into force after authorisation of the scheme by the Commission.

2.7. Cumulation of aid

(52) Under the SDE+, cumulation of aid is possible. The cumulation of aid follows the same conditions that the SDE scheme, approved by the Commission in case N 478/2007.

(53) Firstly, generally applicable aid measures (i.e. the energy investment tax deduction scheme) are taken into account in the calculation of the base tariff and, in particular, the aid amount is deducted from the investment costs.

(54) Moreover, a "cumulation test" is carried out by the implementing body (Agentschap NL), on behalf of the Minister to determine whether benefits from other aid measures should be deducted from the SDE subsidy. In particular, the aided installation under the SDE+ scheme can obtain aid for the same eligible costs up to a maximum amount equal to the specific base tariff for each type of technology. According to the Dutch authorities, under the cumulation test, if a project receives aid under the free category which is lower than its specific base tariff, additional State aid would be accepted up to the amount of its specific base tariff. At the same time, other support
measures received or enjoyed by the beneficiaries of the aid (such as local authority grants) are deducted from the operating aid of the SDE+ scheme, in order to respect the maximum aid allowed by the 2008 Community Guidelines on State Aid for Environmental Protection currently applicable (hereinafter referred to as "the EAG")\(^\text{35}\).

Finally, the market price may also be corrected in the following cases:

1. The market value of guarantees of origin and certificates (in case in the future these guarantees or certificates get a market value, as it will be the case with renewable energy obligation schemes);

2. the market value of CO\(_2\) rights (in case producers of renewable energy in the future get CO\(_2\) rights assigned with a certain market value);

3. any other events that may occur in the future (in case, for example, that new government policies are introduced which have a substantial impact on the difference between the average cost of the energy produced at the relevant average market price of electricity and gas).

3. ASSESSMENT

3.1. Existence of State aid and legality

Article 107(1) TFEU provides that "any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods, shall, in so far as it affects trade between member States, be incompatible with the internal market".

The set-up and financing of the notified scheme is the same as under the existing schemes\(^\text{36}\). The notified modifications do not make the Commission change its position on whether the scheme constitutes State aid within the meaning of Article 107(1) TFEU.

The Netherlands has complied with its obligation to notify the aid in accordance with Article 108 (3) TFEU (see paragraph 51 above). Therefore, the standstill obligation set out in Article 108(3) TFEU is respected.

3.2. Compatibility with the common market

The Commission has assessed the compatibility of the modifications introduced by the SDE+ scheme in the light of the EAG, in particular section 3.1.6.

3.2.1. Introduction of renewable heat

The Commission notes that the supported renewable heat is generated from renewable sources which comply with the definition of renewable energy

\(^{35}\text{OJ C 82, 1.4.2008, p.1.}\)

\(^{36}\text{N 707/02, N 543/05 and N 478/07.}\)
sources and biomass laid down in points 70(5) and 70(6) of the EAGs and with article 2 of 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 (hereinafter "the Renewable Energy Directive"). In particular, regarding ambient energy, although the Renewable Energy Directive does not expressly refer to ambient energy as such, it makes a clear reference in article 2(b) to "aerothermal energy", which relates to energy stored in the form of heat in ambient air, as well as to geothermal and hydrothermal energy.

(61) The base tariffs, the reference electricity price and the reference gas price are calculated in the same way as in the SDE scheme, which was already authorised by the Commission in its previous decisions in cases N 707/2002, N 708/2002, N 543/2005 and N 478/2007. In particular, the subsidy tariff is a premium tariff limited to the difference between the base tariff and the market price of the heat. Hence, the Commission sees no reason to reassess the calculation method again as it has been shown in its previous decisions on the existing schemes that they limit the subsidy to the difference between the production costs of the renewable energy and the market price of the form of power concerned, and are therefore in line with paragraph 107 EAG.

(62) In particular, the base tariff calculation for renewable heat does not lead to over compensation for the following reasons:

(i) First, for new installations for the production of renewable heat or for the production of renewable electricity and heat, the eligible costs calculation only takes into account the additional investment and operational and maintenance costs (including fuel costs) required to produce renewable heat, excluding any previous investment.

(ii) Secondly, regarding existing installations for the production of renewable electricity which make some investments for renewable heat production, only investment and operation and maintenance costs that are exclusively made for renewable heat production from the installation are taken into account, excluding fuel costs, due to the fact that renewable heat is a by-product of renewable electricity production.

(iii) Moreover, a different base tariff applies to different technologies for the production of heat for own consumption or for supply to third parties, as well as different corrective measures.

(iv) Furthermore, the Dutch authorities explain that base tariffs, which are based on expert advice, already take into account other aid measures (for example, national schemes), for which the production plant is eligible.

(v) As regards geothermal heat production installations, whose production capacity varies depending on the successfulness of the drilling process, given a specific investment, a specific verification is carried out by the implementing body (Agentschap NL), to assess whether the main characteristics of the installation (for example the investment costs and
output capacity) are reasonably similar to those of the geothermal heat production reference installation. Otherwise, an adjustment is required leading to lower investment costs.

(vi) Finally, regarding the typical projects d) and e) mentioned in section 2.3.1 above, the proposed aid would cover the individual production installations of biogas, the shared facilities and the connection\(^{37}\) to the shared facilities to convert biogas into renewable electricity and renewable heat or exclusively renewable heat. Therefore, there is no funding for transport infrastructure. Moreover, the operating aid is divided among the individual undertakings that jointly operate a hub, in proportion to the amount of energy produced by each undertaking. Therefore, in order to avoid overcompensation, for these projects a separate hub installation category with a lower base tariff is determined and will be applied unless expert calculations show that there are no obvious cost benefits of sharing energy production facilities. Finally, by the methodology used - costs are calculated per unit of energy and the subsidy is paid according to the energy production due to their participation in a hub— it is not possible for individual beneficiaries to be overcompensated.

(63) The operating aid is aimed at production of renewable heat, including heat used in district heating, and covers the connection to the heat distribution network, since the connection is part of the production installation as it is therefore necessary for selling renewable heat on the market. However, heat infrastructure on the demand side, as for example a heat grid, is not included within the eligible costs. Therefore, the aid only covers the generating part of the district heating, and thus, is covered by section 3.1.6 EAG.

(64) The Commission notes that due to the fact that there is no market price for renewable heat, the market price for renewable heat is based on the avoided amount of natural gas for the same heat amount. In this respect, the Dutch authorities explain that the linkage between natural gas and renewable heat is a common practice for heat delivery contracts.

(65) On the basis on the above considerations, it can be concluded that the base tariffs for renewable heat only cover the difference between the costs of producing energy from renewable energy sources and the market price of renewable heat, both for the purposes of production of renewable heat for the purposes of subsequently selling it on the market to third parties as well as for own consumption. Therefore, the aid granted to renewable heat does not lead to overcompensation and is in conformity with section 3.1.6 EAG.

3.2.2. Introduction of osmosis

(66) Osmosis is a non-fossil maritime energy source, like wave and tidal energy. Ocean energy is included within renewable non-fossil sources in Article 2 a) of the Renewable Energy Directive.

\(^{37}\) According to the Dutch authorities, the connection is part of the production installation as it is inevitable for renewable energy production.

3.2.3. The possibility to carry over eligible production to the following years

The SDE+ scheme allows producers to be compensated for the eligible production not used to obtain operating aid in the eligible period (the expected economic lifetime of the production installation (depreciation period)), during one year after the expiration of the above-mentioned period.

Under paragraph 109 a) EAG, operating aid may only be granted until "the plant has been fully depreciated according to normal accounting rules". In particular, it is expressly stated that "any further energy produced by the plant will not qualify for any assistance".

The depreciation period used in the SDE+ scheme did not change compared to the approved scheme and the base tariff is calculated on the basis of this depreciation period which was already considered in line with normal accounting rules. The base tariff is subsequently limited to the eligible production in a year, which may deviate from the actual production. If in one year the actual production is higher than the eligible production, the base tariff is paid only for the eligible production and not for the actual production. If in one year the actual production is lower than the eligible production, the base tariff is limited to the actual production and not granted for the eligible production foreseen. In order to take into account such deviations, one additional year to achieve total eligible production is granted.

However, it is not possible to obtain aid for the production exceeding the eligible production. As the aid is only granted for a pre-determined annual amount of production and as higher actual production (than the eligible production) is not benefitting from the aid, the carry over of annual eligible production one more year does not lead to production benefitting from aid beyond the normal depreciation costs of the plant.

3.2.4. The introduction of a single ceiling base tariff and prioritising less expensive projects when the budget is exceeded

As it has been pointed out by the Dutch authorities, the introduction of a single ceiling base tariff makes the different technologies compete for the available budget and gives priority to the cheapest technologies. In this respect, the more expensive technologies have to apply for a lower base tariff than the one calculated for the specific technology under the so called "free-category", which will amount to a maximum of 15 eurocents per kWh.

Due to the fact that no technology will be able to apply for a base tariff higher than its specific annually calculated base tariff in any of the different stages foreseen and that this will be the case over the whole period of the implementation of the SDE+ scheme, as well as that only technologies with a higher base tariff will be able to obtain compensation under the "free
category”, the SDE+ scheme provides no overcompensation for any technology.

(74) The prioritisation of less expensive projects on the application date when the budget is exceeded does not lead to overcompensation, since the technologies to be aided in these circumstances will not be compensated on the basis of a base tariff higher than the specific base tariff calculated for that specific technology.

3.2.5. Cumulation

(75) The cumulation test applicable under the SDE scheme and already approved by the Commission is also applicable under the SDE+ scheme. Hence, the Commission sees no reason to reassess the calculation method again.

(76) Moreover, the possibility to cumulate aid for the same eligible costs up to the amount of the base tariff for those projects or installations receiving aid on the basis of a base tariff lower than their specific base tariff, does not lead to overcompensation since it is ensured that the operating aid received is not higher that the losses incurred in the production of energy, as set out in point 107 EAG.

3.2.6. Conclusion

(77) Accordingly, the Commission comes to the conclusion that the notified scheme complies with the Environmental Aid Guidelines and is therefore compatible with the internal market in accordance with Article 107(3)(c) TFEU.

4. DECISION

The Commission has accordingly decided not to raise objections to the notified measure because the aid is to be considered compatible with the common market within the meaning of Article 107(3)(c) TFEU and Article 61(3)(c) of the EEA Agreement.

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Yours faithfully,
For the Commission

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Vice-President