Brussels, 27.9.2018  
C(2018) 6358 final

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

Subject: State Aid SA.51306 (2018/N) – Belgium  
Individual aid to three offshore windfarm projects (Mermaid, Seastar and Northwester2)

Sir,

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

1. Procedure

(1) On 17 August 2018, following pre-notification contacts, the Belgian authorities notified the Commission, in accordance with Article 108(3) of the Treaty on the Functioning of the European Union (“TFEU”), of the above-mentioned measure, consisting of a support granted to three individual offshore windfarm projects located in the Belgian exclusive economic zone, the Mermaid, Seastar and Northwester2 projects.

(2) On the same day, Belgium waived its right under Article 342 of the TFEU in conjunction with Article 3 of EC Regulation No 1/1958 to have the decision adopted and notified in French and Dutch and agreed that the decision be adopted and notified in English.

Son Excellence Monsieur Didier REYNDERS  
Ministre des Affaires étrangères  
Rue des petits carmes, 15  
B – 1000 Bruxelles
2. Detailed description of the individual aid measures

2.1. Background and objective

(3) The present decision relates to individual aid granted to the Mermaid, Seastar and Northwester2 offshore windfarm projects that the Belgian authorities committed to notify on the basis of the Commission decision adopted on 8 December 2016 in case SA.458671 (“2016 Commission decision”), whereby the Commission approved the Belgian federal renewable energy certificates regime (“REC regime”) and two individual aid measures to support the Rentel and Norther offshore windfarm projects on the basis of the REC regime.

(4) While the REC regime also applied to the three notified projects, the level of the levelised cost of energy (“LCOE”) applying to the projects had not been fixed at the time of the adoption of the 2016 Commission decision. The Belgian authorities therefore committed to notify these projects later2, regardless of whether each of them reaches the 250 MW capacity individual notification threshold set out in the Guidelines on State aid for environmental protection and energy 2014-20203 (“EEAG”).

(5) The main objective of the Belgian REC regime is to promote the production of offshore renewable energy, in order to contribute to reaching the share of at least 13% of renewable energy in gross final energy consumption in Belgium in 2020, as laid down in Directive 2009/28/EC4 (“RES Directive”).

(6) By means of a national political agreement, the target of 13% has been divided between the three regions of Belgium (Flanders, Wallonia and Brussels) and the federal level. At the federal level, the target was fixed at 2.21%, which represents a capacity of 2200 MW. This goal can be achieved, amongst others, by the installation of offshore renewable energy capacity, which falls exclusively within the purview of the federal level.

(7) So far, 40% of the target of 2200 MW is operational, with a current total capacity amounting to 877 MW. In addition, the Rentel and Norther projects assessed individually in the 2016 Commission decision, currently in the construction phase, represent a combined capacity of approximately 650 MW, which is nearly 30% of the target.

(8) According to the Belgian authorities, the realisation of the three notified offshore windfarm projects, with a combined total capacity of 706 MW, is indispensable to close the gap and reach the 2200 MW target by 2020.

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2 See recital (25) of the 2016 Commission decision
2.2. Legal basis

(9) The notified offshore windfarm projects are to be supported under the REC regime laid down in the Act organising the electricity market of 29 April 1999 (“Electricity Act”) and the Royal Decree establishing mechanisms to promote electricity from renewable energy sources of 16 July 2002 (“REC Royal Decree”).

(10) The LCOE and some other modalities of the support mechanism that will apply to the three notified projects are set out in the Royal Decree of 17 August 2018 amending the REC Royal Decree. Its entry into force is subject to the Commission's approval of the measure.

2.3. Form of aid

2.3.1. The REC regime

(11) The Belgian authorities explained that the essential elements and the functioning of the REC regime approved in the 2016 Commission decision will remain unchanged. Certain modalities of the scheme will however be amended with respect to projects which have obtained a domain concession and which reach financial close on or after 1 July 2018. This will apply solely to the Mermaid, Seastar and Northwester2 projects. The purpose of those amendments is to reduce the overall level of support for the three notified offshore windfarm projects.

(12) The basic functioning of the REC regime is as follows: eligible producers of offshore renewable energy receive from the Belgian federal energy regulator, the CREG, a green certificate for every MWh of renewable energy produced. These producers then sell their green certificates to the Belgian transmission system operator (“TSO”), Elia, at a guaranteed minimum price pursuant to Article 14 of the REC Royal Decree. In addition, the producers sell their electricity directly in the market and are subject to standard balancing responsibilities.

(13) To avoid creating incentives to produce electricity when electricity prices are negative, the mechanism of zero-pricing of green certificates described in the 2016 Commission decision will apply to the three notified projects.

(14) According to the REC Royal Decree, for offshore wind installations that are covered by a domain concession with financial close on or after 1 July 2018, the obligation for the TSO to purchase green certificates at the minimum price will be limited to a 17 year period as of the commissioning date of each installation. The purchase obligation will also be limited in terms of full load hours. The green certificate price will apply to a volume of generated electricity limited to the production of 63,000 full load hours of all wind turbines within a domain concession. This total supported volume constitutes a maximum ceiling: if the 17 year period of support expires before this ceiling is reached, the number of MWh actually receiving support will be lower than the equivalent of 63,000 full load hours.

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5 This Royal Decree was published in the Official Belgian Gazette on 27 August 2018.
7 See recitals (12) and (13) of the 2016 Commission decision.
8 See recitals (88) to (93) of the 2016 Commission decision.
hours. This maximum supported volume will be fixed by Ministerial Decree for each domain concession.

(15) According to the REC Royal Decree, for offshore wind installations that are covered by a domain concession with financial close on or after 1 July 2018, the minimum price for the green certificates will be calculated as the LCOE minus a measure of market revenue according to the following formula:

\[ \text{minimum price} = \text{LCOE} - \left( \text{electricity reference price} \times (1 - \text{correction factor}) + \text{the value of the guarantee of origin certificate} \times (1 - \text{grid losses factor}) \right), \]

where:

(a) the LCOE level will be fixed by Article 14, § 1 of the REC Royal Decree uniformly at 79 EUR/MWh for all projects which obtained a domain concession and which reach financial close on or after 1 July 2018. This LCOE level is based on the CREG's report\(^9\) which assessed the figures of the Mermaid, Seastar and Northwestern2 projects and also transposed to the Belgian context the level of support that was granted as a result of two tenders organised by the Netherlands for the development of four offshore windfarms located in the area of Borssele, which borders the Belgian domain concessions;

(b) the electricity reference price will be defined as the average in EUR/MWh of the daily quotations in year \(Y-1\) of the future contracts “calendar \(Y\)”, as published by APX Holding B.V., registered with the Dutch Trade Register of the Chamber of Commerce, adjusted by the CREG based on the difference between the contracted sales price and the average nominal price equal to 90 % of the electricity reference price (cf. the application of the correction factor as pointed out below);

(c) the correction factor will be applied to the forward electricity price in order to take into account costs and risks (balancing and profiling) incurred by the electricity purchaser. The correction factor is established at 0.10 pursuant to Article 14, § 1, 1°quater of the REC Royal Decree, without prejudice to the possibility to adjust the correction factor for each domain concession pursuant to Article 14, § 1ter/1;

(d) the value of the guarantee of origin certificate will be based on the actual sales price traded in the market. It will be stipulated in the contracts and updated annually by the CREG;

(e) the grid losses factor will be calculated by the CREG each month, for each concession, on the basis of the difference between the quantity of electricity produced and the quantity of electricity fed into the grid.

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Pursuant to Article 7, § 1 bis of the Belgian Electricity Act, the CREG is required to draft a report on a yearly basis concerning the effectiveness regarding the costs of the minimum price at which the TSO will purchase the green certificates.

In order to ensure a more regular revenue stream for the domain concession holders without increasing the total amount of support received over the support term of 17 years, the Belgian authorities explained that payment will take the form of ex ante prepayments and ex post settlements.

According to Article 14, § 1 septies of the REC Royal Decree, as from the commissioning of each wind turbine, the TSO will make monthly prepayments to the domain concession holders. The amount of the monthly prepayments will be fixed annually by the CREG for each installation and calculated by applying the green certificate minimum price formula to a presumed production volume.

For the first five years after commissioning of each wind turbine, the presumed production will be the equivalent of 4,100 full load hours. For the sixth and following years, the presumed production will equal to the average annual production over the previous five operating years calculated by the CREG.

The prepayments will be calculated using presumed values for the various parameters included in the minimum price formula, namely:

(a) a presumed electricity reference price. This will be calculated on the basis of the average of the last 365 daily Endex CAL+1 quotations published at the time of calculation;

(b) a presumed correction factor, being the most recent correction factor set by the CREG;

(c) a presumed value of the guarantees of origin. This will be calculated on the basis of the contract for the sale of guarantees of origin concluded by the domain concession holders concerned or, if applicable, on the basis of the average value over the previous calendar year of the reference index used in that contract;

(d) a presumed grid losses factor. This will be calculated on the basis of the history of cable losses or, for the first operating year, substantiated technical estimates.

In addition, if the actual production of a wind turbine during any of the first five operating years is lower than the presumed production, the TSO will make an additional prepayment, calculated on the basis of the following formula:

\[
\text{additional prepayment} = (4,100 \text{ full load hours} \times \text{MW} - \text{actual production}) \times \text{electricity reference price} \times (1 - \text{correction factor}),
\]

where the electricity reference price and the correction factor are defined as in recital (15) above.

For the sixth and following years of operation, at the end of each operating year of a given wind turbine, the CREG will establish a volume settlement, which compares the presumed production with the actual production, and a price settlement, which compares the presumed green certificate price used to calculate
the prepayments with the definitive green certificate price (taking into account zero-priced certificates under the negative prices mechanism). On the basis of those two settlements, the CREG will calculate a single cash \emph{ex post settlement} amount payable each year by the domain concession holders to the TSO or vice versa.

(23) For the first five operating years, special rules apply to the \emph{ex post settlement} which the CREG will establish after the end of the fifth operating year of the last wind turbine to be commissioned. First, the \emph{ex post settlement} is to be paid partly in cash and partly in green certificates. On the one hand, with regard to the \emph{volume settlement}, if the actual production was lower than the presumed production, the domain concession holders will have to either surrender green certificates at zero value or make payments in cash at a rate of 79 EUR/MWh for each missing green certificate. On the other hand, the \emph{price settlement} should be repaid in cash and will also take into account any additional prepayment which should be repaid to the TSO. Second, the deadline to submit the required number of green certificates is the end of the third month after the support term for the last wind turbine to be commissioned, while the deadline to make the cash settlement payment is the end of the ninth month after the support term for the last wind turbine to be commissioned.

\subsection*{2.3.2. The cable mark-up}

(24) In addition, pursuant to Article 7, § 2, third indent of the Belgian Electricity Act, installations that have their financial close after 31 December 2016 are under the obligation to connect to the modular offshore grid (“MOG”). The Belgian authorities indicated that for these installations, the minimum price for the green certificates is increased by a cable mark-up determined by the CREG after verification of the costs of the export cable and certain related equipment such as the offshore high-voltage substation, based on offers in the context of a tender procedure in accordance with public procurement tendering rules.

(25) The Belgian authorities emphasized that the costs of the export cable and the relevant related equipment is covered only by the cable mark-up and not by the LCOE of 79 EUR/MWh in order to avoid double compensation.

\subsection*{2.4. Beneficiaries}

(26) Under the REC regime approved in the 2016 Commission decision, the beneficiaries of the REC regime are offshore renewable energy producers holding both a domain concession and a guarantee of origin certificate and whose supported installations are located in the Belgian exclusive economic zone.

(27) In addition, pursuant to Article 14, § 1 of the REC Royal Decree, the domain concession holders and the Belgian TSO must enter into a contract upon proposition by the TSO for the purchase of green certificates that must be approved by the CREG.
(28) The Belgian authorities have committed to ensuring that firms having the status of firm in difficulty as defined by the Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty\(^{10}\) will not be eligible to receive support under the REC regime.

(29) The Belgian authorities have also committed to suspend any payment of aid under the notified scheme to a beneficiary which has benefitted from an earlier unlawful aid that was declared incompatible by a Commission decision, until that beneficiary has reimbursed or paid into a blocked account the total amount of unlawful and incompatible aid and the corresponding recovery interest.

(30) Mermaid THV, Seastar NV and Northwee\(^{2}\)r2 NV are the beneficiaries of the notified individual aid measures.

(31) According to the information provided by the Belgian authorities, the three notified projects have a combined production capacity of 706 MW, which represents around 3\% of electricity generation capacity in Belgium.

(32) The Belgian authorities indicated that the depreciation period of the three offshore windfarms is 20 years.

2.4.1. The Mermaid project

(33) The Mermaid offshore windfarm project is located 52 km offshore from the Belgian port of Ostend, in an area with water depth between 24 m and 40 m.

(34) This project comprises 28 wind turbine generators with a maximum generation capacity of 235 MW representing 1.07\% of electricity generation capacity in Belgium. It is expected to reduce Belgian CO\(_2\) emissions by around 363,000 tons per year.

(35) Pursuant to Article 14, § 1 of the REC Royal Decree, the LCOE is fixed at 79 EUR/MWh for installations covered by the domain concession granted to the Mermaid project (see recital (15)(a) above), under the assumption of a return on equity of the project of […]\(^{(8)}\) \%. In addition, based on a decision from the CREG\(^{11}\), the Mermaid project will receive a cable mark-up compensating for the connection costs.

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\(^{11}\) The CREG decision was not published at the time of the adoption of the present decision.
The table below summarises the characteristics of the Mermaid project based on information submitted by the Belgian authorities:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Mermaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum generation capacity</td>
<td>235 MW</td>
</tr>
</tbody>
</table>
| Average generation\(^\text{12}\) | P50: […] GWh/year  
P90: […] GWh/year |
| Total investment costs (CAPEX)   | EUR […] million |
| Investment costs                 | […] EUR/MW |
| Operation costs (OPEX)           | P50: […] EUR/MWh  
P90: […] EUR/MWh |
| Estimated support                | LCOE: 79 EUR/MWh 
Cable mark-up: up to 15 EUR/MWh\(^\text{13}\) |
| WACC\(^\text{14}\) (pre-tax)     | With aid: […] %  
Without aid: […] % |
| Project IRR\(^\text{15}\) (pre-tax) | With aid: […] %  
Without aid: 
  - low prices scenario: […] %
  - central prices scenario: […] %
  - high prices scenario: […] % |

\(^{12}\) An assessment made on P50 (respectively P90) means that there is a 50 % (respectively 90 %) chance that effective wind times are higher than estimate.

\(^{13}\) Confidential information

\(^{14}\) the Mermaid project has waived any right to a cable mark-up above 15 EUR/MWh.

\(^{15}\) Weighted average cost of capital

\(^{15}\) Internal rate of return
The related single-purpose company, Mermaid THV, was conceived as a contractual joint venture entered into operation between Otary RS NV\(^{16}\) (65%) and Electrabel (35%) on 9 January 2012. Mermaid THV was recently merged into Seastar NV which was renamed Seamade NV, as part of a transaction by which Otary RS NV, Electrabel NV and Eneco Wind Belgium SA acquired joint control over SeaMade NV\(^{17}\).

In 2017, Mermaid THV realised EUR [...] balance-sheet total.

The Mermaid offshore windfarm project is currently engaged in discussions with the European Investment Bank (“EIB”) with a view to obtain financing from the European Fund for Strategic Investment (“EFSI”). The EIB loan is expected to amount to approximately EUR [...].

2.4.2. The Seastar project

The Seastar offshore windfarm project is located 39 km offshore from the Belgian port of Ostend, in an area with water depth between 22 m and 38 m.

The project comprises 30 wind turbine generators with a maximum generation capacity of 252 MW representing 1.1% of electricity generation capacity in Belgium. It is expected to reduce Belgian CO\(_2\) emissions by around 372,000 tons per year.

Pursuant to Article 14, § 1 of the REC Royal Decree, the LCOE is fixed at 79 EUR/MWh for installations covered by the domain concession granted to the Seastar project (see recital (15)(a) above), under the assumption of a return on equity of the project of [...] %. In addition, based on a decision from the CREG\(^{18}\), the Seastar project will receive a cable mark-up compensating for the connection costs.

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\(^{16}\) The establishment of the joint venture Otary RS NV has been approved in the Commission decision adopted on 6 June 2011 in case M.6155 – GEM/DEME/Electrawinds Offshore/SRIWE/Z-Kracht/Power@Sea/Rent-A-Port Energy/Socofe/JV.

\(^{17}\) On 20 February 2018, Otary RS NV, Electrabel NV and Eneco Wind Belgium SA signed a term sheet regarding the creation of a new joint venture which will develop and own the two projects with a view on the timely completion of both projects. The concentration was approved by Commission decision of 5 July 2018 in case M.8855 – Otary/Eneco/Electrabel/JV.

\(^{18}\) The CREG decision was not published at the time of the adoption of the present decision.
The table below summarises the characteristics of the Seastar project based on information submitted by the Belgian authorities:

<table>
<thead>
<tr>
<th>Seastar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum generation capacity</strong></td>
</tr>
<tr>
<td>252 MW</td>
</tr>
<tr>
<td><strong>Average generation</strong></td>
</tr>
<tr>
<td>P50: […] GWh/year</td>
</tr>
<tr>
<td>P90: […] GWh/year</td>
</tr>
<tr>
<td><strong>Total investment costs (CAPEX)</strong></td>
</tr>
<tr>
<td>EUR […] million</td>
</tr>
<tr>
<td><strong>Investment costs</strong></td>
</tr>
<tr>
<td>[…] EUR /MW</td>
</tr>
<tr>
<td><strong>Operation costs (OPEX)</strong></td>
</tr>
<tr>
<td>P50: […] EUR/MWh</td>
</tr>
<tr>
<td>P90: […] EUR/MWh</td>
</tr>
<tr>
<td><strong>Estimated support</strong></td>
</tr>
<tr>
<td>LCOE: 79 EUR/MWh</td>
</tr>
<tr>
<td>Cable mark-up: up to 13 EUR/MWh</td>
</tr>
<tr>
<td><strong>WACC (pre-tax)</strong></td>
</tr>
<tr>
<td>With aid: […] %</td>
</tr>
<tr>
<td>Without aid: […] %</td>
</tr>
<tr>
<td><strong>Project IRR (pre-tax)</strong></td>
</tr>
<tr>
<td>With aid: […] %</td>
</tr>
<tr>
<td>Without aid:</td>
</tr>
<tr>
<td>– low prices scenario: […] %</td>
</tr>
<tr>
<td>– central prices scenario: […] %</td>
</tr>
<tr>
<td>– high prices scenario: […] %</td>
</tr>
</tbody>
</table>

The related single-purpose company, Seastar NV, is a limited liability company which was established on 16 December 2013 and owned by Otary RS NV holding 51% of the shares and by Otary’s shareholders (Dredging Environmental & Marine Engineering NV, Green Offshore NV, Elicio NV, S.R.I.W. Environnement SA, Z-Kracht NV, Aspiravi Offshore II NV, Socofe SA, and Power@Sea NV), each holding a 6.125% participation in Seastar NV. As explained in recital (37), Seastar NV recently absorbed Mermaid THV as part of a transaction by which Otary RS NV, Electrabel NV and Eneco Wind Belgium SA acquired joint control over Seastar NV (now called Seamade NV).

In 2017, Seastar NV realised EUR […] balance-sheet total.

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19 The Seastar project has waived any right to a cable mark-up above 15 EUR/MWh.
The Seastar offshore windfarm project is currently engaged in discussions with the EIB with a view to obtain financing from the EFSI. The EIB loan is expected to amount to approximately EUR [...].

2.4.3. The Northwester2 project

The Northwester2 offshore windfarm project is located 48 km offshore from the Belgian port of Ostend, in an area with water depth between 25 m and 40 m.

The project comprises 23 wind turbine generators with a maximum generation capacity of 219 MW representing 0.99 % of electricity generation capacity in Belgium. It is expected to reduce Belgian CO₂ emissions by around 308,000 tons per year.

Pursuant to Article 14, § 1 of the REC Royal Decree, the LCOE is fixed at 79 EUR/MWh for installations covered by the domain concession granted to the Northwester2 project (see recital (15)(a) above), under the assumption of a return on equity of the project of [...] %. In addition, based on a decision from the CREG^{20}, the cable mark-up compensating for the connection costs is fixed at 12.67 EUR/MWh for the Northwester2 project.

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^{20} CREG – Beslissing 1788 over de vastlegging van het bedrag ter dekking van de totale kosten van de aansluiting op het Modular Offshore Grid voor de domeinconcessie Northwester 2, 26 juli 2018
The table below summarises the characteristics of the Northwester2 project based on information submitted by the Belgian authorities:

<table>
<thead>
<tr>
<th><strong>Northwester2</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum generation capacity</td>
<td>219 MW</td>
</tr>
<tr>
<td>Average generation</td>
<td>P50: [...] GWh/year</td>
</tr>
<tr>
<td></td>
<td>P90: [...] GWh/year</td>
</tr>
<tr>
<td>Total investment costs (CAPEX)</td>
<td>EUR [...] million</td>
</tr>
<tr>
<td>Investment costs</td>
<td>[...] EUR/MW</td>
</tr>
<tr>
<td>Operation costs (OPEX)</td>
<td>P50: [...] EUR/MWh</td>
</tr>
<tr>
<td></td>
<td>P90: [...] EUR/MWh</td>
</tr>
<tr>
<td>Estimated support</td>
<td>LCOE 79 EUR/MWh</td>
</tr>
<tr>
<td></td>
<td>Cable mark-up: 12.67 EUR/MWh</td>
</tr>
<tr>
<td>WACC (pre-tax)</td>
<td>With aid: [...] %</td>
</tr>
<tr>
<td></td>
<td>Without aid: [...] %</td>
</tr>
<tr>
<td>Project IRR (pre-tax)</td>
<td>With aid: [...] %</td>
</tr>
<tr>
<td></td>
<td>Without aid:</td>
</tr>
<tr>
<td></td>
<td>– low prices scenario: [...] %</td>
</tr>
<tr>
<td></td>
<td>– central prices scenario: [...] %</td>
</tr>
<tr>
<td></td>
<td>– high prices scenario: [...] %</td>
</tr>
</tbody>
</table>

The related single-purpose company, Northwester2 NV, is jointly controlled by (i) Parkwind NV, which is in turn jointly controlled by the Korys-Colruyt group and Participatiemaatschappij Vlaanderen, and (ii) Summit Tailwind Belgium NV, which is ultimately controlled by Sumitomo Corporation.

In 2017, Northwester2 NV realised EUR [...] balance-sheet total.
The Northwester2 offshore windfarm project is currently under appraisal for receiving financing from the EFSI by the EIB\(^2\). The EIB loan is expected to amount to EUR 210 million.

2.5. Duration, budget and financing

The support for the three notified offshore windfarm projects will be paid out over a 17-year period, as of the date of commissioning of each individual installation, it being understood that the support period will in principle expire on 31 December 2037. As explained in recital (14), the green certificate price will apply to a volume of generated electricity limited to the production of 63,000 full load hours of all wind turbines within a domain concession.

Out of the total budget of the REC regime, the estimated budget allocated to the support of the Mermaid, Seastar and Northwester2 projects is EUR 3.5 billion, EUR 2.45 billion being allocated to the Mermaid and Seastar projects and EUR 1.11 billion to the Northwester2 project. The corresponding annual budget allocated to the support of the three notified projects amounts to EUR 206 million.

2.6. Cumulation

The Belgian authorities confirmed that the aid cannot be cumulated with any other aid covering the same eligible costs and specifically clarified that, under the Belgian law, since the Federal government is the only body competent for offshore renewable energy, the producers of offshore electricity cannot benefit from any regional aid regimes.

2.7. Transparency

The Belgian authorities committed to comply with the transparency requirements set out in Section 3.2.7 of the EEAG. In particular, the Belgian authorities created a comprehensive State aid website\(^2\).

3. Assessment of the measure

3.1. Existence of aid

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

In their notification, the Belgian authorities refer to the 2016 Commission decision in which it was concluded that the REC regime involves State aid.

In determining whether a measure constitutes State aid within the meaning of Article 107(1) of the TFEU, the Commission has to apply the following criteria: the measure must be imputable to the State and involve State resources, it must confer an advantage on certain undertakings or certain sectors which distorts or


threatens to distort competition and is liable to affect trade between Member States. The application of these cumulative conditions is examined below.

3.1.1. State resources and imputability

(61) Article 107(1) of the TFEU requires that State aid is granted by a Member State or through State resources. The Commission has already assessed the REC regime in the 2016 Commission decision and concluded that the financing of the REC regime involves State resources.

(62) The Mermaid, Seastar and Northwester2 offshore windfarm projects are supported on the basis of the REC regime and all the elements of the REC regime apply to these three projects. Thus the financing of the aid to these individual projects involves State resources.

(63) The rules that set out the functioning of the REC regime result from State legislation described in recitals (9) and (10) above. As concluded in the 2016 Commission decision, the support granted under the REC regime is therefore imputable to Belgium.

(64) In the light of those considerations, the Commission observes that the aid is therefore financed from State resources and imputable to the State.

3.1.2. Selective advantage

(65) The REC regime grants support to offshore renewable electricity producers through a green certificates system (see recital (12) above) which grants additional revenues to these producers on top of the electricity market price. This premium is not provided by the market itself and would not be obtained under normal market conditions. It therefore provides an economic advantage to offshore renewable electricity producers that is not available to other type of producers. The REC regime thus provides an advantage that is selective in nature.

(66) As the Mermaid, Seastar and Northwester2 offshore windfarm projects are supported by the REC regime, these projects benefit from the selective advantage.

3.1.3. Effects on competition and trade

(67) The Commission notes that the REC regime provides a selective advantage to some producers of renewable electricity and that the Belgian electricity market is liberalised and connected with neighbouring countries. The Mermaid, Seastar and Northwester2 projects are therefore granted a selective advantage that threatens to distort competition and is likely to affect trade between Member States.

3.1.4. Conclusion with regard to the existence of State aid

(68) Taking the above into consideration, the Commission concludes that the support to the Mermaid, Seastar and Northwester2 offshore windfarm projects, receiving aid on the basis of the REC regime, constitutes State aid within the meaning of Article 107(1) of the TFEU.

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24 See recital (61) of the 2016 Commission decision.
25 See recital (62) of the 2016 Commission decision.
3.2. Lawfulness of the aid

(69) The Belgian authorities confirmed that the individual aid will not be awarded to the three notified projects before the approval of the Commission (see recital (10) above). Belgium therefore complies with the standstill obligation set out in Article 108(3) of the TFEU.

3.3. Compatibility with the EEAG

(70) The Commission has assessed the compatibility of the individual aid to the Mermaid, Seastar and Northwester2 projects with the internal market pursuant to Section 3.2 of the EEAG which lays down the general applicable rules and Section 3.3 which sets specific rules for supporting renewable energy.

3.3.1. Objective of common interest

(71) As set out under points 30 and 31 of the EEAG, the general objective of environmental and energy aid is to increase the level of environmental protection compared to the level without the aid, particularly referring to the Europe 2020 strategy. In this respect, Member States will have to precisely define the objective pursued.

(72) Point 33 of the EEAG states that for individual projects Member States may demonstrate the contribution to the common objective by quantitative data. The Mermaid, Seastar and Northwester2 projects will contribute to achieving this objective by introducing 235 MW, 252 MW and 219 MW of renewable electricity to the Belgian energy mix respectively (see recitals (34), (40) and (48) respectively).

(73) Therefore, the Commission concludes that the aid to the Mermaid, Seastar and Northwester2 offshore windfarm projects contribute to an objective of common interest.

3.3.2. Need for State intervention

(74) Member States need to demonstrate that State aid is necessary to remedy a market failure that otherwise would remain unaddressed pursuant to point 37 of the EEAG. As explained in point 115 of the EEAG, the EU Emission Trading System and CO₂ taxes may not have resulted in a full internalisation of the costs of greenhouse gases emissions and State aid may still be needed for distinct but related objectives such as renewable energy. The Commission presumes that such a market failure still exists in the field of renewable policy pursuant to point 115 of the EEAG.

(75) Furthermore, point 38 of the EEAG explains that while a general need for State intervention may exist, for individual projects such need will still be assessed. The Belgian authorities have demonstrated that without aid the three notified offshore wind projects are not profitable (see recitals (86) and (88) below). This shows that the pricing of greenhouse gases, which increases electricity prices, has not taken away the need for State intervention for the individual projects.

(76) The Belgian authorities also mentioned that there is no other policy measure already sufficiently addressing this market failure in Belgium, in particular given
the significant costs of construction and operation of offshore renewable installations.

(77) Therefore, the Commission concludes that the negative externalities are not sufficiently addressed and the need for State intervention is demonstrated for the Mermaid, Seastar and Northwester2 offshore windfarm projects.

3.3.3. **Appropriate instrument**

(78) With reference to points 40 and 116 of the EEAG, the Commission recalls that the aid is presumed to be appropriate in order to allow Member States to achieve their targets in line with the EU 2020 objectives, provided all other conditions are met.

(79) The Commission notes that the aid granted to the Mermaid, Seastar and Northwester2 offshore windfarm projects on the basis of the REC regime, contributes to achieving the 2020 targets (see recitals (5) to (8) above).

(80) The Belgian authorities therefore demonstrated that the aid is an appropriate instrument.

3.3.4. **Incentive effect**

(81) The incentive effect is present if the aid changes the beneficiary's behaviour towards reaching the objective of common interest.

(82) First, the Commission considers that aid has no incentive effect for the beneficiary if work on the project has already started prior to the aid application by the beneficiary to the national authorities, pursuant to point 50 of the EEAG.

(83) The Belgian authorities explained the process provided under Belgian law to obtain a domain concession. Owners of a domain concession can receive aid under the REC regime (see recital (26) above). The Royal Decree of 20 December 2000\(^{26}\) provides that an application to obtain a domain concession must be made public enabling each interested party to submit a request for competition in order to obtain a domain concession for the same location.

(84) Recitals (26) and (27) above describe the process for offshore windfarms to receive green certificates. This process is also applied for the Mermaid, Seastar and Northwester2 offshore windfarm projects that are benefitting from the REC regime. The Belgian authorities confirmed that these projects had not started work before the aid application.

(85) Second, according to points 60 and 61 of the EEAG, the incentive effect is, in principle, to be identified through the counterfactual scenario analysis, comparing the levels of intended activity with aid and without aid.

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\(^{26}\) Royal Decree of 20 December 2000 concerning the conditions and the procedure for granting public concessions for the construction and operation of plants producing electricity from water, wind, or current in the marine areas where Belgium can exercise its jurisdiction in accordance with international maritime law.
The Belgian authorities stressed that without aid, the three notified projects would not be financially viable, as the costs of generating electricity (LCOE) from offshore wind energy are higher than the income from the sale of electricity generated. Belgium also showed that without aid the IRR of the projects would be significantly below investors’ expectations given the overall risk profile of such projects. The IRR would be very low or even negative, as shown in the table below. In such a situation, any reasonable investor would not want to invest in these projects given the overall risk profile of projects of this nature.

<table>
<thead>
<tr>
<th>WACC (pre-tax)</th>
<th>Mermaid</th>
<th>Seastar</th>
<th>Northwester2</th>
</tr>
</thead>
<tbody>
<tr>
<td>With aid</td>
<td>[...]%</td>
<td>[...]%</td>
<td>[...]%</td>
</tr>
<tr>
<td>Without aid</td>
<td>[...]%</td>
<td>[...]%</td>
<td>[...]%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project IRR (pre-tax)</th>
<th>Mermaid</th>
<th>Seastar</th>
<th>Northwester2</th>
</tr>
</thead>
<tbody>
<tr>
<td>With aid</td>
<td>[...]%</td>
<td>[...]%</td>
<td>[...]%</td>
</tr>
<tr>
<td>Without aid:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>low prices scenario:</td>
<td>[...]%</td>
<td>[...]%</td>
<td>[...]%</td>
</tr>
<tr>
<td>central prices scenario:</td>
<td>[...]%</td>
<td>[...]%</td>
<td>[...]%</td>
</tr>
<tr>
<td>high prices scenario:</td>
<td>[...]%</td>
<td>[...]%</td>
<td>[...]%</td>
</tr>
</tbody>
</table>

The assumed WACC for the Mermaid and Seastar offshore windfarm projects is [...] % with aid and it is [...] % for the Northwester2 project. With aid, these projects IRR are in line with what is expected to be needed for the projects, but still below the WACC. The aid would therefore not exceed what is needed for the projects to go ahead, including a reasonable rate of return.

Pursuant to Article 14, § 1 of the REC Royal Decree and on the basis of the CREG’s report (see recital (15) above), the LCOE is fixed at 79 EUR/MWh for the three notified projects. This cost is above the wholesale electricity prices and market price would not provide the incentive to go ahead with the projects.

Therefore, the Commission concludes that the REC regime and the aid to the Mermaid, Seastar and Northwester2 offshore windfarm projects have an incentive effect to address the objective of common interest.

3.3.5. Proportionality and cumulation

Point 69 of the EEAG states that environmental and energy aid are considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the environmental protection or energy objective. Specific conditions for operating aid to renewable energy are laid down in Section 3.3.2 of the EEAG.

With reference to point 124 of the EEAG, the Commission first notes that the aid is granted as a premium on top of the electricity market price and the Belgian authorities explained that offshore producers sell electricity directly on the market and are also subject to standard balancing responsibilities (see recital (12) above).
Moreover, the negative prices mechanism referred to in recital (13) above ensure that generators have no incentive to generate electricity under negative prices.

(92) With reference to point 126 of the EEAG, the Commission observes that the aid under the REC regime is allocated on the basis of the process for receiving domain concessions (see recital (83) above). However, as concluded in the 2016 Commission decision, since the price was not an awarding criterion, the Commission cannot view this process as a competitive bidding process in the sense of point 126 of the EEAG.\(^{27}\)

(93) The Commission recalls that this provision requires the aid to be granted on the basis of a competitive bidding process as of 1 January 2017 and that the Belgian authorities committed to introduce such a competitive bidding process for concession awarded after this date. As mentioned in recitals (97) and (98) of the 2016 Commission decision, the Commission notes that the Mermaid, Seastar and Northwestern2 projects were already awarded a domain concession before 1 January 2017.

(94) With reference to points 128 and 131 of the EEAG, the Commission notes that taking into account the parameters of the formula used to determine the minimum price at which the TSO buys the green certificates (see recital (15) above), the aid per unit of energy cannot exceed the difference between the LCOE and the market price of electricity. As set out in recital (15) above, the LCOE was calculated based on the CREG’s report and includes a normal rate of return on equity \([…] \%\). Therefore, the Commission concludes that conditions set out in point 131 a) and b) EEAG are met.

(95) Moreover, the Commission notes that pursuant to the Belgian Electricity Act, the CREG is required to draft a report on a yearly basis concerning the effectiveness regarding the costs of the minimum price at which the TSO will purchase the green certificates (see recital (16) above). The support to the three offshore windfarms will be granted during a 17-year period, which does not go beyond the depreciation period (see recital (32) above). Therefore, conditions set out in point 131 c) and d) EEAG are met.

(96) The Belgian authorities indicated that the Mermaid, Seastar and Northwestern2 projects will also receive support to connect to the MOG. The level of compensation for the connection costs will be fixed by the CREG after verification of the costs based on offers in the context of a tender procedure in accordance with public procurement tendering rules (see recital (24) above). This procedure prevents any risk of overcompensation for these connection costs.

(97) On 26 July 2018, the CREG released a report establishing the level of the cable mark-up at 12.67 EUR/MWh for the Northwestern2 project. At the time of the adoption of the present decision, the CREG has not yet released reports establishing the level of the cable mark-up for Mermaid and Seastar projects. However, the Mermaid project waived any right to a cable mark-up above 15 EUR/MWh (see recital (36) above) and the Seastar project waived any right to a cable mark-up above 13 EUR/MWh (see recital (43) above).

\(^{27}\) See recitals (94) and (95) of the 2016 Commission decision.
Based on the information provided by Belgium, the Commission therefore concludes that the aid to the Mermaid, Seastar and Northwester2 projects is proportional.

3.3.6. Avoidance of undue negative effects on competition and trade and balancing test

The Commission first notes that point 116 of the EEAG states that, to allow Members States to achieve their targets in line with the EU 2020 objectives, the Commission presumes the limited distortive effects of the aid provided all other conditions are met. As concluded in Sections 3.3.1 to 3.3.5 of this decision, the aid is considered to incentivise the beneficiary to contribute to a common objective in an appropriate and proportional way.

As set out in point 97 of the EEAG, for State aid measures that are well targeted to the market failure they aim to address, the risk that the aid will unduly distort competition is more limited. The Commission notes that the aid directly aims to achieving the renewable energy targets set out in the RES Directive and CO₂ reduction in a proportional (see point 98 of the EEAG) and appropriate way. The measure will specifically help Belgium to achieve its renewable and decarbonisation targets for the energy sector in line with the EU targets for 2020 (see recital (5) above).

With reference to point 100 of the EEAG, the Commission notes that the sales increase will remain limited given the size of the three offshore windfarm projects on the electricity market. The electricity generated by the planned offshore windfarm projects will indeed be a small fraction of the total generation in Belgium, representing only 3 % of total Belgian production capacity (see recital (31) above).

Secondly, the offshore windfarm projects have a wide range of shareholders and the realisation of the planned projects will not significantly increase market concentration or strengthen the position of the incumbent generators. In particular, Electrabel, which is the largest electricity producer in Belgium, holds 35 % of the Mermaid THV shares (see recital (37) above). The Commission notes however that the Mermaid project will represent only 1,07 % of the installed production capacity in Belgium (see recital (34) above) and that Electrabel is not the majority shareholder of Mermaid THV. The Commission thus concludes that the risk of undue distortions of competition is limited.

Therefore, the Commission considers that the negative effects of the aid in terms of distortions of competition and impact on trade between Member States are limited and out-weighted by the positive effects in terms of contribution to the objective of common interest (production of energy from renewable sources and reduction of CO₂ in the electricity generation) so that the overall balance is positive.

Therefore, with reference to point 88 of the EEAG and given the above, the aid to the Mermaid, Seastar and Northwester2 offshore windfarm projects is not expected to lead to undue market distortions which will be outweighed by the positive effects of the projects in terms of contribution to the objective of common interest.
3.3.7.  Transparency of the aid

(105) Member States are required under Section 3.2.7 of the EEAG to publish as of 1 July 2016 the full text of the approved REC regime or the individual aid granting decision and its implementing provisions, and certain information related to the beneficiaries of aid.

(106) The Belgian authorities committed to ensure transparency by publishing information of all grants on a comprehensive State aid website, at national or regional level (see recital (57) above).

3.3.8.  Conclusion with regard to the compatibility with the EEAG

(107) In light of the above assessment, the Commission finds that the individual aid granted on the basis of the REC regime to the Mermaid, Seastar and Northwestern2 offshore windfarm projects complies with the requirements set out in the EEAG.

4. Authentic language

(108) As mentioned under Section 1 of this decision, Belgium has waived its right to have the decision adopted and notified in French and Dutch. The authentic language will therefore be English.

5. Conclusion

The Commission has accordingly decided not to raise objections to the aid on the grounds that it is compatible with the internal market pursuant to Article 107(3)(c) of the Treaty on the Functioning of the European Union.

Yours faithfully
For the Commission

Margrethe VESTAGER
Member of the Commission