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**Subject: State Aid SA.57858 (2021/N) - Denmark
- Thor Offshore wind farm**

Excellency,

1. PROCEDURE

- (1) Following pre-notification contacts, by electronic notification of 21 January 2021, Denmark notified, pursuant to Article 108(3) of the Treaty of the Functioning of the European Union (TFEU) a State aid measure for the Thor offshore wind farm, which will be established in Danish waters.
- (2) On 25 January 2021, the Danish authorities agreed to waive their rights deriving from Article 342 of the Treaty on the Functioning of the European Union (TFEU), in conjunction with Article 3 of Regulation 1/1958¹, and to have this decision adopted and notified in English.

2. DESCRIPTION OF THE MEASURE

2.1. Background and objectives of the notified project

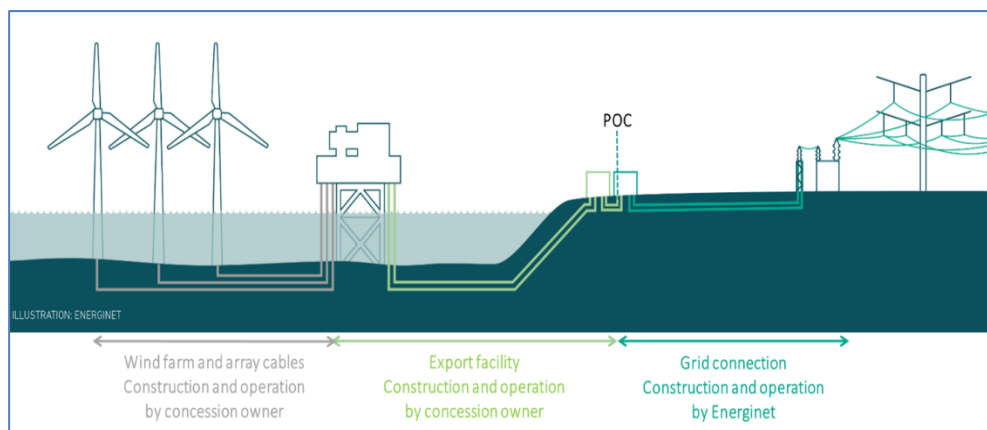
- (3) The notified measure consists of a tender for the design, construction and operation of an offshore wind farm with a minimum 800 to maximum 1000 MW capacity in the Thor site, located in the Danish part of the North Sea off the west coast of Jutland at a distance of minimum 20 km from the shore.

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

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- (4) The offshore farm project includes both the wind farm itself, the offshore substation and the grid connection from the offshore substation to the Point of Connection (PoC) in the first onshore substation (see Figure 1). There will be two onshore substations, one to be build and owned by the concession owner, and one to be build and owned by the Danish Transmission System Operator (TSO), Energinet. The point of connection will be in the second onshore substation owned by the TSO. The onshore grid connection will be built to receive 1,000 MW in the PoC and will be available to receive first power by 1 January 2025, or later, according to the demands of the concession winner. In addition to this, the concession winner will also have to pay the cost of the onshore grid connection built and owned by Energinet. The Danish authorities confirmed that equal and non-discriminatory third party access to the transmission grid in line with EU regulations is ensured in the concession agreement. The Danish Energy Agency (DEA) is entitled, at any point in time during the concession period, to appoint the Danish TSO to take over the cables routing onshore and the nearshore substation onshore without compensation for the value of the cable (which will remain available for the wind farm) but would need to compensate any costs arising from the transfer itself (e.g. upgrades for new technical requirements from the TSO). Furthermore, the TSO would thereafter be obliged to compensate the wind farm for curtailments.

Figure 1 - Outline of the Thor Offshore Wind Farm project



Source: Notification

- (5) Prior to submission of final bids, a Strategic Environmental Assessment (SEA) of the plan for Thor Offshore Wind Farm will be conducted. Furthermore, supplementary surveys with focus on benthic flora and fauna, marine mammals, fish and fisheries, underwater noise, safety of navigation, radar and radio interference, marine archaeology, visibility analysis and cumulative impacts as well as a full Environmental Impact Assessment (EIA) for the onshore project to be built by the Danish TSO, will be carried out. All results will be published as they become available in due time before submission of final bids. The concession winner will be responsible for undertaking the EIA of the concrete project offshore after the signing of the concession agreement. The license for construction, which is also the environmental permit, for the offshore project cannot be given before the EIA of the concrete project offshore has been carried out and approved. The concession winner pays the full cost of the site-investigations after having won the bid.

- (6) The objective of the measure is to contribute to the increased level of the environmental protection in Denmark. The measure will help to achieving a national target of 55% of renewable energy by 2030 and to phasing out coal from electricity production in the same year. In a long term, the measure will further help to achieve a complete fossil fuel independency of Denmark by 2050. Furthermore, the measure will contribute to achieving Denmark's target to reduce its carbon emissions by 70% in 2030 compared to 1990 levels and to reach carbon neutrality by 2050.
- (7) Moreover, the measure will contribute to achieving the common EU target of at least 32% share of renewable energy sources on the energy consumption in 2030 set by the Directive (EU) 2018/2001 ('RED II')². It will also back the achievement of the goals set by the Commission in the European Green Deal, in particular supply of clean, affordable and secure energy.³
- (8) Establishing offshore wind farms is an important contribution to increasing the share of renewable energy in the Danish and the regional energy system. New analysis from 2020 indicates that the CO₂-reduction thanks to the Thor offshore wind farm will amount to 15.000 tons CO₂ in 2030 in Denmark. As the Thor wind farm will only have full effect a few years prior to 2030 but will have an effect in the next 30 years thereafter, it is the long-term effect of the Thor wind farm, which is relevant. This effect will primarily result in lower electricity prices as well as higher amounts of renewable energy in Denmark, which makes electrification in other sectors possible, having as consequence a positive effect on the CO₂ emissions in these sectors.
- (9) Even though energy sources like PV solar-based plants and onshore wind in some situations today can compete with fossil-fuelled power plants, the cost of electricity produced from offshore wind is still higher than electricity produced from onshore wind and PV solar-based plants. At the same time, it is increasingly difficult to establish the needed amount of capacity with onshore wind and PV solar-based plants alone due to land constraints.
- (10) The Danish authorities demonstrated that offshore wind is a technology that, depending on developments in the electricity price, is likely to require State intervention in the form of subsidies to be financially viable in Denmark. Electricity generated by this technology cannot under all circumstances compete on market terms with electricity generated from existing conventional electricity production in Denmark due to the difference between the investment costs and the net present value of the expected operating profits of the investment without aid, but especially due to variation in electricity prices. Therefore, according to the Danish authorities, without the aid, the Thor offshore wind farm would not be financially viable.

² Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources OJ L 328/80, 21.12.2018). As regards the calculation of the contribution of biomass to the achievement of the EU target, see in particular Article 22(11) of the RED II.

³ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions from 11 December 2019.

- (11) The levelised cost of electricity (LCOE) for the Thor offshore wind farm is estimated to be between 27 øre/kWh and 36 øre/kWh. The calculations are based on the Technology Data Catalogue issued by the DEA⁴. The lower LCOE is calculated with a rate of return of 4%, while the higher LCOE is calculated with a rate of return of 8%. Therefore, the rate of return is an important determinant for the level of the LCOE. According to the Danish authorities, it is not exactly clear, which rate of return is demanded by investors, but 4% is a likely level for a very secure investment in offshore wind, while 8% is likely for a more risky investment. The Thor aid scheme shields investors from long-term price changes but exposes them fully to within year electricity price fluctuations. The LCOE can be compared to the latest electricity price projection by the DEA from 21 September 2020⁵:

2020-øre/kWh	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Offshore wind (DK1)	32	32	32	31	30	30	29	29	28	27	27	26	25	24	22

- (12) The forecast above shows that the electricity price is expected to decrease over the period 2026-2040. In all years, electricity prices are expected to be below the LCOE based on a rate of return of at least 6%. For a rate of return of 4%, electricity prices will be above the LCOE at first but will be below from about 2035 onward. It is expected that electricity prices will remain low after 2040. Based on a comparison of the LCOE with projected electricity prices, the Danish Energy Agency expects offshore wind to require subsidies, at least for the near future.
- (13) The joint auctions organised under the multi-technology scheme⁶ for wind⁷ and PV in 2018 and 2019 resulted in low levels of aid⁸ caused by high electricity prices and favourable financing opportunities. However, there is still uncertainty concerning the development of these technologies in the future. In addition, despite the low levels of aid, the favourable market conditions have not led to substantial development in offshore wind energy on market terms. The cost of electricity produced from offshore wind is still higher than electricity produced from onshore wind and PV solar-based plants.
- (14) Furthermore, the Danish authorities claim that electricity production based on offshore wind technology is still a business prone to risks, in particular

⁴ <https://ens.dk/en/our-services/projections-and-models/technology-data/technology-data-generation-electricity-and>.

⁵ https://ens.dk/sites/ens.dk/files/Analyser/af20_-_elprisnotat.pdf.

⁶ Commission decision of 17 August 2018 in the State aid case SA.49918 - Multi-technology tender 2018-2019, OJ C 406, 9.11.2018, p. 5.

⁷ Onshore wind turbines and open door offshore wind turbines were beneficiaries of the multi-technology tender, together with wave power plants, hydroelectric power plants and solar PV. Large scale offshore wind projects have to distinguished from open door offshore wind turbines included in the multi technology tenders. In case of open door turbines, the developer will pre-develop the site on its own behalf and the permits to establish the wind farms will be obtained before submitting a bid (i.e. not after the bid as is the case for large scale offshore wind projects).

⁸ For the 2018 auction, the weighted average premium of the successful bids was 0.0228 DKK/kWh (around 3.1 EUR/MWh). For the 2019 auction, the weighted average premium of the successful bids was 0.015428 DKK/kWh (around 2.1 EUR/MWh).

technology and construction risks as well as the risk of the fluctuating electricity price over the medium to long term.

2.2. National legal basis

- (15) On 1st December 2020, a revision to the Danish Act on Promotion of Renewable Energy (RE Act) and the Act on Electricity Supply was passed in the Danish Parliament, authorising the amount of State aid that can be paid within the caps in the two-way contract for difference model (CfD model) (see recitals (30)-(31)) concerning electricity produced by the Thor offshore wind farm.
- (16) The legal basis for the State aid measure comprises the legislation, other general provisions in the Act on Promotion of Renewable Energy (RE Act) and the Act on Electricity Supply, as well as the Concession Agreement. The concession is conditional to the revision to the Danish Act on Promotion of Renewable Energy (RE Act) and the Act on Electricity Supply being put into effect by the Minister for Climate, Energy and Utilities after the notification of the European Commission's State aid approval decision and in due time before the submission of final bids.

2.3. Beneficiary

- (17) In March 2020, a prior information notice was published. The purpose of the prior information notice was to inform interested economic operators about the details of the project, especially the criteria for prequalification, thus making it possible for economic operators to form consortia in due time before the contract notice and preliminary tender conditions were to be published.
- (18) The beneficiary will be selected through a tender process dedicated for the Thor offshore site. The tender process is conducted in accordance with the Danish law on public procurement, law no. 1564 of 15 December 2016, as well as directive 2014/24/EU on public procurement⁹.
- (19) The tendering procedure is conducted as a negotiated procedure and the contract notice¹⁰ was published in the Official Journal of the European Union¹¹ on 25 September 2020 together with the tender specifications containing a State aid approval standstill disclaimer. After negotiations with the potential tenderers in April 2021, the final tender specifications will be published (expectedly latest by August 2021). Final offers will be received by November 2021. Due to the negotiated procedure, some adjustments to the tender conditions can be made based on input from the bidders but only adjustments which do not fundamentally alter the tender conditions are allowed (e.g. the subsidy scheme (the CfD model) as well as the criteria for selecting the winner cannot be changed).
- (20) The tender is open to all interested parties (such as natural persons, micro-, small- and medium-sized enterprises and large enterprises). Thus, the beneficiary (single

⁹ Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC, OJ L 94, 28.3.2014, p. 65.

¹⁰ Entire tendering material is available in the electronic tendering system at: <https://www.ethics.dk/ethics/eo#/bfb4d610-bfa1-4bfe-8808-6deb212e27cb/homepage>.

¹¹ Contract notice no 2020/S 187-448425.

bidder or consortium of companies) could be all types of undertakings that fulfil the required prequalification criteria.

- (21) The beneficiary has to comply with the following requirements:
- i. Aid will not be granted to a firm in difficulty in line with point (16) of the Guidelines on State aid for environmental protection and energy 2014-2020¹², with its subsequent amendments and prolongation¹³ (“EEAG”);
 - ii. The beneficiary needs to repay any illegal aid received in the past;
 - iii. The beneficiary must arrange for the sale of the production on the electricity market, face standard balancing responsibilities and cover the costs involved with both sale and balancing.
 - iv. No aid is granted for balancing costs;
 - v. Works should not have started before the date of granting the aid.

2.4. Form of aid and duration

- (22) The aid will be paid in the form of a two-way CfD premium during a 20 years period. The Danish authorities confirmed that the 20 years period ensures that no aid will be granted beyond the period of depreciation of the offshore wind farm. The lifetime of a wind turbine is expected to be around 27 years and the ordinary Danish accounting rules allow for depreciation over the entire lifetime of an installation.
- (23) The CfD premium will be paid on top of the electricity price for the electricity sold on the market. Specifically, the CfD premium will be the difference between the offered bid price and the reference price. The offered bid price is a fixed amount in DKK/kWh (in current prices) and will not be indexed.
- (24) The reference price is fixed for a period of 12 months and will be calculated as a simple average of the electricity prices in the previous calendar year running from 1 January to 31 December. The electricity prices are the hourly spot price¹⁴ in electricity price area DK1 stated by the Nordic electricity exchange, Nord Pool.
- (25) The price premium is a fixed amount for one whole calendar year but may vary in size year by year, depending on the electricity prices in the previous year. The price premium will be settled in the beginning of each new year. Hours with

¹² OJ C 200, 28.6.2014, p. 1.

¹³ On 2 July 2020, the Commission adopted a communication prolonging and amending the EEAG. See Communication from the Commission C/2020/4355 concerning the prolongation and the amendments of the Guidelines on Regional State Aid for 2014-2020, Guidelines on State Aid to Promote Risk Finance Investments, Guidelines on State Aid for Environmental Protection and Energy 2014-2020, Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty, Communication on the Criteria for the Analysis of the Compatibility with the Internal Market of State Aid to Promote the Execution of Important Projects of Common European Interest, Communication from the Commission – Framework for State aid for research and development and innovation and Communication from the Commission to the Member States on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to short-term export-credit insurance, OJ C 224, 8.7.2020, p. 2.

¹⁴ The spot price for electricity means the price per hour per kWh on the spot market in the relevant electricity grid price area in question (DK 1). In this context, the spot price is the day-ahead auction price on Nordpool.

prices of zero or below (i.e. non-positive prices) are included in the calculation of the reference price. This is done to ensure that the reference price reflects a measure of centrality for the full range of clearing prices in the DK1 electricity market.

- (26) The price premium will be discontinued in hours with non-positive prices on the spot market in Nord Pool price area DK1. This means, that in every single hour with non-positive prices, the premium will be discontinued.
- (27) The total subsidies in a given hour is the product of the price premium and the output measured for that same hour. Total premium from the State or total payment from the concession owner will be settled on a monthly basis.
- (28) In line with the principles of a CfD, the winning bidder will receive its CfD premium on top of the market price in the years when its offered bid price exceeds the annual reference price. On the other hand, the winning bidder will pay the CfD premium to the State in the years when the annual reference price exceeds the bidder's offered bid price. However, the symmetric payment is modified to improve the incentive for the concession owner to produce electricity. This means that in years when the concession owner has to pay the State for electricity production delivered, this requirement will lapse in hours in which the spot price in DK1 on Nord Pool is lower than the size of the concession owner's payment per kWh that year.
- (29) The Danish authorities explained that this is done to avoid that in years, where the concessionaire shall pay the Danish State, periods appear where the concessionaire chooses to stop electricity production even though the electricity price is higher than the concessionaire's marginal production costs. The Danish authorities consider that this is not appropriate from a societal economic perspective. By having the above mentioned modification to the symmetric payment, the concessionaire has an incentive to produce at all times, where the electricity price is higher than their marginal costs (which is societal economical appropriate) and the Danish State's total revenue is not affected, as the producer without the modification anyhow would have chosen to stop production at lower prices.
- (30) The overall payments of the CfD premiums will be limited by the caps on payment from both the State and the concession owner. Caps have been included on the total net value of the subsidies that the State can pay to the concession owner and the net value of the concession owner's payment back to the State over the 20-year period. The State Cap has been set to de-risk the project seen from the Danish State and the Danish taxpayers' point of view. The Concession Owner Cap will de-risk the two-way CfD from the concession owner's point of view.
- (31) The State Cap is DKK 6.5 bn in 2018 prices (approximately EUR 870 million). The Concession Owner Cap is DKK 2.8 bn in 2018 prices (approximately EUR 375 million).
- (32) The values of the subsidies or the payment from the concession owner will be settled on a monthly basis. The values of both caps are based on real prices (i.e. 2018 prices) and the subsidy payments will therefore be adjusted for inflation every year to their 2018 value.

2.4.1. *Competitive bidding process*

- (33) The aid is set via a competitive bidding process. The tendering model used is a negotiated tendering procedure pursuant to the provisions in sections 61-66 of the Danish Public Procurement Act, Act no. 1564 of 15 December 2016 with later amendments. This tendering model, with pre-qualification and preliminary dialogues with potential tenderers and investors, is the same approach as in previous Danish offshore wind tenders¹⁵. Only applicants that have been prequalified participate in the preliminary dialogues and are invited to submit tenders in the tendering procedure. This approach has proven successful in achieving significantly competitive bid prices.
- (34) When evaluating the tenders, both the offered bid price per kWh and the total expected subsidy costs over the 20-year period are relevant, due to a budget evaluation threshold.
- (35) The tenderer must submit a tender for Thor Offshore Wind Farm with a statement of which capacity between 800 and 1000 MW is to be established and offer a price in DKK “øre” per kWh.

Bids below the budget evaluation threshold

- (36) If the bid with the lowest offered price in “øre” per kWh amounts to total subsidy costs over the 20 year period, which are below the budget evaluation threshold of DKK 3.7 bn. (2018 prices), awarding is provided to the bidder who has offered the lowest price per kWh.
- (37) Such a bid will automatically be accepted and will not require further approval from the parties to the Danish Energy Agreement 2018¹⁶.
- (38) If there are two or more bids with the exact same bidding price, and these are the bids with the lowest price per kWh below the budget evaluation threshold, the bid with the highest capacity (MW) will be chosen. If these bids have the exact same bidding price per kWh and the exact same capacity, the winning bidder will be chosen through lottery.

No bids below the budget evaluation threshold

- (39) However, in the event that no bids results in total subsidy costs, which are within the budget evaluation threshold, the bid can still be accepted by the parties to the Energy Agreement 2018. In this event, the political desire is to minimize the budget exceeding while still realizing the plans for offshore wind farms in

¹⁵ See Commission decision C(2016) 6405 final of 3 October 2016 in State Aid case SA.43751 (2016/N) – Denmark Design and construction of a 350 MW offshore wind capacity, OJ C 36, 3.2.2017, p. 2.

¹⁶ In June 2018, all political parties in the Danish Parliament entered into an Energy Agreement 2018 to ensure the green transition and to provide certainty for long-term green investments. As part of the Energy Agreement 2018, it was decided to establish three new offshore wind farms in Danish waters before 2030, thus expanding the total supply of energy from offshore wind by at least 2.400 MW. The first of the three offshore wind farms to be tendered out is Thor Offshore Wind Farm.

Denmark. Therefore the award criteria will be the lowest total expected subsidy costs over the 20-year period

- (40) Such a bid can only be successful if accepted by the parties to the Energy Agreement 2018. Therefore, there is a risk that the tender will not be accepted if the parties to the Danish Energy Agreement 2018 deems the costs too high.
- (41) If two or more bids result in the exact same total subsidy costs, and these bids are the ones with the lowest subsidy costs, the bid with the highest capacity (MW) will be chosen. If these bids have the exact same bidding price and the exact same capacity, the winning bidder will be chosen through lottery.

Contractual penalty

- (42) The successful bidder will be subject to a contractual penalty for defective performance. This penalty will take effect if the Concessionaire will not construct the wind farm and connect it to the grid, hereunder if circumstances show that this is so, or if the construction work is not commenced before 1 January 2026 (since the wind farm must be established and connected to the grid by 2027).

2.4.2. Cumulation

- (43) The Danish authorities have confirmed that the aid granted under the notified measure cannot be cumulated with any other aid.
- (44) During the concession period, the Concessionaire may ask the DEA for permission to expand or amend the electricity production facility in order to exploit the wind energy for the production of other forms of energy (hereunder Power-to-X etc.). In this context, there would be no other aid measure (be it under the form of investment aid to expand the facility or any other form of aid). In other words, in such an expansion scenario, the concessionaire would only be compensated (under the initial bid price) for the additional electricity produced.

2.4.3. Duration of the measure

- (45) The measure will be put into effect after the notification of the European Commission's State aid approval decision. The payment must commence no later than 31 December 2027 but can begin sooner, if the concession winner should wish so. The DEA estimates that the payments will commence approximately on 1 January 2027 and end on 1 January 2047 but the exact timing is by nature unknown.
- (46) It will not be possible to add additional months to account for the installation process or for hours with no subsidies due to electricity prices being non-positive (i.e. the price is zero or negative).

2.5. Financing and budget

- (47) The maximum budget for the 20 years' duration of the contract is DKK 6.5 bn (based on 2018 prices). The average annual payment will fluctuate in correlation with the electricity price. Therefore, it is impossible to predict a precise annual budget.

- (48) The source of the budget will be the State budget.

2.6. Transparency

- (49) The Danish authorities have committed to comply with the transparency requirements in line with EEAG points 104 – 106 by publishing the relevant data for the notified measure on a national website¹⁷ that will link to the Commission's transparency register.

2.7. Firms in difficulty or subject to an outstanding recovery order

- (50) The Danish authorities have confirmed that no aid can be granted to undertakings in difficulty in line with point (16) of the EEAG or to undertakings subject to an outstanding recovery order following a previous Commission decision declaring aid illegal and incompatible with the internal market. The winning bidder will have to confirm that it is not a “firm in difficulty”, as defined in the Community Guidelines on State aid for rescuing and restructuring firms in difficulty, and the applicant will immediately notify the DEA if it becomes an undertaking in difficulty during the application period, or doubts arise in this regard. The Danish authorities have also confirmed that undertakings, which were not in difficulty on 31 December 2019 but became undertakings in difficulty in the period from 1 January 2020 to 30 June 2021, cannot participate in the tender.

3. ASSESSMENT

3.1. Presence of State Aid

- (51) Under Article 107(1) TFEU, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods, in so far as it affects trade between Member States, is incompatible with the internal market.
- (52) In determining whether a measure constitutes State aid within the meaning of Article 107(1) of the Treaty, the Commission has to apply the following criteria: (i) it must be imputable to the State and involve State resources, (ii) the measure must confer an advantage on certain undertakings or certain sectors (selective advantage), (iii) it must distort or threaten to distort competition and (iv) it must be liable to affect trade between Member States.

3.1.1. Existence of State resources and imputability

- (53) The support for the production of renewable electricity from the Thor wind farm is imputable to the State, as the support has been established by the Law (see recitals (15) and (16)).
- (54) The support will be funded entirely out of the State budget. The notified measure is therefore granted through State resources.

¹⁷ <https://ens.dk/service/lovstof>.

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

3.1.2. Selective economic advantage on certain undertakings or certain sectors

- (56) An advantage, within the meaning of Article 107(1) TFEU, is any economic benefit, which an undertaking would not have obtained under normal market conditions, that is to say in the absence of State intervention¹⁸. Article 107(1) TFEU also requires that a measure, in order to constitute State aid, is selective in the sense that it favours "*certain undertakings or the production of certain goods*".
- (57) Under the notified measure, the concession owner of the Thor offshore wind farm (winner of the tendering procedure) receives an advantage because it will obtain additional support in the form of a premium on top of the market price for its electricity production from the Thor offshore wind farm. Those payments guarantee the producer of electricity from the Thor offshore wind farm revenues higher than what it would obtain on the market.
- (58) Furthermore, the measure is selective because it favours only a generator of electricity from offshore wind, and even more, only the winner of the tendering procedure for the Thor offshore wind farm. Therefore, the aid is not accessible to other electricity producers that are in comparable legal and factual situation in that they produce electricity and sell it on the market.
- (59) It follows that the measure at issue confers a selective advantage within the meaning of Article 107(1) TFEU.

3.1.3. Impact on competition and on trade between Member States

- (60) In accordance with settled case law¹⁹, for a measure to impact competition and trade it is sufficient that the recipient of the aid competes with other undertakings on markets open to competition.
- (61) The electricity market has been liberalised and electricity producers engage in trade between Member States. The electricity generated by the supported Thor offshore wind farm is sold on the spot market where it enters in competition with electricity from different sources (such as electricity from other renewable energy sources (RES), conventional and nuclear sources) and from different Member States.
- (62) Therefore, the advantage granted to the producer of electricity from the Thor offshore wind farm is likely to distort competition and affect trade between Member States.

¹⁸ Judgment of the Court of Justice of 11 July 1996, SFEI and Others, C-39/94, ECLI:EU:C:1996:285, paragraph 60; Judgment of the Court of Justice of 29 April 1999, Spain v Commission, C-342/96, ECLI:EU:C:1999:210, paragraph 41.

¹⁹ Judgment of the Court of 30 April 1998, Het Vlaamse Gewest v Commission, ECLI:EU:T:1998:77.

3.1.4. Conclusion on the existence of State aid

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

3.2. Legality of the aid

- (64) The measure was notified to the Commission by the Danish authorities on 21 January 2021 and it has not been implemented to date, thereby fulfilling the notification and standstill obligation of Article 108(3) TFEU.

3.3. Compatibility of the aid with the internal market

- (65) Article 107(3)(c) TFEU provides that the Commission may declare compatible “aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest”. Therefore, compatible aid under that provision of the Treaty must contribute to the development of certain economic activity. Furthermore, the aid should not distort competition in a way contrary to the common interest.
- (66) Moreover, the EEAG set out specific compatibility conditions for aid for energy from renewable sources.
- (67) The Commission notes that the notified measure aims at promoting the generation of electricity from a specific RES technology, offshore wind. Consequently, the Commission has assessed the notified aid measure on the basis of the general compatibility provisions of the EEAG with its subsequent amendments and prolongation²⁰ (set out in its section 3.2. of the EEAG) and the specific compatibility criteria for operating aid granted for electricity from RES (sections 3.3.1 and 3.3.2.1. of the EEAG).

3.3.1. Contribution to the development of an economic activity

- (68) Under Article 107(3)(c) TFEU, the measure must contribute to the development of certain economic activity²¹.
- (69) The notified aid measure supports the development of the economic activity of electricity production from offshore wind at the Thor site, thus aiding in the establishment of the Thor offshore wind farm, which would not otherwise have been established. In so doing, the measure at issue will contribute to the development of the economic activity of electricity production from offshore wind.
- (70) In view of the above, the Commission considers that the notified measure facilitates the development of certain economic activities, as required by Article 107(3)(c) TFEU.

²⁰ OJ C 290, 10.08.2016, p.11. and OJ C 224, 8.7.2020, p. 2.

²¹ C-594/18 P *Austria v Commission* EU:C:2020:742 - Planned aid for Hinkley Point C nuclear power station (United Kingdom), paras 20 and 24.

3.3.2. Need for State intervention

- (71) According to subsection 3.2.2 of the EEAG, the Member State needs to demonstrate that there is a need for the State intervention and in particular, that the aid is necessary to remedy a market failure that otherwise would remain unaddressed. In the case of the production of electricity from renewable sources, the Commission presumes that a residual market failure remains, which can be addressed through aid for renewable energy, for the reasons set out in paragraph 115 of the EEAG.
- (72) In recitals (10) to (14), the Danish authorities demonstrated that offshore wind is a technology that still requires State intervention in the form of subsidies to be financially viable in Denmark.
- (73) As explained in recital (13), the auctions organised under the multi-technology scheme for wind and PV in 2018 and 2019 resulted in low levels of aid caused by high electricity prices and favourable financing opportunities. However, there is still uncertainty concerning the development of these elements in the future. Despite the low levels of aid, the favourable market conditions have not led to substantial development in offshore wind energy on market terms. Information provided by the Danish authorities in recitals (11) and (12) shows that the cost of electricity produced from offshore wind installations is still higher than electricity produced from onshore wind and photovoltaic installations.
- (74) Furthermore, also in accordance with the information provided by the Danish authorities, the Commission notes that electricity production based on offshore wind technology is still a business prone to risks, in particular technology and construction risks as well as the risk of the fluctuating electricity price over the medium to long term.
- (75) Therefore, based on the assessment carried out by the Danish authorities, it is unlikely that, absent the aid, the development of electricity production from offshore wind turbines and thus the development of offshore wind technology would occur, or would occur to the same extent.
- (76) Based on the information provided by Danish authorities, the Commission concludes that the measure is a necessary instrument to contribute to the development of certain economic activities.

3.3.3. Appropriateness

- (77) According to paragraph 40 of the EEAG, the proposed measure must be an appropriate instrument to address the policy objective concerned. According to paragraph 116 of the EEAG, for aid to energy from renewable sources the Commission presumes the appropriateness and limited distortive effects of the aid provided that all other compatibility conditions are met.
- (78) As it is explained under sections 3.3.1, 3.3.2 above and as it will be shown in sections 3.3.4, 3.3.5, 3.3.6, 3.3.7 and 3.3.8 below, these other compatibility conditions are met. Therefore, the Commission considers the aid to be appropriate.

3.3.4. *Incentive effect*

- (79) An aid measure has an incentive effect if it incentivises the beneficiary to change its behaviour towards the development of a certain economic activity pursued by the aid measure and if the change in behaviour would not occur without the aid.²²
- (80) The Danish authorities demonstrated that State support is needed to change behaviour towards generating investments in offshore wind farms, which are not financially viable.
- (81) As mentioned in recitals (10) to (14) above, the offshore wind technology is still not entirely cost-competitive. Electricity generated by this technology cannot compete on market terms with electricity generated from existing conventional electricity production in Denmark due to the difference between the investment costs and the net present value of the expected operating profits of the investment without aid, but especially due to variation in electricity prices. On the basis of the information provided by the Danish authorities, the Commission notes that without the aid, the Thor offshore wind farm project (including building of the farm itself, the offshore substation and the grid connection from the offshore substation to the PoC in the first onshore substation) would not be financially viable and would not be carried out.
- (82) Furthermore, paragraph 50 of the EEAG stipulates that aid does not present an incentive effect in all cases where works on the project started prior to the aid application.
- (83) As mentioned in above recital (21), in line with paragraph 50 of the EEAG the Danish authorities will verify that works on the projects have not begun before the granting of aid.
- (84) The Commission therefore concludes that the aid has an incentive effect, as the measure induces the beneficiary to change its behaviour towards the development of electricity production from the Thor offshore wind farm and increased investments in offshore wind turbines and their connection to the grid, which it would not undertake without the aid.

3.3.5. *Proportionality*

- (85) Paragraph (27)(e) of the EEAG stipulates that for aid to be proportionate it should be limited to the minimum amount necessary to achieve the objective of development of certain economic activities.
- (86) According to paragraph 69 of the EEAG, environmental aid is considered to be proportionate, if the aid amount per beneficiary is limited to the minimum needed to induce the additional investments or activity by the beneficiary.
- (87) Finally, paragraph 87 of the EEAG provides that in case of operating aid granted by way of a competitive bidding process, the proportionality of individual aid is

²² See in that sense points 49 and 144 of the EEAG, as well as the Hinkley judgment in footnote 22.

presumed to be met if the general conditions are fulfilled. In addition, the provisions of the paragraph 124 of the EEAG need to be fulfilled.

- (88) The proportionality of the aid under this measure is ensured by granting the aid through a tendering procedure on the basis of clear, transparent and non-discriminatory criteria in line with paragraph 80 of the EEAG.
- (89) The tender procedure ensures the aid granted to the beneficiary to be limited to the minimum needed to achieve the operation of the Thor offshore wind farm, since the concession contract to operate the Thor wind farm (for a specific period of time) is awarded on the basis of a sole award criterion, namely the lowest price.
- (90) The Commission notes that the Danish authorities have confirmed that the tendering procedure will be open to anyone who can meet the prescribed requirements for participation. Denmark expects that a sufficiently large number of tenderers will come forward to ensure an adequate level of competition in the auctions.
- (91) In order to safeguard that the beneficiary of aid is not overcompensated, the Danish tender conditions limit the duration of aid to 20 years. As indicated in recital (22), the lifetime of a wind turbine is expected to be 27 years and the ordinary Danish accounting rules allow for depreciation over the entire lifetime of an installation. The Commission therefore concludes that the notified aid measure complies with paragraph 129 of the EEAG.
- (92) As described in recital (22), the aid will be granted in the form of a market premium. Furthermore, the CfD premium will work as a two-way contract. This means that the aid beneficiary will pay the CfD premium to the State in years when the annual reference price exceeds the offered bid price. In addition, as indicated in recitals (30) and (31), the overall payments of the CfD premiums will be limited by caps.
- (93) In line with paragraph 124 (a) of the EEAG aid will be granted as a premium in addition to the market price whereby the generators sell their electricity directly to the market. As provided in recital (21), the beneficiary of the aid is responsible for selling his electricity production on the electricity market. The Commission therefore concludes that the notified aid measure complies with paragraph 124 (a) of the EEAG.
- (94) As described in recital (21), the beneficiary eligible for premiums is subject to standard balancing responsibilities and no aid is granted for covering balancing costs. The Commission therefore concludes that the notified aid measure complies with paragraph 124 (b) of the EEAG.
- (95) As provided in recital (21), no premium will be paid for any production during hours when the spot price is not positive. The Commission therefore concludes that the notified aid measure complies with paragraph 124 (c) of the EEAG.
- (96) In light of those elements, the Commission concludes that the aid is proportionate and in line with the relevant EEAG sections.

3.3.6. *Cumulation*

- (97) As exposed in recital (43), the operating aid granted under the notified measure cannot be cumulated with any other aid.

3.3.7. *Avoidance of undue negative effects on competition and trade between Member States and balancing test*

- (98) The negative effects of the measure on competition and trade must be sufficiently limited, so that the overall balance of the measure is positive. The Court has clarified that in order to assess whether a measure adversely affects trading conditions to an extent contrary to the common interest, the Commission must weigh up the positive effect of the planned aid for the development of the activities that aid is intended to support and the negative effects that the aid may have on the internal market²³.
- (99) On the positive side of the balance, the Commission notes that the measure will facilitate the development of renewable energy production from offshore wind technology in Denmark. Moreover, the aid will induce positive indirect effects in terms of environmental gains.
- (100) In this regard, the Commission notes that promotion of the development of renewable energy is one of the aims of the Union's policy on energy pursuant to Article 194 TFEU. Moreover, paragraph 30 of the EEAG recognises that an increased level of environmental protection may be attained through a shift to a low carbon economy with a significant share of variable energy from RES.
- (101) Therefore, the Commission welcomes the fact that, as explained in recitals (6)-(7), the notified measure supports the new EU²⁴ and national targets (climate neutrality by 2050 and increased use of renewable energy sources). It is consistent with the Danish National Energy and Climate Plan (NECP)²⁵ aiming at increasing the share of renewables in the national energy mix at low cost for the electricity consumer.
- (102) The Commission notes that the notified measure will contribute to meeting Denmark's national target of 55% of its energy consumption from RES by 2030. In addition, the measure will contribute to achieving the EU target of at least 32% share of RES on the energy consumption in 2030 set by the RED II. Moreover, the measure will contribute to the Denmark's long-term goal to reduce its greenhouse gases by 70% by 2030 (relative to 1990 level) and to reach net zero

²³ C-594/18 P Austria v Commission EU:C:2020:742, para 101.

²⁴ Directive (EU) 2018/2001 establishes a binding renewable energy target for the EU for 2030 of 32% (RED II) and the European Council of 11 December 2020 endorsed a binding EU target of a net domestic reduction of at least 55% in greenhouse gas emissions by 2030 compared to 1990, <https://www.consilium.europa.eu/media/47296/1011-12-20-euco-conclusions-en.pdf>.

²⁵ Available online at: https://ec.europa.eu/energy/sites/ener/files/documents/dk_final_necp_main_en.pdf.

emission by 2050 at the latest. The Commission notes that the notified measure is in line with the Green Deal Communication²⁶.

- (103) As explained in recital (13), the auctions organised under the multi-technology scheme for wind and PV in 2018 and 2019 resulted in low levels of aid caused by high electricity prices and favourable financing opportunities. However, the Commission notes that there is still uncertainty concerning the development of these elements in the future. In addition, despite the low levels of aid, the favourable market conditions have not led to substantial development in offshore wind energy on market terms. The cost of electricity produced from offshore wind is still higher than electricity produced from onshore wind and PV solar-based plants. As explained in recital (9), the Commission notes that it is increasingly difficult to establish the needed amount of capacity with onshore wind and PV solar-based plants alone due to land constraints.
- (104) In addition, as exposed in recital (4), the Thor offshore wind farm project includes both the wind farm itself, the offshore substation and the grid connection from the offshore substation to the PoC in the first onshore substation. Since equal and non-discriminatory third party access to the transmission grid in line with EU regulations is ensured in the concession agreement, the aid will also help developing addition grid connection available for other electricity producers.
- (105) On the negative side of the balance, the Commission notes that the measure provides an advantage to the selected beneficiary, at the exclusion of any other producer. However, the Commission notes that the aid will be allocated through a competitive bidding process, which will limit the risk of overcompensation. In addition, as mentioned in recital (30), the overall payments of the CfD premiums will be limited by a cap on payment from the State. Therefore, the measure is designed to limit distortions of competition.
- (106) Paragraph 116 of the EEAG establishes a presumption that aid to energy from renewable sources have limited distortive effects provided all other compatibility conditions are met. As it is explained under sections 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6 above and section 3.3.8 below, these conditions are met. Therefore, the design of the notified measure ensures that distortions of competition and trade are kept to the minimum.
- (107) In light of the above, the Commission concludes that the notified measure has significant positive effects in terms of facilitating an economic activity and of environmental protection while not leading to undue distortions of competition and trade. It follows that the positive effects of the aid outweigh its negative effects on competition and trade. Therefore, the aid at issue facilitates the development of certain economic activities while not adversely affecting trading conditions to an extent contrary to the common interest, as required by Article 107(3)(c) TFEU.

²⁶ Section 2.1.1. Increasing the EU's climate ambition for 2030 and 2050 of the Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: The European Green Deal, COM/2019/640 final.

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

- (108) According to point 104 of the EEAG, Member States have the obligation to ensure transparency of the aid granted by publishing certain information on a comprehensive State aid website. As explained above in recital (49), the Commission takes note that the Danish authorities comply with this transparency requirement by publishing the relevant data for the notified measure on a national website²⁷ that will link to the Commission's transparency register.
- (109) As explained in section 2.7 above, the Commission notes that no aid will be granted to undertakings in difficulty and all firms that intend to participate in the tender will have to provide a declaration that they are not a “firm in difficulty”. The Commission therefore considers that the notified measure is in line with point (16) of the EEAG. The Commission notes that the Danish authorities do not allow undertakings, which were not in difficulty on 31 December 2019 but became undertakings in difficulty in the period from 1 January 2020 to 30 June 2021 to participate in the tender. Besides, the Danish authorities confirm that no aid can be granted to undertakings subject to an outstanding recovery order following a previous Commission decision declaring aid illegal and incompatible with the internal market. The Commission therefore considers that the notified measure is in line with point (17) of the EEAG.

3.3.9. Conclusion with regard to the compatibility of the measure

- (110) In light of the above, the Commission concludes that the aid facilitates the development of an economic activity and does not adversely affect trading conditions to an extent contrary to the common interest. Therefore, the Commission considers the aid compatible with the internal market based on Article 107(3)(c) TFEU and on the relevant provisions of EEAG.

4. AUTHENTIC LANGUAGE

- (111) As mentioned in recital (2), the Danish authorities have accepted to have the decision adopted and notified in English. The authentic language will therefore be English.

5. CONCLUSION

The Commission has accordingly decided not to raise objections to the aid granted in State Aid SA.57858 (2021/N) - Thor Offshore wind farm - on the grounds that the aid is compatible with the internal market pursuant to Article 107(3)(c) of the Treaty on the Functioning of the European Union.

If this letter contains confidential information, which should not be disclosed to third parties, please inform the Commission within fifteen working days of the date of receipt.

²⁷ <https://ens.dk/service/lovstof>.

If the Commission does not receive a reasoned request by that deadline, you will be deemed to agree to the disclosure to third parties and to the publication of the full text of the letter in the authentic language on the Internet site:

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

Your request should be sent electronically to the following address:

European Commission,
Directorate-General Competition
State Aid Greffe
B-1049 Brussels
Stateaidgreffe@ec.europa.eu

Yours faithfully,

For the Commission

Margrethe VESTAGER
Executive Vice-President