Subsidy Advice Unit Report on a Proposed Subsidy to Green Volt Floating Offshore Wind Farm Limited

Referred by the Department for Energy Security and Net Zero

23 May 2024

Subsidy Advice Unit



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1. Introduction

- 1.1 This report is an evaluation prepared by the Subsidy Advice Unit (SAU), part of the Competition and Markets Authority, under section 59 of the Subsidy Control Act 2022 (the Act).
- 1.2 The SAU has evaluated the Department for Energy Security and Net Zero's (DESNZ) assessment of compliance of the proposed subsidy to Green Volt Floating Offshore Wind Farm Limited (the Subsidy) with the requirements of Chapters 1 and 2 of Part 2 of the Act (the Assessment).¹
- 1.3 This report is based on the information provided to the SAU by DESNZ in its Assessment and evidence submitted relevant to that Assessment and relevant information submitted by third parties.
- 1.4 This report is provided as non-binding advice to the DESNZ. The purpose of the SAU's report is not to make a recommendation on whether the subsidy should be given, or directly assess whether it complies with the subsidy control requirements. DESNZ is ultimately responsible for granting the subsidy, based on its own assessment, having the benefit of the SAU's evaluation.
- 1.5 A summary of our observations is set out at section 2 of this report.

The referred subsidy²

- 1.6 DESNZ is proposing to award a subsidy to Green Volt Floating Offshore Wind Farm Limited (Green Volt) in the form of an exemption from the requirement to hold a licence for the supply of electricity, so that it may supply offshore installations (oil and gas platforms). It aims at reducing greenhouse gas emissions from these offshore installations by enabling the direct supply of electricity from a sustainable source of generation.
- 1.7 The Electricity Act 1989 requires suppliers of electricity to hold a supply licence, which imposes costs and obligations on licence holders. The proposed licence exemption will ensure that Green Volt is given parity with on-platform fossil fuel turbine and self-supply, which already benefit from a similar licence exemption. This will incentivise Green Volt to develop a viable supply based on renewable energy and incentivise customers to choose to use it.

¹ Chapter 1 of Part 2 of the Act requires a public authority to consider the subsidy control principles and energy and environment principles before deciding to give a subsidy. The public authority must not award the subsidy unless it is of the view that it is consistent with those principles. Chapter 2 of Part 2 of the Act prohibits the giving of certain kinds of subsidies and, in relation to certain other categories of subsidy creates a number of requirements with which public authorities must comply.

² Referral of a proposed subsidy exempting Green Volt Floating Offshore Wind Farm Limited from the requirement to hold an electricity supply licence - GOV.UK (www.gov.uk)

1.8 The exemption relates to a wind farm to be developed off the coast of Aberdeenshire. The wind farm is expected to supply electricity to up to four offshore installations to replace the output of onboard fossil fuel-powered generators. Additional output from the wind farm will be transmitted to the onshore electricity network and will be subject to the relevant licensing costs and fees under the Electricity Act 1989. DESNZ consulted on the proposed exemption in January-February 2024.³

SAU referral process

- 1.9 On 5 April 2024, DESNZ requested a report from the SAU in relation to the subsidy.
- 1.10 DESNZ explained⁴ that the Subsidy is a Subsidy of Particular Interest because it has determined that the value of the subsidy is greater than £10 million, by reference to the gross cash equivalent of the costs and obligations avoided.⁵
- 1.11 DESNZ's determination of the subsidy value depended on a number of variables, including the power requirements and lifetimes of the offshore installations as well as the amount of power generated by the wind farm. Having regard to these factors, the value of the subsidy is estimated to be between £100 million and £550 million, with a legal maximum of at £2 billion over the 35 year life of the wind farm.
- 1.12 The SAU notified DESNZ on 11 April 2024 that it would prepare and publish a report within 30 working days (ie on or before 23 May 2024). The SAU published details of the referral on 12 April 2024.

³ Electricity supply licence exemption: Green Volt Offshore Wind Farm - GOV.UK (www.gov.uk)

⁴ In the information provided under section 52(2) of the Act.

⁵ See <u>The Subsidy Control (Gross Cash Amount and Gross Cash Equivalent) Regulations 2022 (legislation.gov.uk)</u> and annex 4 of the <u>Statutory Guidance</u>.

⁶ Sections 53(1) and 53(2) of the Act.

⁷ Referral of a proposed subsidy exempting Green Volt Floating Offshore Wind Farm Limited from the requirement to hold an electricity supply licence - GOV.UK (www.gov.uk)

2. Summary of the SAU's observations

- 2.1 The Assessment uses the four-step structure described in the Statutory Guidance for the United Kingdom Subsidy Control Regime (the <u>Statutory Guidance</u>) and as reflected in the SAU's Guidance on the operation of the subsidy control functions of the Subsidy Advice Unit (the <u>SAU Guidance</u>).
- 2.2 We consider that DESNZ has carefully considered the Subsidy's compliance with the Subsidy Control Principles and highlight the following positive features:
 - (a) the Assessment closely follows and refers to the Statutory Guidance throughout;
 - (b) the Assessment sets out a clear and evidenced counterfactual, identifying two possible scenarios as to how the market will develop and then considering which scenario is the most likely to occur (Step 2); and
 - (c) the Assessment identifies and then monetises the benefits to carry out a detailed benefit-cost ratio analysis looking at different scenarios (Step 4).
- 2.3 However, we consider that the Assessment should be improved by:
 - (a) providing a more detailed discussion of alternative policy options in Step 1, in particular with clearer and more detailed reasoning to support the conclusion that a class exemption⁸ is not an appropriate means of addressing the policy objective;
 - (b) better articulating whether and how the supply license costs are not a business-as-usual cost for Green Volt (Step 2); and
 - (c) explaining more clearly how the subsidy is limited to what is necessary to achieve the policy objective (Step 3).
- 2.4 Our report is advisory only and does not directly assess whether the subsidy complies with the subsidy control requirements. The report does not constitute a recommendation on whether the subsidy should be implemented by DESNZ. We have not considered it necessary to provide any advice about how the proposed subsidy may be modified to ensure compliance with the subsidy control requirements.⁹

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⁸ A class exemption refers to a legal provision that allows all entities meeting specific criteria to be exempt from specific requirements or regulations, rather than through granting exemptions on an individual basis.

⁹ Section 59(3)(b) of the Act.

3. The SAU's Evaluation

3.1 This section sets out our evaluation of Assessment, following the four-step framework structure used by DESNZ.

Step 1: Identifying the policy objective, ensuring it addresses a market failure or equity concern, and determining whether a subsidy is the right tool to use

- 3.2 The first step involves an evaluation of the Assessment against:
 - (a) Principle A: Subsidies should pursue a specific policy objective in order to (a) remedy an identified market failure or (b) address an equity rationale (such as local or regional disadvantage, social difficulties or distributional concerns); and
 - (b) Principle E: Subsidies should be an appropriate policy instrument for achieving their specific policy objective and that objective cannot be achieved through other, less distortive, means.¹⁰

Policy Objectives

- 3.3 The Assessment sets out two versions of the policy objective for the Subsidy:
 - (a) to reduce greenhouse gas emissions from production of oil and gas through supporting the delivery of the UK's first major oil and gas electrification project, and as a consequence, delivery of the policy objective of reducing greenhouse gas emissions from the production of oil and gas; and
 - (b) to remedy market failure, by reducing greenhouse gas emissions from offshore oil and gas platforms that would be supplied by Green Volt.
- In our view, the Assessment provides a rationale and context for the Subsidy. However, there is some ambiguity in relation to the specific policy objective, given the two versions presented in the Assessment. The policy objective in the Assessment should be presented consistently.¹¹

¹⁰ Further information about the Principles A and E can be found in the <u>Statutory Guidance</u> (paragraphs 3.32 to 3.56) and the <u>SAU Guidance</u> (paragraphs 4.7 to 4.11).

¹¹ The <u>Statutory Guidance</u> (paragraphs 16.12-16.22) sets out that, when describing a policy objective in relation to a market failure or inequality, Public Authorities should consider the specific outcome they want to achieve and what effect they are trying to have on the market failure or inequality, and that it is better to be precise about their objectives so that the benefits of achieving that objective can be meaningfully balanced against the likely harms of the subsidy.

Market failure

- 3.5 The Statutory Guidance sets out that market failure occurs where market forces alone do not produce an efficient outcome.¹²
- The Assessment sets out that the Subsidy aims to address two types of market failure: negative externalities and coordination failures.
- 3.7 The Assessment describes the primary market failure as a negative externality from carbon emissions arising from the production activities of oil and gas platforms. These activities have costs not directly borne by the platforms, and the platforms find it economically efficient to continue using fossil-fuel energy sources rather than transition to renewable energy. The Subsidy will address this by mitigating some of the additional costs incurred by the platforms when transitioning to renewable energy sources.
- 3.8 The Assessment also sets out that there are two coordination failures. The first relates to deliverability of the North Sea Transition Deal commitment to reduce emissions from operations to 50% of 2018 levels by 2030. 13 The Assessment states that this will be prevented by the lack of alignment in incentives to use different sources of energy, which the Subsidy will overcome.
- 3.9 The second coordination failure relates to a failure of wind farm developers and oil and gas platform operators to coordinate the co-development of large-scale electrification infrastructure at sufficient pace, resulting in significant areas of uncertainty, which increases the delivery risk for individual projects and disincentivises investment.
- 3.10 In our view, the Assessment clearly describes the negative externality arising from carbon emissions, but could be clearer on identifying the specific costs associated with carbon emissions. ¹⁴ Further, whilst negative externalities linked to carbon emissions are generally well recognised, the Assessment could more clearly identify relevant supporting evidence. ¹⁵
- 3.11 Further, we note that coordination failures are traditionally considered to arise not just through a misalignment of incentives between different actors in the market but where there is an inherent uncertainty over how others in the market will act, preventing individual actors from acting in a way that, if all took the required actions, would lead to a better outcome for all. The Assessment should either

¹² Statutory Guidance, paragraphs 3.35-3.48.

¹³ The North Sea Transition Deal between the UK Government and oil and gas industry aims to support the industry transition to net zero future, including through exploiting new and emerging technologies such as hydrogen production, Carbon Capture Usage and Storage and offshore wind – as well as offshore decommissioning. See
Transition Deal (nstauthority.co.uk)">https://example.com/html/>
Transition Deal (nstauthority.co.uk).

¹⁴ Statutory Guidance, paragraphs 3.36-3.40.

¹⁵ For example see <u>The costs to health and the environment from industrial air pollution in Europe – 2024 update — European Environment Agency (europa.eu)</u>.

more closely align the description of the coordination failures with this, along with supporting evidence, or consider whether the issues identified relate to a different type of market failure (for example, whether they are a further expression of the negative externalities identified).

Consideration of alternative policy options and why the Subsidy is the most appropriate and least distortive instrument

- 3.12 In order to comply with Principle E, public authorities should consider why the decision to give a subsidy is the most appropriate instrument for addressing the identified policy objective, and why other means are not appropriate for achieving the identified policy objective.¹⁶
- 3.13 The Assessment notes that the Electricity Act 1989 explicitly provides for individual licence exemptions where the costs of compliance are found to be disproportionate. Against this, the Assessment considers the following options for achieving the policy objective:
 - (a) Market solution without subsidy: DESNZ commissioned an independent third party to examine the commercial case for providing green energy to platforms, which concluded that a supply licence exemption would be required in order to present 'a credible commercial case.'
 - (b) Alternative customer-led solution: DESNZ considered whether the platforms could credibly deliver the same benefits against the policy objective without the Green Volt project. DESNZ concluded that there was significant uncertainty over whether platforms could pursue alternative options for electrification in a way which met the policy objective.
 - (c) Class exemptions: DESNZ considered whether a new class exemption could be created to exempt all direct supply by offshore renewable generation to offshore oil and gas installations. DENSZ concluded that that a class exemption was not appropriate for a single actor and that it had no evidence that a class exemption was necessary given that there have been no other applications for individual exemptions. DESNZ also considered whether the existing class exemptions for offshore platforms might be removed. While this would also remove the misaligned incentives, DESNZ concluded that this would not be justified given that licensing is designed to apply costs and obligations that are proportionate to an operator's impact on the system. Given that oil and gas platforms do not make use of the electricity system, it would be disproportionate and distortive to remove the existing exemption.

¹⁶ Statutory Guidance, paragraphs 3.54-3.56.

- (d) Adjusting the existing carbon pricing regulation: DESNZ explains that it considered whether the UK Emissions Trading Scheme (UK ETS) could be adjusted to improve incentives for the use of renewable power sources. However, the UK ETS is a market-based scheme and so the price of carbon allowances is set by the market.
- 3.14 In our view, the Assessment should include a broader and more detailed discussion of alternative tools (such as regulation, commercial loans etc) to achieve the policy objective and why they are not suitable (in particular as the first two options considered are essentially the counterfactual). We consider notably that the Assessment should provide a more detailed and clearer reasoning to support its conclusion that a class exemption is not appropriate. We note that during the referral we received one third party representation from a potential other supplier of renewable energy which claimed that a class exemption may be a less distortive outcome.

Step 2: Ensuring that the subsidy is designed to create the right incentives for the beneficiary and bring about a change

- 3.15 The second step involves an evaluation of the assessment against:
 - (a) Principle C: First, subsidies should be designed to bring about a change of economic behaviour of the beneficiary. Second, that change, in relation to a subsidy, should be conducive to achieving its specific policy objective, and something that would not happen without the subsidy; and
 - (b) Principle D: Subsidies should not normally compensate for the costs the beneficiary would have funded in the absence of any subsidy.¹⁷

Counterfactual assessment

3.16 In assessing the counterfactual, the Statutory Guidance explains that public authorities should assess any change against a baseline of what would happen in the absence of the subsidy (the 'do nothing' scenario). This baseline would not necessarily be the current 'as is' situation (the 'status quo') but what would likely happen in the future – over both the long and short term – if no subsidy were awarded.

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¹⁷ Further information about the Principles C and D can be found in the <u>Statutory Guidance</u> (paragraphs 3.57 to 3.71) and the <u>SAU Guidance</u> (paragraphs 4.12 to 4.14).

¹⁸ Statutory Guidance, paragraphs 3.60-3.62.

- 3.17 The Assessment identifies two potential counterfactual scenarios which could occur absent the Subsidy:
 - (a) In the first scenario, which it considers the most likely, Green Volt would be unable to progress the wind farm project because the licensing costs for offshore supply would make it uncompetitive. There is a risk that Green Volt's prospective customers would not deliver alternative electrification projects by 2030, and the policy objective will not be met. Further, even if Green Volt were to proceed, the independent third-party analysis, based on one platform's economics, indicated that Green Volt's supply of this platform would not be commercially viable without this subsidy.
 - (b) In the second scenario, some potential customers may pursue other options for electrification (see paragraph 3.13(b)). Still, given the uncertainty around the delivery of alternatives and the risk that some platforms do not electrify without Green Volt, the Assessment concludes there is a risk the policy objective would similarly not be met under this scenario.
- 3.18 In our view, the Assessment clearly sets out and evidences a plausible counterfactual scenario. In particular, we note that the Assessment identifies two potential counterfactual scenarios and appropriately discounts the alternative given the lower likelihood of it occurring, which aligns with the Statutory Guidance.
- 3.19 However, as the independent third-party analysis' conclusions are presented at a relatively high level, the Assessment could have benefited from explaining the financial/economic model underpinning those conclusions. The Assessment should also explain how conclusions based on the economics of one platform apply to other platforms and the impact on Green Volt's financial viability in aggregate.

Changes in economic behaviour of the beneficiary

- 3.20 The Statutory Guidance sets out that subsidies must bring about something that would not have occurred without the subsidy. ¹⁹ In demonstrating this, public authorities should consider the likely change or additional net benefit.
- 3.21 The Assessment states that the Subsidy is expected to incentivise Green Volt to develop a new wind farm and supply energy at a competitive price to oil and gas platforms. The Assessment uses analysis commissioned from an independent third party to demonstrate that this will not occur in the absence of the Subsidy.
- 3.22 In our view, the Assessment clearly explains how the Subsidy will change Green Volt's behaviour to achieve the policy objective compared to the counterfactual.

¹⁹ Statutory Guidance, paragraph 3.64.

The Assessment could be strengthened if the independent third-party analysis considered a similar commercial analysis to the one where the platforms sourced their power from existing fossil fuel power arrangements, rather than just Green Volt's commercial case compared to electrification via 'power from shore.'

Additionality assessment

- 3.23 According to the Statutory Guidance, 'additionality' means that subsidies should not be used to finance a project or activity that the beneficiary would have undertaken in a similar form, manner, and timeframe without the subsidy.²⁰
- 3.24 The Assessment states that the Subsidy will allow Green Volt to establish a commercially viable electricity supply for oil and gas platforms. The Assessment relies on the independent third-party analysis (see paragraph 3.17(a)) to conclude that Green Volt would not undertake this activity without the subsidy.
- 3.25 In our view, the Assessment provides a basis for determining that the subsidy will not be used to finance a project or activity that Green Volt would have undertaken without the subsidy, notwithstanding the greater clarity that the Assessment could have provided regarding the independent third-party analysis used, as discussed in paragraph 3.19.
- 3.26 The Assessment also states that supply licence costs are not business as usual because:
 - (a) Green Volt is a generating station but is being incentivised to engage in additional activity to supply electricity to specific consumers;
 - (b) the amounts related to the electricity supply to end users would be limited; and
 - (c) the supply costs arise from an activity (supply to oil and gas platforms) that Green Volt would not otherwise undertake.
- 3.27 In our view, the Assessment should be improved by better articulating whether and how the supply license costs are not a business-as-usual cost for Green Volt. In particular, such recurring costs are operating costs (including regulatory costs) for a business engaged in electricity supply and thus would ordinarily be deemed business-as-usual. We note that even if these costs are business-as-usual, the additionality test could still be met by setting out how Green Volt could not fund the licensing cost itself without any subsidy.

²⁰ Statutory Guidance, paragraphs 3.63-3.67.

Step 3: Considering the distortive impacts that the subsidy may have and keeping them as low as possible

- 3.28 The third step involves an evaluation of the assessment against:
 - (a) Principle B: Subsidies should be proportionate to their specific policy objective and limited to what is necessary to achieve it; and
 - (b) Principle F: Subsidies should be designed to achieve their specific policy objective while minimising any negative effects on competition or investment within the United Kingdom.²¹
- 3.29 For Step 3, the Statutory Guidance sets out certain aspects of the subsidy or scheme to consider, including the nature of the instrument, the breadth of beneficiaries and the selection process, the size of the subsidy, the timespan over which a subsidy is given, the nature of the costs being covered, performance criteria, ringfencing, monitoring and evaluation and subsidy races. Annex 3 of the guidance explains that, given the potential distortive impact of subsidies or schemes of interest/subsidies or schemes of particular interest, public authorities should consider providing a more in-depth assessment of the characteristics of the subsidy, and of the market characteristics, including identifying the markets, market concentration, barriers to entry, expansion and exit and market growth.

Proportionality

- 3.30 The Assessment states that the Subsidy has been designed to be proportionate and the minimum necessary to achieve the required change in behaviour (ie for Green Volt to develop an offshore windfarm and for oil and gas platforms to source electricity from it). It relies on the independent third party analysis to demonstrate that the exemption is necessary as the imposition of licence fees would undermine the commercial case for a transition to offshore renewable energy sources for these platforms.
- 3.31 The Assessment also states that, if a platform(s) were to electrify using a direct connection to the onshore grid (absent the Subsidy), the same level of decarbonisation would not be achieved, as the platform(s) may not connect to the grid before 2030 and Green Volt's remaining expected customers may continue to use existing oil/gas generation.
- 3.32 Drawing on information provided in Steps 1 and 2, the Assessment concludes that the supply licence exemption is necessary for Green Volt windfarm to be a

²¹ Further information about the Principles B and F can be found in the <u>Statutory Guidance</u> (paragraphs 3.72 to 3.108) and the <u>SAU Guidance</u> (paragraphs 4.15 to 4.19).

- commercially viable option for the electrification of these platforms, in particular, to attract an 'anchor' customer for the project.
- 3.33 The Assessment states that the Subsidy caps the electricity supply that falls under the exemption at 195.5MW with a maximum timespan of 35 years, a figure based on the estimated maximum demand from Green Volt's intended customers and the useful life of the wind farm. The Assessment also notes that the value of the Subsidy is small compared to Green Volt's operational expenditure.
- 3.34 In our view, the Assessment includes a number of relevant considerations to proportionality. It could however be more comprehensive, for example by drawing on the cost benefit analysis presented under Step 4, and the analysis of the Subsidy's expected impact on the abatement of carbon emissions from North Sea oil and gas production relative to the avoided regulatory costs.
- 3.35 We also consider that the Assessment could be strengthened by explaining more clearly how the subsidy is limited to what is necessary to achieve the policy objective. In particular, the Assessment could more clearly explain how the independent third-party analysis shows that the subsidy is limited to what is necessary to provide sufficient commercial incentive for a platform to electrify via the Green Volt wind farm compared to electrifying direct from the shore, thereby targeting a level of carbon emissions reduction consistent with the policy objective.

Design of subsidy to minimise negative effects on competition and investment

- 3.36 The Assessment states that the subsidy design mitigates the negative effects of the subsidy on competition and investment, which it considers to be minimal. It discusses most of the subsidy characteristics set out in Chapter 3 of the Statutory Guidance as being potentially relevant for the likelihood of distortive impact on competition or investment, including: the nature of the instrument, the breadth of beneficiaries and selection process, the size of the subsidy, its timespan, the nature of costs being covered, the performance criteria, ringfencing and monitoring and evaluation.
- 3.37 The Assessment notes that the subsidy design mitigates negative effects on competition or investment including through:
 - (a) ensuring benefits accrue only in relation to activities which contribute directly to the primary policy objective (ie the licence exemption is solely in relation to offshore activities);
 - (b) addressing regulatory costs to place the supply from Green Volt on a level regulatory playing field with fossil fuel power sources; and
 - (c) imposing a time limit of 35 years on the subsidy in line with the useful life of the wind farm.

3.38 In our view, DESNZ has conducted a systematic review of the subsidy characteristics, following closely the Statutory Guidance.

Assessment of effects on competition or investment

- 3.39 The Assessment explains that oil and gas platform electrification and offshore electricity supply is a novel UK market.
- On the oil and gas platform electrification market, it identifies other windfarm projects with a Crown Estate Scotland Innovation and Targeted Oil and Gas' seabed lease as potential direct competitors to Green Volt because these leases are for projects intended to supply oil and gas platforms. The Assessment explains that the Subsidy will result in some distortions and negative effects on competition. In particular, the Green Volt project is in a more advanced planning stage than other potential competitors and the exemption results in a commercial advantage for Green Volt. The Assessment however notes that Green Volt's closest competitors may also apply for an individual supply licence exemption.
- 3.41 The Assessment also considers impact on the UK floating offshore wind market, noting that the project would mark a significant increase in the UK's floating offshore capacity, although representing a very small proportion of the UK's floating offshore wind project pipeline. The Assessment explains that the project's early delivery timeline creates a risk of displacing smaller offshore wind projects, (which could be beneficial for diverse supply chain development and potential future cost reductions through greater diversity of designs and project locations) in the Contracts for Difference subsidy scheme auction.
- 3.42 In our view, the Assessment usefully considered the impact of the Subsidy on competition, looking both at the oil and gas electrification market and the wider market for UK floating offshore wind, and identifying relevant competitors which may be affected by the subsidy. The Assessment usefully considers the interaction of the Subsidy with other relevant subsidies and schemes (in this case, Contracts for Difference). However, the Assessment should also consider any impact of the subsidy on investment.
- 3.43 The discussion of relevant markets could however be strengthened with a more structured approach for assessing market characteristics in line with the Statutory Guidance, explaining the expected wider impacts on GB supply of electricity of the subsidy (even if this is expected to be minimal). For example, the Assessment could draw on information used for Step 4 to explain the linkages between floating offshore electricity generation and demand, and wider GB markets; setting out the expected impacts and clearly explaining if these are expected to be minimal.

Step 4: Carrying out the balancing exercise

- 3.44 The fourth step involves an evaluation of the assessment against subsidy control Principle G: subsidies' beneficial effects (in terms of achieving their specific policy objective) should outweigh any negative effects, including in particular negative effects on: (a) competition or investment within the United Kingdom; (b) international trade or investment.22
- 3.45 The Assessment sets out that the key benefit of the policy to reduce carbon emissions. It uses a Benefit Cost Ratio exercise, monetising the expected levels of carbon emissions reduction under various demand scenarios and comparing these against the policy costs.
- 3.46 The Assessment also sets out wider benefits from the subsidy, including additional renewable energy capacity to the onshore grid from Green Volt, 23 which will contribute to the decarbonisation of the wider economy, and impact on the electricity system.
- 3.47 The Assessment considers the potential negative impacts of the subsidy on consumers, competition, and the risk that removing obligations associated with a supply licence results in a negative effect. The Assessment also discusses geographical and distributional impacts of the Subsidy.
- The Assessment concludes that the direct, quantified benefits and costs to society 3.48 show that the benefit of the Subsidy is greater than the costs, including the wider negative effects.
- 3.49 In our view, the Assessment considers relevant benefits and impacts and carries out a useful quantitative analysis of the key policy benefit and costs.

Energy and Environment Principles

- 3.50 This step involves an evaluation of the Assessment with regard to compliance with the energy and environment principles.²⁴
- 3.51 The Statutory Guidance summarises the scope of the different energy and environment principles that apply to different types of subsidies.²⁵ DESNZ has carried out an assessment against Principles A, B, C, E and H, and it has provided

²² See Statutory Guidance (paragraphs 3.109 to 3.117) and SAU Guidance (paragraphs 4.20 to 4.22) for further detail.

²³ This will not benefit from a licence exemption.

²⁴ See Schedule 2 to the Act.

²⁵ Principles A and B apply to all subsidies in relation to energy and environment. Principle C applies for subsidies for electricity generation adequacy, renewable energy or cogeneration. Principle D applies to subsidies for electricity generation only. Principle E applies to subsidies for renewable energy or cogeneration. Principle F applies to subsidies in the form of partial exemptions from energy related taxes and levies. Principle G applies to subsidies that compensate electricity intensive users for increases in electricity costs, Principle H relates to subsidies for decarbonisation of industrial emissions. Principle I relates to subsidies for improving energy efficiency of industrial activities.

reasons why it considers Principles D, F, G and I not to be applicable to the Subsidy.

Principle A: Aim of subsidies in relation to energy and environment

- 3.52 The assessment against Principle A should show how the subsidy is consistent with delivering a secure, affordable and sustainable energy system and a well-functioning and competitive energy market, or increasing the level of environmental protection compared to the level that would be achieved in the absence of the subsidy. If a subsidy is in relation to both energy and environment, it should meet both of these limbs.²⁶
- 3.53 The Assessment states that the Subsidy relates to both energy and the environment, and that both limbs of Principle A are met.
- 3.54 In relation to the first limb, the Assessment states that a 'secondary benefit' from the Subsidy is that it will enable Green Volt to participate in the wholesale electricity market. Further, the Subsidy will have a 'small positive impact' on energy affordability and consumer bills given Green Volt will 'facilitate a connection to shore that will be shared with their intended customer' meaning that additional revenue will be generated (by onshore licensed suppliers that supply electricity to Green Volt's customers when that is required) while the costs remain the same.
- 3.55 In relation to the second limb, the Assessment states that the Subsidy will increase the level of environmental protection relative to the counterfactual, by leading to a 'significant reduction in greenhouse gas emissions from oil and gas production'. The Assessment notes that the construction of offshore wind farms can have negative marine or ornithological environmental impacts, but that these risks are assessed and mitigated through the licensing and consenting processes for wind farms.
- 3.56 In our view, this addresses how the Subsidy complies with Principle A.

Principle B: Subsidies not to relieve beneficiaries from liabilities as a polluter

- 3.57 The assessment against Principle B should explain clearly how the proposed subsidy or scheme does not relieve a polluter from having to bear the full costs of the pollution caused.²⁷
- 3.58 The Assessment states that Green Volt will not directly have any greenhouse gas emissions during the operation of the wind farm and that the Subsidy will have no

²⁶ Statutory Guidance, paragraphs 4.19-4.28.

²⁷ Statutory Guidance, paragraphs 4.29-4.35.

impact on any responsibilities it might have in relation to emissions from construction.

3.59 In our view, this addresses how the Subsidy complies with Principle B.

Principle C: Subsidies for electricity generation adequacy, renewable energy, or cogeneration

- 3.60 Subsidies or schemes for electricity generation adequacy, renewable energy, or cogeneration, should be assessed against Principle C. The assessment should show clearly that the subsidy does not undermine the UK's ability to meet its obligations under Article 304 of the Trade and Cooperation Agreement (TCA), that requires the UK to ensure that wholesale electricity and natural gas prices reflect actual supply and demand, and that, to this end the government shall ensure that the wholesale electricity and natural gas market rules will, in general terms, be transparent, encourage free price formation, and operate in an efficient and secure manner. Principle C also requires that the subsidy or scheme does not unnecessarily affect the efficient use of electricity interconnectors as provided for under Article 311 of the TCA. This article provides for the efficient use of, and nondiscriminatory approach to capacity on, interconnectors between the UK and the European Union. The assessment should also show how the subsidy or scheme has been determined by means of a transparent, non-discriminatory and effective competitive process, or, alternatively, an explanation should be provided for why a non-competitive process was not required.²⁸
- 3.61 In relation to the first limb (Article 304 of the TCA), the Assessment explains that the beneficiary is a renewable energy generator that will be supplying electricity directly to end users. While the direct supply of electricity may be considered to be part of wholesale electricity markets, DESNZ does not expect that the Subsidy will have a significant impact on prices paid by platforms for their electricity.
- 3.62 In relation to the second limb (efficient use of electricity interconnectors), DESNZ explains that the Subsidy will not affect the use of electricity interconnectors.
- 3.63 In relation to the third limb (transparent, non-discriminatory and effective competitive process), the Assessment states that the Subsidy was awarded in a transparent and open manner. However, it is also notes that a competitive process to determine the Subsidy was not used as the market for direct supply of power to decarbonise oil and gas facilities is insufficient for competitive process. The Assessment states that appropriate measures are in place to prevent overcompensation, noting in particular that Green Volt can only accrue benefits in

²⁸ Statutory Guidance, paragraphs 4.36-4.45.

- relation to the electricity it can supply for the purpose of decarbonising oil and gas platforms, and is further limited by the useful life of the wind farm.
- 3.64 In our view, this addresses how the Subsidy complies with Principle C.

Principle E: Subsidies for renewable energy or cogeneration shall not affect beneficiaries' obligations or opportunities to participate in electricity markets

- 3.65 Under Principle E, subsidies for renewable energy or cogeneration shall not affect beneficiaries' obligations or opportunities to participate in electricity markets. A statement that nothing in the terms of the scheme relieves a recipient of the obligation or ability to participate in electrical markets is sufficient to ensure compliance with this principle.²⁹
- 3.66 The Assessment states that the terms of the Subsidy do not restrict Green Volt's ability to participate in electricity markets.
- 3.67 In our view, this addresses how the Subsidy complies with Principle E.

Principle H: Subsidies for the decarbonisation of emissions linked to industrial activities

- 3.68 Under Principle H, subsidies for the decarbonisation of emissions linked to industrial activities in the United Kingdom should achieve an overall reduction in greenhouse gas emissions, and reduce the emissions directly resulting from the industrial activities concerned. The assessment should identify clearly the relevant greenhouse gases (with reference to those identified as such in the Climate Change Act), and the industrial activities (as described in the Act) responsible for those gases, and show that such emissions would be reduced compared to the situation absent the subsidy or scheme.
- 3.69 The Assessment explains, with supporting evidence, that the subsidy will achieve an overall reduction in greenhouse gas emissions and reduces carbon emissions resulting directly from the production of oil and gas compared to the counterfactual scenario. It also states that there is no potential for emissions to be displaced by the subsidy and confirms that it does not simply reduce emissions in the inputs to the industrial activity.
- 3.70 In our view, this addresses how the Subsidy complies with Principle H.

²⁹ Statutory Guidance, paragraphs 4.49-4.52.

Other Requirements of the Act

3.71	This step in the evaluation relates to the requirements and prohibitions set out in
	Chapter 2 of Part 2 of the Act, where these are applicable. ³⁰

3.72 DESNZ has confirmed that it has not found any of the requirements of Chapter 2 to be relevant.

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³⁰ Statutory Guidance, chapter 5.