

Bord Gáis Energy
One Warrington Place
Dublin 2
D02 HH27

Department of the Environment, Climate and Communications
29-31 Adelaide Road
Dublin 2
D02 X285

26th February 2024

**Re: Consultation on the offshore renewable energy (ORE) Future Framework Policy
Statement- Bord Gáis Energy Consultation Response**

Dear Sir/ Madam,

Bord Gáis Energy (BGE) welcomes this consultation on the Future Framework Policy Statement. We would like to provide our perspective on this consultation as an energy supplier to more than 500,000 customers and as an electricity generator.

In line with our Sustainability Strategy¹ we are committed to supporting our customers to reach net zero by 2045. We support the Government's Climate Action Plan targets and as a leading supplier of energy, we commit to playing our role in transitioning Ireland to 80% renewable electricity by 2030 and more broadly to reach a net zero power system by 2050.

We will play our part by significantly growing our Green Power Purchase Agreements (PPAs) and sourcing power from wind and solar farms on the island of Ireland. More than 23% of our current electricity supply to our customers comes from renewable PPAs, with this proportion set to increase over the coming years.

A core element of our decarbonisation journey will be providing decarbonised, dispatchable power generation from our generation sites, that can complement intermittent renewables like wind and solar. BGE operates a 445 MW Combined Cycle Gas Turbine (CCGT) in Whitegate, Cork. We are also in the process of constructing two 100MW hydrogen ready gas peakers in Athlone and Dublin.

In our view, one of the most prominent options for decarbonised, dispatchable power generation is through using green hydrogen and its derivatives. In the short-term, this could entail blending green hydrogen with natural gas and in the medium- to long- term

¹ Bord Gáis Energy's Sustainability Strategy is available here:
<https://www.bordgaisenergy.ie/home/sustainability>

converting existing gas generation units to run on 100 per cent green hydrogen or constructing new 100 per cent hydrogen generation units².

Green hydrogen is produced from renewable energy sources like wind and solar. The National Hydrogen Strategy³ highlights that post- 2030, hydrogen production will stem mainly from offshore wind, owing to Ireland's significant offshore wind potential. The National Hydrogen Strategy also lists hydrogen-run power generation as a key end-user. Hydrogen- run power generation is particularly important for 'dunkleflaute' events. prolonged periods of low/no wind and solar. As hydrogen can be stored over long periods in geological stores, it's beneficial in supporting intermittent renewables, ensuring a secure and stable energy supply.

To deliver hydrogen power generation, a full value chain is needed comprising of renewables to power electrolysis (including offshore wind), hydrogen storage, grid and transport solutions as well as changes to/ new power generation units. Many of these elements have long-lead times and the delivery of each core element needs to be co-ordinated. It is critical that offshore wind can be delivered on time, but crucially, that there is a clear route to market for offshore wind that is used for hydrogen production.

Overall, BGE is committed to delivering renewable power to its customers through green PPAs and decarbonised dispatchable generation. For both objectives, offshore wind will play a crucial role and the Future Framework will be critical in providing a clear pathway forward. In this context, we provide the following comments on the consultation, with further detail outlined in the appendix:

Non- grid ORE projects:

- An assumption appears to have been made that much of the grid challenges will be addressed close to 2040, and for this reason, non-grid solutions such as private wires is not a focus area in the Future Framework. As this is not guaranteed we believe there is cause to further reflect on how private wires and hybrid grid connections can support the delivery of ORE projects and climate action targets.
- We believe the 2GW of non-grid offshore wind for delivery in the early 2030s should be used for renewable hydrogen production, as per the original target set out in the carbon budget published in 2022.

Hydrogen & ORESS: We are very concerned that successor to the current ORESS framework must be delivered in a short window prior to 2026 and therefore may not allow for a support framework for hydrogen production. It is critical that the ORESS successor has a facility for hydrogen production. This must be integrated into the design to ensure that hydrogen volumes are available to support the decarbonisation of hard to abate sectors.

² Where technically feasible to do so.

³ National Hydrogen Strategy- available here: <https://www.gov.ie/en/publication/624ab-national-hydrogen-strategy/>

Thank you for the opportunity to comment on this important matter. I am available to discuss our response if it would be helpful.

Yours faithfully,

[Redacted signature]

[Redacted name]

Bord Gáis Energy

[sent by email]

Appendix- Consultation Questions & BGE Answers

1(b) Has each key priority been adequately described and considered all relevant components? For each key priority please provide any additional concerns, aspects or commentary for inclusion.

We observed that there was limited reflection on the need to address grid infrastructure challenges in the post- 2030 landscape in this section. Grid infrastructure availability is a key challenge for ORE projects at present. Given the time needed to deliver grid, we expect this to be a challenge that persists into the 2030 timeframe and beyond. Further reflection is needed regarding the fact that other solutions such as private wires and hybrid connections may play a considerable role in supporting ORE projects in 2030 and beyond.

1(c) How best should the 2GW of non-grid limited offshore wind capacity be procured?

We believe the 2GW should be used for renewable hydrogen production, as per the original target set out in the carbon budget published in 2022.

There is a need for a clear target for hydrogen production to kick-start a domestic hydrogen market to decarbonise several hard to abate sectors. In the absence of this, there may be a slow ramp up of hydrogen production which could negatively impact Ireland's ability to achieve future carbon budgets. Given Ireland will be unable to meet several aspects of the first carbon budget, including the electricity sectoral emissions ceiling, priority must be given to key sectors that will help to deliver emissions savings in future carbon budgets.

In Climate Action Plan 2024, it was explained that there remains 'unallocated emissions' i.e., a volume of emissions savings that must be delivered, however, there is an absence of clear policy measures to deliver this (as well as an accompanying estimate of how much emissions might be saved). It is mentioned that hydrogen could play a role in addressing this gap and this should be further assessed. Steps should be taken now to identify opportunities to deliver these savings, including the 2GW target as well as ensuring that hydrogen supports are integrated into the ORESS successor design (see response to question 1(d) for further information).

With respect to how the 2GW of non-grid hydrogen production should be delivered, a separate consultation should be released regarding the design of hydrogen business supports. There are different options that should be considered in detail, for example, price-based mechanisms like the European Hydrogen Bank or criteria-based mechanisms such as the UK hydrogen production support model. We suggest that consideration is given to whether Ireland can avail of existing options that could expedite the design and delivery of a business model, for example, availing of the European Hydrogen Bank's 'Auction As A Service' framework.

To deliver the 2GW of non-grid capacity, it will be vital to take flexible approach to delivering a supporting private wire framework. As recommended in our earlier response to the private wire consultation, we believe a regulatory sandbox should be used to allow early-stage projects to be delivered. In addition, hybrid grid connections could also play an important role in delivering the 2GW target.

1(d) What are your views on the design parameters for the successor scheme to ORESS, what else should/should not be considered?

There are several potential end-use scenarios for future ORESS electricity volumes, including electricity provided to the Irish national grid, electricity to produce hydrogen for consumption in Ireland (and potentially for export abroad), electricity consumption for a private wire network with various end-use options, electricity consumption for export via an interconnector (including multi-purpose interconnectors) and more.

DECC has put forward a schedule for ORESS auctions up to 2030, and through actions 5 and 7 of the Future Framework DECC is committing to provide a similar schedule post-2030 in due course. As part of this schedule, to give certainty to investors, clarity should be provided regarding how the different end-uses will be treated in ORESS auctions.

These end-uses may require different types and levels of supports. Consideration must be given to how future ORESS schemes will be designated (e.g. by end-use type or mixed end-uses to encourage flexible or multi-purpose projects) and must be designed to ensure that the different end-uses can be appropriately incentivised such that they do not compete with one another and cause adverse consequences.

Given that the future ORESS framework must be designed, and State Aid approved by 2026, and considering the time needed to consult and deliver on that framework, priority must be placed on certain end-use scenarios from the list above.

We are very concerned that the successor to the current ORESS framework must be delivered in a short window prior to 2026 and therefore may not allow for a support framework for hydrogen production. While we agree that the ORESS design must be turned around quickly in order to give certainty to the market and to prevent a stop-start for ORE projects, we are concerned that hydrogen production will not be adequately accommodated.

Given the change in wording of the 2GW target, shifting from 'hydrogen production-based' to 'non-grid based', as well the short time to develop a support scheme, we have serious concerns about whether the successor ORESS scheme design will enable hydrogen production.

As highlighted in our response to the National Hydrogen Strategy consultation, one of Bord Gáis Energy's core goals is to decarbonise its gas generation asset base, particularly its Whitegate 445MW CCGT. We are aiming to do this by the early- to mid- 2030s. With this in mind, it's important that the ORESS successor scheme design incorporates a support for renewable hydrogen production. A clear plan is needed to ensure there is joined up policy thinking for the different teams within DECC that work on both ORE development and hydrogen strategy, enabling both teams to work together to deliver a suitable scheme design, with input from industry. We recommend that additional resourcing is provided to the Hydrogen team to support the development of a suitable framework.

1(e) What frameworks and/or supports are required for alternate routes to market such as CPPAs, Power-to-X projects, interconnector-hybrid projects and export projects?

Given the challenges associated with delivering ORE and equally reflecting on the need for ORE projects to be delivered in time to support climate action targets, we believe every opportunity should be provided to projects who may not have been successful in ORESS auctions, to deliver the project under other routes to market, while remaining in the DMAP area.

A private wire framework must be expedited to facilitate some projects that are of strategic importance for decarbonisation and/or for fostering key markets that will support export growth in the future.

Finally, to develop a full hydrogen value chain, hydrogen production should be coupled with storage solutions, including geological storage. Hydrogen storage not only supports the decarbonisation of conventional generation units, but it also enhances energy security. The Energy Security Package commits to exploring renewable gas storage solutions to improve the resilience of Ireland's energy markets. Hydrogen storage supports should also be considered as part of the set of frameworks needed to support power-to-X projects.