Submission from Dublin Rathdown Greens, [redacted]

**1) With respect to key driver (i), cost levels, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice**

ANSWER:
Option 3&4
The connection points on the shores of Ireland should not only serve to bring power in from our costal wind facilities, they should also serve as points of connection to France or Britain. Rather than building two separate facilities to serve import-export and off-shore wind turbines, it is faster, cheaper and more efficient to co-locate these functions. All grid connection points to serve off-shore wind farms should be designed to support the export of power at a future date.
The alternative is that on windy days off-shore wind power is converted from DC to AC to feed the local grid, transmitted to the nearest export connection point, converted back to DC, and then exported. This decreases the efficiency of our system and creates additional burdens on the Irish grid.
It is our feeling that options 3 & 4 better integrate the needs of the wind farm developers and the export transmission development. Developer led models may not provide sufficient attention to the needs and challenges of connecting the Irish grid with those of our neighbours.

**2) With respect to key driver (ii), environmental impact, which of models 1,2,3,4, or variant of these delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?**

ANSWER:
Option 3&4
A focused development with a minimum number of high capacity hub connections is important.

**3) With respect to key driver (iii), future proofing and technologies, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?**

ANSWER:
Option 3&4
The ease of exportation will be critical going forward as Ireland can have a major role to play as an especially important source of wind energy for Europe.

**4) With respect to key driver (iv), required infrastructure, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?**

ANSWER:
Option 3&4

A tightly coordinated infrastructure will ensure the grid functions well as a whole.

**5) With respect to key driver (v), compatibility with Relevant Projects, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?**
ANSWER:
Option 3&4
All options were relevant to this point. The most important factors for transitioning are the continuation of those sites in progress to be integrated in a plan developed now. In this way, current development continues to completion, with planning for the next phase coming onstream as available.

**6) With respect to key driver (vi), social acceptance, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?**
ANSWER:
Option 3&4
The minimisation of landing points will also help export which will influence public opinion as electricity becomes cheaper. Ireland's role in producing wind power for local consumption and exporting excess power to Europe will stimulate the Irish economy and provide dividends for both the Irish people and our European partners.
A plan-led approach is preferable due to community acceptance of projects, which can be an obstacle in achieving renewable energy targets. Communities should be involved in as many stages as possible, such as information, planning participation and financial participation. We should follow similar community- or partly community-owned models such as Denmark, the UK and Belgium. Where financial resources are low in the community, some revenue from the generation of energy should go back into the community, and this amount should be prescribed by government.

**7) With respect to key driver (vii), facilitating the timely development of offshore wind capacity to achieve the 2030 target, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?**
ANSWER:
Option 3&4
Wind energy should benefit the Irish people and control of how wind energy is distributed should ultimately reside with the Irish state as guardian of the country's resources on behalf of the people.
**8) Rank the key drivers in order of importance 1-7, which have the greatest impact on the choice of model.**
ANSWER:

1. Vii) SDG Targets
2. Ii) Environmental
3. Iii) Future Proofing
4. I) Cost
5. Iv) Infrastructure

6. Vi) Social Acceptance
7. V) Compatibility

**9) How important is it for Ireland to develop an indigenous offshore wind energy industry? How best can an indigenous industry be developed?**
ANSWER
Ireland has the potential to become a major generator of wind energy for the European market. The adoption of an ambitious wind energy programme in Ireland, that could supply up to 10% of Europe's energy needs, would be beneficial to Ireland both from the point of view of energy independence and as a stimulus to establishing the Irish economy as a leader in the new technology and sustainable economic model envisaged by the UN SDGs.
Starting the process of planning an export model, with investment by the state, ensures long term benefits are delivered to the Irish economy and the Irish people.
Meeting and potentially exceeding the 2030 SDG on wind energy will be environmentally, economically, and sustainably beneficial to Ireland.

**10) How should onshore and offshore grid connections be optimised? For example, should consideration be given to common hubs for adjacent projects?**
ANSWER
Wind developments already in process should continue to completion.

**11) Are there any further considerations which might reduce the cost to the consumer?**
ANSWER
An export model is key to creating a sustainable model that would be of benefit to the end consumer.

**12) Currently, developer compensation is not provided for delayed delivery of grid connections to renewable generators connecting to the network. Should developer compensation arrangements be provided for delivery of offshore grid connections to renewable projects? Similarly, who is best placed to bear the outage risks under the various options?**
ANSWER
Compensation:
Outage Risks: Hub outage = State takes risk; Individual Turbines= Developer/owner of turbine takes risk.

**13) Are there any further drivers which should be considered when assessing a grid delivery model suitable for offshore wind development in Ireland?**
ANSWER
The current plans need to be more ambitious to realize Ireland's potential to become a world leader in wind energy and a major supplier of wind to the European market.

**14) Overall, which model, or model variant, is most appropriate as an enduring grid delivery model for offshore wind in the Irish context?**
ANSWER:
Options 3&4 are preferable to options 1&2.

**15) It is accepted that a transition towards the chosen enduring grid delivery model will be required to leverage the development of the Relevant Projects in the short term.**

**Taking into account the high-level roadmaps set out at Figures 5 and 6 above, what should this transition look like?**
Continue with projects already in progress until completion and plan to integrate them at a future upgrade point into the new longer-term strategy.



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