### Introduction

- The Dutch government has set a goal to realize 21 GW windpower on the North Sea by 2030. The plan is to build five platforms of each of 2GW and connected to onshore with 2GW HVDC. In order to optimise the use of the cables when there is no wind, an interconnector can be built to the UK (multi purpose interconnector).
- At the moment a CBA has been performed by a consultant. The distribution of the benefits and costs have been quantitively assessed considering:
  - The TYNDP 2022 Distributed Energy scenario and higher interconnection scenario
  - All monetary values quoted on real 2021 prices
  - An average of five historical weather years: 2012, 2014, 2015, 2017 and 2018
- Based on these figures, the SEW (producer, consumer surplus and congestion rent) over the lifetime of the cable is positive.
- But...(maybe this discussion is premature, but still....)

 As the European energy system evolves from a fossil fuel-driven economy to renewable energy sources, a proper (TEN-E) CBA should not focus only on electricity but also take into account alternatives;

For example:

- Floating sun farms on the North Sea;
- Off shore batteries and conversion (H2).
- These kinds of alternatives not only impact the CBA but also the CBCA, moreover there is a competition between regulated assets and non regulated assets.

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# **Characteristics of the MPI**

- The TSOs are investigating the possibilities of a point-to-platform connection.
  - This configuration results in structural congestion on the line between the platform and the Dutch embankment. Following EU law, this would lead to a revision of the bidding zone with the result that the platform would have its own bidding zone.
  - This bidding zone is under the jurisdiction of the EU, while the line between the UK and the platform is an interconnector with a third country. Both boundaries then generate congestion income.

## **CBCA** challenges

- Options for considering cost-sharing of investments
  - 1. All MPI relevant investments from the radial 2 GW Grid Windfarm and UK onshore connection
  - 2. Only for the cable between Windfarm and UK shore
  - 3. Cost-sharing on all equipment from shore to shore (excluding platform)
- Congestion revenue share key:
  - No adequate legislation for third countries and offshore projects.
  - The link between the offshore windfarm and the Dutch onshore is an internal EU line for which the congestion income may not be shared with the UK.
- Sharing of internal costs:
  - There is no discussion on the division of costs that the Netherlands will make to accommodate the extra capacity that will be flowing through the Dutch network from neighboring countries towards the UK via NL or the other way around.
  - The TSO will make extra costs for redispatch and investment into the grid.

### **Questions for discussion:**

- What makes a MPI an MPI, only the connection from shore to platform, or the whole configuration?
- How to handle sharing of investment costs with the UK/third countries?
- How to handle sharing of congestion rent with UK/third countries?
- How could this be harmonized on an EC/NRA/TSO level?
- What kind of legislation to follow in such topics?