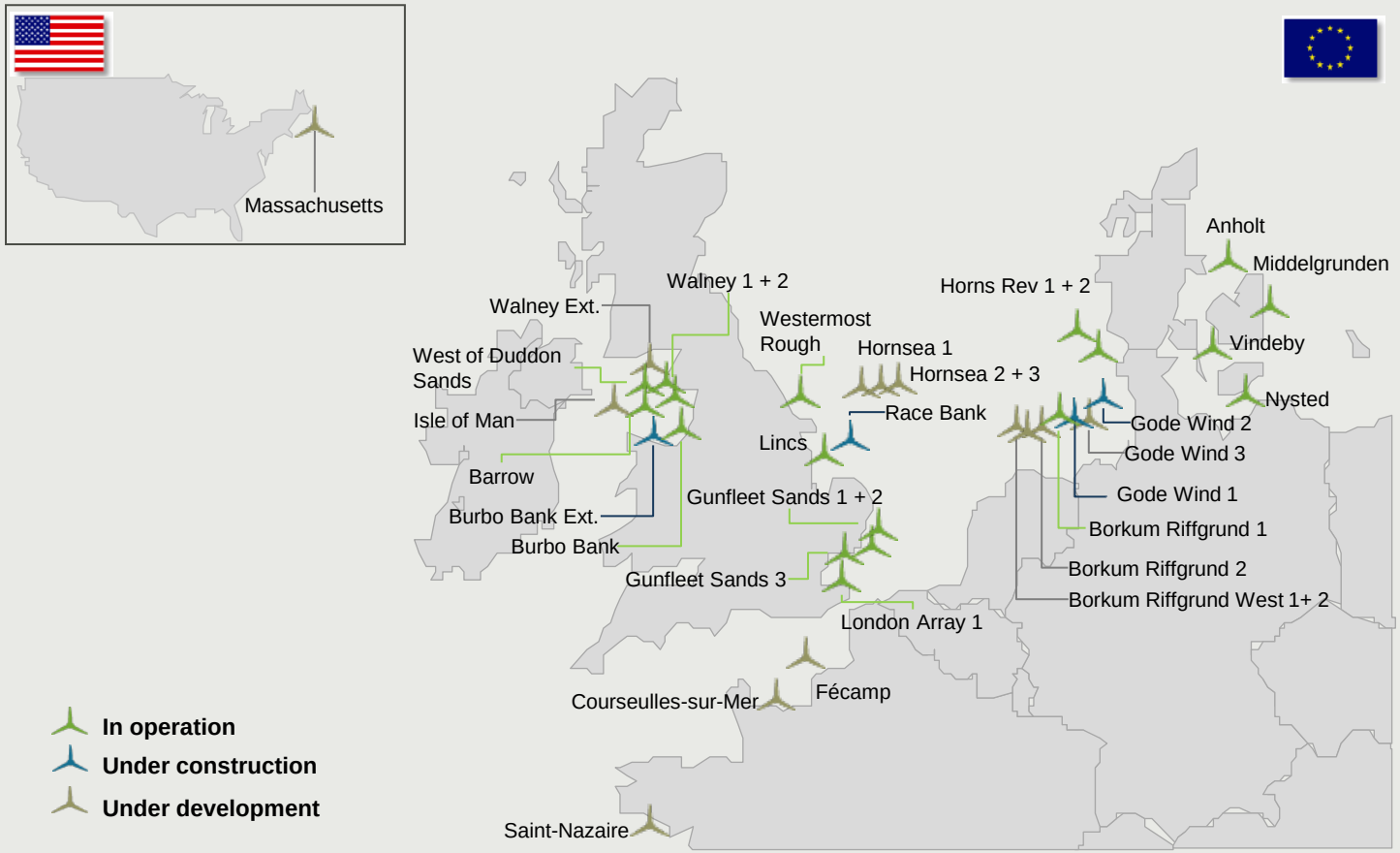
DANISH OFFSHORE WIND ENERGY TENDERS

Sune Strøm, DONG Energy

Agora Energiewende, Berlin, November 12th 2015

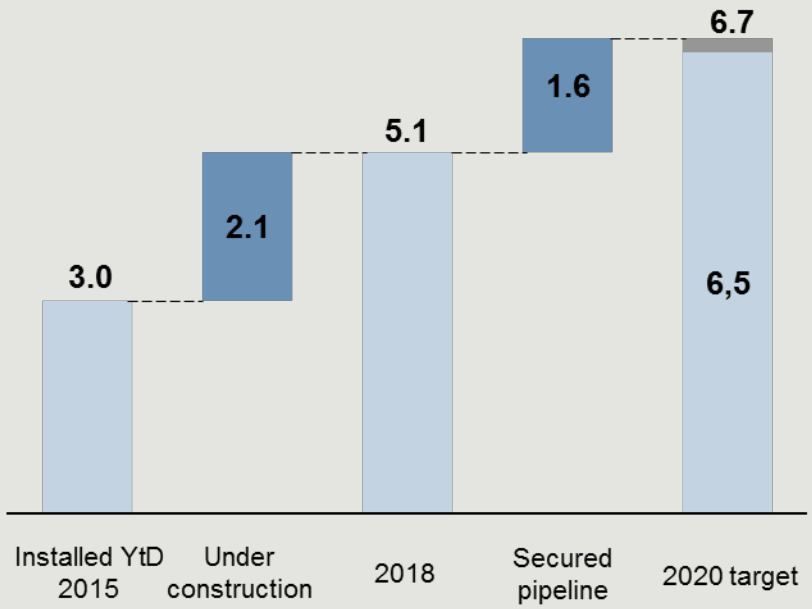
DONG Energy is the global leader in offshore wind



DONG Energy will build 4 GW over the next 6 years and reduce cost to less than 100 €/MWh in 2020

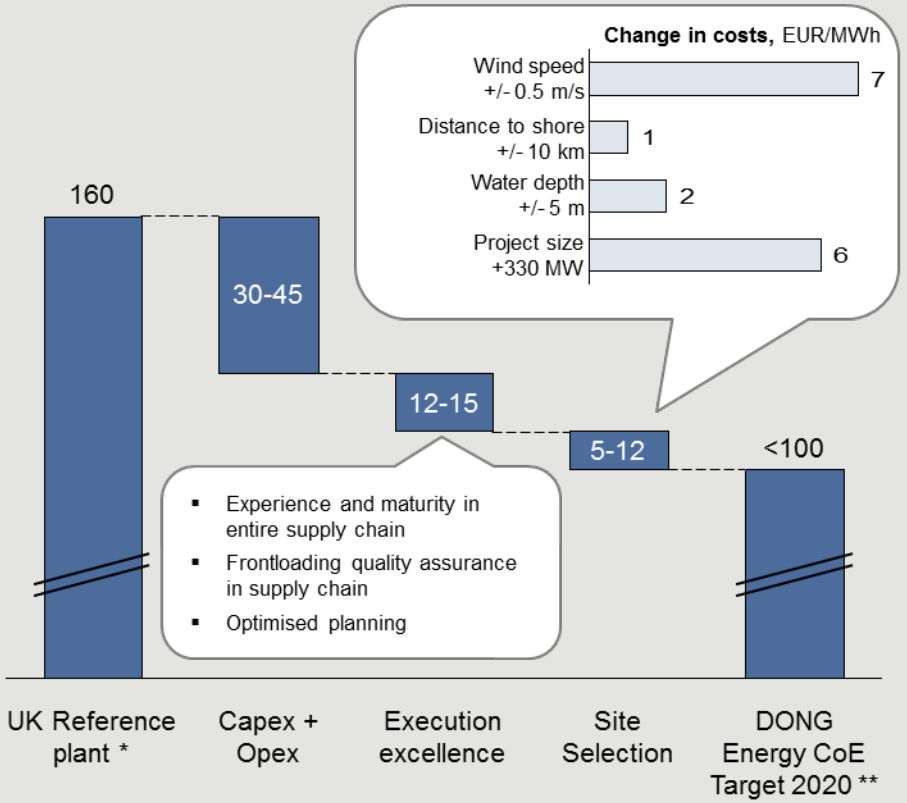
DONG Energy pipeline towards 2020

GW



Main potentials for reducing Cost of Energy – UK setting

€/MWh
2012-prices



* Average power price incl. ROCs and LECS received for UK-site Walney 2 in 2012. DONG Energy 2020 target is based on UK Round 3 park - FiD. Incl. transmission costs. All prices are in 2012-prices and including substations and offshore power cables
** UK plant, far from shore

DONG Energy is a main investor in the German Energiewende

More than 3.5 bn € have already been invested in Germany

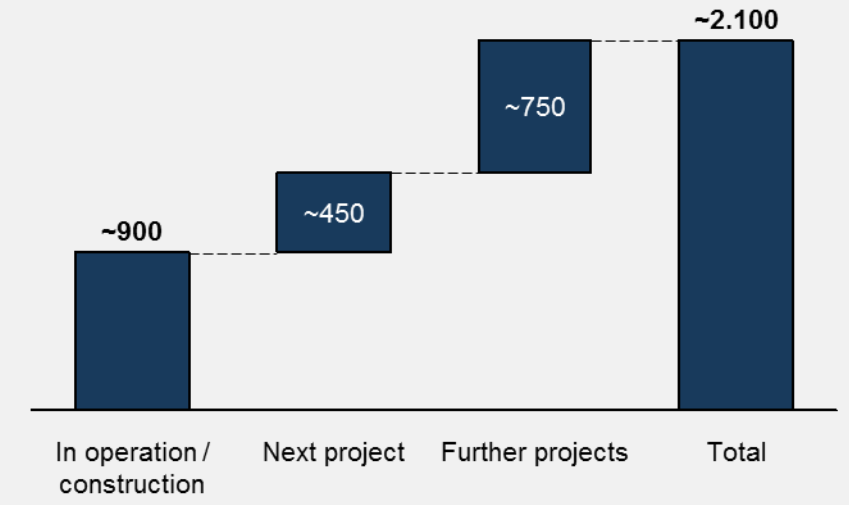
DONG Energy Windfarms

Other Windfarms

Overview of DONG Energies German Offshore projects

The German pipeline of DONG Energy shows project rights with an overall capacity of approx. 2,1 GW

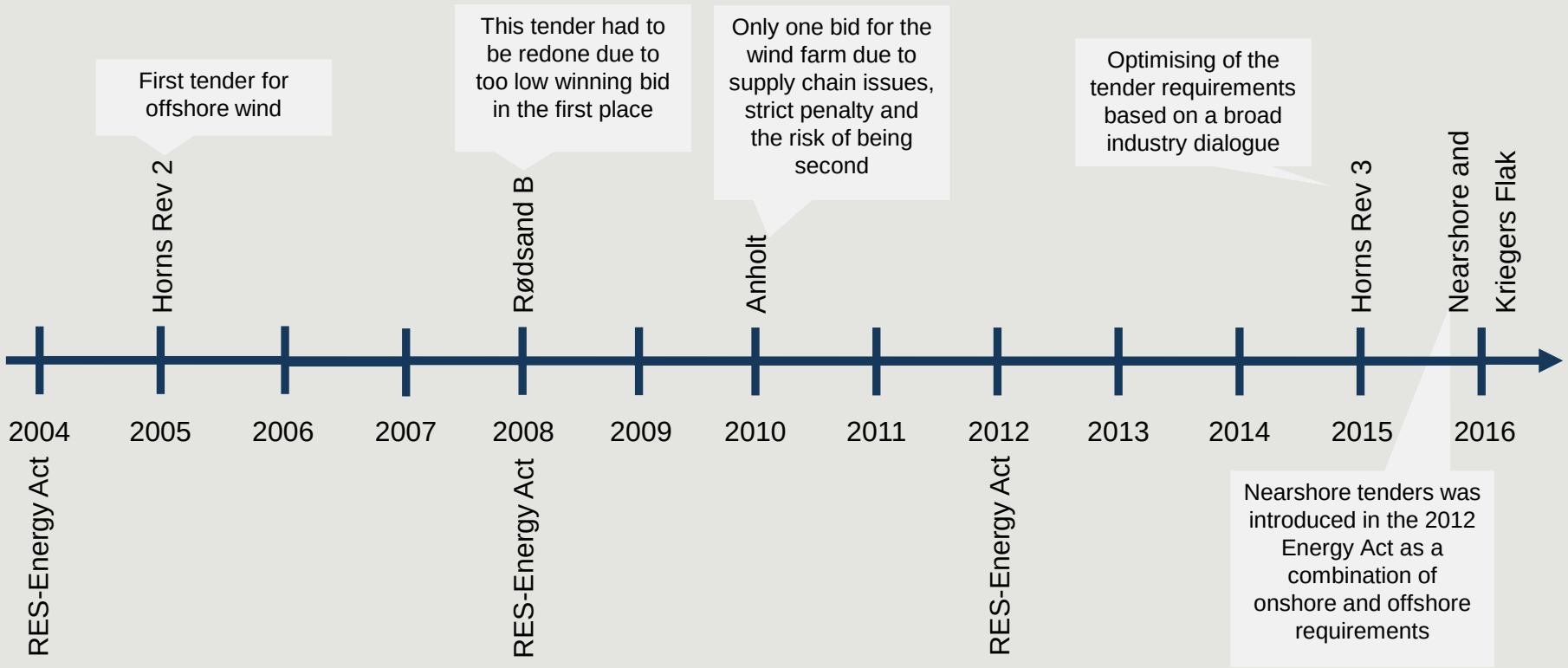
DONG Energy Capacity [MW]



- Our first German Offshore wind farm, Borkum Riffgrund 1 is generating electricity since February and is being finally commissioned these days.
- Construction works of GodeWind 1 and 2 have started in April 2015.
- Main Office in Hamburg and O&M hub in Norden/Norddeich
- Approx. 130 Employees

Denmark has tendered out offshore wind farm sites since 2005 based on an authority driven process

Broad political support and continuously updated RES-Energy Acts have been the cornerstone for the offshore wind development



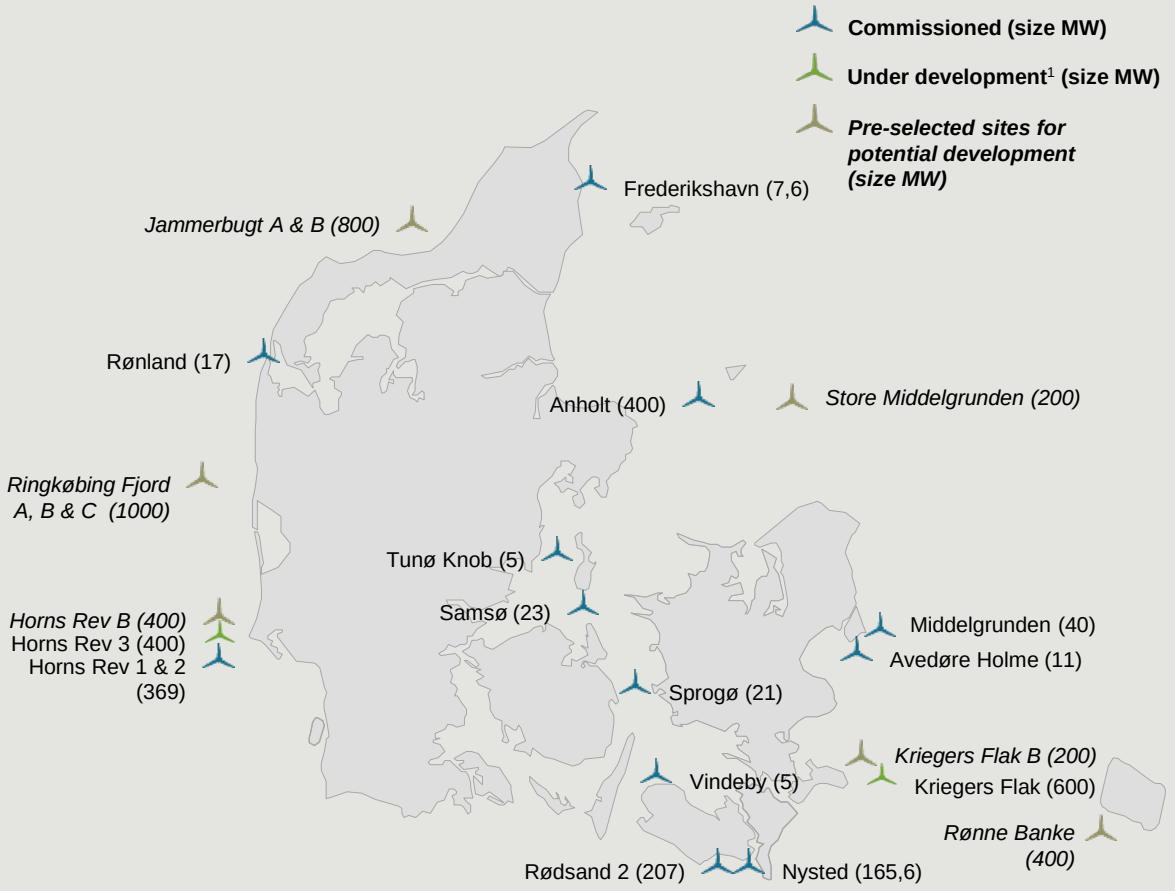
The process starts with a look at the map

Offshore wind farm authority group

- Suitable offshore wind farm areas are pointed out and reserved based on other sea use, wind, sea bed, depth, distance to shore, grid connection etc.

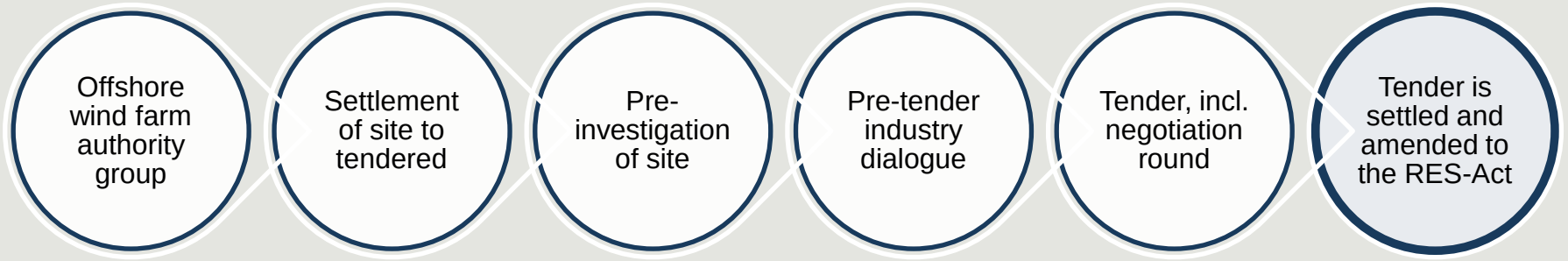
Settlement of site to tendered

- The sites are ranked economically
- Political agreement on tendering out the “best” site



1. Broad definition covering projects whose tender process have just opened (Kriegers Flak) and those where a bidder has already been awarded right to develop project (HR3).

The process starts with a look at the map and it ends with an amendment to the RES-Act



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- Energinet.dk (the TSO) conducts pre-investigation of the site and publishes the results continuously

- The industry is invited to a dialogue regarding the coming tender and it’s expected requirements

- Pre-qualification
- Preliminary bid
- EIA is finalised
- Negotiation round
- Final bid

- The parties behind the RES-Act decides to accept the bid or not
- The winning bid is included in the RES-act
- Final development and construction starts

Offshore and nearshore offshore are two different options

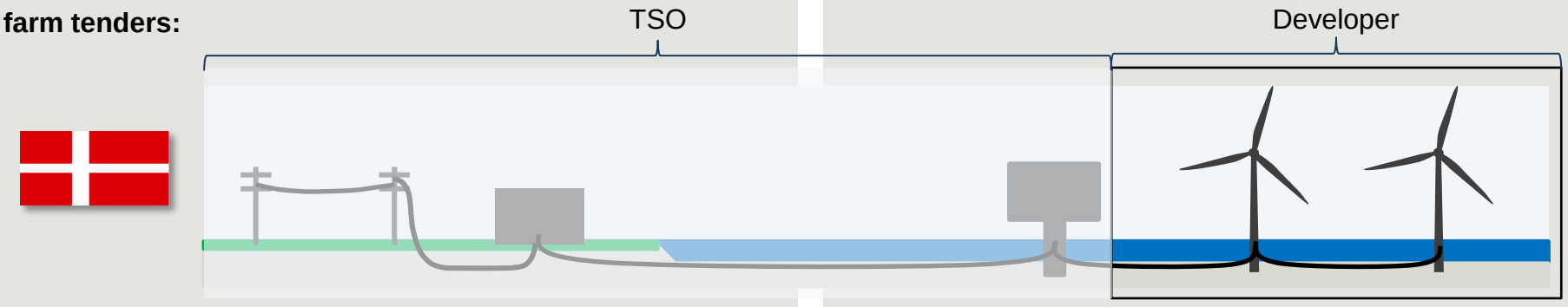
Offshore wind farm tenders:

- 15 km and further out
- Larger sites, expected 400 MW and upwards
- One site tender
- EIA included
- Grid connection:
  - TSO: Offshore substation and export cable to the connection point with the high voltage grid
  - Guaranteed connection data and compensation for outage

Nearshore offshore wind farm tenders

- Min. 4 km from the coast
- Max 200 MW pr. site
- Multi-site tender 5 sites (in the first tender, two sites are expected to be used)
- EIA included
- Grid connection:
  - Developer: Potential offshore substation and export cable to the onshore connection point (specified in the tender material)
  - DSO/TSO: From the onshore connection point to the grid

Offshore wind farm tenders:



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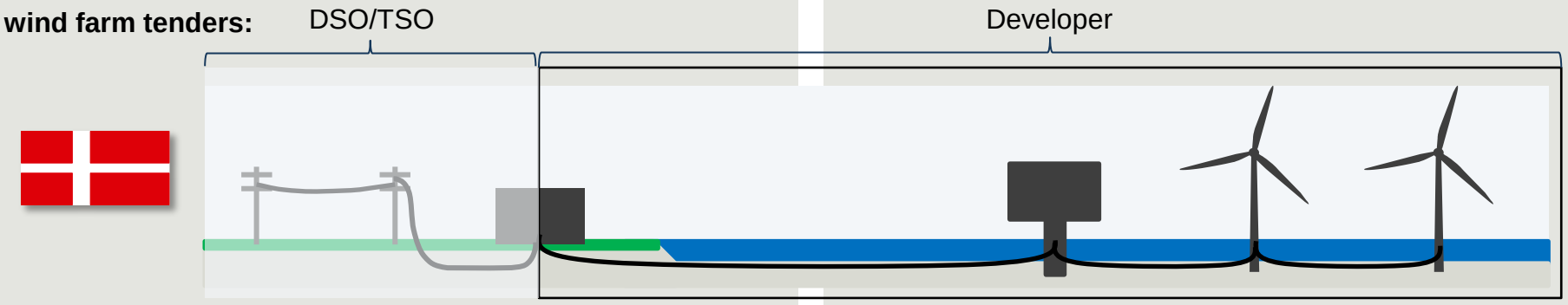


Tender is a reality for the offshore wind industry, careful design ensures competitive pressure, capable developers and efficiency

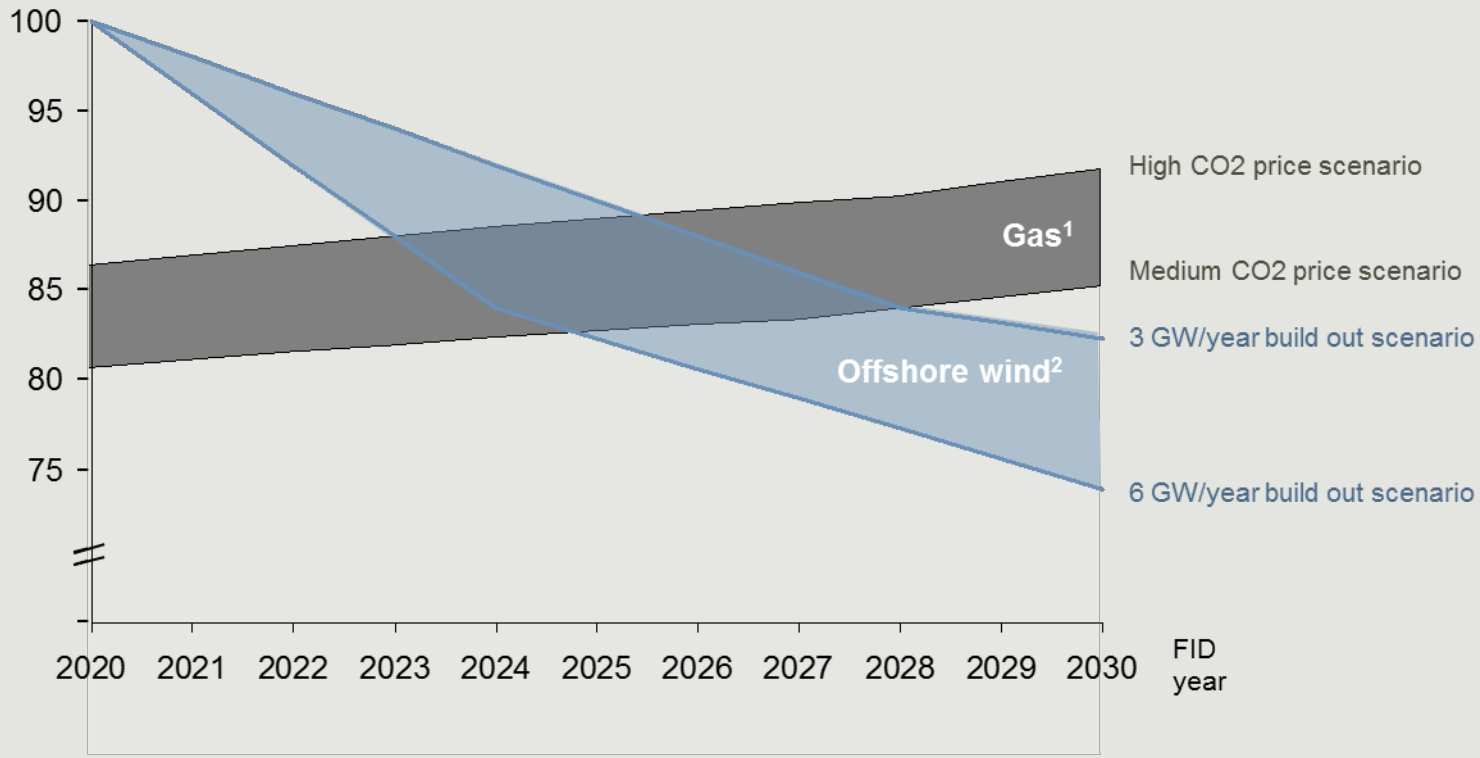
- Offshore wind energy will need the option of technology specific tenders in the State Aid Guidelines to continue its cost reducing path
- Competitive pressure by letting the developer get the responsibility from the offshore wind farm to the onshore connection point
- Pre-qualification criteria will ensure capable bidders in the competition
- Authorities to define suitable areas with both the conditions for effective offshore wind energy production and high probability for consent
- The developers to select the sites to build at either through an open-door approach or multi-site tender
- Flexibility regarding the consent in order for the developer to optimise the site – park layout and turbine selection
- One-stop shop and industry dialogue

DONG energy

Offshore wind will be competitive during the next decade with sufficient market volume

LCOE for gas and offshore wind dependent on annual market size of offshore wind and CO_2 price development

EUR/MWh (real 2012)



1 Plants running at technical maximum (93% capacity factor). Lower limit represents costs with WEO NPS CO_2 prices (€22 in 2025, €27 in 2030, €37 in 2040), upper limits uses BNEF CO_2 prices (€35 in 2025, €42 in 2030, €55 in 2040

2 Costs based on FID 2020 / CoD 2023, learning rate 16 pct., based on DONG Energy target and EWEA's central scenario, 2015. Lower limit represents scenario with annual build out of 6 GW, upper limit has a build out of 3 GW

Source: DONG Energy, EWEA, IEA World Energy Outlook and Bloomberg NEF