

Offshore Wind 2011

Offshore transmission networks

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Today's presentation

- ❖ **What is the investment opportunity?**
- ❖ **A regulatory regime to attract investment**
- ❖ **Opportunities & challenges ahead...**



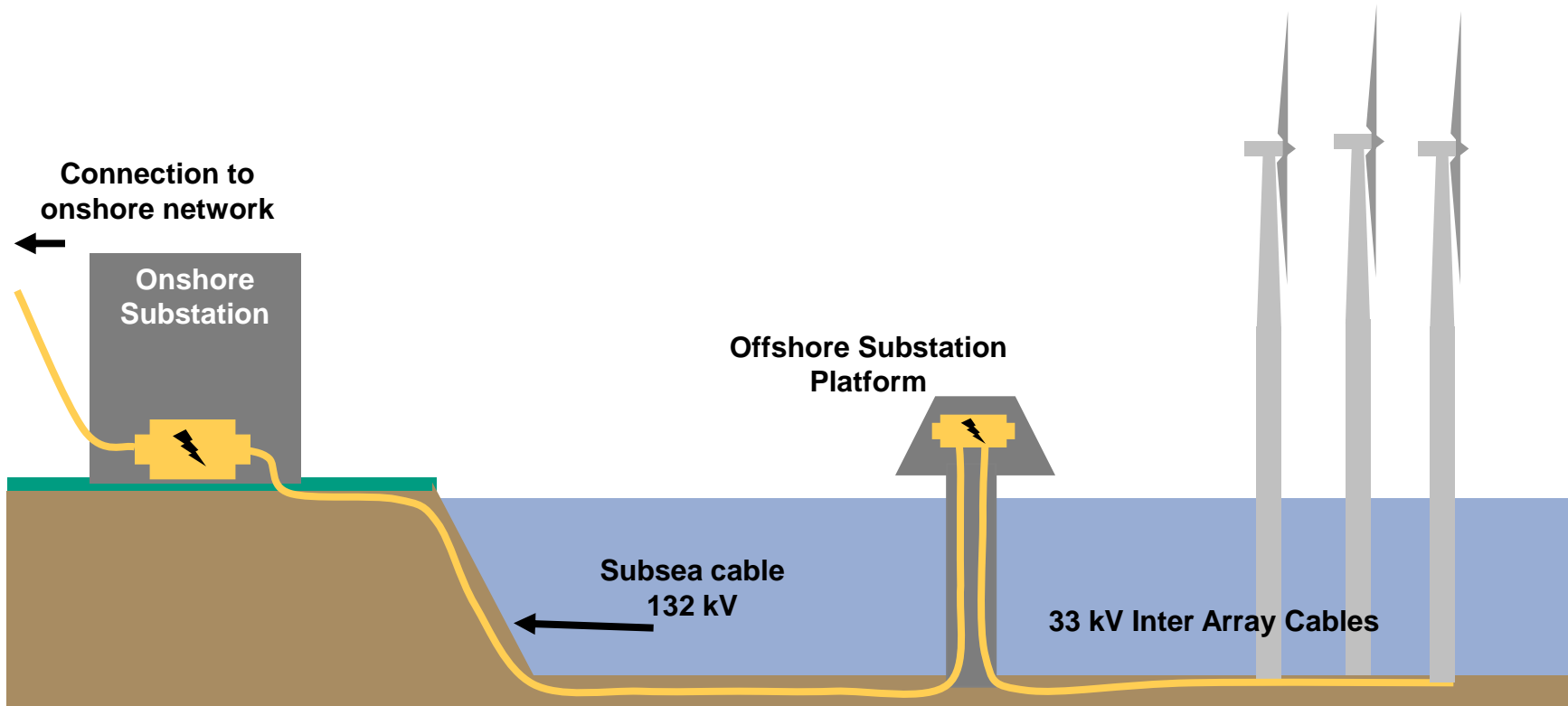
Wider policy landscape

- Energy markets, wholesale and retail
- Low carbon initiatives
- Network regulation and investment
- European regulation and interconnection
- Interaction with global energy and financial markets

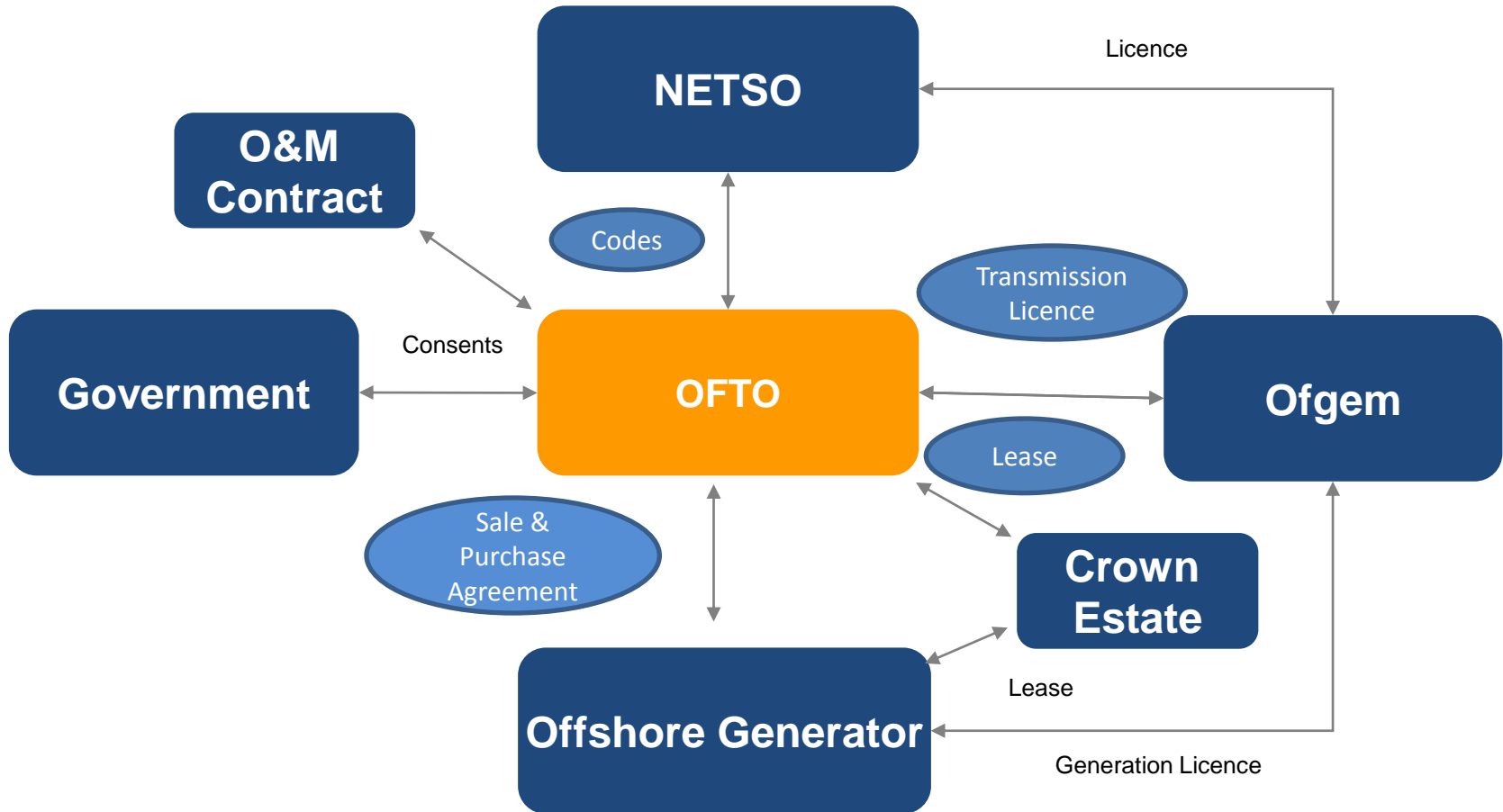
What is the OFTO opportunity?

- ❖ So what is an OFTO ..?
- ❖ How does it work?
- ❖ Track record? (ie do we have any yet?)
- ❖ Today's market activity...

What is an OFTO?



Commercial & regulatory structure



Regulatory regime

Low risk revenue stream

- **Well defined regulatory regime** – extension of the onshore precedent
- **Asset transfer value set by Ofgem**
- **20 yr revenue stream bid by OFTO**
- Revenue paid by NETSO
- Availability based
- No automatic periodic regulatory review
- No construction, energy or stranding risk
- Low counterparty risk – no exposure to generator
- Upside – cost savings, non-regulated services,

Revenue adjustments

- Availability incentives and penalties capped at 10%
- Post-construction revenue adjustments to reflect final transfer value
- Fully indexed to RPI
- Full pass-through of:
 - business rates, lease rentals, licence fees and Ofgem tender costs
 - effects of code changes
 - extra decommissioning costs due to change in law
- Incremental capex up to 20%
- Possible extension or re-tender at end of revenue stream

OFTO Licence - how does it work?

1. Obligations

OFTOs are required to:

- Comply with transmission licence requirements in return for a regulated revenue
- achieve the broad obligation to operate assets in line with industry best practice to minimise the effect and duration of any transmission outage
- report details of any service reduction over 21 days
- provide written statement of compliance with best practice if availability below 75% in a year or 80% over two years

This creates an obligation to repair assets

If does not comply, enforcement action could be significant – licence revocation

OFTO Licence - how does it work?

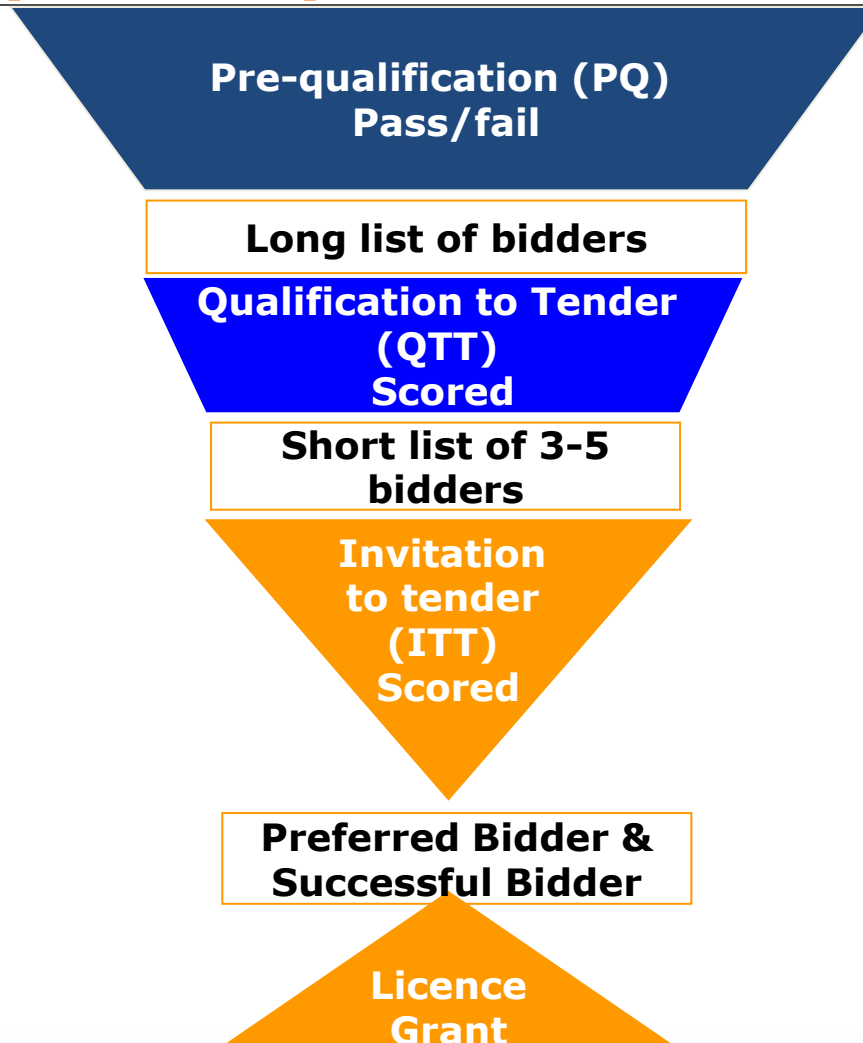
2. Incentives

- Not to compensate generator for lost revenue – disproportionate
- Incentive designed to encourage behaviour to maintain availability
- OFTO faces reduced revenue if it fails to meet availability target
- Incentive significantly reduces equity returns in case of major outage – does not put OFTO at risk of breaking minimum cover ratios

Design

- Availability target set at 98%
- Revenue uplift for good performance
- Monthly weighting
- 50% of OFTO revenue is at risk for performance below the target in a year
- Revenue impact is spread over five years

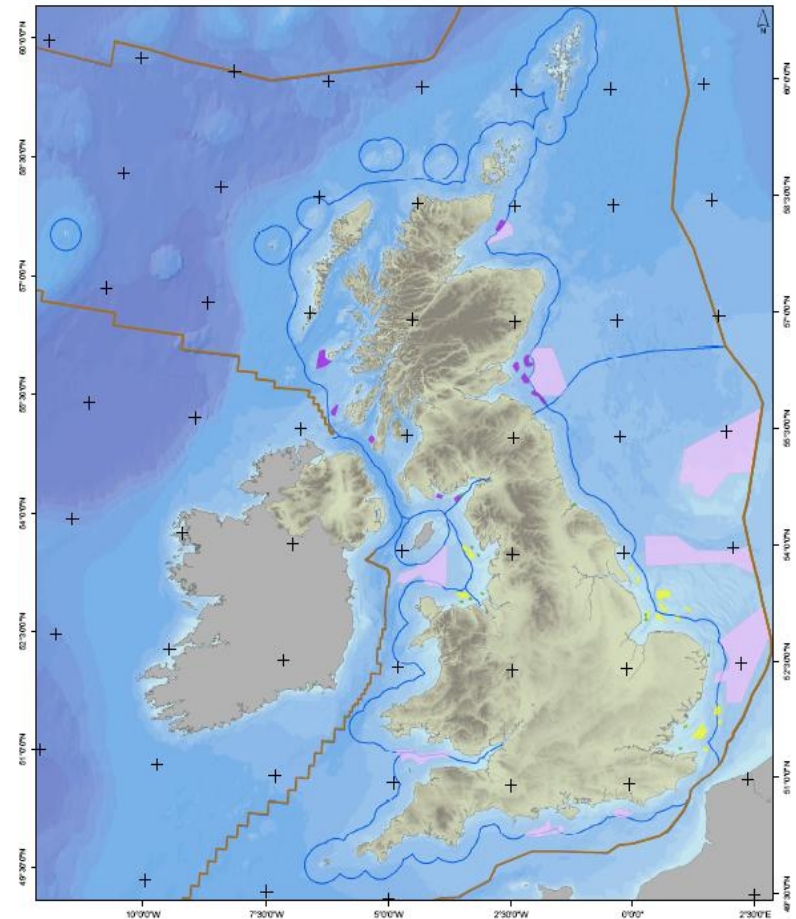
Clear competitive process



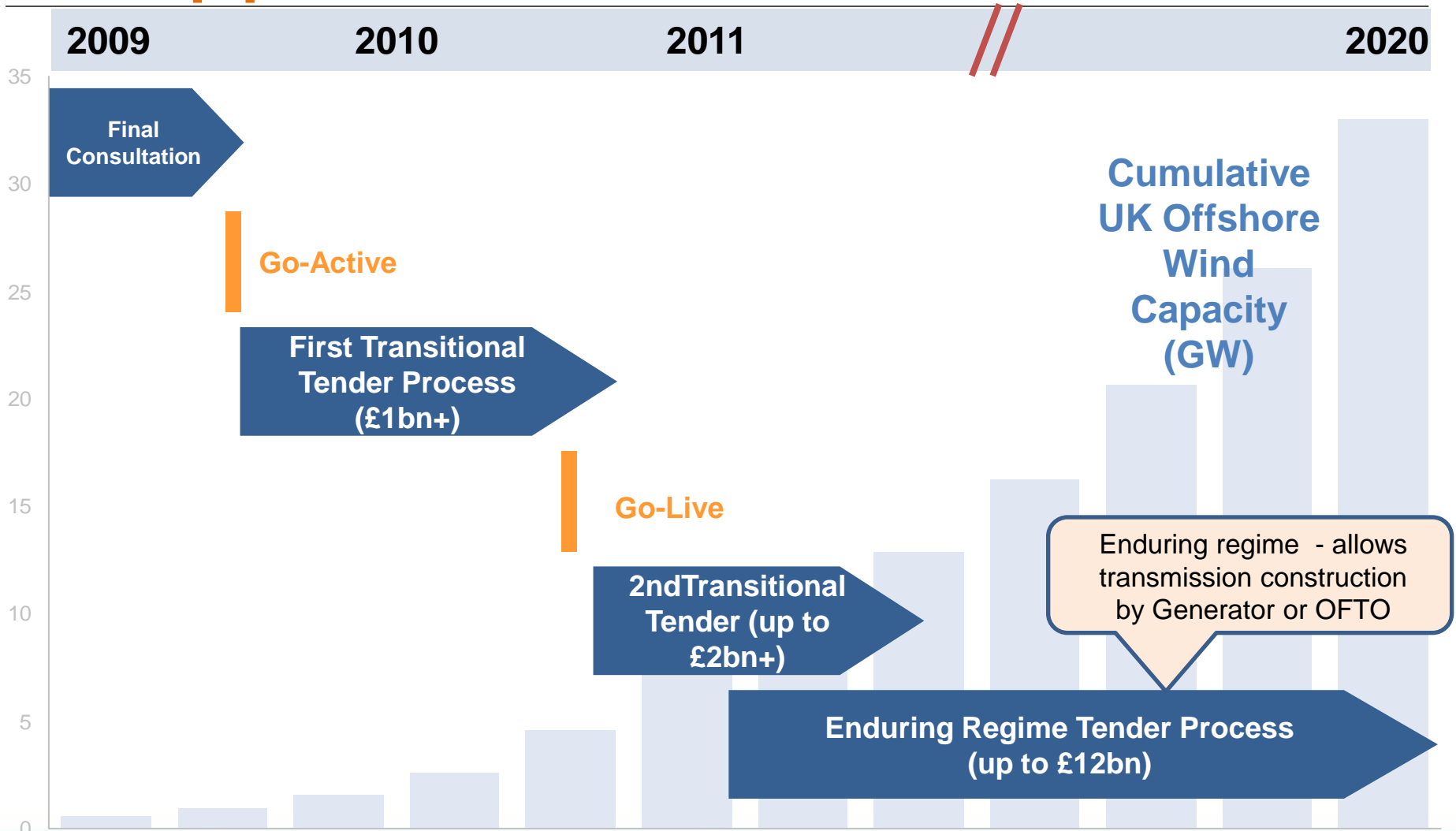
Project pipeline

- ❖ Linked to Crown Estates leases – R1, R2 & R3 Zones
- ❖ Developer/generator requirements & choices determine timing & model for transmission opportunities come to market.
- ❖ Enduring regime flexibility – generator choice – generator build or OFTO build.
- ❖ OFTO build regime detail being developed
- ❖ Extensive engagement with generation developers
- ❖ Key issues
 - Consenting/pre-construction
 - Asset based tenders
 - Construction/supply chain competition
 - OFTO financing and competition
 - Delivery incentives

Crown Estate Round 3



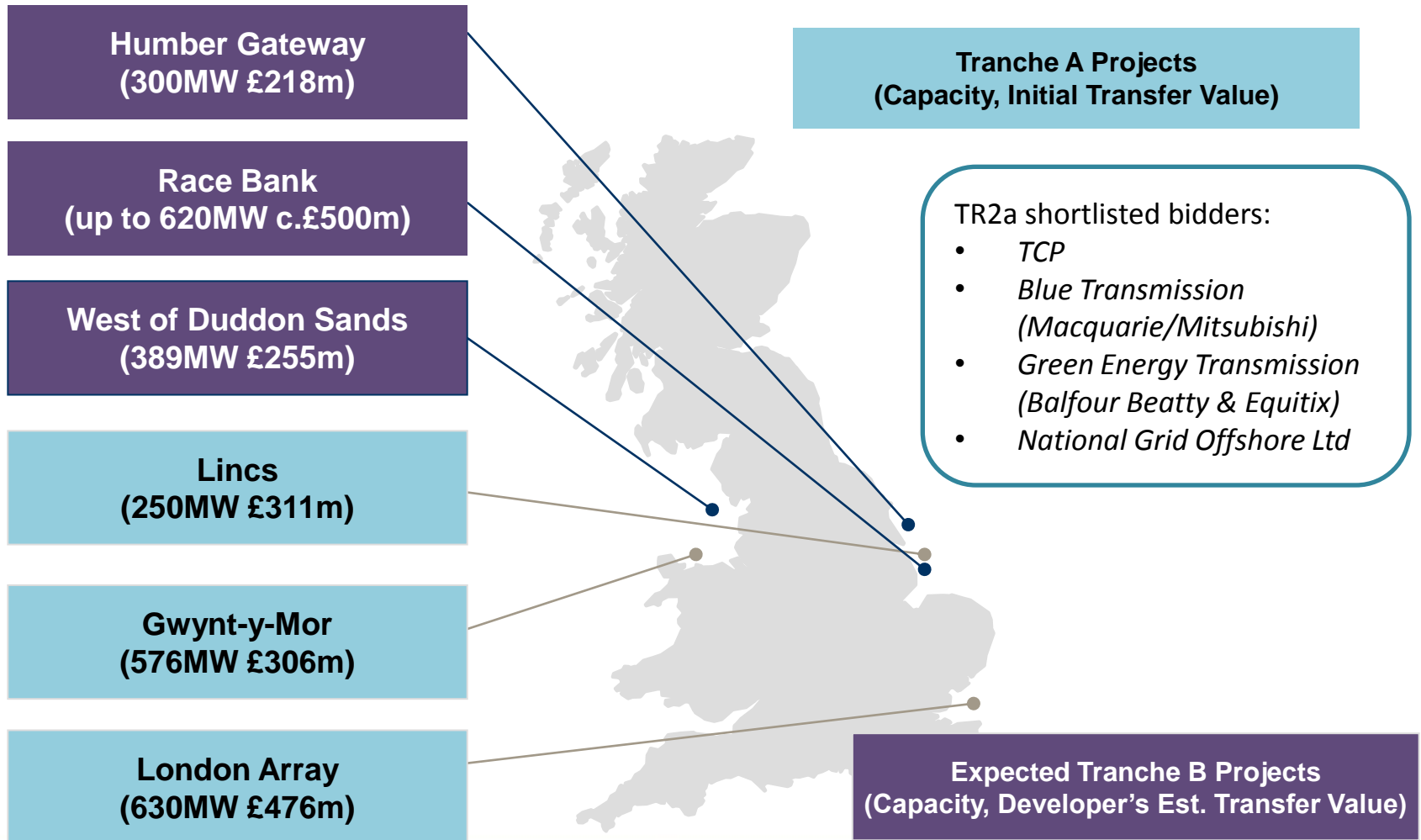
OFTO pipeline



Tender Round 1 (£1.1 billion)

Project	Preferred Bidder/OFTO
✓ Robin Rigg (licenced February 2011)	• Transmission Capital Partners (TCP)
✓ Gunfleet Sands (licenced July 2011)	
✓ Barrow (licenced September 2011)	
Ormonde	
Thanet	• Balfour Beatty
✓ Walney 1 (licenced October 2011)	• Macquarie
Walney 2	
Sheringham Shoal	
Greater Gabbard	• Green Energy Transmission (Equitix, Balfour Beatty, AMP)

Tender Round 2



Current activity - coordinated offshore transmission development

- Ofgem and DECC announced coordination workstream in Jan 2011 to look at potential opportunities to enhance co-ordination within the offshore transmission regime. Expected outcomes:
 - identifying and exploiting savings from co-ordinated network development where possible
 - ensuring the regulatory regime supports this approach
- National Grid is already the System Operator (NETSO) both onshore and offshore; Offshore Transmission Coordination Advisory Group (OTCG) established & work underway with inputs from Stakeholder Community
- Ofgem/DECC conclusions to be informed by a range of evidence and analysis; Assessment of options which emerge will relate to how they perform against Ofgem and Government objectives and statutory obligations
- Any proposals that are set out in our conclusions report would be subject to public consultation

Investment Highlights

Attractive investment sector

- Strong political and regulatory support for UK offshore wind
- Rare opportunity for new entrants to enter the UK transmission sector
- Relatively low risk asset class

Robust new regulatory regime

- 20 year revenue stream with limited regulatory intervention
- Pass through of certain key costs
- OFTO protected from wind farm operating risk and risk of stranding
- Upside potential: opex, non-regulated services, increased capacity

Transparent competitive process

- Well defined tender process, structured to ensure level playing field and transparency
- Two qualification stages followed by ITT stage with data room access
- High quality list of pre-qualified parties now announced

Long term opportunity

- A number of phases over several years: potentially £15 bn of assets
- Early participation will provide valuable experience for the enduring regime
- Enduring regime offers design and construction opportunities

Market appetite

- Market evolving rapidly on bidder & developer sides
- Interest strong to date
- Bidder/consortium configurations evolving
- Market awareness & understanding increasing, breadth & depth in growing phase – bidders & generators
- Particular interest in larger asset opportunities – interest expressed from potential future new entrants
- Bidder/partnering approach may need to evolve for enduring depending on how projects come to market
- Understanding of technology options, innovations & constraints

Benefits

For Generators

- Deliver cheaper offshore grid connections; assets owned and financed by regulated OFTO
- Transmission risk is responsibility of OFTO; incentivised to attain high availability
- Flexibility for future offshore generation needs

For OFTO's

- Encourage innovation through competition and enable new entrants to compete in the market
- Long term regulatory certainty and light-handed regulation
- Low risk - OFTO protected against generator failure and credit risk

For consumers

- Efficient and economic network investment
- Savings compared to onshore regulated networks
- Flexibility for future integration co-ordination needs



ofgem E-Serve

Promoting choice and value
for all gas and electricity customers