Irish Wind Energy Association

# Unlocking the Potential of Offshore Wind in Ireland

Dr. David Connolly
CEO, IWEA
24th September 2019

# IWEA Represents ~90% of Wind Energy in Ireland

## Members across existing assets, development & supply chain for onshore & offshore:

- Wind farm developers
- Asset owners
- Supply Chain:
  - Turbine manufacturers
  - Construction companies
  - Supply companies
  - Accountants
  - Insurance
  - Consultancy
  - Legal firms
  - Banks


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# 2030:
# A Game Changer

## REQUIRES AT LEAST 3.5 GW OF OFFSHORE WIND ENERGY BY 2030



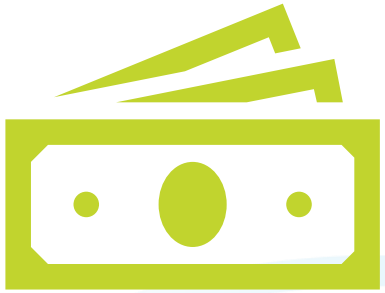
## Government pledges to generate 70% of electricity from renewable sources by 2030

Updated / Monday, 25 Mar 2019 **14:17**

| | Technology | NDP 2030 | Uptake to meet 2030 targets (Based on MACC analysis) 2025 | 2030 |
|---|---|---|---|---|
| Electricity | **Total RES in Generation mix[4], %** | **55** | **52** | **70** |
| | ▪ Onshore wind, GW | ~7 | ~6.5 | ~8.2 |
| | ▪ Offshore wind, GW | 1.8 | ~1.0 | ~3.5 |
| | ▪ Solar PV, GW | 1.5 | ~0.2 | ~0.4 |

# How Can We Work Together to Deliver the Benefits of Offshore Wind in Ireland?

Huge Potential



Rapidly Falling Prices

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# Irish Market Overview: DRAFT

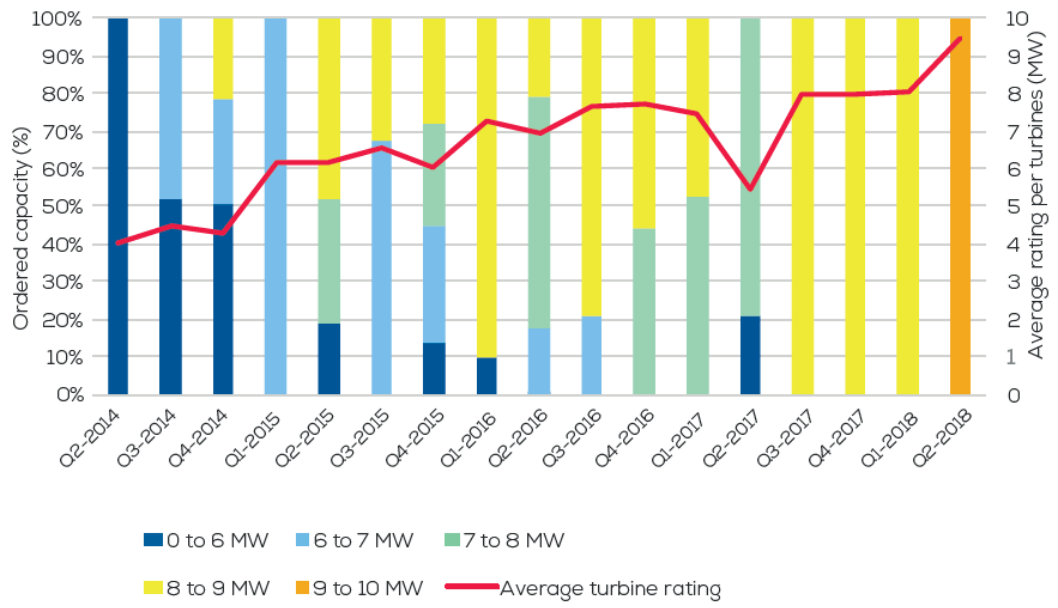
## Final Report will launch at IWEA Autumn Conference

| Wind Farm | Capacity (MW) | Developer | Foundation | Stage |
|---|---|---|---|---|
| Arklow Bank 2 | 520 | SSE Renewables | Fixed | Consented |
| Codling Wind Park | 1100 | Fred Olsen, Hazel Shore | Fixed | Consented |
| Oriel | 330 | Oriel, Parkwind, ESB | Fixed | In planning system |
| Codling Wind Park Extension | 1000 | Fred Olsen, Hazel Shore | Fixed | In planning system |
| Dublin Array | 600 | Innogy, Saorgus | Fixed | In planning system |
| Skerd Rocks | 400 | Fuinneamh Sceirde Teoranta | Fixed | In planning system |
| Braymore Point | 800 | SSE Renewables | Fixed | In development |
| Celtic Sea Array | 800 | SSE Renewables | Fixed/ Floating | In development |
| Clogherhead | 500 | ESB, Parkwind | Fixed | In development |
| Cooley Point | 500 | ESB | Fixed | In development |
| Helvick Head | 1000 | Energia | Fixed | In development |
| Kilmichael Point | 500 | ESB | Fixed | In development |
| NISA | 750 | Statkraft | Fixed | In development |
| Inis Ealga | 400 | DP Energy | Floating | In development |
| Unnamed project, tbc | 1000 | Energia | Fixed | In development |
| Floating Power Plant A/S | 224 | DP Energy | Floating | In development |
| Block 30 (Off Shore Wind) | 600 | Lightfield Limited | Floating | In development |

# Offshore Turbine Technology Rapidly Improving

## >8 MW Available Today

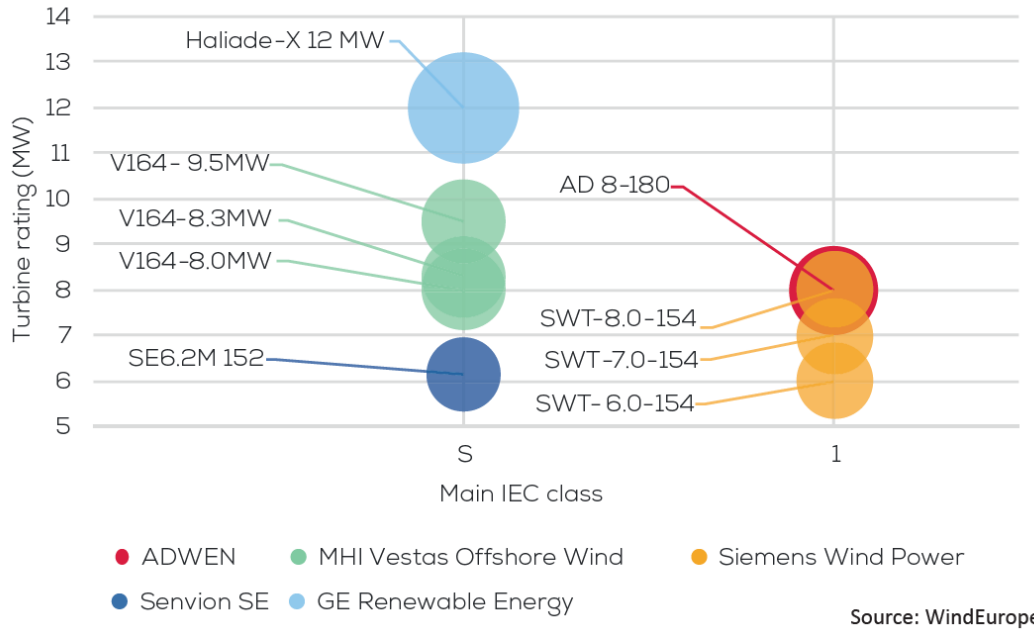
FIGURE 26
Ordered offshore wind turbine power ratings in Europe




Source: WindEurope

## 12 MW Available Soon

FIGURE 29
6 MW+ offshore turbines currently available in Europe (size of the bubble represents the rotor diameter)




Source: WindEurope

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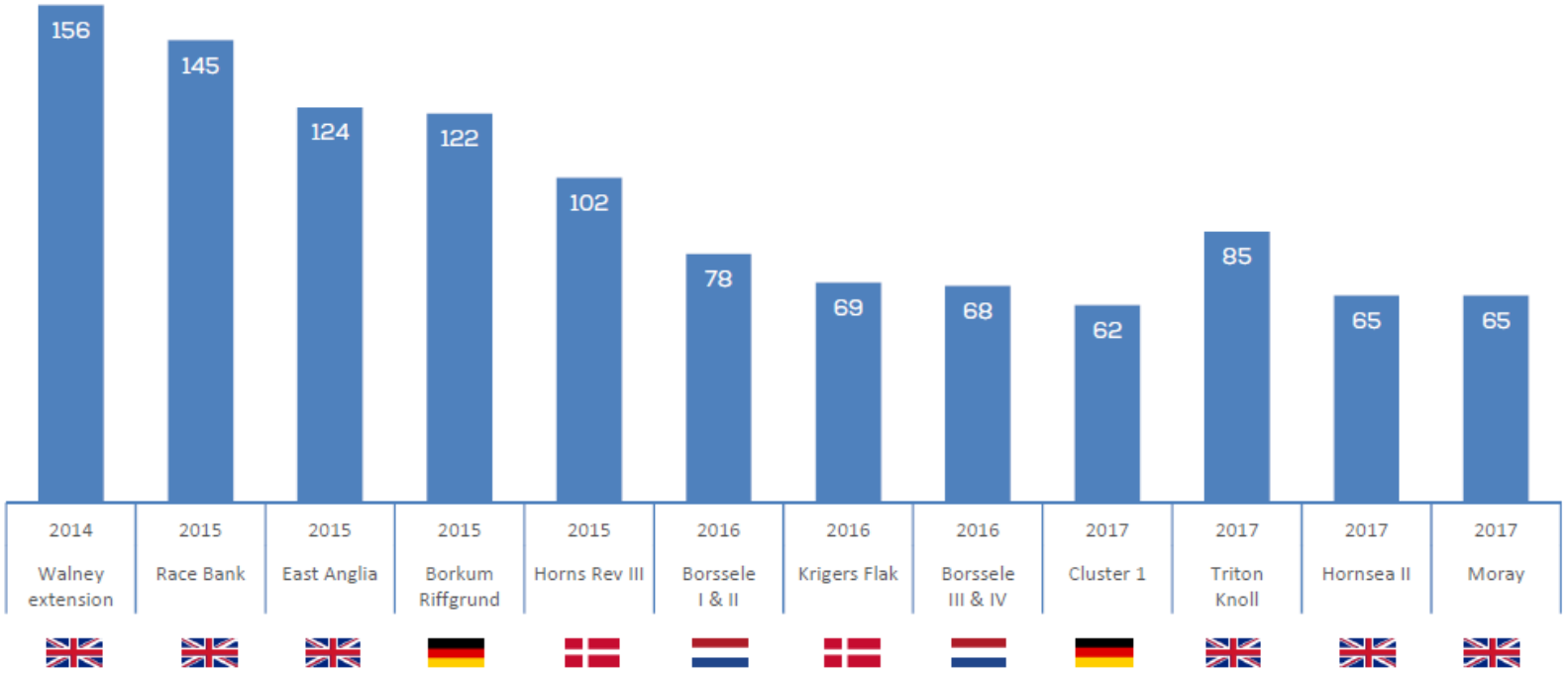
# Offshore Wind Prices Falling Rapidly once Industry is Established

## Prices Dropping in Other Auctions

**Levelised revenue of electricity, incl. transmission costs**
EUR/MWh*, 2016-prices




Wind EUROPE

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# Government Wants to see ‘Legacy’ projects soon and ‘Enduring’ after that

## Legacy Projects – Vital for 2025

Transition Protocol for Consenting by Q4 2019

Grid Offer by Q2 2020, must accept by Q4 2021, Developer Led

RESS by Q2 2021

## Enduring Projects – Vital for 2030

Consenting Regime by Q4 2020 (final step is NMPF)

RESS in Q3 2022 & in Q3 2024

Grid Offer +8 Months, EirGrid Led

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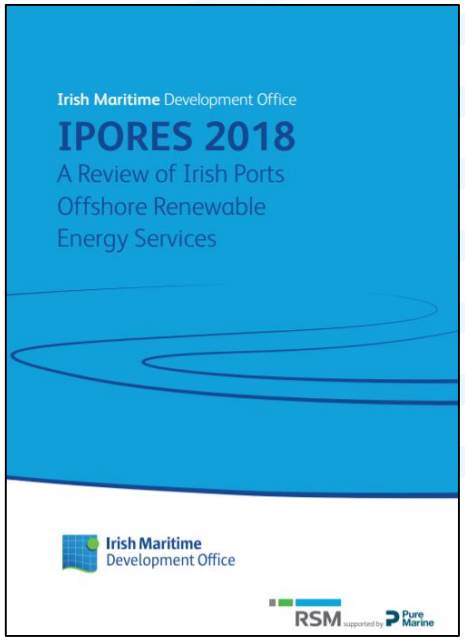
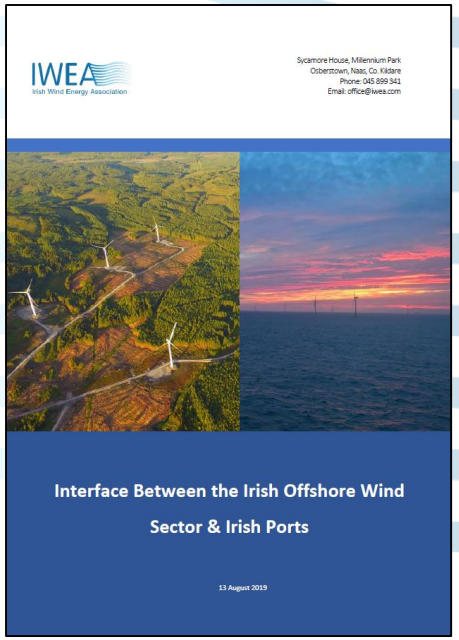
# Supply Chain is Critical

- Competing on a global market
- Vital that Ireland gets started as soon as possible to attract the supply chain
- A top priority for IWEA to kickstart the industry
  - Engaging with Irish ports to ensure they are ready
  - Work underway by IWEA on the supply chain to identify:
    - Needs
    - Opportunities
    - Gaps
    - Policies required

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