

# THE ROLE OF ENERGY COMPANIES IN THE ENERGY TRANSITION – LATEST INSIGHTS IN COST REDUCTIONS



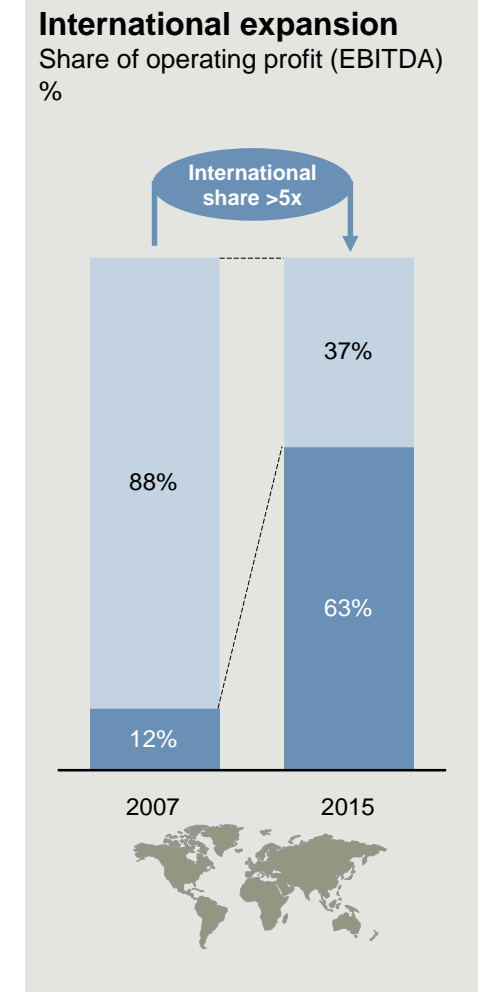
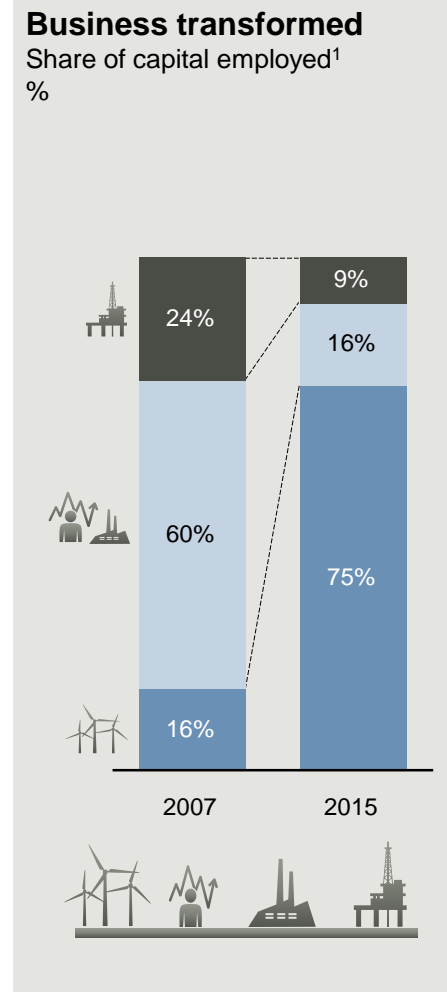
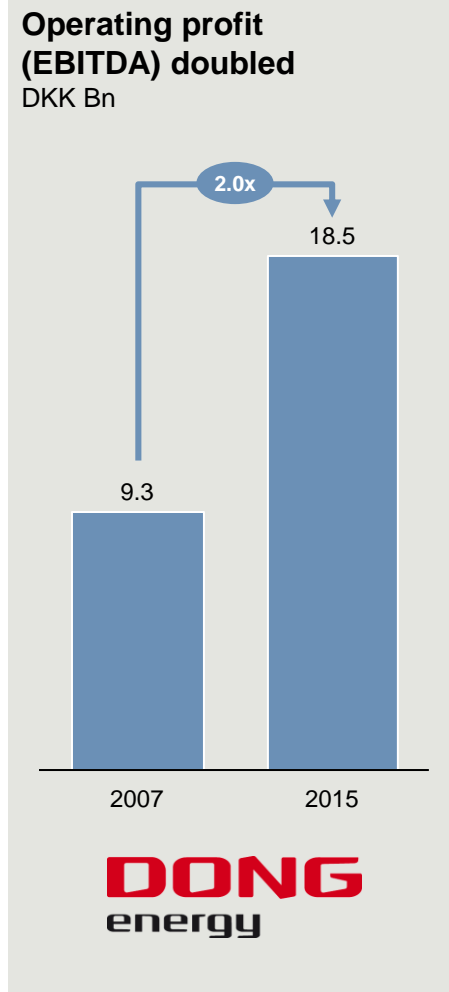
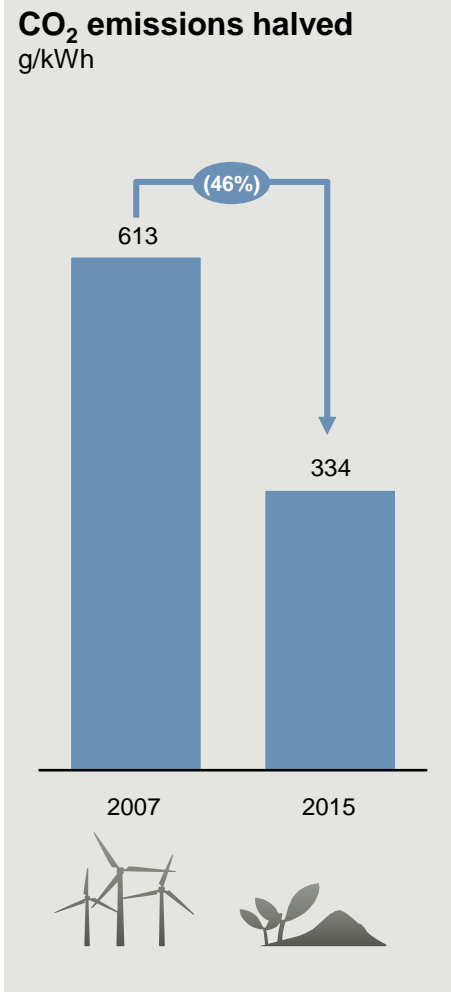
**October 2016 – EUFORES Copenhagen**

Martin Neubert

Chief Strategy Officer

DONG Energy Wind Power

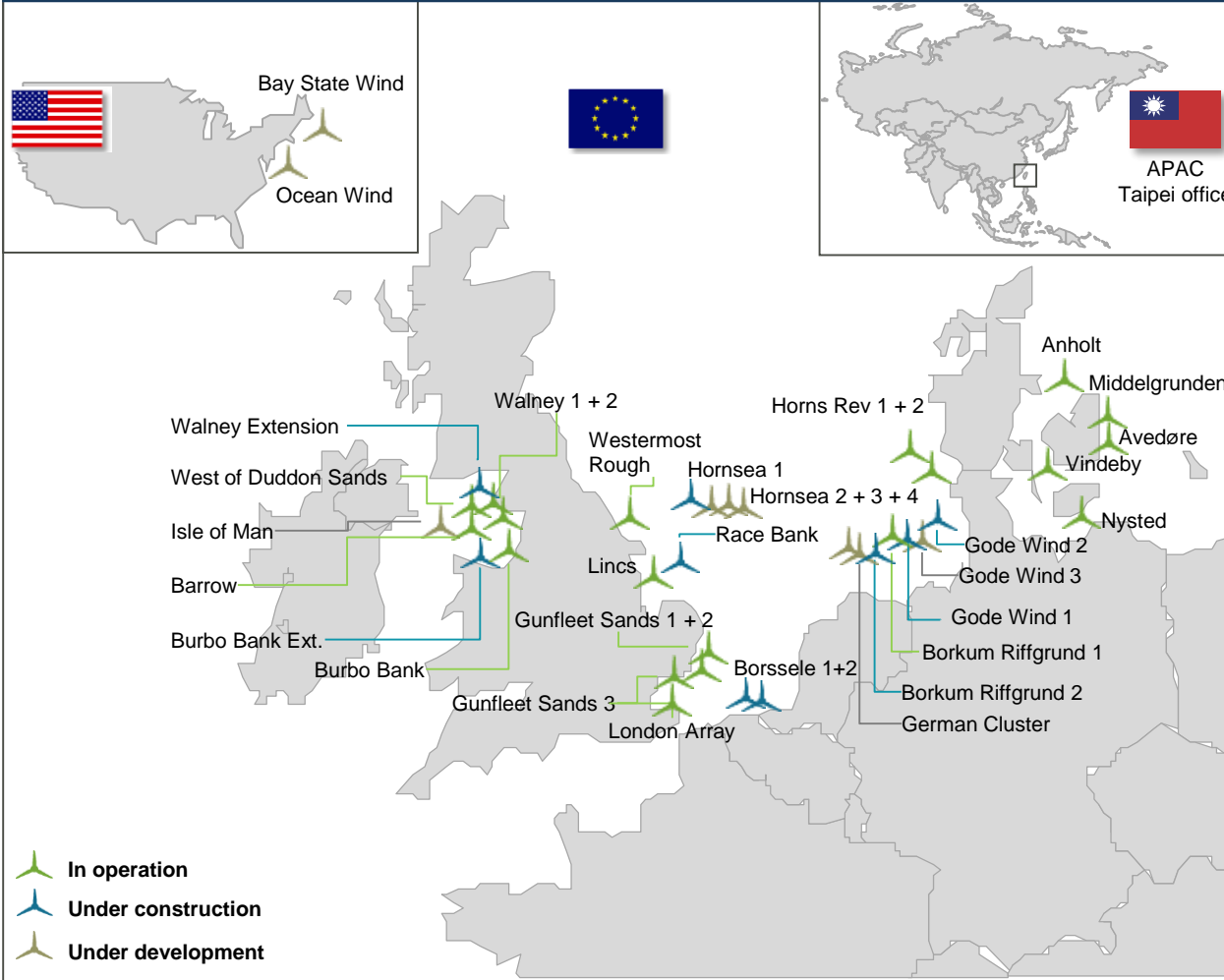
# Green transformation is our growth strategy



1. Excluding unallocated capital employed on DONG Energy group level

# DONG Energy Wind Power is the market leader within offshore wind

## DONG Energy Wind Power geographical footprint



## Unparalleled experience and track record

1991 **25 years of experience and track record in the offshore wind sector** 2016

19 offshore wind farms in operation

9 offshore wind farms under construction

**3,009 MW**  
Constructed capacity

**2,000**  
Dedicated employees

**4,440 MW**  
under construction

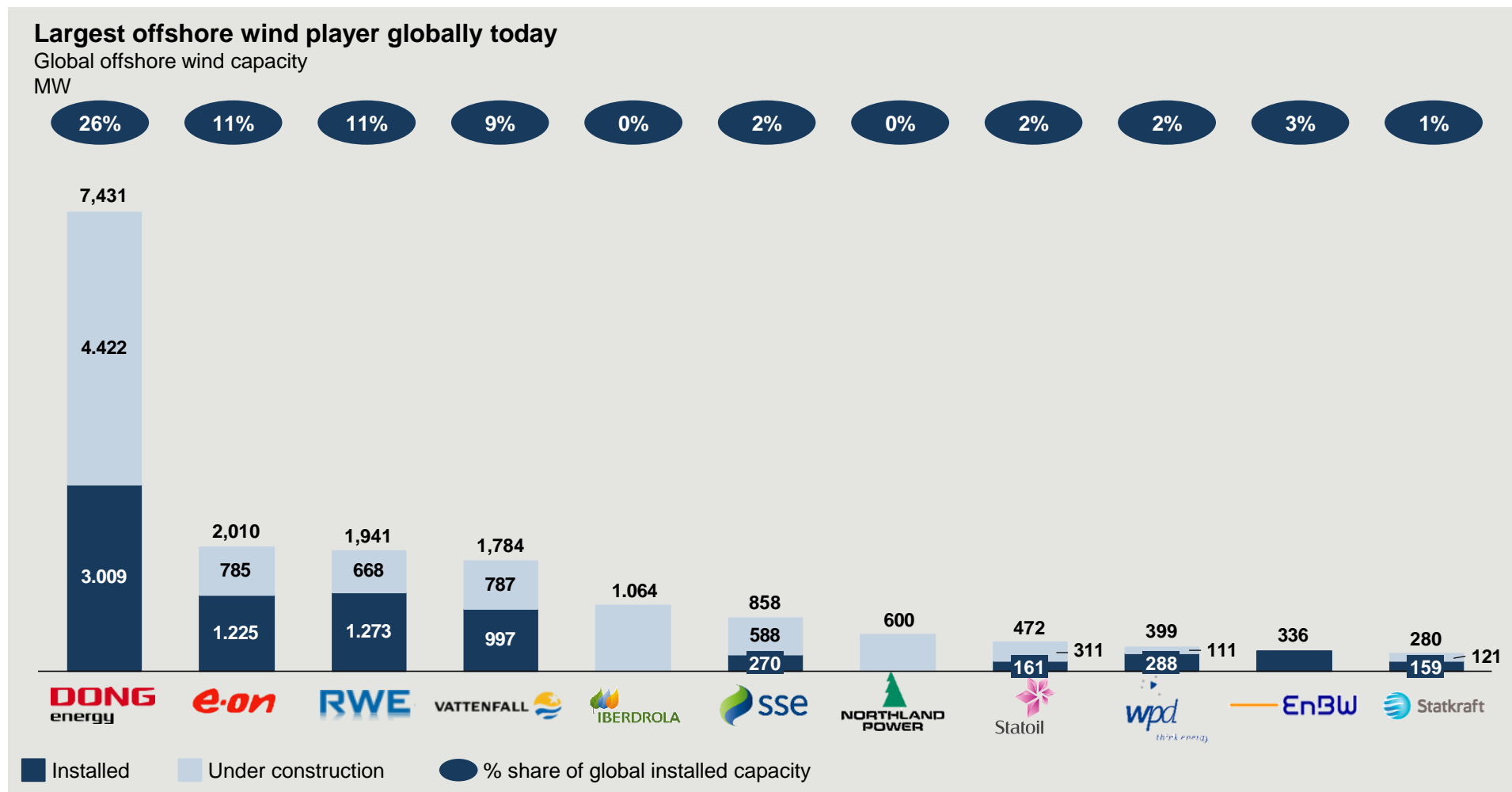
**7.5 million**  
Europeans with clean electricity

**3,103 MW**  
World's leading operator

**13**  
Partnerships



# ... and we are today a global leader



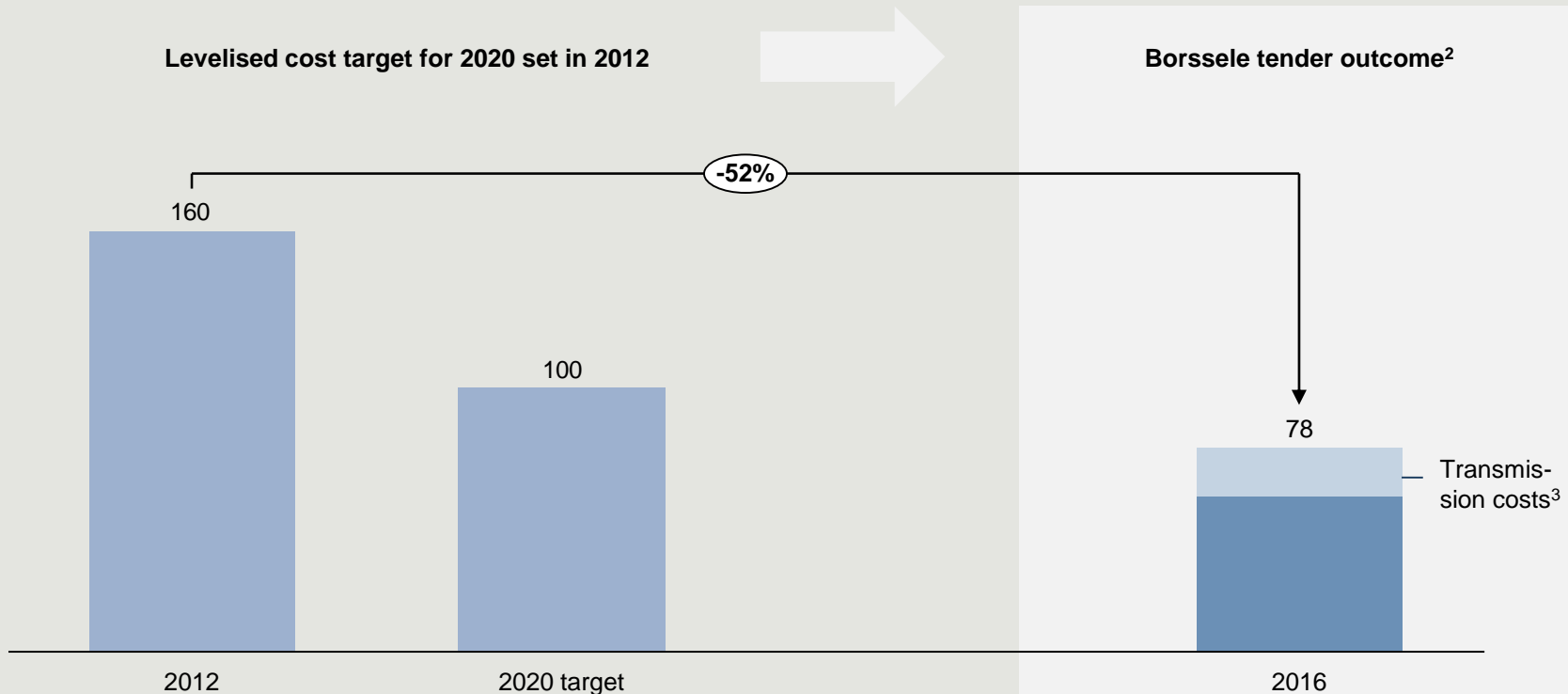
Source: Bloomberg New Energy Finance, 4COffshore, DONG Energy (as of August 2016)

# 2020 cost target reached 3 years ahead of time

## The Borssele 1&2 auction shows a cost reduction of 50% since 2012

### Costs of offshore wind

Year of final investment decision, EUR/MWh, 2012 / 2016 prices<sup>1</sup>



1: Target originally communicated in 2012 prices (corresponds to 165 and 103 EUR/MWh in 2016-prices, respectively).

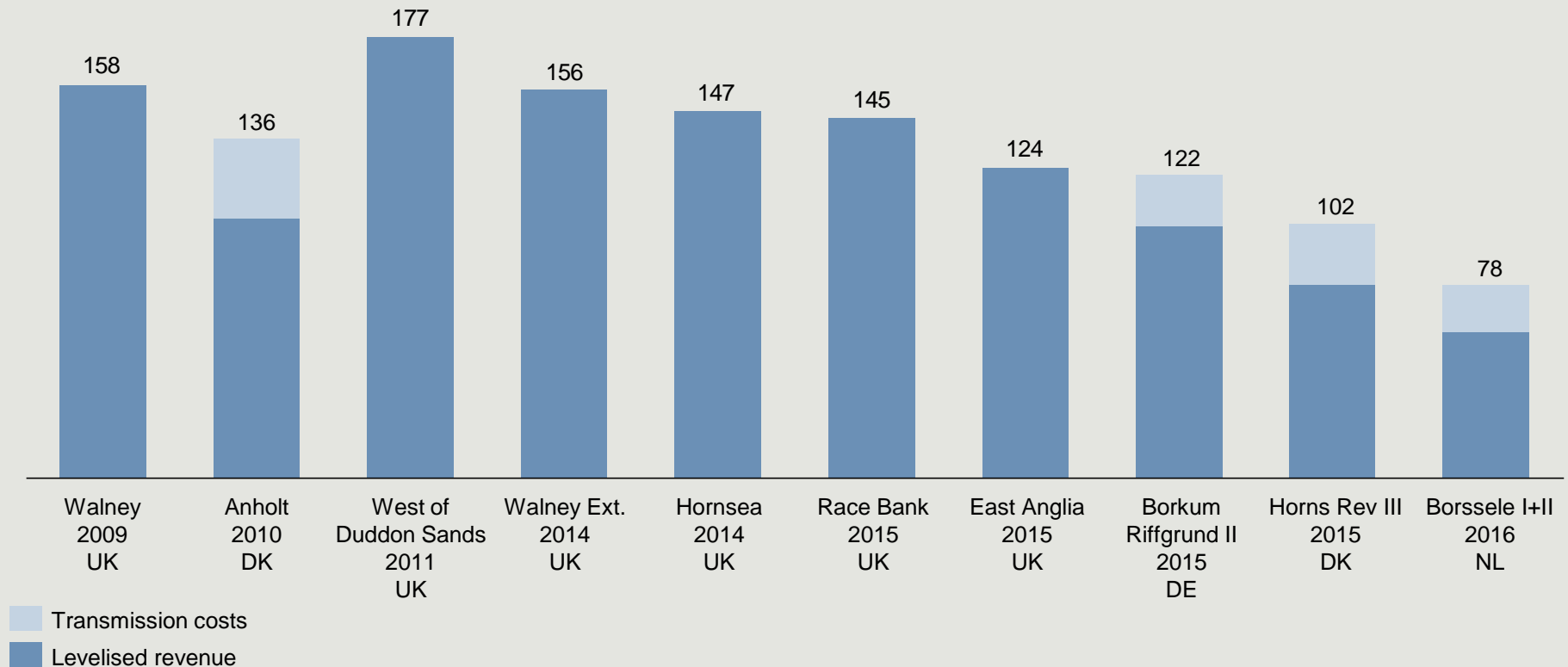
2: Average price for the electricity over the lifetime of the plant used as proxy for the levelised costs of electricity. It consists of a subsidy element for the first 15 years and a market income for the remaining 10 years. Discount rate of 3,5% used to reflect society's discount rate. Market income based on PBL Dutch National Energy Outlook (NEV) 2015. Strike price 72,70 EUR/MWh & contract length 15 years.

3: Adjustment of costs to account for the fact that the 2012 target was set for a UK project which primarily incl. costs of transmission and extra development costs.

# Offshore wind shows rapidly declining costs across all markets

## Offshore wind costs<sup>1</sup>

Estimated at the year of contracting, EUR/MWh, 2016 prices



1: Average price for the electricity over the lifetime of the plant used as proxy for the levelised costs of electricity. It consists of a subsidy element for the first years and a market income for the remaining years of the 25 years lifetime. Discount rate of 3,5% used to reflect society's discount rate. Market income based on country specific wholesale market price projections at the time of contracting

**Note:** Exchange rate on July 7 2016 has been used. Adjustment of costs to account for the fact that the 2012 target was set for a UK project which primarily incl. costs of transmission and extra development costs.

**Source:** DECC; Danish Energy Agency; Energinet.dk; NEV

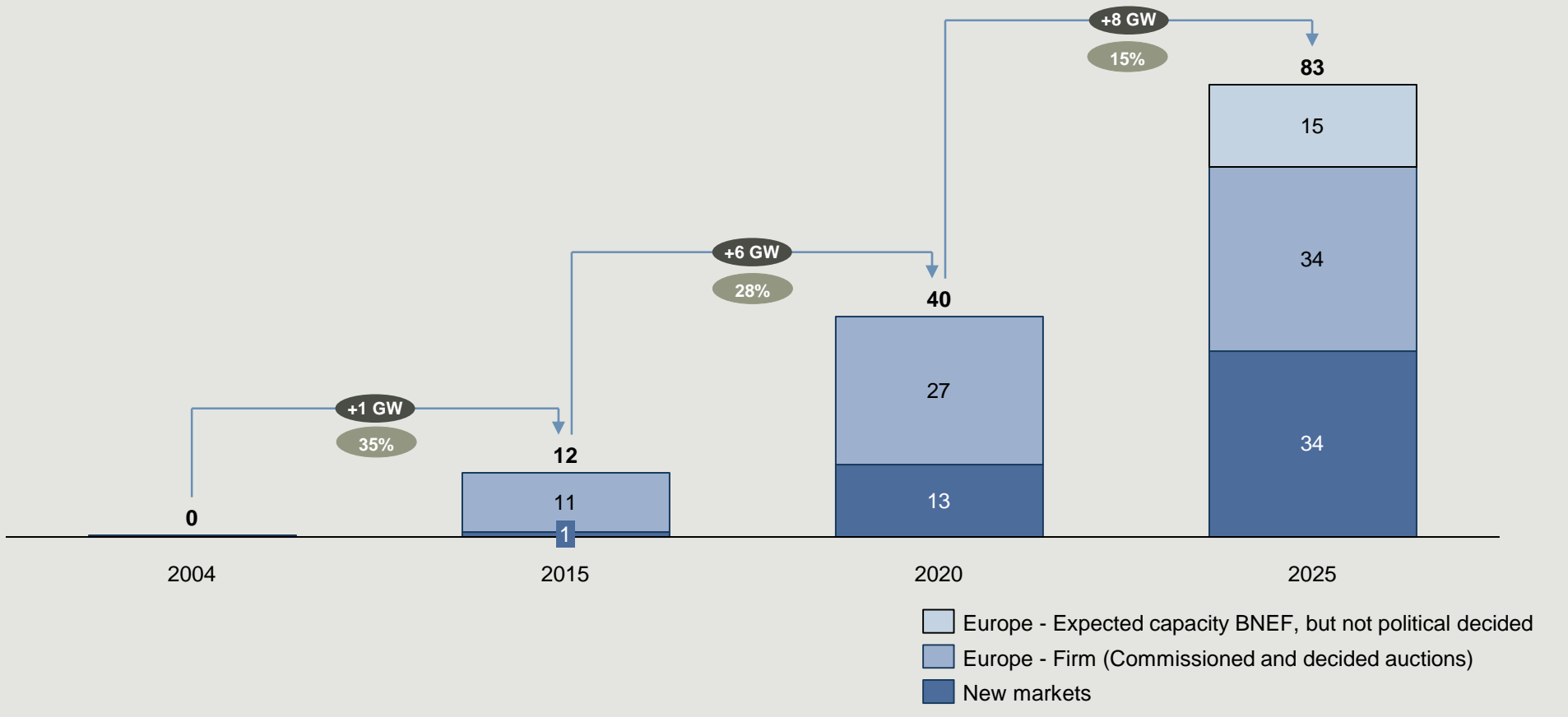
# By 2025 offshore wind will be truly global

## Will Europe still lead the offshore wind energy sector?

### Strong growth in established and new offshore wind markets

Installed Capacity, GW

# GW addition/year    % CAGR



Source: Bloomberg New Energy Finance (BNEF), H1 2016 offshore wind market outlook and DONG Energy