

Wind Energy Activities

Greifswald, Nov 2nd



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DONG
energy

DONG Energy – an introduction

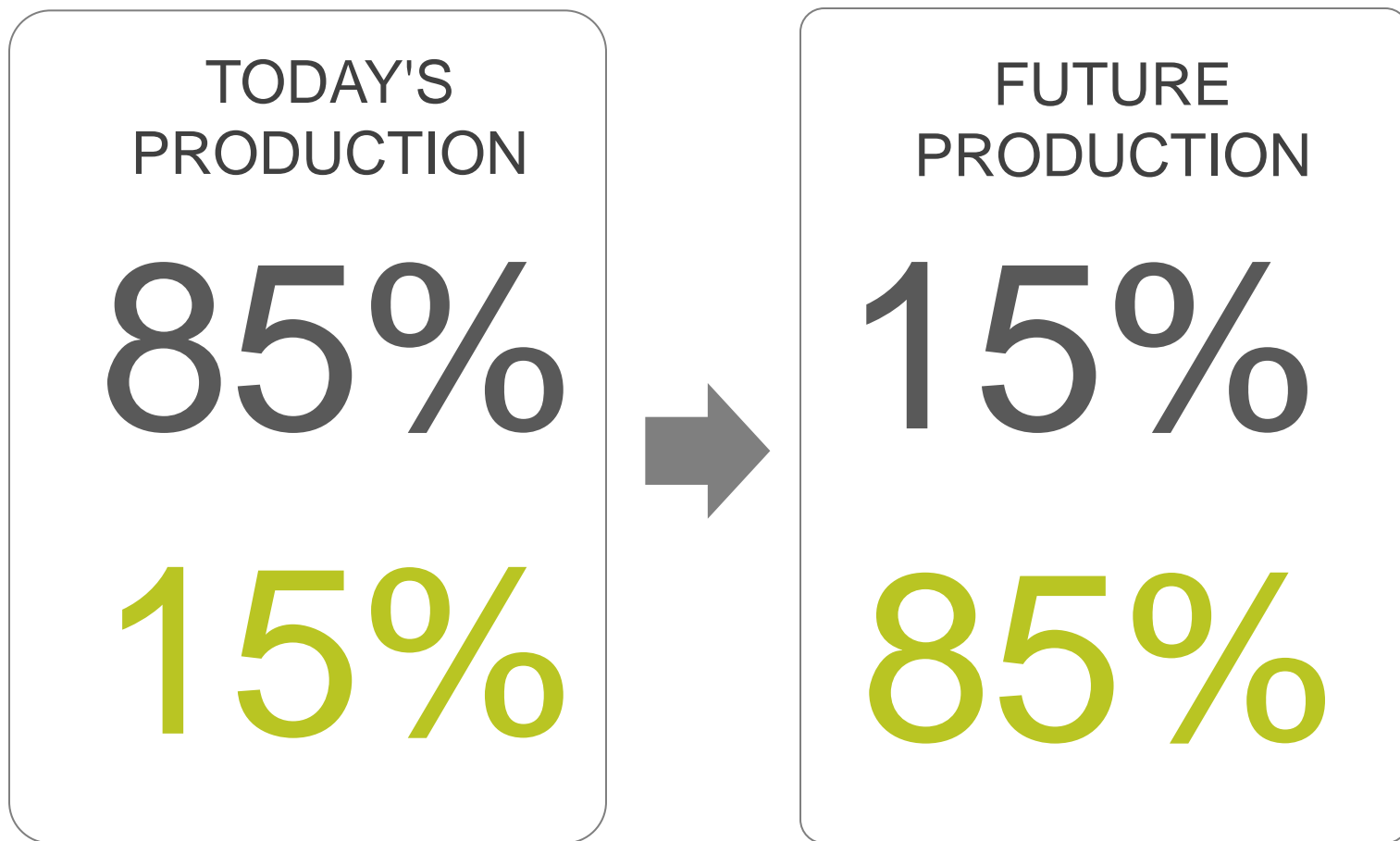
DONG Energy is one of the leading energy companies in Northern Europe

We are headquartered in Denmark. Our business is based on procuring, producing, distributing and trading in energy and related products in Northern Europe

DONG Energy has app. 5.500 employees and had a turnover of more than DKK 60 billion in 2008

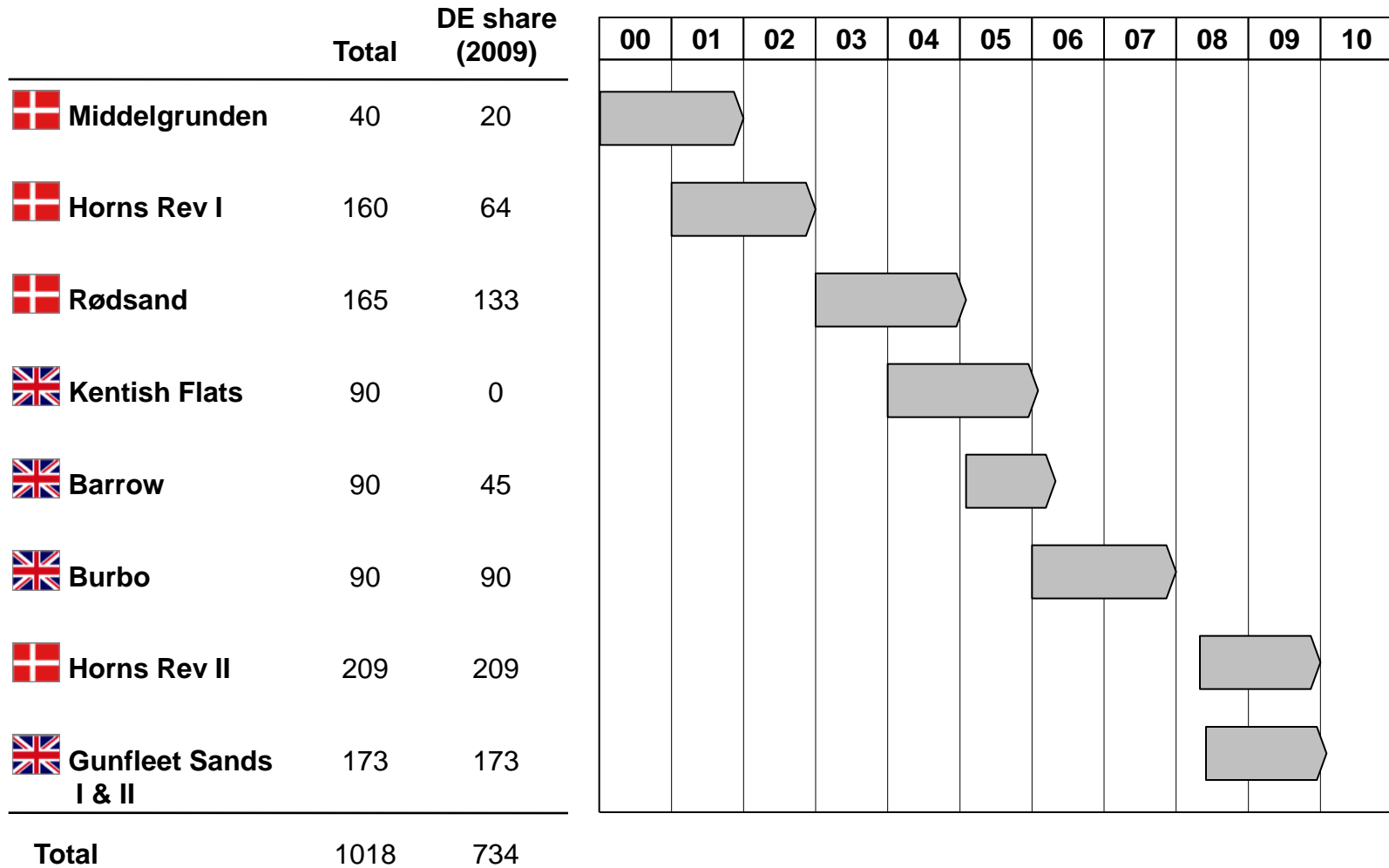


Dong Energy's vision is to supply reliable energy without CO₂

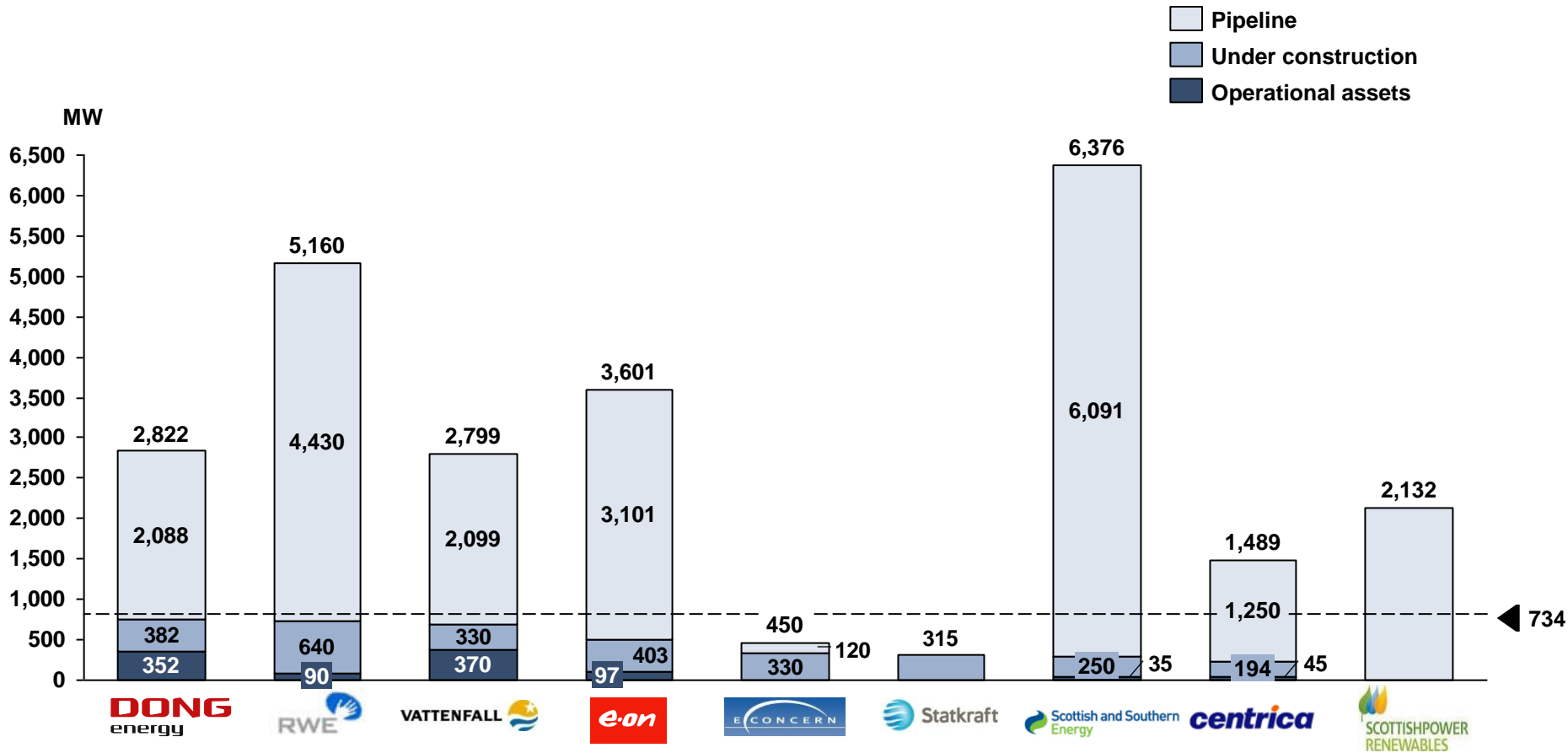


DONG Energy has pioneered offshore wind

MW



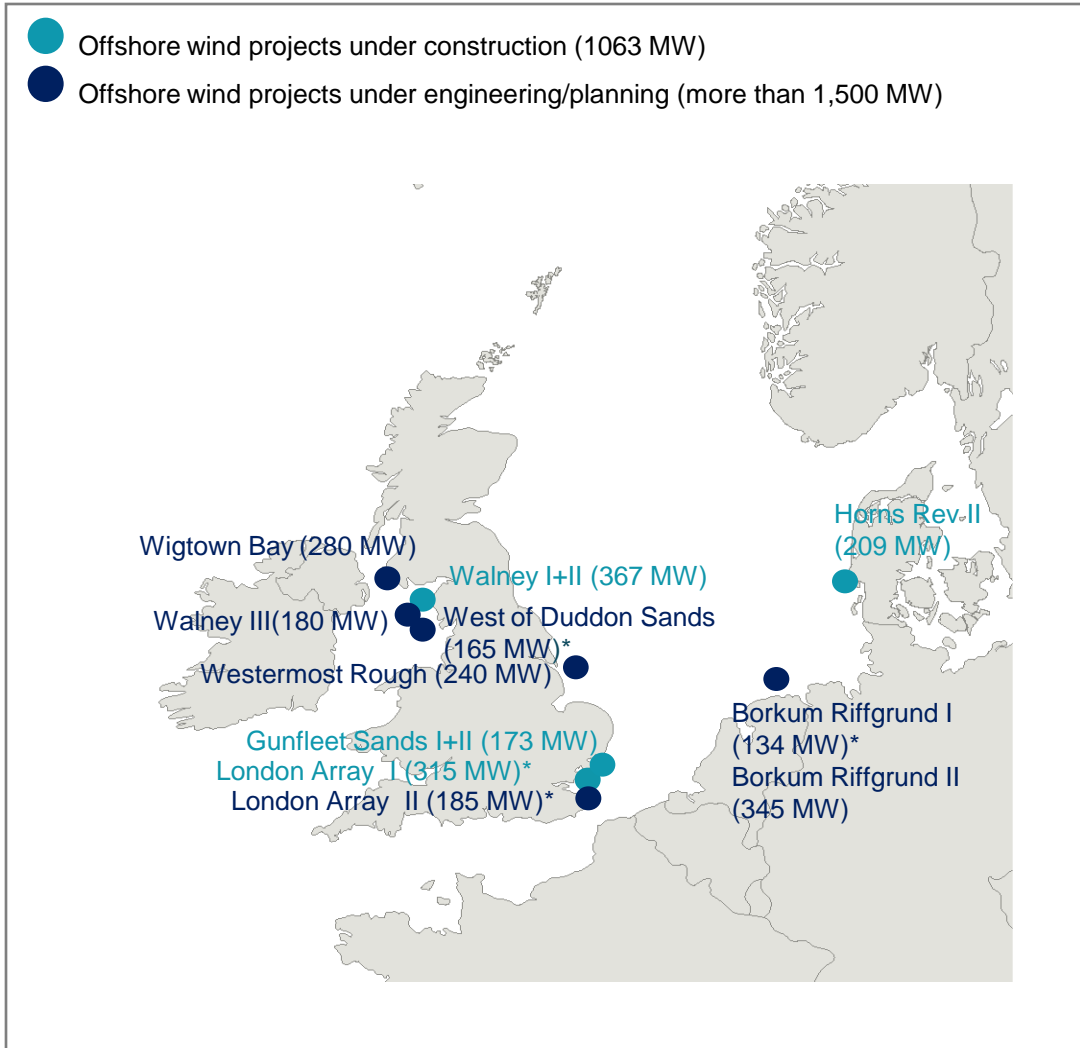
DONG still in the lead but other utilities are picking up speed



Source: Company websites, July 2009

Note: Eoncern has declared bankruptcy. The Belwind project construction which is about to commence has been taken over by a financial consortium

DONG Energy holds a substantial offshore wind pipeline – under construction and planning



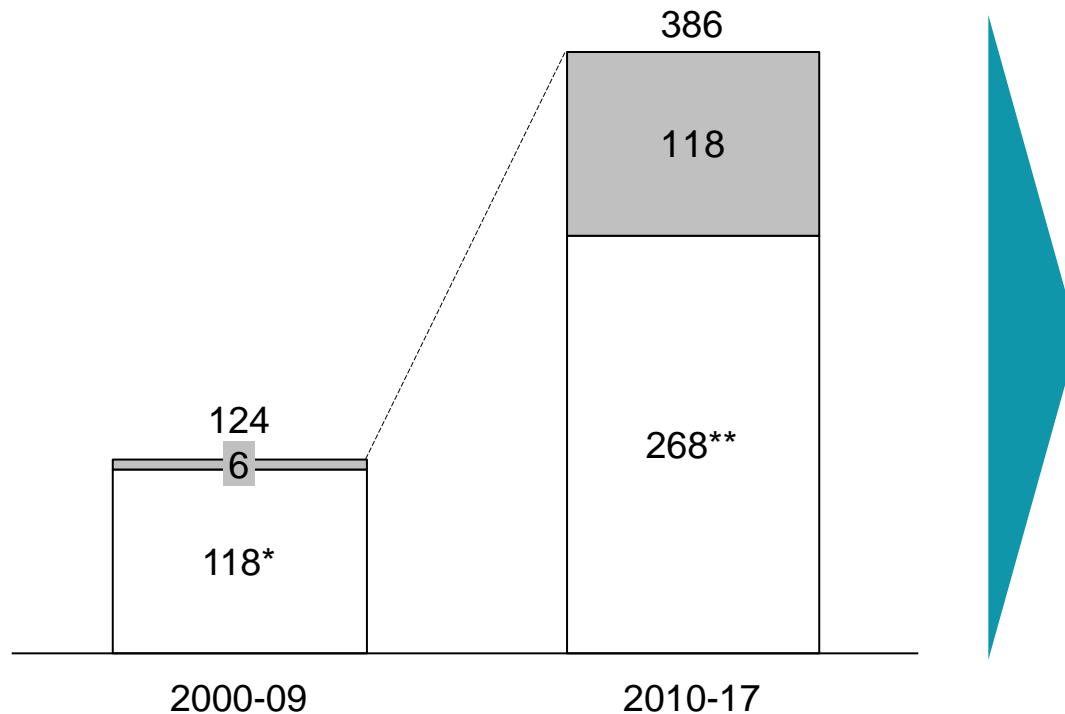
- More than 1000 MW offshore wind under construction
- Pipeline to ensure growth past 2013
- Furthermore, offshore pipeline could be strengthened from DK offshore tender, UK round 2.5 and 3, and opportunities in Germany and the Netherlands

* Figures represent DONG Energy's share of the projects

Recent years' high activity levels are projected to almost triple in the coming 7 years

MW/year

□ Offshore
■ Onshore



- By 2015 DONG Energy will have built wind farms with a total capacity of more than 4 GW
- The organization will deliver more than 3 times the annual volume
 - Scale advantages vs.
 - Larger risk in projects

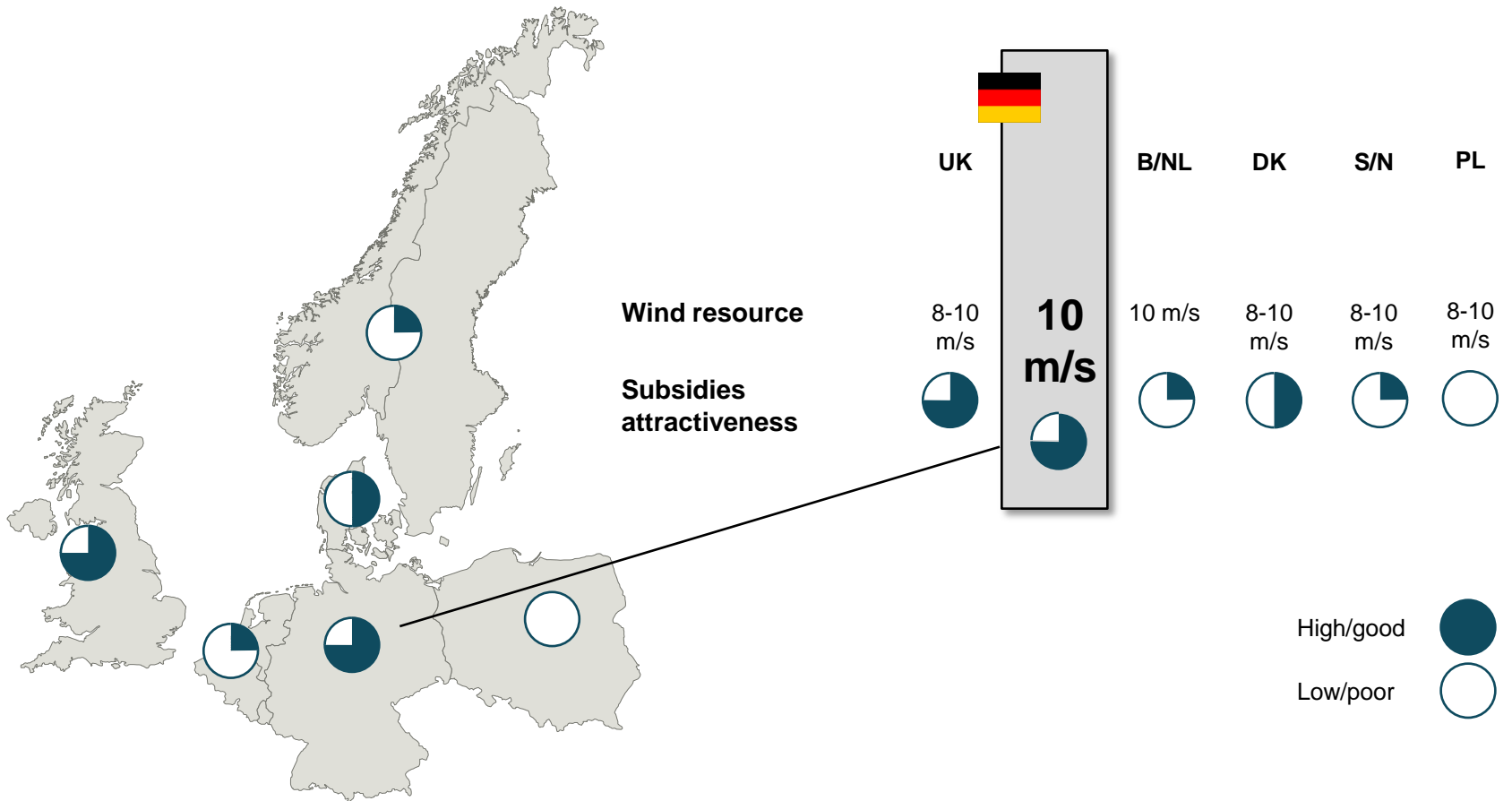
Note: This includes MW which DONG Energy has contributed to building, not what DONG Energy currently owns

Source: Project development portfolio database, historical data

* Horns Rev II and Gunfleet Sands account for 35% of this number

** Could increase with DK Mølleudbud (400MW) in which case the offshore capacity per year is 346 MW

Strong focus on offshore wind



Borkum Riffgrund I

Key figures

| | |
|----------------------------|--------------------------------|
| Number of turbines | 77 |
| Capacity | 277 |
| Distance from shore | 36km (to Borkum island) |
| Water depth | 23-29m |
| Construction | 2012/2013 |

Status quo

- first (and crucial) approval obtained
- design foundations/substation/electrical work ongoing
- FID expected Q3 2010

Borkum Riffgrund II

Key figures

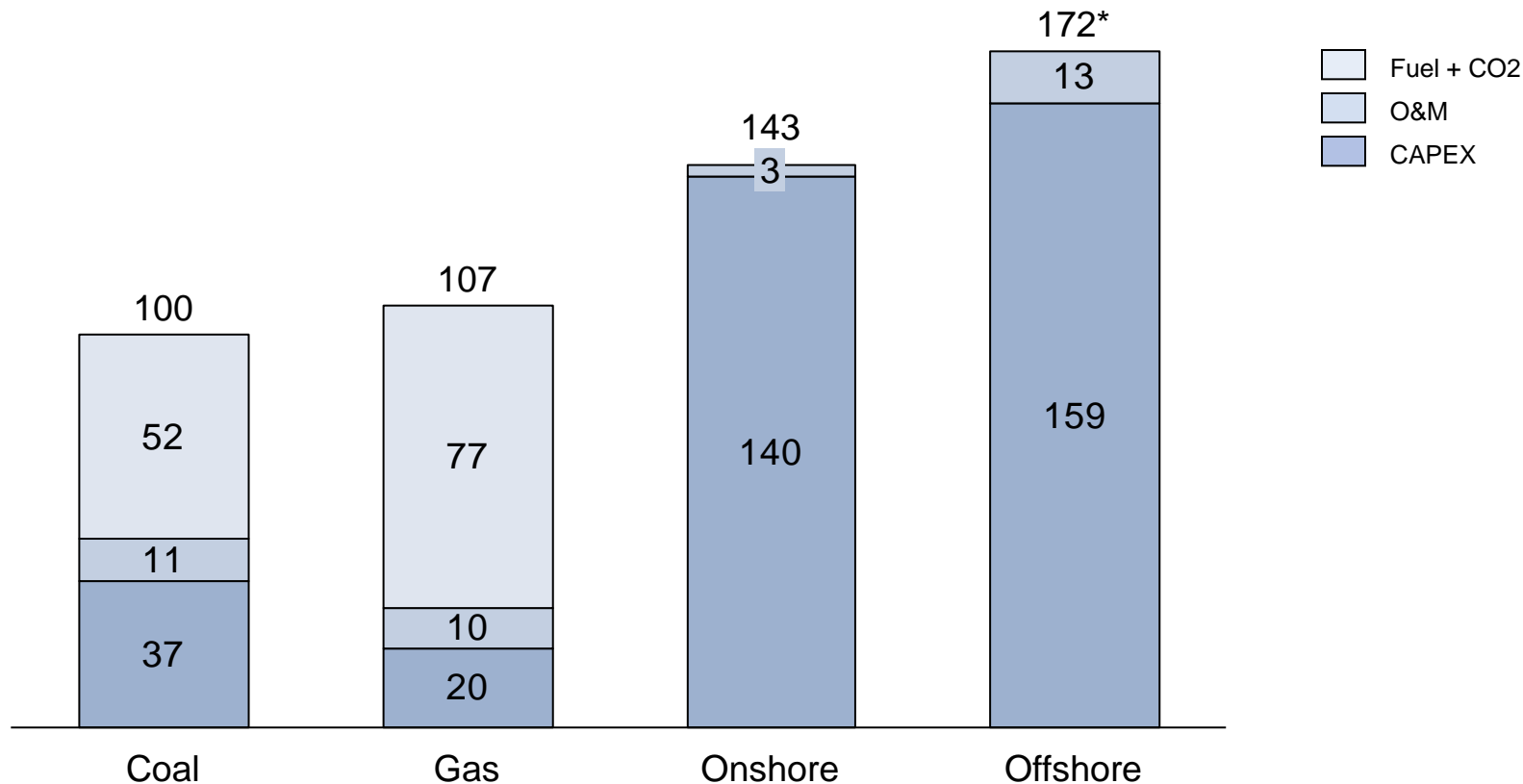
| | |
|----------------------------|------------------|
| Number of turbines | 96 |
| Capacity | 345 |
| Distance from shore | 36km |
| Water depth | 24-29m |
| Construction | 2013/2014 |

Status quo

- documents for 1st approval submitted
- FID planned in 2011

Offshore wind is far more expensive than onshore – and the renewable technologies are far more expensive than thermal

Index: coal=100; 2010 forward fuel prices (May 2009)

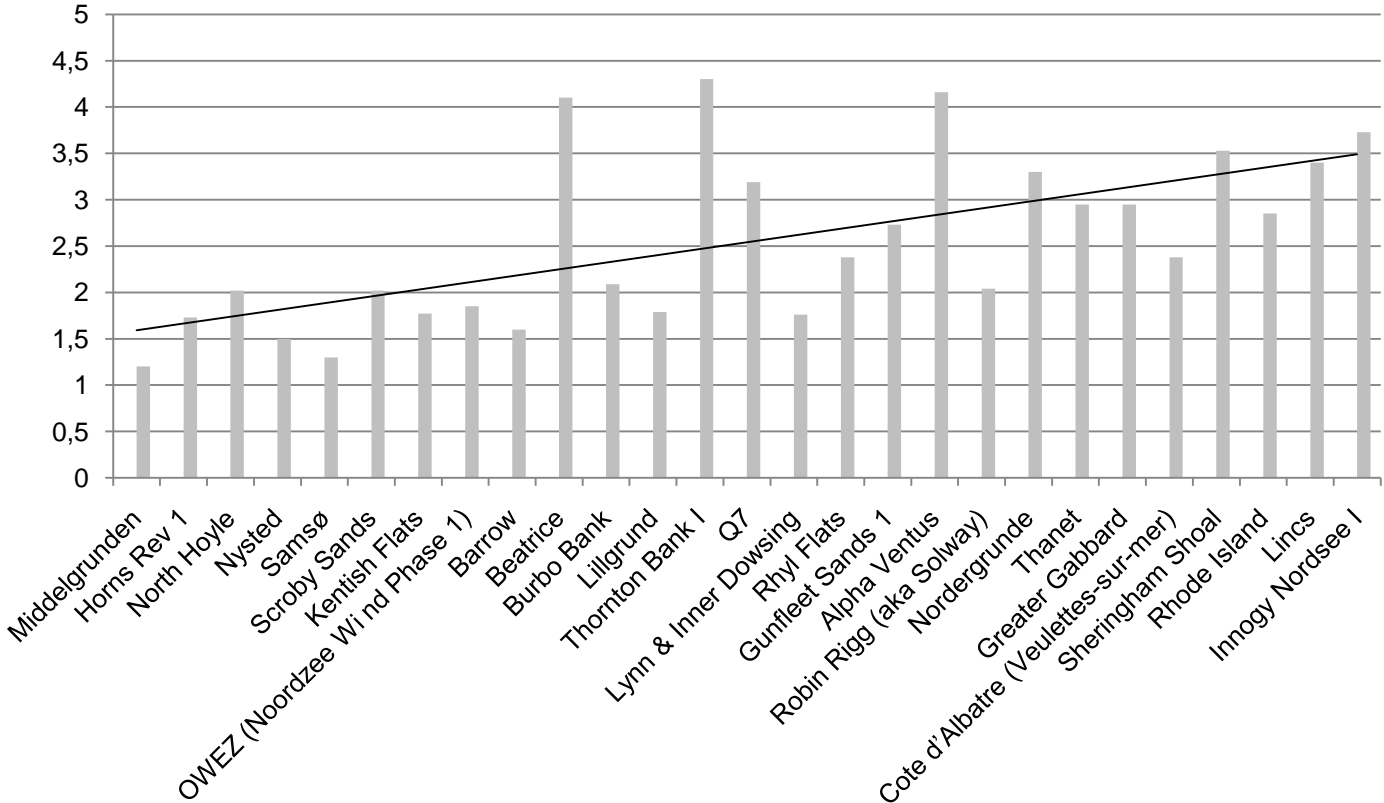


* Of which 5-10% covers export cable and substation

Source: Poyry Energy Consultants, DONG Energy estimates on full load hours

Industrialization of the delivery model is necessary in order to ensure sustainable economics of offshore wind farms

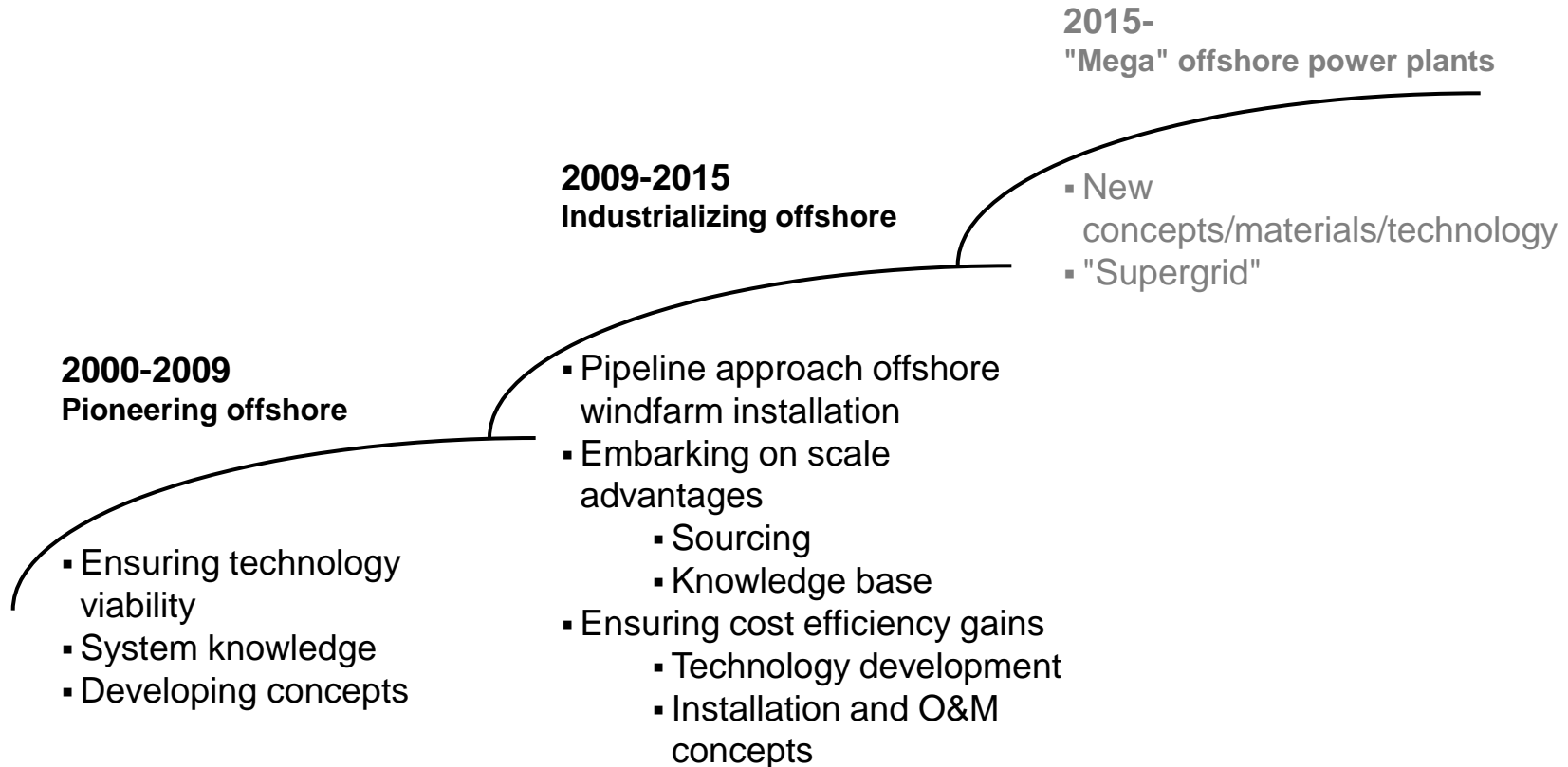
Investment pr. MW (in m€)



Source: Vestas company presentation



DONG Energy has the vision to develop the offshore industry



Step 1: The world's largest offshore wind turbine agreement

- improving economics, reducing commercial risk, securing supply

In March 2009 DONG Energy and Siemens entered into the world's largest offshore wind turbine agreement

Siemens is to supply up to 500 3,6 MW wind turbines to DONG Energy's coming offshore wind farms in Northern Europe (totalling up to 1800 MW) – in a 5 year time horizon



Decided

- Walney I+II 102 WTGs
- London Array 175 WTGs

Still pending 223 WTGs

- Borkum Rifgrund I
 - Borkum Rifgrund II
 - West of Duddon Sands
 - Westermost Rough
 - Wigtown Bay
 - Danish offshore tenders
 - Other licenses
- } Pipeline of more than 400 WTGs

Step 2: Acquisition of A2Sea

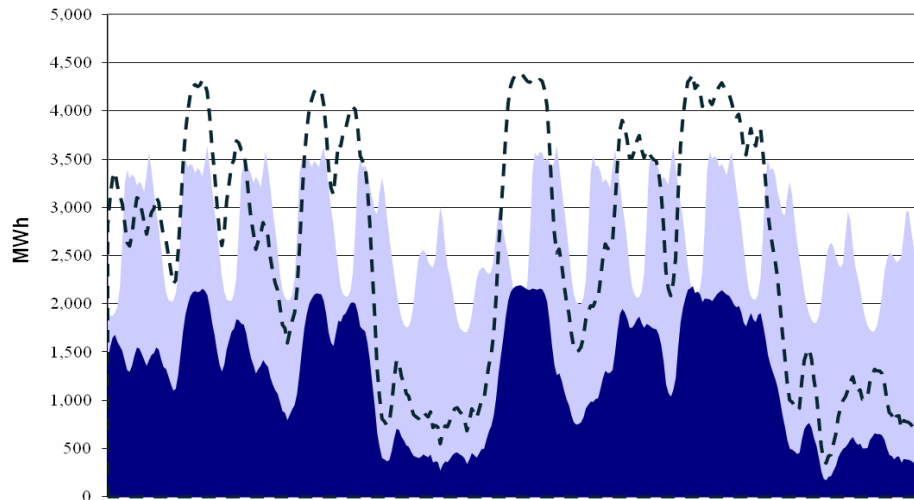
- reducing operational risk/supply chain constraints and increasing skills



- **Low criticality vessels** are tugs, barges, service and crew vessels with a high number of operating days, but also with high market availability and short lead times
- **Medium criticality vessels** are diving ships, cable installation vessels and heavy lift cranes for substation and accommodation platform installation. These vessels generally have limited market availability with a medium lead time, but have with a relatively low number of operating days.
- **High criticality vessels** are foundation and WTG installation vessels that have a high number of operating days, long lead times and low market availability of substitute vessels in case of unexpected problems during operation.

Challenges posed by large scale wind integration include fluctuations in supply and demand ...

Consumption and wind energy production in West Denmark 4-17 December 2006



■ Wind ■ Consumption
- - - Double wind production capacity

Implications of short term changes in wind power (UK example)

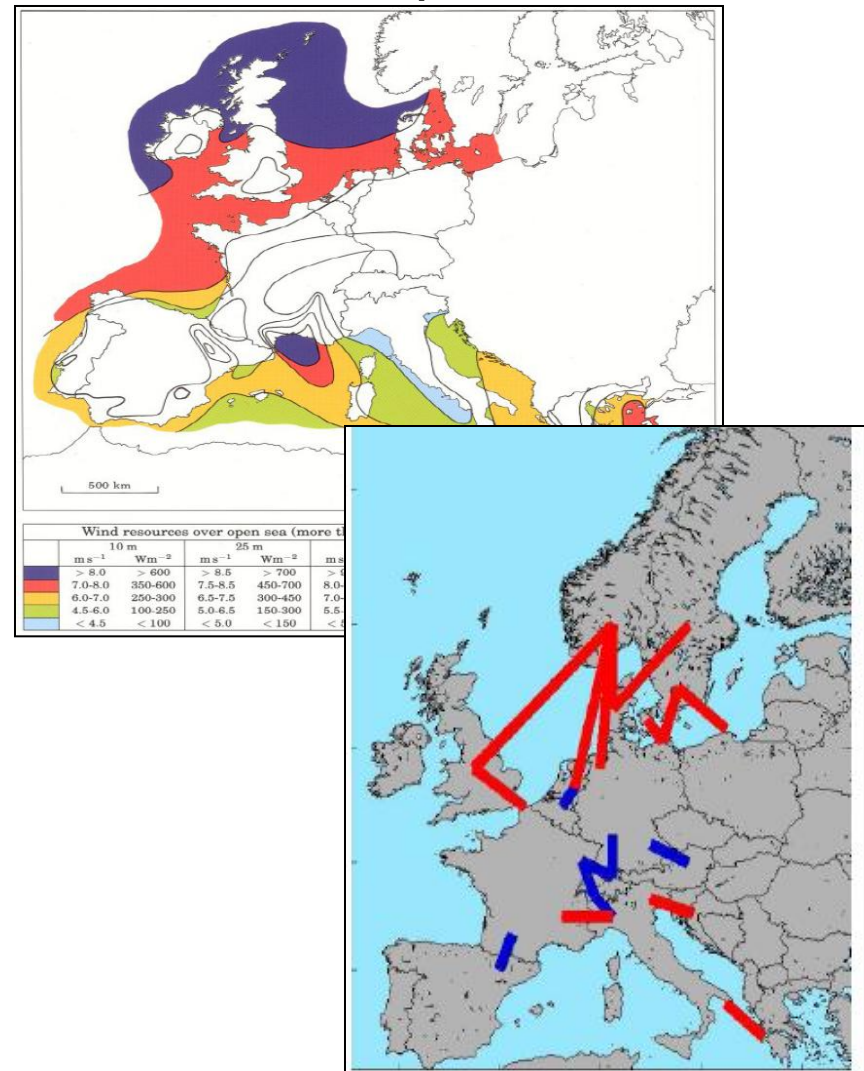
Ability required to either

- *Power up replacements for wind* at a rate of 3.7 GW per hour – i.e. 4 nuclear power stations going from no power to full power every hour
- *Suddenly turn down demand* at a rate of 3.7 GW per hour

... and geographical dispersion of supply and demand

- Consumption is concentrated in industrialized zones
- Most favorable wind farm locations are found in the North Sea and Baltic regions
- EU Economic Recovery Plan
 - €4 billion for energy projects up to 2010, including first stage of an offshore "super grid"
 - €565 million for specific offshore wind projects, e.g. Krieger's Flak to test super grid functionality and potential for successful cross-national cooperation

Wind resources over open sea



Thank you for your attention

Horns Rev 1 offshore wind farm, Denmark