



**Orsted**

**Investor presentation  
Q2 2020**

12 August 2020

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# Second quarter well in line with expectations

## Highlights – Q2 2020

- EBITDA totalled DKK 3.0 billion, a decrease of 18% compared to Q2 2019 driven by lower partnership earnings. Adjusting for partnership earnings EBITDA increased by 29%
- EBITDA from offshore and onshore wind farms in operation increased by 7%, to DKK 2.9 billion in Q2 2020
- Green share of generation reached 86% in Q2 2020
- Signed a 920MW fixed price CPPA for 20 years for the offshore wind farm Greater Changhua 2b & 4
- The 230MW Plum Creek onshore wind farm commissioned ahead of schedule and on budget
- Acquired the 227MW<sub>ac</sub> Muscle Shoals solar PV project, located in Alabama
- Co-founded the 'Green fuels for Denmark' partnership with the aim of building a large-scale, offshore wind powered hydrogen facility in Copenhagen
- The renewable hydrogen project, WESTKÜSTE 100, received funding from the German government



# Ørsted and TSMC sign the world's largest renewables CPPA

## CPPA highlights

- In June 2018, Ørsted was awarded 920MW for the Greater Changhua 2b & 4 project in Taiwan, at a 20-year fixed feed-in-tariff of 2,548 TWD/MWh (approx. 72.3 EUR/MWh)
- On 8 July 2020, Ørsted and Taiwan-based TSMC signed a corporate power purchase agreement (CPPA) for the project's full production
- The 20-year fixed-price contract period starts once Greater Changhua 2b & 4 reaches commercial operations in 2025/2026, subject to grid availability and Ørsted's final investment decision
- The project will receive a price for power including Taiwan Renewable Energy Certificates (T-REC) during the contract period that is higher than the original feed-in-tariff
- Corporates looking to procure significant amounts of renewable energy and T-RECs through CPPAs to support the transition to green energy and meet the requirements of the Taiwanese government and its customers
- The expected industrial Taiwanese power price is above the feed-in-tariff that we secured at the government awarded auction



# Construction programme – Offshore

Project	Borssele 1 & 2	Virginia	Hornsea 2	Changhua 1 & 2a
Country				
Asset type				
Capacity	752MW	12MW (EPC)	1,386MW	900MW
Expected completion	Q4 2020	Q4 2020	H1 2022	2022
Status	On track	On track	On track	On track
Comments	All foundations and array cables installed 78 out of 94 turbines installed	The two turbines installed Final installation and commissioning work ongoing	Onshore construction work ongoing	Onshore construction work ongoing

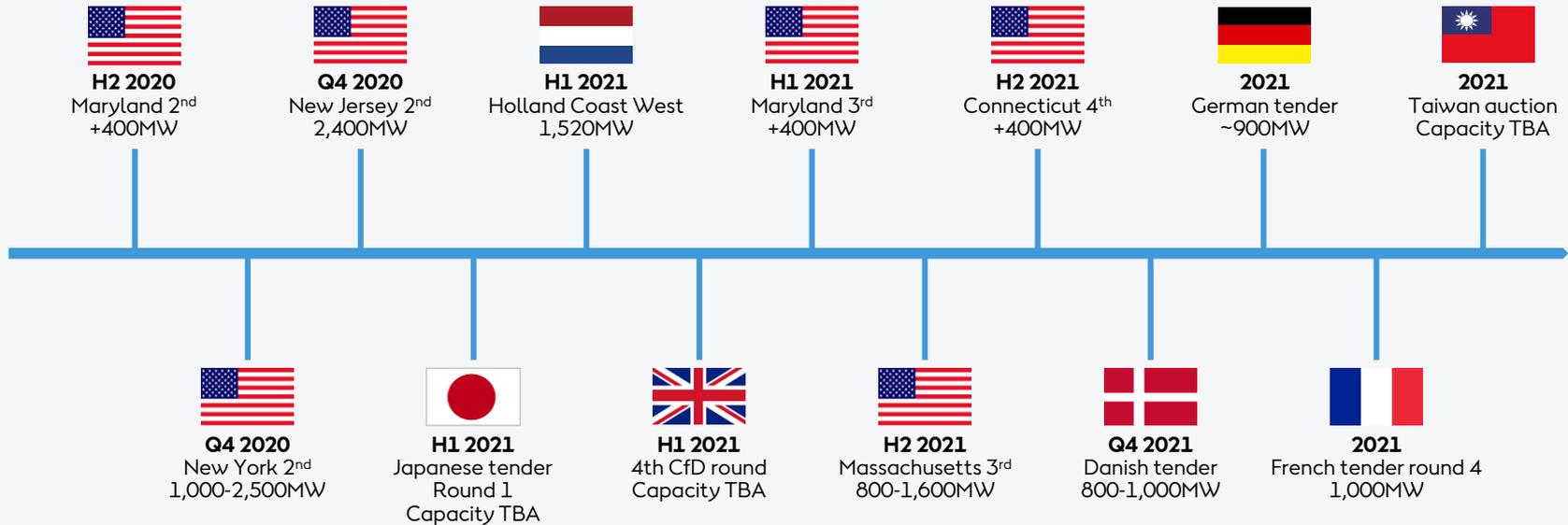


# Construction programme – Onshore and Markets & Bioenergy

Project	Willow Creek	Permian Energy Center	Muscle Shoals	Renescience Northwich
Country				
Asset type				
Capacity	103MW	420MW <sub>ac</sub> 40MW <sub>ac</sub>	227MW <sub>ac</sub>	80,000 tonnes waste
Expected completion	Q4 2020	Mid-2021	Q3 2021	2020
Status	On track	On track	On track	Delayed
Comments	11 out of 38 turbines installed Transmission line and substation energised by mid-August	Pile, modules and inverter installation underway Substation energization planned for November 2020	Pile installation underway Inverter deliveries commenced, module deliveries planned for October 2020	Reconfiguration completed Production ramp-up has resumed post COVID-19 lockdown



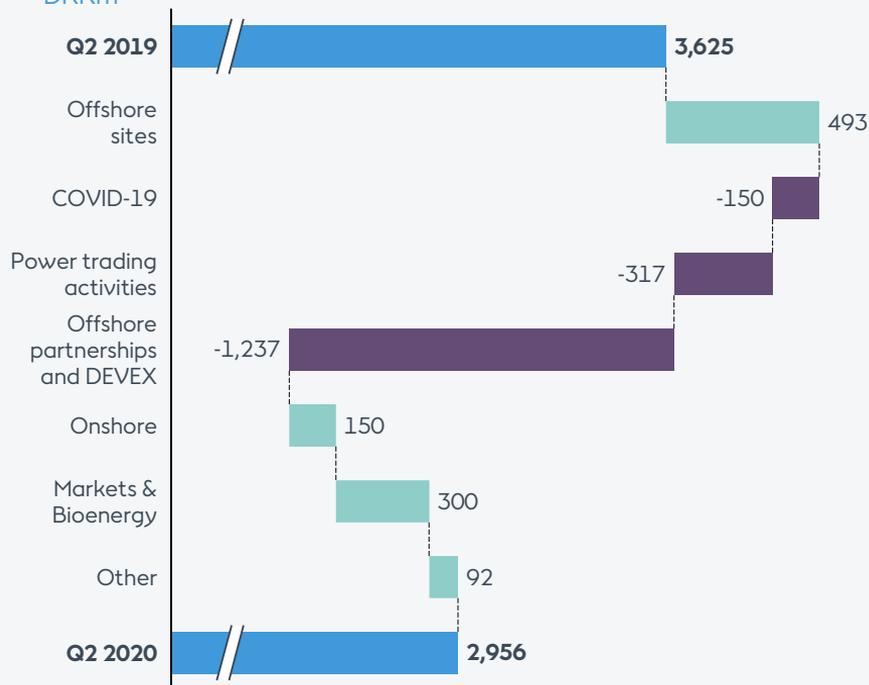
# Expected offshore wind auctions and tenders in 2020 and 2021



# Q2 2020 – Continued solid, underlying performance

## Q2 2020 EBITDA decreased DKK 669m

DKK m



## Offshore EBITDA DKK 2,361m – Down DKK 1,211m

- Reported earnings from operating wind farms increased 1%:
  - Increased earnings from operational sites due to a 20% ramp-up in generation, primarily driven by Hornsea 1 and a high number of outages and curtailments in Q2 2019
  - Adverse COVID-19 related impacts especially on the UK power market
  - Lower earnings from trading related to hedging of our power exposures and power portfolio optimisation
- Adjusting for COVID-19 impact and trading results, the underlying site EBITDA increased by 21%
- Partnership earnings in Q2 2020 related to Virginia EPC demo project and lower CAPEX spend at Hornsea 1. In Q2 2019 earnings primarily related to Hornsea 1
- Expensed project development costs in line with Q2 2019

## Onshore EBITDA DKK 312m – Up DKK 150m

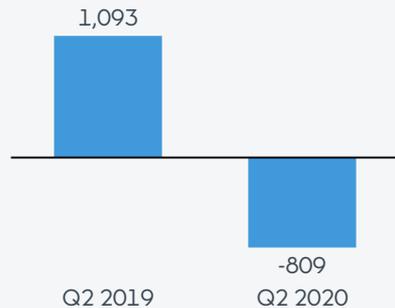
- Ramp-up of generation from Sage Draw, Lockett and Plum Creek led to 93% increase in earnings

## Markets & Bioenergy EBITDA DKK 185m – Up DKK 300m

- Higher sales of ancillary services and lower fixed costs at CHP plants. Gain on divestment of Inbicon

# Q2 2020 – Financial performance

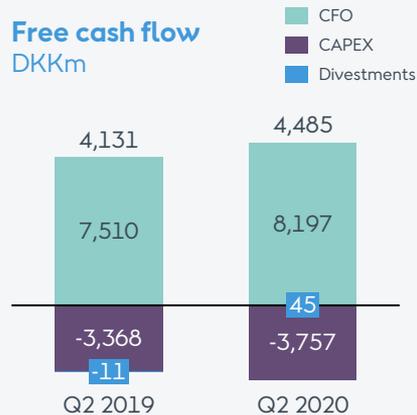
## Net profit DKKm



### Net profit down DKK 1.9bn

- One-off effects of DKK -1.2bn from deferred tax related to tax equity at Sage Draw and Plum Creek and loss from early termination of debt
- Lower EBITDA and higher depreciation

## Free cash flow DKKm



### FCF totalled DKK 4.5bn

- Positive cash flow from operations driven by EBITDA, tax equity contribution from our partners at Sage Draw and Plum Creek and divestment of Walney Ext. transmission asset
- Gross investments related to our Offshore and Onshore portfolio

## Net interest-bearing debt development DKKm

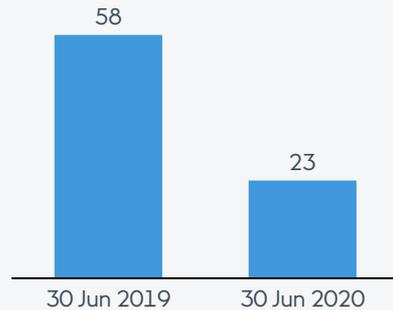


### Net interest-bearing debt of DKK 22.3bn

- Positive free cash flow of DKK 4.5bn
- Exchange rate adjustments of DKK 0.8bn relating to our GBP bond debt

# Q2 2020 – Financial and non-financial ratios

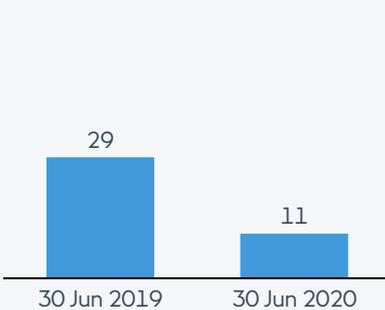
## FFO / Adj. net debt (last 12 months), %



### FFO / Adj. net debt of 23%

- Credit metric for the year expected to be in line with our target of around 30%
- Low level at the period ending 30 June 2020 due to high current tax (in Q4 2019)

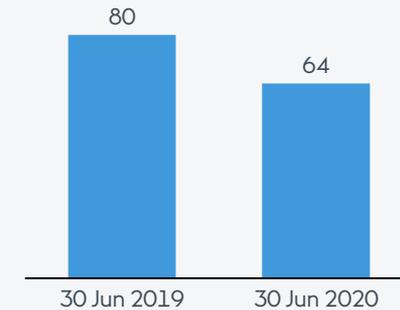
## ROCE (last 12 months) %



### ROCE of 11%

- Decrease as Q2 2019 was significantly impacted by Hornsea 1 farm-down in Q4 2018

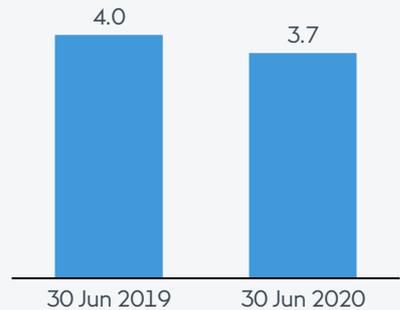
## Greenhouse gas emissions (scope 1 and 2), g CO<sub>2</sub>e/kWh



### Emissions continue to decrease

- Decrease due to additional offshore and onshore capacity
- On track to meet scope 1 and 2 target of less than 10g CO<sub>2</sub>e/kWh in 2025

## Safety (year-to-date) Total recordable injury rate (TRIR)



### TRIR amounted to 3.7

- TRIR decreased compared to the same period last year
- Total recordable injuries in H1 2020 decreased by 7% compared to last year

# 2020 guidance and long-term financial estimates and policies

## 2020 guidance

	DKKbn
EBITDA without new partnerships	16-17
Gross investments	28-30

## Business unit EBITDA FY 2020 vs. FY 2019

	Direction
Offshore	Lower
Onshore	Higher
Markets & Bioenergy	In line

## Financial estimates

Total capex spend, 2019-2025	DKK 200bn
Capex allocation split, 2019-2025:	
- Offshore	75-85%
- Onshore	15-20%
- Markets & Bioenergy	0-5%
Average ROCE, 2019-2025	~10%
Average share of EBITDA from regulated and contracted activities, 2019-2025	~90%
Average yearly increase in EBITDA from offshore and onshore wind and solar farms in operation, 2017-2023	~20%

## Financial policies

	Target
Rating (Moody's/S&P/Fitch)	Baa1/BBB+/BBB+
FFO/Adjusted net debt	Around 30%

Dividend policy:

Ambition to increase the dividend paid by a high single-digit rate compared to the dividend for the previous year up until 2025

# Q&A

## Conference call

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**For questions, please press 01**





# Appendix

# Renewable capacity as of 30 June 2020

Indicator	Unit	H1 2020	FY 2019	H1 2019
<b>Installed renewable capacity</b>	<b>MW</b>	<b>10,439</b>	<b>9,870</b>	<b>8,303</b>
- Offshore wind power	MW	6,820	6,820	5,602
- Denmark	MW	1,006	1,006	1,006
- United Kingdom	MW	4,400	4,400	3,182
- Germany	MW	1,384	1,384	1,384
- US	MW	30	30	30
- Onshore wind power, US	MW	1,555	987	803
- Solar power, US	MW	10	10	10
- Thermal heat, biomass, Denmark	MW	2,054	2,053	1,888
<b>Decided (FID) renewable capacity (not yet installed)</b>	<b>MW</b>	<b>3,561</b>	<b>4,129</b>	<b>5,006</b>
- Offshore wind power	MW	3,038	3,038	4,256
- United Kingdom	MW	1,386	1,386	2,604
- Germany	MW	-	-	-
- Netherlands	MW	752	752	752
- Taiwan	MW	900	900	900
- Onshore wind power, US	MW	103	671	625
- Solar power, US	MW	420	420	-
- Thermal heat, biomass, Denmark	MW	-	-	125
<b>Awarded and contracted capacity (not yet FID) renewable capacity</b>	<b>MW</b>	<b>4,996</b>	<b>4,996</b>	<b>4,746</b>
- Offshore wind power	MW	4,996	4,996	4,116
- Germany	MW	1,142	1,142	1,142
- US	MW	2,934	2,934	2,054
- Taiwan	MW	920	920	920
- Onshore wind power, US	MW	-	-	230
- Solar power, US	MW	-	-	400
<b>Sum of installed and FID capacity</b>	<b>MW</b>	<b>14,000</b>	<b>13,999</b>	<b>13,309</b>
<b>Sum of installed + FID + awarded and contracted capacity</b>	<b>MW</b>	<b>18,996</b>	<b>18,995</b>	<b>18,055</b>
<b>Installed storage capacity</b>	<b>MW<sub>ac</sub></b>	<b>21</b>	<b>21</b>	<b>1</b>

## Installed renewable capacity

The installed renewable capacity is calculated as the cumulative renewable gross capacity installed by Ørsted before divestments.

For installed renewable thermal capacity, we use the heat capacity, as heat is the primary outcome of thermal energy generation, and as bioconversions of the combined heat and power plants are driven by heat contracts.

## Decided (FID) renewable capacity

Decided (FID) capacity is the renewable capacity for which a final investment decision (FID) has been made.

## Awarded and contracted renewable capacity

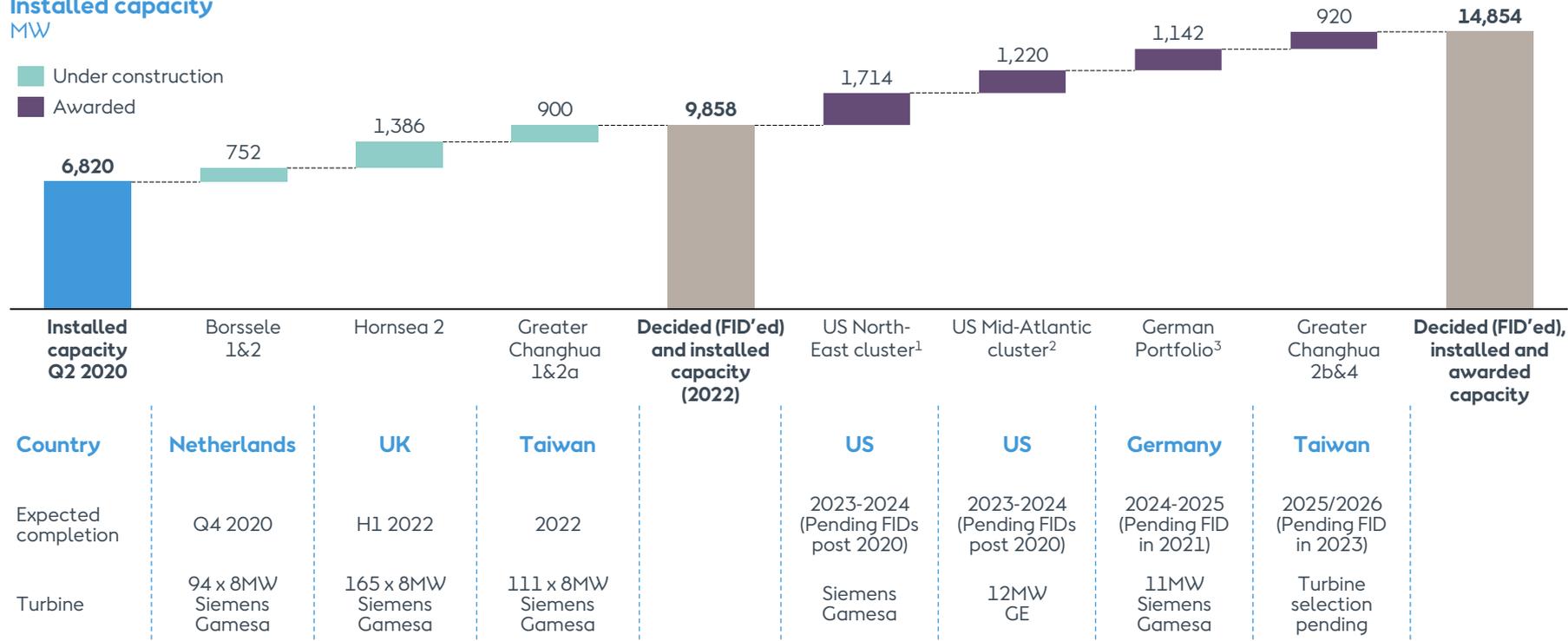
The awarded renewable capacity is based on the capacities which have been awarded to Ørsted in auctions and tenders. The contracted capacity is the capacity for which Ørsted has signed a contract or power purchase agreement (PPA) concerning a new renewable energy plant. Typically, offshore wind farms are awarded, whereas onshore wind farms are contracted. We include the full capacity if more than 50% of PPAs/offtake are secured.

# Offshore wind build-out plan

## Installed capacity

MW

- Under construction
- Awarded



### Country

Netherlands

UK

Taiwan

US

US

Germany

Taiwan

Expected completion

Q4 2020

H1 2022

2022

2023-2024  
(Pending FIDs post 2020)

2023-2024  
(Pending FIDs post 2020)

2024-2025  
(Pending FID in 2021)

2025/2026  
(Pending FID in 2023)

Turbine

94 x 8MW  
Siemens Gamesa

165 x 8MW  
Siemens Gamesa

111 x 8MW  
Siemens Gamesa

Siemens Gamesa

12MW  
GE

11MW  
Siemens Gamesa

Turbine selection pending

# Offshore market development – US

<b>Massachusetts</b>	<ul style="list-style-type: none"><li>• Bill currently under consideration to increase offshore wind target to at least 5.2GW by 2035</li><li>• Next auction of 800-1,600MW expected in H2 2021</li></ul>
<b>Connecticut</b>	<ul style="list-style-type: none"><li>• Legislation signed approving procurement of 2GW of offshore wind capacity by 2030, of which 1.2GW remains available</li><li>• Next auction of +400MW expected in H2 2021</li></ul>
<b>New York</b>	<ul style="list-style-type: none"><li>• Next auction of up to 2,500MW with bid submission expected in H2 2020</li><li>• Target 9GW offshore wind by 2035</li><li>• BOEM announced that release of final offshore lease areas in early 2020 and lease auctions later in 2020 is unlikely</li></ul>
<b>New Jersey</b>	<ul style="list-style-type: none"><li>• Subsequent auctions expected in 2020 (2.4GW) and 2022</li><li>• Target increased to 7.5GW offshore wind capacity by 2035, from 3.5GW by 2030</li></ul>
<b>Maryland</b>	<ul style="list-style-type: none"><li>• Target approx. 1.6GW offshore wind capacity by 2030, of which 1.2GW remains available</li><li>• Auctions of at least 400MW each in 2020, 2021 and 2022, respectively</li></ul>
<b>Virginia</b>	<ul style="list-style-type: none"><li>• Executive order signed establishing a non-binding 2.5GW offshore wind target by 2026</li><li>• Signed Clean Economy Act for development of at least 5.2GW of offshore wind by 2034</li></ul>
<b>Rhode Island</b>	<ul style="list-style-type: none"><li>• Executive order signed to power the state with 100% renewable energy by 2030</li></ul>



# Offshore market development – UK and Continental Europe

<b>United Kingdom</b>	<ul style="list-style-type: none"> <li>• Target annual build-out of 3GW to reach 40GW capacity by 2030</li> <li>• Development consent order for Hornsea 3 is postponed to 31 December 2020</li> <li>• Auction framework for 7GW new lease areas announced. Expected autumn 2020</li> <li>• New leasing round in Scotland for up to 10GW launched in June 2020</li> </ul>
<b>Germany</b>	<ul style="list-style-type: none"> <li>• First centralised tender expected in 2021, approx. 900MW to be built annually from 2026</li> <li>• Announced draft of new tender framework introducing concession payment as second bid component in case of several zero subsidy bids. Framework will be voted after summer at earliest</li> <li>• Target for offshore wind capacity by 2030 increased from 15GW to 20GW and 40GW by 2040</li> </ul>
<b>Netherlands</b>	<ul style="list-style-type: none"> <li>• Government target of 11GW offshore wind by 2030</li> <li>• Next tender of 1,520MW for Holland Coast West with bid deadline Q2 2021</li> </ul>
<b>Denmark</b>	<ul style="list-style-type: none"> <li>• Two offshore wind tenders of approx. 2GW in total towards 2027. Next tender of 800-1,000MW launched, expected bid in Q4 2021</li> <li>• Bornholm and North Sea Energy Islands tenders of 5GW in total towards 2030</li> <li>• Tenders expected to include the offshore transmission assets</li> </ul>
<b>France</b>	<ul style="list-style-type: none"> <li>• Government ambition for tendered capacity of 8.75GW for the period 2020-2028</li> <li>• Next tender (Round 4) with a capacity of 1GW expected in 2021</li> </ul>
<b>Poland</b>	<ul style="list-style-type: none"> <li>• Signed non-binding term sheet with PGE regarding purchase of 50% stake in two offshore wind projects with a total capacity of up to 2.5GW. Transaction execution expected Q4 2020</li> <li>• Draft legislation aiming to award 10.9GW offshore wind by 2027. Final act expected H2 2020</li> </ul>
<b>Belgium</b>	<ul style="list-style-type: none"> <li>• Allocation of additional approx. 2GW towards target to construct approx. 4 GW by 2030</li> </ul>



# Offshore market development – APAC

## Taiwan

- Taiwan has met its target of awarding 5.5GW to be commissioned by 2025
- An additional 10GW offshore wind to be constructed between 2026-2035
- Third round auction rules expected to be announced by the end of 2020
- 600MW Greater Changhua 3 project ready for future auctions

## Japan

- Target of 10GW offshore and onshore wind power to be constructed by 2030
- Established JV with TEPCO for Choshi offshore wind project near Tokyo
- 11 areas designated as potentially suitable for development of offshore wind with a capacity of approx. 7GW. Preliminary selection for the 2<sup>nd</sup> round of promotional zones has commenced
- Choshi zone officially designated as a “Special Promotion Area” for 1<sup>st</sup> round
- Expect framework for upcoming auction to be in place during H2 2020 ahead of an expected auction in H1 2021

## South Korea

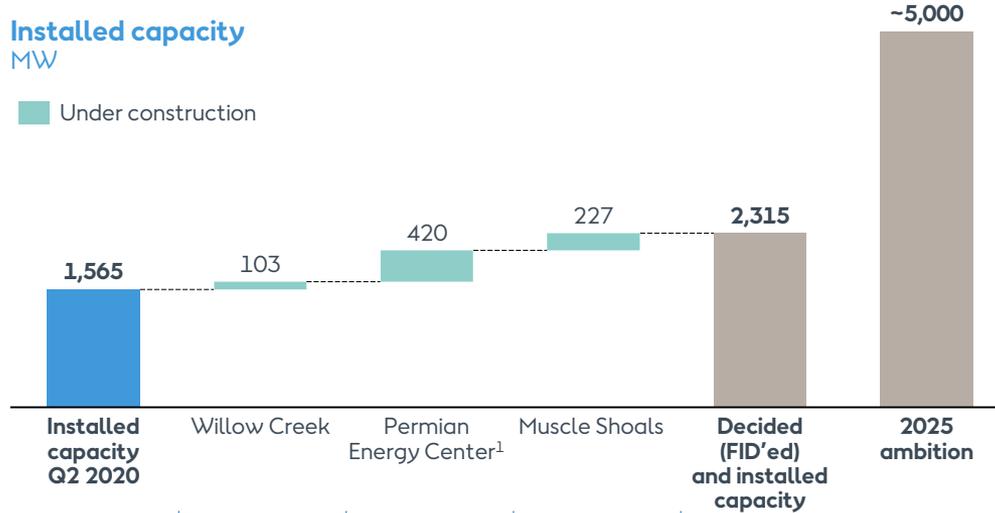
- 12GW offshore wind build-out has been targeted in order to reach the 20% renewable mix towards 2030 and up to 35% by 2040



# Onshore build-out plan

## Installed capacity MW

■ Under construction



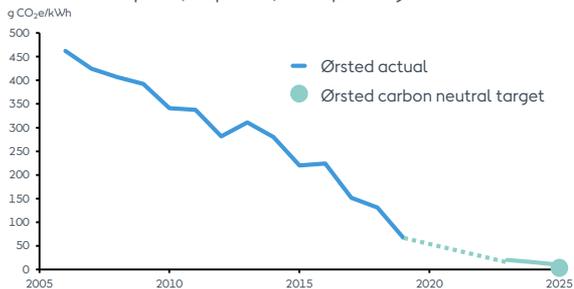
Region	SPP North, SD	ERCOT, TX	SERC, AL
Expected completion	Q4 2020	Mid-2021	Q3 2021
Technology	GE turbines	Solar PV	Solar PV
Offtake solution	Un-contracted	PPA with ExxonMobil	PPA with Tennessee Value Authority



# Sustainability and ESG at Ørsted

## Green leadership

- We want to help keep global warming below 1.5°C
- In Q2 2020, 86% of our energy generation was green. By 2025, we target 99%
- We have reduced the carbon intensity of our energy generation by 86%<sup>1</sup> to 64g CO<sub>2</sub>e/kWh in Q2 2020
- By 2025: Target is to become carbon neutral in our energy generation and operations (scope 1 and 2) by reducing emissions to less than 10g CO<sub>2</sub>e/kWh and neutralising any remaining emissions with carbon offsets
- By 2032: Target is to reduce emissions by 50% in our energy trading and supply chain, compared to 2018
- By 2040: Target is to become carbon neutral in our total carbon footprint (scope 1-3) as required by science



## Contributing to the global goals



Ørsted is a signatory to the UN Global Compact and adheres to its ten principles for responsible business behaviour.

### Strong commitment to UN Sustainable Development Goals

The UN Sustainable Development Goals (SDGs) define some of the greatest societal challenges of our time.

SDGs where Ørsted makes the biggest difference:



Ensure access to affordable, reliable, sustainable and modern energy for all



Take urgent action to combat climate change and its impacts

## ESG ratings of Ørsted

Rating agency	Rating	Benchmark
 CDP DRIVING SUSTAINABLE ECONOMIES	A	<ul style="list-style-type: none"> <li>• Highest possible rating</li> <li>• Recognised as a global leader on climate action</li> </ul>
<b>MSCI</b>	AAA	<ul style="list-style-type: none"> <li>• Highest possible rating</li> </ul>
 SUSTAINALYTICS	83 of 100	<ul style="list-style-type: none"> <li>• No. 1 among direct market cap peers</li> <li>• Highest possible 'Leader' status</li> </ul>
 Corporate ESG Performance RATED BY ISS ESG Prime	B+	<ul style="list-style-type: none"> <li>• No. 1 of all utilities</li> <li>• Awarded highest possible 'Prime' status</li> </ul>
 G R E S B	A	<ul style="list-style-type: none"> <li>• Highest possible rating in the GRESB Infrastructure Public Disclosure Assessment</li> </ul>

# Group – Financial highlights

FINANCIAL HIGHLIGHTS		Q2 2020	Q2 2019	Δ	FY 2019
EBITDA	DKKm	2,956	3,625	(18%)	17,484
• Offshore		2,361	3,572	(34%)	15,161
• Onshore		312	162	93%	786
• Markets & Bioenergy		185	(115)	n.a.	1,495
Net profit – continuing operations		(809)	1,093	n.a.	6,100
Net profit – discontinued operations		(16)	(18)	(11%)	(56)
Total net profit		(825)	1,075	n.a.	6,044
Operating cash flow		8,197	7,510	9%	13,079
Gross investments		(3,757)	(3,368)	12%	(23,305)
Divestments		45	(11)	n.a.	3,329
Free cash flow – continuing operations		4,485	4,131	9%	(6,897)
Net interest-bearing debt		22,272	4,980	347%	17,230
FFO/Adjusted net debt <sup>1</sup>	%	23.1	57.5	(34%p)	31.0
ROCE <sup>1</sup>	%	10.8	29.3	(19%p)	10.6



# Offshore – Financial highlights

FINANCIAL HIGHLIGHTS		Q2 2020	Q2 2019	Δ	FY 2019
EBITDA	DKKm	2,361	3,572	(34%)	15,161
• Sites incl. O&Ms and PPAs		2,578	2,552	1%	13,750
• Construction agreements and divestment gains		396	1,638	(76%)	3,765
• Other, incl. project development		(613)	(618)	(1%)	(2,354)

## KEY BUSINESS DRIVERS

Power generation	TWh	2.6	2.2	20%	12.0
Wind speed	m/s	8.0	8.0	0%	9.2
Availability	%	95	87	8%p	93
Load factor	%	32	31	1%p	42
Decided (FID) and installed capacity*	GW	9.9	9.9	0%	9.9
Installed capacity*	GW	6.8	5.6	22%	6.8
Generation capacity**	GW	3.8	3.3	13%	3.6

\* Installed capacity: Gross offshore wind capacity installed by Ørsted before divestments

\*\* Generation capacity: Gunfleet Sands and Walney 1 & 2 are consolidated according to ownership interest. Other wind farms are financially consolidated

## Wind speed (m/s), offshore wind farms



The wind speed indicates how many metres per second the wind has blown in the areas where we have offshore wind farms. The weighting is based on our generation capacity

\*Indicates m/s for full year 2020 (if Q3 and Q4 follows the normal wind year)

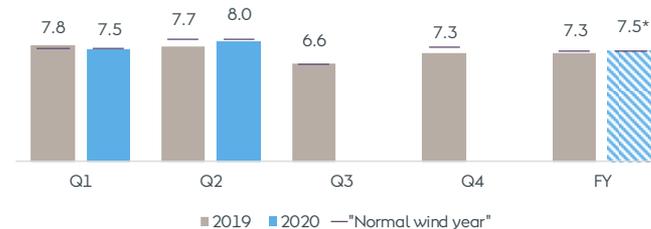
# Onshore – Financial highlights

FINANCIAL HIGHLIGHTS		Q2 2020	Q2 2019	Δ	FY 2019
EBITDA	DKKm	312	162	93%	786
• Sites		103	75	37%	466
• Production tax credits and tax attributes		268	140	91%	628
• Other, incl. project development		(59)	(53)	11%	(308)

## KEY BUSINESS DRIVERS

Power generation	TWh	1.6	0.8	95%	3.5
Wind speed	m/s	8.0	7.7	4%	7.3
Load factor	%	49	47	2%p	98
Availability	%	96	97	(1%p)	45
Installed capacity	MW	1,565	813	92%	997

## Wind speed (m/s), onshore wind farms



The wind speed indicates how many metres per second the wind has blown in the areas where we have offshore wind farms. The weighting is based on our generation capacity

\*Indicates m/s for full year 2020 (if Q3 and Q4 follows the normal wind year)

# Markets & Bioenergy – Financial highlights

FINANCIAL HIGHLIGHTS		Q2 2020	Q2 2019	Δ	FY 2019
EBITDA	DKKm	185	(115)	n.a.	1,495
• CHP plants		152	(126)	n.a.	1,152
• Gas markets & Infrastructure		(190)	(163)	17%	390
• LNG		-	(41)	n.a.	(957)
• Distribution, B2C and city light		305	261	17%	1,280
• Other, incl. project development		(82)	(46)	78%	(370)
Free cash flow		719	(1,101)	n.a.	(655)

## KEY BUSINESS DRIVERS

Heat generation	TWh	1.0	1.1	(13%)	8.3
Power generation	TWh	0.9	0.7	37%	4.6
Degree days	#	436	269	62%	2,399



# Currency and energy exposure

## Currency exposure Q3 2020 – Q2 2025

DKKbn

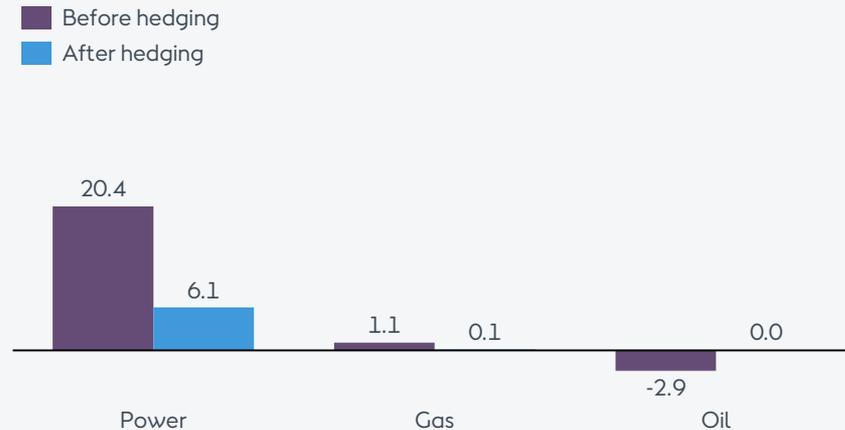


Risk after hedging, DKKbn	Effect of price +10%	Effect of price -10%
---------------------------	----------------------	----------------------

GBP: 18.2 sales position	+1.8	-1.8
USD: 8.2 sales position	+0.8	-0.8
TWD: 1.1 sales position	+0.1	-0.1

## Energy exposure Q3 2020 – Q2 2025

DKKbn

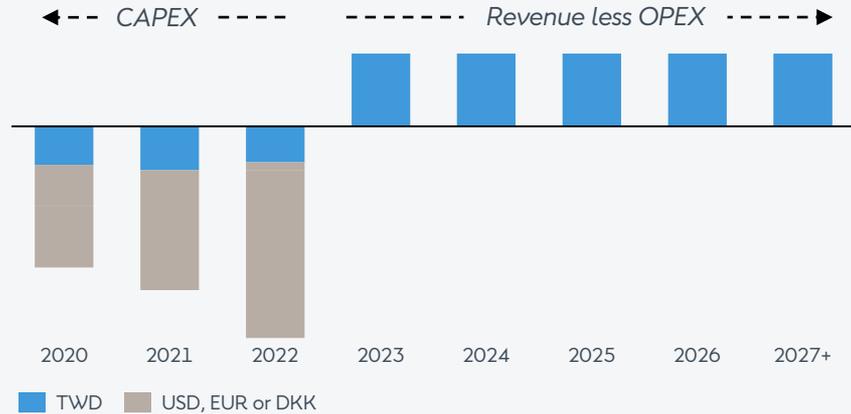


Risk after hedging, DKKbn	Effect of price +10%	Effect of price -10%
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Power: 6.1 sales position	+0.6	-0.6
Gas: 0.1 sales position	+0.0	-0.0
Oil: 0.0 purchase position	-0.0	+0.0

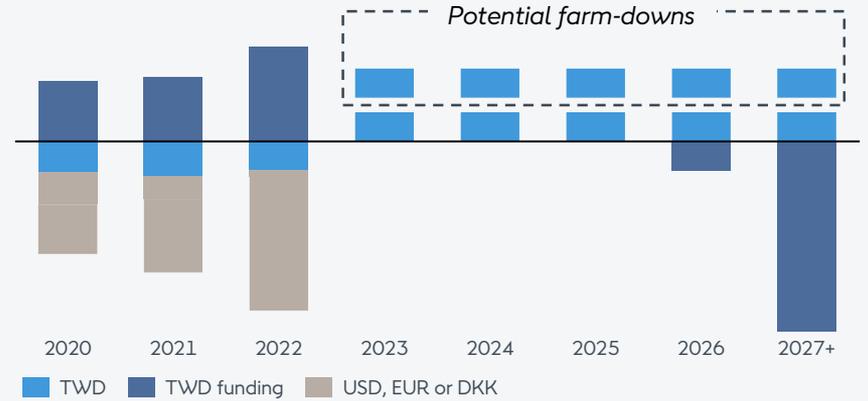
# Natural hedges significantly reduce Taiwan Dollar risk

## Cash flows from Changhua 1 & 2a Illustrative



- CAPEX primarily denominated in USD, EUR or DKK
- Future revenue less OPEX denominated in TWD

## Risk mitigation Illustrative



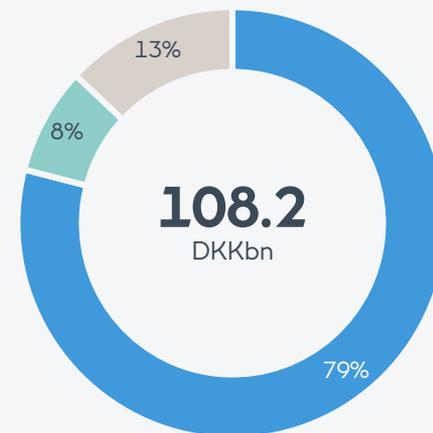
- TWD hedged with derivatives in the near term
- Natural TWD hedges in the long term:
  - TWD funding (Revolving Credit Facilities and Bonds)
  - Potential farm-downs
  - CAPEX in local currency

# Capital employed

Capital employed, DKKm	H1 2020	FY 2019	H1 2019
Intangible assets and property and equipment	114,496	106,685	92,364
Equity Investments and non-current receivables	2,241	1,044	1,410
Net working capital, work in progress	10,030	8,756	4,551
Net working capital, tax equity	(7,588)	(4,587)	(3,528)
Net working capital, capital expenditures	(9,121)	(3,304)	(3,957)
Net working capital, other items	1,092	2,540	1,326
Derivatives, net	2,454	782	656
Assets classified as held for sale, net	8,182	8,211	11,098
Decommissioning obligations	(6,490)	(6,158)	(5,781)
Other provisions	(6,168)	(6,443)	(7,677)
Tax, net	(334)	(253)	1,434
Other receivables and other payables, net	(591)	(481)	(470)
<b>TOTAL CAPITAL EMPLOYED</b>	<b>108,203</b>	<b>106,792</b>	<b>91,426</b>
<b>OF WHICH CONTINUING OPERATIONS</b>	<b>108,237</b>	<b>106,833</b>	<b>91,612</b>
<b>OF WHICH DISCONTINUED OPERATIONS</b>	<b>(34)</b>	<b>(41)</b>	<b>(186)</b>

## Capital employed by segment %, H1 2020

■ Offshore
 ■ Markets & Bioenergy
 ■ Onshore



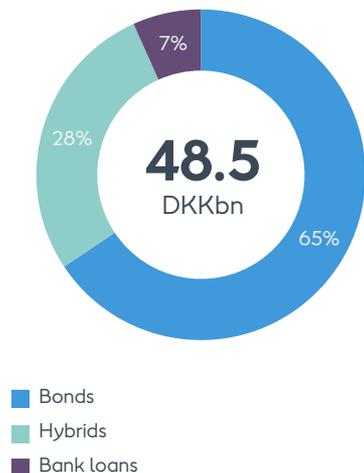
# FFO/Adjusted net debt calculation

Funds from operations (LTM) / Adjusted net debt, DKKm	H1 2020	FY 2019	H1 2019
<b>EBITDA – Business Performance</b>	<b>18,489</b>	<b>17,484</b>	<b>30,186</b>
Interest expenses, net	(1,849)	(1,312)	(889)
Interest expenses, leasing	(97)	(171)	(76)
Reversal of interest expenses transferred to assets	(377)	(344)	(428)
Interest element of decommission obligations	(220)	(212)	(209)
50% of coupon payments on hybrid capital	(278)	(279)	(273)
Operating lease obligations, interest element	-	-	76
<b>Adjusted net interest expenses</b>	<b>(2,821)</b>	<b>(2,318)</b>	<b>(1,799)</b>
Reversal of gain (loss) on divestment of assets	(878)	101	(15,367)
Reversal of recognised lease payment	-	-	376
Current tax	(6,437)	(5,799)	(3,186)
<b>FUNDS FROM OPERATION (FFO)</b>	<b>8,353</b>	<b>9,468</b>	<b>10,210</b>
<b>Total interest-bearing net debt</b>	<b>22,272</b>	<b>17,230</b>	<b>4,980</b>
50% of hybrid capital	6,616	6,616	6,619
Cash and securities, not available for distribution	1,628	1,437	1,094
Decommission obligations	6,490	6,158	5,781
Deferred tax on decommissioning obligations	(900)	(866)	(719)
<b>ADJUSTED INTEREST-BEARING NET DEBT</b>	<b>36,106</b>	<b>30,575</b>	<b>17,755</b>
<b>FFO / ADJUSTED INTEREST-BEARING NET DEBT</b>	<b>23.1%</b>	<b>31.0%</b>	<b>57.5%</b>

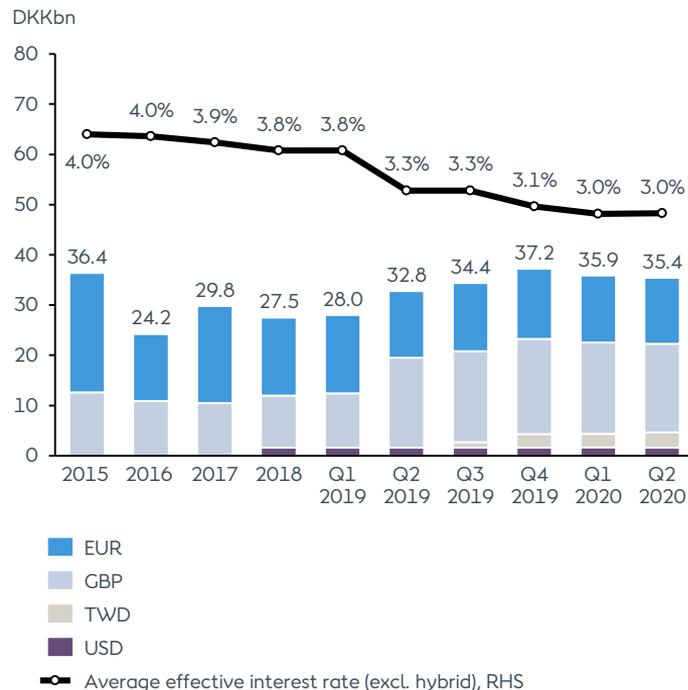


# Debt overview

## Gross debt and hybrids 30 June 2020

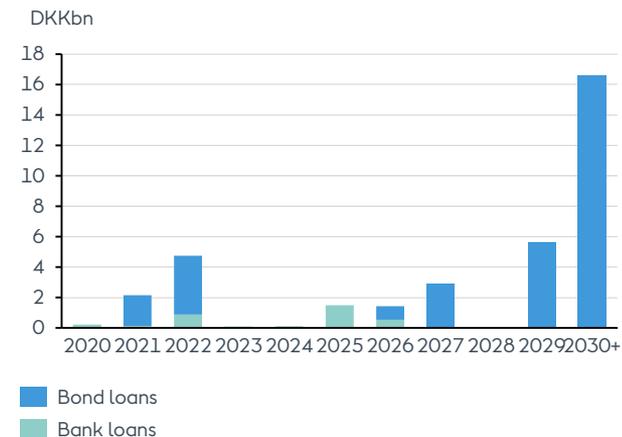


## Effective funding costs – gross debt (excl. hybrid) 30 June 2020



## Long term gross debt maturity schedule 30 June 2020

	Cost of debt (%)	Modified duration (%)	Avg. time to maturity (years)
Bond loans	3.1	8.7	10.9
Bank loans	2.2	8.4	4.1
<b>Total</b>	<b>3.0</b>	<b>8.6</b>	<b>10.3</b>



# Hybrid capital in short

Hybrid capital can broadly be defined as funding instruments that combine features of debt and equity in a cost-efficient manner:

- Hybrid capital encompasses the credit-supportive features of equity and improves rating ratios
- Perpetual or long-dated final maturity (1,000 years for Ørsted)
- Absolute discretion to defer coupon payments and such deferrals do not constitute default nor trigger cross-default

- Deeply subordinated and only senior to common equity
- Without being dilutive to equity holders (no ownership and voting rights, no right to dividend)

Due to hybrid's equity-like features, rating agencies assign equity content to the hybrids when calculating central rating ratios (e.g. FFO/NIBD).

The hybrid capital has increased Ørsted's investment capacity and supports the growth strategy and rating target.

Ørsted has made use of hybrid capital to maintain our ratings at target level in connection with the merger with Danish power distribution and production companies back in 2006 and in recent years to support our growth in the offshore wind sector.

HYBRIDS ISSUED BY ØRSTED A/S <sup>1</sup>	PRINCIPAL AMOUNT	TYPE	FIRST PAR CALL	COUPON	ACCOUNTING TREATMENT <sup>2</sup>	TAX TREATMENT	RATING TREATMENT
<b>6.25% hybrid due 3013</b>	EUR 700m	Hybrid capital (subordinated)	June 2023	Fixed for the first 10 years, first 25bp step-up in June 2023	100% equity	Debt – tax-deductible coupon payments	50% equity, 50% debt
<b>2.25% Green hybrid due 3017</b>	EUR 500m	Hybrid capital (subordinated)	Nov. 2024	Fixed during the first 7 years, first 25bp step-up in Nov. 2029	100% equity	Debt – tax-deductible coupon payments	50% equity, 50% debt
<b>1.75% Green hybrid due 3019</b>	EUR 600m	Hybrid capital (subordinated)	Dec. 2027	Fixed during the first 8 years, first 25bp step-up in Dec. 2032	100% equity	Debt – tax-deductible coupon payments	50% equity, 50% debt

# Ørsted's outstanding Green Bonds



CICERO  
Dark Green

## Ørsted A/S

Bond Type	Face Value	Coupon	Issue date	Maturity	Allocated to green projects (in DKK)	Avoided emissions (t CO2/year) attributable to the bonds
Senior Unsecured	EUR 750m	1.5%	24 November 2017	26 November 2029	5,499	733,000
Hybrid capital	EUR 500m	2.25%	24 November 2017	24 November 3017	3,674	459,000
Senior Unsecured	GBP 350m	2.125%	16 May 2019	17 May 2027	2,400	285,000
Senior Unsecured	GBP 300m	2.5%	16 May 2019	16 May 2033	2,100	239,000
Senior Unsecured/CPI-linked	GBP 250m	0.375%	16 May 2019	16 May 2034	1,600	183,000
Hybrid capital	EUR 600m	1.75%	9 December 2019	9 December 3019	200	26,000

## Ørsted Wind Power TW Holding A/S

Bond Type	Face Value	Coupon	Issue date	Maturity	Allocated to green projects (in DKK)	Avoided emissions (t CO2/year) attributable to the bonds
Senior Unsecured	TWD 4,000m	0.92%	19 November 2019	19 November 2026	882	73,000
Senior Unsecured	TWD 8,000m	1.5%	19 November 2019	19 November 2034	1,500	125,000

Ørsted has developed a Green Finance Framework which is an update to the previous framework from 2017. In the 2019 update Ørsted has broadened the green financing instruments to include Green Bonds, Green Loans and other types of green financing instruments. Furthermore Ørsted has decided to only use green proceeds for financing of offshore wind projects.

Besides the five outstanding Green Bonds, Ørsted has in May established a TWD 25bn Green RCF to finance the construction of the offshore wind projects in Taiwan

# Financing strategy



We have a centralised financing strategy as customary for vertically and horizontally integrated European energy utilities.

The strategy supports:

- A capital structure supportive of our BBB+ rating ambition
- Concentration of and scale in financing activities
- Cost efficient financing based on a strong parent rating
- Optimal terms and conditions and uniform documentation
- Transparent debt structure and simplicity
- No financial covenants and restrictions on operating arrangements
- Corporate market more stable and predictable than project finance market
- Avoidance of structural subordination

All cash flow generated by our subsidiaries supports the creditworthiness and rating of and thus the debt taken up by the parent company, Ørsted A/S.

The financing strategy optimizes the effect of a fully integrated cash pool where cash at practically all of the company's more than 150 subsidiaries is made available for the company's financing and liquidity purposes.

Financing of activities at subsidiary level is provided by Ørsted A/S in a standardised and cost-efficient setup involving very few resources at Business Unit and Corporate Treasury.

Widespread use of project financing is not considered cost-efficient and dilutes the creditworthiness of the company.

# Currency risk management

## General hedging principles

- The main principle is to hedge highly certain cash flows
- Cost-of-hedging is minimized by netting of exposures, use of local currency in construction contracts and debt in local currency.

## Managing outright long risk (GBP)

- Operations: minimum 5-year hedging staircase determined by the Board of Directors with 100% in year 1 – declining to 20% in year 5. The hedging staircase is a compromise between stabilizing cash flows in the front-end and ensuring a balanced FFO/NIBD.
- Beyond the 5-year horizon the GBP exposure is to some extent hedged with GBP-denominated debt.

## Managing time-spread risk (new markets)

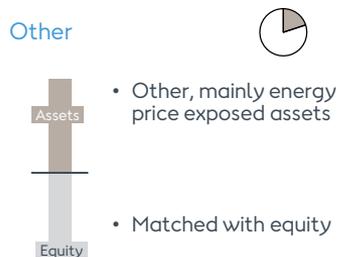
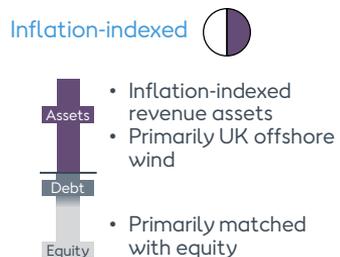
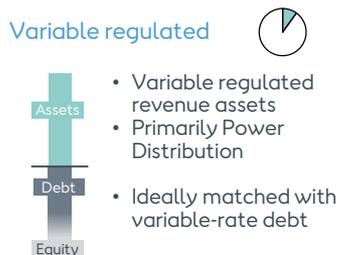
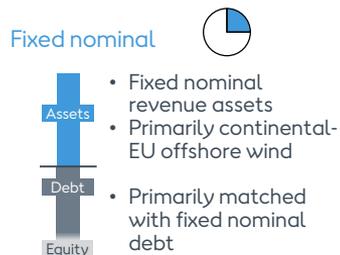
- Construction period: Hedge 100% of year 1 currency cash flow risk, while not increasing the total portfolio currency exposure.
- In new markets the capital expenditures beyond year 1 is netted with future revenue in the same currency.



# Interest rate and inflation risk management

## Four risk categories of assets and debt allocation

Illustrative



## Objectives of interest rate and inflation risk management

1. Protect long-term real value of equity by offsetting interest and inflation risk exposure embedded in assets by allocating debt with similar, but opposite risk exposure
2. Cost of funding optimized by actively managing debt portfolio
3. Cost of hedging minimised by using natural portfolio synergies between assets, allowing matching of up to 100% of asset value with appropriate debt

## Framework for risk management

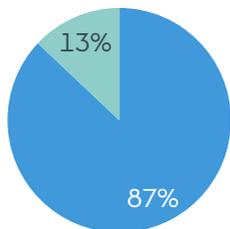
- Assets divided into four different risk categories, based on nature of inflation and interest risk exposure
- Simple risk metrics are used to match assets with appropriate debt within each category
- Fixed nominal-category has first priority for debt allocation, to protect shareholders against inflation eroding the real value from fixed nominal cash flows
- Inflation-indexed revenues reserved to service equity return for shareholders thereby to a large extent protecting the real value of equity against fluctuations in inflation rates

# Energy risk management

## Risk picture

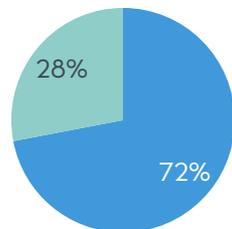
- We manage market risks to protect Ørsted against market price volatility and ensure stable and robust financial ratios that support our growth strategy
- For Offshore, a substantial share of energy production is subsidized through either fixed tariffs or green certificates. Remaining exposure is hedged at a declining rate up to five years
- Onshore mitigate their power exposure by entering into long term power sales agreements
- Markets & Bioenergy manage their market risk actively by hedging with derivatives in the energy markets up to five years

### Offshore exposure



■ Subsidized exposure  
■ Market exposure

### Onshore exposure



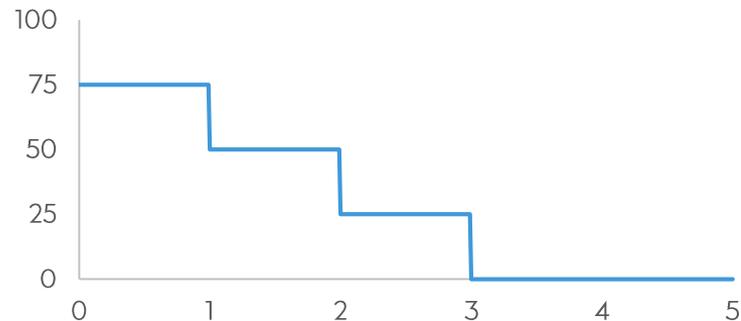
■ Power purchase agreements  
■ Market exposure

Note: expected exposure 2020-2024, as of 31/12/2019

## Hedging of open exposure

- Open energy exposure is reduced actively
- Minimum hedging requirements are determined by the Board of Directors. In the first two years, a high degree of hedging is desired to ensure stable cash flows after tax
- The degree of hedging is declining in subsequent years. This is due to: 1) reduced certainty about long-term production volumes and 2) increasing hedging costs in the medium to long term; both spread costs and potential cost of collateral

## Offshore minimum power hedging requirement



Note: actual hedging level is significantly higher

# Glossary

## Availability

Availability is calculated as the ratio of actual production to the possible production, which is the sum of lost production and actual production in a given period. The production-based availability (PBA) is impacted by grid and wind-turbine outages, which are technical production losses. PBA is not impacted by market requested shutdowns and wind farm curtailments, as this is deemed not to be reflective of site performance, but due to external factors. Total availability is determined by weighting the individual wind farm's availability against the capacity of the wind farm.

## Awarded and contracted renewable capacity

The awarded renewable capacity is based on the capacities which have been awarded to Ørsted in auctions and tenders. The contracted capacity is the capacity for which Ørsted has signed a contract or power purchase agreement (PPA) concerning a new renewable energy plant. Typically, offshore wind farms are awarded, whereas onshore wind farms are contracted. We include the full capacity if more than 50% of PPAs/offtake are secured.

## Decided (FID) renewable capacity

Decided (FID) capacity is the renewable capacity for which a final investment decision (FID) has been made.

## Degree days

Degree days are a measure of how cold it has been and thus indicate the amount of energy needed to heat a building. The number of degree days helps to compare the heat demand for a given year with a normal year. The number of degree days expresses the difference between an average indoor temperature of 17°C and the outside mean temperature for a given period. The need for heat increases with the number of degree days.

## Green energy share

The green (renewable energy) share of our heat and power generation and the distribution of the generation from the individual energy sources and fuels are calculated on the basis of the energy sources used and the energy generated at the different energy plants.

Wind and solar-based generation is computed as the input from the individual plant (wind and solar), as there is only one source of power for each plant. For CHP plants, the share of the specific fuel (e.g. biomass) is calculated relative to the total fuel consumption for a given plant/unit within a given time period. The specific fuel share is then multiplied with the total heat and power generation for the specific plant/unit in the specific period. The result is the fuel-based generation for the individual unit – for example the biomass-based generation of heat and power from the CHP unit within a given time period.

The following energy sources and fuels are considered renewable energy: wind, solar and biomass. The following energy sources are considered fossil energy sources: coal, natural gas and oil.

## Heat generation

Thermal heat (including steam) generation is measured as net output sold to heat customers.

## Installed renewable capacity

The installed renewable capacity is calculated as the cumulative renewable gross capacity installed by Ørsted before divestments.

For installed renewable thermal capacity, we use the heat capacity, as heat is the primary outcome of thermal energy generation, and as bioconversions of the combined heat and power plants are driven by heat contracts.

## Load factor

The load factor is calculated as the ratio between actual generation over a period relative to potential generation, which is possible by continuously exploiting the maximum capacity over the same period. The load factor is commercially adjusted. Commercially adjusted means that, for Danish and German offshore wind farms, the load factor is adjusted if the offshore wind farm has been financially compensated by the transmission system operators in situations where the offshore wind farm is available for generation, but the output cannot be supplied to the grid due to maintenance or grid interruptions. Wind farms in other countries are not compensated for non-access to the grid.

## Power generation

Power generation from wind farms is determined as generation sold. The Gunfleet Sands and Walney 1 & 2 offshore wind farms have been consolidated according to ownership interest.

Thermal power generation is determined as net generation sold based on settlements from the official Danish production database. Data for generation from foreign facilities are provided by the operators.

## Safety

The lost-time injury frequency (LTIF) is calculated as the number of lost-time injuries per one million hours worked. The number of hours worked is based on 1,667 working hours annually per full-time employee and monthly records of the number of employees converted into full-time employees. For suppliers, the actual number of hours worked is recognised on the basis of data provided by the supplier, access control systems at locations or estimates.

LTIF includes lost-time injuries defined as injuries that result in an incapacity to work for one or more calendar days in addition to the day of the incident.

## Wind speeds

Wind speeds for the areas where Ørsted's offshore and onshore wind farms are located are provided to Ørsted by an external supplier. Wind speeds are weighted on the basis of the capacity of the individual wind farms and consolidated to an Ørsted total for offshore and onshore respectively. Normal wind speed is a 20-year historical wind speed average.



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