

## **Orsted Energy**

Orsted Energy is a Danish multinational Power company at the forefront of the global energy transition. The firm was previously known as 'Danish oil and gas' prior to selling entire upstream fossil fuel business in 2017. Today, the have ambitious targets in place to produce 99% of their energy from renewables sources by 2025.

The Energy sector re-iterates our buy rating on Orsted based on an implied upside of 24% from a DCF model, coupled with our strong thesis surrounding Orsted's rapid expansion into the U.S for 2021

The companies Q3 earnings report drastically beat analysts expectations by issuing EPS 9% above estimates. The firm outlined major increases in energy production across both onshore and offshore segments while also recording record levels off offshore construction.

## **Author Information**

**Sector Manager** 

Name: Oliver Begley Email: begleyo@tcd.ie

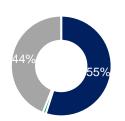
**Senior Analyst** 

Name: James Deegan Email: jadeegan@tcd.ie

**Senior Analyst** 

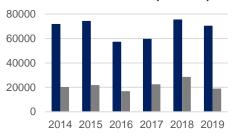
Name: Kristian Robertson Email: robertkr@tcd.ie

#### Revenue by segment %

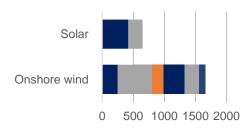


- Offshore Wind
- Onshore operations
- Markets & Bioenergy

#### Revenue & EBITDA (DKK bn)



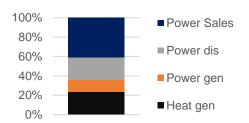
## Onshore operations by # of licenses



# Orsted Offshore wind installed capacity (MW)



#### Markets + Bioenergy



## **Business Overview**

Orsted is a Danish power company that focuses on 3 prime entities, Offshore wind, Onshore and Markets & Bioenergy.

Offshore wind - Orsted constructs, owns, and operates offshore wind turbines across the world. They have built more offshore wind farms than any other developer and aim to double current wind capacity by 2025. The firm's offshore operations are most prevalent in the US, Taiwan, Denmark, Germany, and the UK.

**Onshore** – Operates and owns 7 onshore wind farms, and 2 solar fields in the U.S; Currently constructing 2 further wind farms and installing 687Mw of solar energy; Operate 2 battery storage facilities in the U.K adding stability to supply.

**Markets + Bioenergy** – Generates heat and power from combined heat and power plants in Denmark; sells power from wind turbines and gas plants in the wholesale and retail markets. Distributes power in Denmark and optimizes energy portfolios. Provides route-to-market services for third-parties

## **Investment Thesis**

#### Strategic position in the U.S

As the U.s adapt their energy policy to support a green future they will soon roll-out licences for onshore & offshore energy operations. Orsted's current market leading position in the U.S positions them strategically to obtain multiple additional licences. The company has recently submitted bids for up to 2.5GW in New York with an outcome expected before the end of the year.

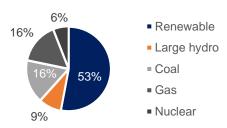
### Additional stimulus tailored at climate change/recovery

As economies emerge from the Covid-19 crisis we continue to see encouraging stimulus packages tailored at propping up the renewable industry. Given Orsteds leading BBB+ balance sheet, cash of 473M DKK and geographically diverse portfolio they are best positioned to capitalize on further Stimulus.

### Competitive advantage in fragmented industry

Orsted are the global leader in innovation and large-scale deployment of offshore wind technology. As market leader they can produce at lower costs, and overcome the industries regulatory, environmental, and licencing issues with minimal delays. A problem that destroys smaller competitors

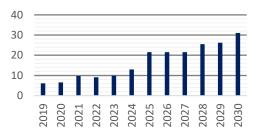
# New energy installations by source



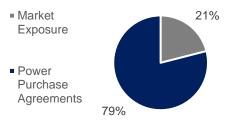
# EU Electricity Consumption (MWh)



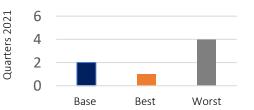
#### Offshore energy installations (MW)



### **Onshore Exposure**



### **Projected U.S permits released**



## **Industry Overview**

Offshore Wind – 6.1 GW installed in 2019 a record year for offshore wind. The same capacity is expected to be installed in 2020 highlighting how Covid-19 has had little effect on the industry. Europe continues to lead installations followed by Asia Pacific. Estimated that 205 GW will be added globally through 2030 with 900,000 jobs created. Crucially low oil prices have increased the cost competitiveness of off-shore due to decreased competition for vessels and lower transport costs.

Onshore Wind + Solar PV - 2019 onshore wind electricity generation grew by 12%. Growth in 2020 has been slowed by Covid-19 and short term US growth will be further slowed by the phasing out of the Production Tax Credit (PTC). Solar PV increased by 22% in 2019 a record year. Covid-19 will lead to short-term installations slowing but long term growth prospects remain healthy as Solar continues to expand globally.

Markets and Bioenergy – Power Prices were badly affected by Covid-19 as power grid usage has suffered globally due to lockdowns in many countries. In Europe negative power prices were regularly recorded in the first nine months of 2020 as demand dropped by 5-7%. S&P Global Forecasts a partial recovery in power prices between 2021 – 2023 as demand recovers but forecast prices remain 20% below what they were in November of 2019.

## Risks

**Delays Due to COVID-19** - Orsted has seen delays in their 1.4GW Hornsea Project Two in the UK and the 900 MW Greater Changhua 1 & 2a in Taiwan. Orsted's aim to increase their battery storage facilities in the U.K has also been tampered due to Covid-19. Overall the short-medium term impact is minimal, although if Covid-19 continues deep into next year the firm noted in a recent report that major offshore projects could face delays.

**Delays Due to Permitting Issues-** Orsted are seeking to increase their foothold on the US Energy market with plans to for several new windfarms off the cost of the US. However, offshore project delays are "highly likely" due to delays from the Bureau of Offshore Energy in deciding the layout for the wind farms.

**Market Risk-** The energy market by nature is volatile, however Orsted manages this risk by hedging their exposure to energy markets, by focusing on long-term contracts and divestment of assets.

## **Financial Summary**

*Income Statement* 

All in DKK bn	2018	2019	2020E	2021E
Revenue	75,520	70,398	60,298	62,698
EBITDA	28,491	19,020	17,620	23,645
% margin	17.9	26.3	30.59	37.71
EBIT	7,524	12,277	10,333	15,245
% margin	10	17.40	17.10	24.31
Net Income	18,251	7,181	9,821	9,870
% margin	24.17	10.20	16.29	15.74

Orsted's financials have been fluctuating in recent years. Drastic drops were seen in 2019 as they were faced with plummeting gas prices and an increase in depreciation. The recovery has been imminent despite depressed power prices in the trailing 12 months. An increase in output at Borrsele 1 & 2 offshore wind farms should boost earnings in coming quarters while long lasting offshore wind partnerships are anticipated to yield higher earnings. A bottom line increase in both revenue and net income is expected even with a sluggish future outlook for power prices demonstrating strength

## **Capital Structure**

All in DKK bn	As of 27/11/2020	
Current Share Price	1,126.50	
No. of Shares Outstanding	420.10	
<b>Equity Value</b>	473,204.3	
(-) Cash & Equivalents	33,144	
(+) Total Debt	40,640	
(+) Non-Controlling Interests	2,790.	
(+) Preferred Stock	-	
= Enterprise Value	483,490.3	

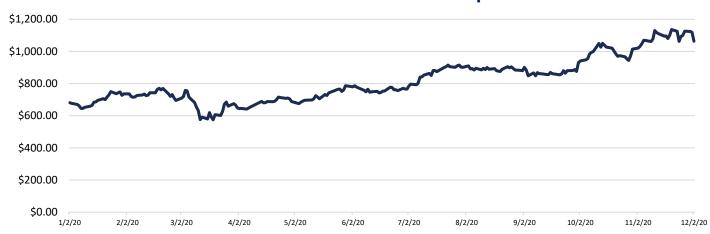
Orsted's cash and debt levels are considerably more appealing than highly leveraged competitors, namely Fortum. Their healthy ratio offers flexibility as they grow their portfolio in the U.S. Total debt is currently 81% covered by cash and equivalents. Current low debt levels will enable Orsted to take advantage of debt laden competitors by swopping in and gaining increased market share. Orsted has no preferred stock

## **Key Financial Metrics**

	Firm	Industry
Gross Margin	30.5%	26.5%
EPS	36.83	30.1
<b>Gross Investments</b>	21bn	2.1bn
Credit Rating	Baa1	Bb+
Quick Ratio	1.588	0.954
Debt/Equity	0.48	0.81
Return on assets	8.37%	6.5%
Div. yield 5yr avg	1.73%	0.92%

Orsted outperforms the industry average an each metric above. Its gross margin exceeds the mean value by 20% despite plummeting power prices. The company is fuelling organic growth through its high level of investments,(21bn). This investment Is primarily focused on offshore wind In the U.K and U.S from 2020-2023. The firm's above industry average credit rating is a vital competitive differentiator for acquiring additional licences

### **ORSTED YTD Share Price Graph**



#### Valuation

#### Comparable Companies Analysis

Orsted's financials demonstrate that the company trading premium. at а firm's P/E ratio stands at double the industry average and is attributable to phenomenal growth in recent months. Analysts are anticipating similar growth for power companies in 2021 as the transition away from fossil fuels continues. Orsted's PEG value outperforms competitors and further outlines the firm's strong competitive advantage and ability to outperform. despite depressed power prices.

Orsted's soaring ROE rate is bound to facilitate future organic growth. Our thesis surrounding the companies' ability to obtain more licenses than anticipated is extremely reliant on ROE, particularly as permits in the U.S permits are rolled out. The industry median values were derived from Orsted's top 7 competitors E.ON, RWE AG, Uniper SE, Fortum Oyj, National Grid PLC, SSE PLC, and Centrica PLC.

### Discounted Cash Flow Analysis

The DCF model yielded a convincing upside of 24%, setting a price target of \$1,396 for Orsted. The majority of this growth is reliant on Orsted's aim to become the leading offshore wind producer in the U.S by 2022. A perpetuity growth rate of 2% was assumed despite the average growth over the last 10 years standing at 7.5%, likewise an exit multiple of 20x was used.

	Firm	Industry
P/E	29.90	17.02
Fwd. P/E	43.55	17.22
PEG	3.97	6.10
P/B	4.98	1.83
P/S	8.22	1.76
EV/EBITDA	27.32	11.85
ROE	20.4%	8.9%
D/C	29.6%	21%

#### **DCF Output: 2% Perpetuity Growth**

Enterprise value	584,915
Less: Total Debt	(40,640)
Less: Preferred Stock	0
Less: Noncontrolling Interest	(2,790)
Plus: Cash and Cash Equivalents	33,144
Implied Equity Value	574,629
Fully Diluted Shares	420
Implied Share Price	DKK 1,368
<b>Current Share Price</b>	DKK 1,127
Implied Upside	21.5%

#### DCF Output: 20.0x Exit EV/EBITDA Multiple

Enterprise Value	596,830
Less: Total Debt	(40,640)
Less: Preferred Stock	0
Less: Noncontrolling Interest	(2,790)
Plus: Cash and Cash Equivalents	33,144
Implied Equity Value	586,544
Fully Diluted Shares	420
Implied Share Price	DKK 1,397
Current Share Price	DKK 1,127
Implied Upside	24.0%