

Ørsted  
Interim report for the first nine months of 2019  
30 October 2019

Operator

Welcome to this Ørsted A/S interim report for the first nine months of 2019. For the first part of this call, all participants will be in a listen-only mode and afterwards, there will be a question and answer session. Today's speakers are CEO Henrik Poulsen and CFO Marianne Wiinholt. Speakers please begin.

0.00.17

Henrik Poulsen

Thank you and good morning everyone. I will start out summarising third quarter results and then I will cover the update on our long-term targets before ending up with an update on our projects and markets. Our company continued its strong financial and strategic performance in the third quarter where EBITDA amounted to DKK 4.1 billion. This was an increase of DKK 1.9 billion or 85% compared to the same quarter last year. The increase in EBITDA was mainly driven by our offshore wind farms in operation where we saw a year-on-year increase of 35% driven by ramp-up in generation from Hornsea 1 and Borkum Riffgrund 2 as well as higher wind speeds. We increased our full-year EBITDA guidance with DKK 0.5 billion during the quarter as a consequence of the reversal of the provision related to the Elsam competition case and strong wind conditions, especially in the month of August.

Our financial performance is in line with our expectations and keeps us well on track to reach our full-year guidance of DKK 16-17 billion. The continued build-out within our offshore and onshore businesses brings our green share of heat and power generation to 87% for the third quarter compared to 71% in third quarter last year. In September, as you know, we signed an agreement to divest our Danish power distribution residential customer and city light businesses to SEAS-NVE at a price of DKK 21.3 billion on a cash and debt free basis. We expect the transaction to close during the first half of next year subject to a regulatory approval by the competition authorities and the Danish Energy Agency. At closing of the transaction, approximately 750 employees will be transferred SEAS-NVE and continue to serve the divested businesses.

The outages and curtailments we experienced across our portfolio during the first half persisted into the third quarter where we saw a profit impact of approximately DKK 150 million. The operational issues at London Array, Borkum Riffgrund 2 and Race Bank have largely been resolved during the third quarter and going forward, we don't expect further production losses related to these issues.

In early October, we installed the last turbine at Hornsea 1. The wind farm is now undergoing a period of extensive testing and commissioning and is expected to be commercially operational later this year. When commissioned, Hornsea 1 will, as you know, become the world's largest offshore wind farm with its 1,218 MW and it will be able to supply more than 1 million UK households with green power.

As you likely noticed, we experienced a rapid reduction of power at Hornsea 1 in August during an unusual set of circumstances affecting the transmission grid. This was caused by an unexpected control system response only revealed during these unusual circumstances and it has now been resolved. Hornsea 1 is progressing through the necessary compliance tests with national grid and by mid-November, we would expect to lift the maximum export capacity from the current 800 MW to the full 1,218 MW.

During the turbine commissioning ramp-up period, we have seen high turbine availability at Hornsea 1.

In September we selected GE as preferred turbine supplier for our US Mid-Atlantic Cluster covering Ocean Wind and Skipjack. These projects will pioneer the deployment of GE's Haliade-X 12 MW turbine continuing our track record as a first mover on new technology.

We have signed contracts with Siemens Gamesa to supply turbines for our Greater Changhua 1 and 2a project and the North-East Cluster in the US consisting of the Sunrise Wind, Revolution Wind and South Fork offshore wind farms.

In August and September, respectively, we submitted bids the Massachusetts and Connecticut offshore wind solicitations.

Earlier this year, our 880 MW Sunrise Wind project off the coast of New York was selected as the preferred bidder. Since the award, we have been negotiating an offshore wind renewable energy certificate for the project and in October, Sunrise Wind signed a 25-year power purchase agreement with the New York Energy Research and Development Authority. The project will receive a fixed all-in price of \$110.37 per MWh from 2024 corresponding to a levelised 2017 price of \$79.60 per MWh.

Following a structured competitive process, we were recently selected by PGE to commence discussions regarding the sale of a 50% stake in two Polish offshore wind projects in the Baltic Sea with a total capacity of up to 2.5 GW. The subject of discussions will be a sale of 50% of the Baltica-3 Development Project with a planned capacity of approximately 1 GW for construction by 2026 and 50% of the Baltica-2 Development Project with a planned capacity of approximately 1.5 GW for construction by 2030. We are quite excited about developing a potential partnership with PGE. Poland has strong offshore wind conditions and could develop into a sizable new market.

In Onshore, we have taken final investment decision on our 230 MW onshore wind farm Plum Creek in Nebraska. Plum Creek is expected to be commissioned during the fourth quarter next year.

Last year, the Danish Western High Court acquitted Elsam, now Ørsted of the Competition Authority's claim that Elsam abused a dominant position on the Danish wholesale power market back in 2005 and 2006. In light of this ruling, the parties have agreed on dismissing the Competition Authority's similar claim for the second half of 2003 and all of 2004. Consequently, the cases between Elsam and the competition authorities have now reached a conclusion in favour of Ørsted.

Despite the fact that the competition authorities' claims against Elsam and Ørsted have now been dismissed, the claimants have chosen to maintain their claims for damages and to continue with their legal action.

Finally, in October, we established a commodity trading unit in Chicago based on our experiences from our successful European trading set-up. The role of the US trading activities will be to manage and mitigate merchant risk derived from onshore wind farms in the US.

Turning to slide 4 and the update of the long-term targets shared at the Capital Markets Day a year ago. I am sure we will come back to topic in the Q&A, but let me just walk you through the primary drivers of the adjustment of our targets and before I dive into it, I should reiterate that these targets obviously are impacted by many factors, including CAPEX and OPEX estimates, production forecasts, expected long-term power prices, currency, etc.

Therefore, our estimates will remain very dynamic and today's update is as such just a snapshot that will continue to evolve. We have, as announced, three things that have added pressure to our long-term

targets. Starting out with the adjustment of our production forecast, we have been running a comprehensive project to upgrade the tools and processes we use to forecast the annual energy production from our offshore wind farms, exploiting our unique access to production wind and turbine data from our large asset portfolio.

Forecasting offshore wind is inherently a complex task. You need to forecast the wind speed, its direction, how it flows, how strong it is at each turbine position. How it interacts with the turbine, how the turbines impact each other, how the wind at each position translates into electricity production. How often and when the turbines will be available and not. Etc. etc.

Given the high number of variables and the use of advanced analytical models crunching millions of data points, such an exercise comes with a fair amount of uncertainty. Now with that said, the project has made us conclude that our current production forecasts underestimate the blockage and wake effects across our asset portfolio. Blockage arises from the wind slowing down as it approaches an object, in this case our wind turbines. There is an individual blockage effect for every wind turbine position as well as a global effect for the whole wind farm which is larger than the sum of all of the individual effects.

When the wind hits the front row of a wind farm, it will slow down as it approaches the front wall, so to speak. Our new wind simulation models suggest that we historically have underestimated these blockage effects. This finding is also supported by a recent report on blockage from industry consultants DNV GL which indicates that this effect is more broadly underestimated.

The second effect is the wake within wind farms and between neighbouring wind farms. This effect where the turbines shield and impact each other has been subject to extensive modelling by the industry for many years and it is still a highly complex dynamic to model.

We have now introduced a more advanced model for estimation of wake effects within a wind farm. It leverages data from our entire operational portfolio and benchmarks the predictions against production data from our scatter systems. The results point to a higher negative effect on production than earlier models predicted. With respect to wake effects between neighbouring wind farms, we are also here in the process of developing a new model capable of more accurately predicting wake effects over longer distances.

We have, among other things, leveraged a first of its kind advanced radar system collecting three-dimensional data on the wind flow. This system has been used at the Westernmost Rough wind farm in the UK where it has given us a lot of new insight into the wind flows. We will also deploy it in Taiwan.

The new model, albeit still being refined, suggests a slower wind speed recovery and therefore higher wake effects. At the same time we have now factored in a more extensive offshore wind build-out in the different regions which will increase the wake effect from neighbouring wind farms.

As the global offshore wind build-out accelerates, the whole industry will see higher wake effects from neighbouring wind farms. We have over the years benchmarked our internal production estimates against third-party views from industry experts and other developers. In comparison, most production estimates from third parties have been trending towards a more positive view than ours. Therefore, we do believe that underestimation of blockage and wake effects likely is an industry-wide issue.

These higher than forecasted blockage and wake effects have also been embedded in our historical actual production numbers but they have been captured in more broadly defined deviation buckets like wind contents, availability, curtailments and ramp-up effects.

We have until now not had the data and the advanced analytics models to do a more granular breakdown of the production deviation. These new tools leveraging all our production data, including the last new assets built over the past couple of years, have given us a more detailed insight into the factors impacting our production. While the production deviation we have discovered is negative, I am firmly convinced that Ørsted's unparalleled access to production data and our advanced analytics capabilities will help drive our competitive advantage. Getting smarter and gaining a more granular insight into our production dynamics is in itself a good thing and it goes without saying that we will seek to leverage the recent findings to enhance the design of future wind farms.

And while not immaterial, the forecast adjustment is not something that changes the competitiveness of offshore wind nor does it change Ørsted's ability to drive profitable growth. We remain very confident about both.

Moving on to slide 5 and the other negative and positive developments we have seen since we announced the CMD targets a year ago. As a second negative impact and as you know, we ultimately had to accept the 6% reduction in our feed-in tariff and a cap on full load production hours on our Changhua 1 and 2a project in Taiwan back in Q1 this year. This is old news but still part of the mix of factors that impact the targets communicated at the Capital Markets Day a year ago.

And thirdly in the US, we have raised the CAPEX estimate for the Deepwater development portfolio primarily related to the transmission assets. We have since the acquisition of Deepwater Wind been working to mature the EPC case for the Deepwater portfolio and this work, while still very much being work in progress, has so far led to higher CAPEX estimates.

In terms of positive developments since the Capital Markets Day, CAPEX estimates for some of our construction projects have improved a bit. Lower interest rates have led to lower return requirements on our OFTO assets, which translates into lower ongoing transmission charges in the UK. And we have seen higher than budgeted availability on one of our newer turbine platform, which positively impacts some of our assets.

Furthermore, we will reduce our overhead cost base by DKK 5-600 million between 2020 and 2022. Recognising the tight cost control remains an imperative in a competitive market environment. Roughly half of the cost reductions will be fall-away costs relating to the simplification of our structure following the divestment of our Danish downstream assets and the other half will come from reductions across our staff functions, both internal and external spend.

When we combine these key impacts since the Capital Markets Day, we come to the status of the long-term financial targets released yesterday. Let me just reiterate:

Average growth in site EBITDA around 20% for the period 2017 through 2023 is unchanged and we remain comfortable with the projected trebling of site EBITDA from 2017 to 2023. Our growth outlook in other words remains very strong and we continue to have strong visibility on our EBITDA growth for the coming many years.

Average return on capital employed around 10% for the period 2019 through 2025 is unchanged. Our growth, in other words, remains healthy and profitable.

The unlevered life-cycle IRR capacity weighted for 7 offshore wind projects across Europe, US and Asia where we set the target at 7.5 to 8.5%, this target has been reduced to 7-8% due to the production forecast

adjustment, the reduced feed-in tariff in Taiwan and the higher CAPEX estimate for the Revolution Wind project in the US.

I should remind you that this IRR metric is fully loaded with all development costs and corporate overhead included. And it does not include any uplift from potential farm-downs in the 7 projects.

Despite the adjustment of the target, we maintain healthy value creation in this portfolio of 7 construction and development projects, also in light of declining interest rates that lead to lower cost of capital. Some of you may wonder why we see an adjustment to the IRR target and not the return on capital employed and EBITDA growth targets. The main reason is that the effects from the Taiwanese tariff reduction and the higher transmission CAPEX estimate for Revolution Wind have a more concentrated impact on the IRR target as it only comprises 7 projects, including the Changhua and Revolution wind projects.

Contrary to this, the return on capital employed and EBITDA growth targets both build on the entire offshore and onshore asset portfolio. When spreading the positive and negative developments, including the overhead cost reductions across the entire asset portfolio, our targets remain unchanged. The average share of EBITDA from regulated and contracted activities targeted to be around 90% for the period 2029 through 2025 is also unchanged. In other words, our portfolio merchant exposure remains very low. The estimated life-time load factor of 48-50% for a defined European portfolio of 10 wind farms is reduced to around 48 % due to the adjustment of the production forecast.

The CAPEX and OPEX multiples communicated at the Capital Markets Day remain unchanged.

Let me reiterate that our fundamental economics and value creation remain solid. And Ørsted remains uniquely positioned to tap into the vast growth opportunity offered by a global renewables market that only continues to expand at a still higher rate.

This concludes the update on our long-term financial targets from last year's Capital Markets Day.

Let us turn to slide 6, where I will give an update on the key offshore construction projects currently in progress. At Hornsea 1, we installed the last of 174 wind turbines in the beginning of October. With the final turbine installed, the project will undergo a period of testing and commissioning and will be commercially operational later this year. More than 8,000 people have worked offshore at the Hornsea 1 site and we are truly proud to complete the work at this record-breaking project becoming the world's largest offshore wind farm.

At our Borssele 1 and 2 windfarm, the construction of the O&M building in Vlissingen is progressing and is expected to be completed in the fourth quarter this year. Offshore installation works will start ahead of schedule with mono-pile installation starting in late December this year and turbine installation expectedly in April 2020. We still expect the windfarm to be completed by the end of 2020 or in early 2021.

The Virginia EPC demo project remains well on track. In October, the US Bureau of Ocean Energy Management issued a no-objection determination on the facility design report and fabrication and installation report for the project. This is a significant milestone as we move forward on building the first ever fully permitted offshore wind project in Federal waters.

The Coastal Virginia Offshore Wind Project will be the first offshore wind farm in the US Mid-Atlantic and we expect to complete the two turbines 12 MW project by the end of next year.

At the Hornsea 2 project, the onshore construction work is progressing according to plan and we continue to expect completion of the wind farm in the first half of 2022.

At our Greater Changhua 1 and 2a project, we are now finalising the signing of supply and installation contracts. The onshore construction work is progressing according to plan and we expect the wind farm to be fully commissioned by 2022.

In September we achieved first power at the Formosa 1 Phase 2 project and the wind farm is scheduled to be officially inaugurated over the coming weeks. Taiwan's first ever offshore wind farm is now fully up and running and supplying green power to the grid.

Turning to slide 7 and an update on construction projects outside Offshore. In our Onshore business we continue to see good progress on our construction projects. In August we secured tax equity funding commitment for Sage Draw. Construction commenced back in June with road and foundation installation well under way. The 338 MW onshore wind farm is expected to be completed by the first quarter of next year.

The construction of Willow Creek is also progressing according to plan with expected completion in the fourth quarter next year.

In September, the construction of Plum Creek in Nebraska began with foundation construction and the project is on track to be completed in the fourth quarter 2020 as well.

In Bioenergy, the bio-conversion of the Asnæs Power Plant is progressing according to plan and we still expect final commissioning by the end of the year. The ramp-up of the waste throughput and production on our first full-scale REnescience plant in the UK is progressing and we see small but steady improvements. Further work and mechanical optimisation is needed before we have visibility on a stable and coherent technical and commercial formula for the REnescience technology. We still target final commissioning of the plant by the end of this year.

In August, Radius reached an important milestone with the installation of smart meter number 1 million. We have seen the main phase of the installation work now being successfully completed on time and budget. The project will be finalised as planned by the end of this year.

To conclude on the ongoing construction projects, let me just say that I remain very happy and satisfied with the execution capacity and capability of the organisation.

Let us turn to slide 8, 9 and 10 and take a look at the latest market development and offshore wind opportunities across the different regions.

Starting in Massachusetts where we have submitted bids in the 800 MW offshore wind solicitation with our Bay State Wind Project in a joint venture with Eversource. The selection of projects for negotiation will expectedly soon be announced.

In Connecticut we have submitted bids in the up to 2 GW offshore wind solicitation with the constitution Wind Project in a joint venture with Eversource. We expect an outcome from the auction in November following the award in Massachusetts.

Yesterday, we announced that we will enter into exclusive negotiations with PSEG for them to potentially become an equity investor in our 1100 MW Ocean Wind project in New Jersey. Subject to further

negotiations towards the joint venture agreement, due diligence and any required regulatory approvals, PSEG would acquire 25% of Ocean Wind.

In New York and New Jersey, we continue to see strong commitment to offshore wind with auctions scheduled for the second half of 2020 in both states.

In Maryland, we expect the first auction to open in the first half of 2020 followed by sequential auctions in 2021 and 2022.

Finally, Virginia governor Ralph Northam signed an executive order establishing a non-binding 2.5 GW offshore wind capacity target to be fully commissioned on an accelerated time line by 2026. In addition to the updated target, the governor also announced that the 2.5 GW of offshore wind will be deployed in federal waters east of Virginia Beach leased by Dominion Energy in 2013.

Back in July 2017, Ørsted entered into a strategic partnership with Dominion Energy where we are to build the two-turbine pilot project off the coast of Virginia Beach with the capacity of 12 MW. In addition to this, we signed a memo of understanding which gives Ørsted the exclusive rights to discuss a strategic partnership with Dominion Energy about developing their commercial site based on the successful deployment of the pilot wind farm.

Turning to slide 9 and the recent market developments in Europe. The determination date for Hornsea 3 development consent has been postponed from October 2019 to the end of March 2020. The Secretary of State is seeking additional information to consider potential impacts on protected sites, including the associated effects of other wind farm projects.

We are working with the relevant bodies to respond to the Secretary of State on these matters and still anticipate a positive decision in due course.

Moving to Germany where the offshore wind capacity target has been increased from 15 GW to 20 GW towards 2030. The first centralised 900 MW German tender is expected to take place in 2021.

In the Netherlands, the draft tender conditions for Holland Coast North were released in October. The tender will have a capacity of up to 760 MW with bid deadline 16 April 2020.

In Denmark, the next tender of 800 to 1,000 MW has been launched with expected bid deadline in the fourth quarter 2021.

In France, we also expect the next tender to be issued during 2021. The capacity of the fourth round will expectedly amount to 1 GW.

As I mentioned earlier, we have been selected by PGE in Poland to commence discussions regarding the sale of a 50% stake in the two offshore wind projects in the Baltic Sea with a total capacity of up to 2.5 GW. The Polish government has agreed to have a 10.3 GW target for offshore wind commissioned by 2040. The government is working to support this ambition through a regulatory framework to be codified into law through the Offshore Wind Act. The sector expects to have the offshore wind act in place by the first quarter next year which should cover all relevant regulatory areas for development of offshore wind.

As I mentioned earlier, we are quite excited about the possibility to develop offshore wind in Poland through the agreement with PGE.

Finally, turning to slide 10 and the market development in Asia-Pacific where I will focus on Japan. In Japan, we continue to develop our partnership with TEPCO with a focus on the Choshi zone off the coast of Tokyo. The Japanese government has quantified that the announced designated 11 zones potentially suitable for development of offshore wind have a capacity of approximately 7 GW. Four of these areas including the Choshi zone have been selected as prospective areas and will work towards qualification during the first quarter next year.

The Ministry of Economy, Trade and Industry is pursuing a targeted timeline for a first auction round to take place in the second half next year.

Turning to slide 11, I will not go through this slide in any detail. It is just for your reference. It seeks to provide an overview of the many upcoming offshore wind auctions and tenders in 2020 and 2021, highlighting the strong global demand for offshore wind. We have never been more optimistic about the competitiveness of offshore wind as a technology. As also alluded to by the International Energy Agency in their report from last week, we are looking into a global offshore wind market that will further accelerate over the coming years.

The technology has some very strong competitive characteristics and what just a few years ago was seen as a niche technology is now on track to become a cornerstone power source in many countries as we move towards 2030 and beyond.

This concludes the offshore market development.

Let us turn to slide 12 and the progress of our US onshore business. The US onshore business continues to expand its portfolio of operating and development projects. With the final investment decision on the Plum Creek onshore wind farm in August, our total installed and decided onshore capacity now stands at 1.7 GW. We expect to take the final investment decision on our first large-scale solar farm. The 400 MW Permian Solar Project in Texas later this year.

With this, I will now pass on the word to Marianne.

Marianne Wiinholt

Thank you Henrik and good morning from me too. Let us start on slide 13 where I will go through the Group financials for Q3, 2019.

In Q3 2019, we realised an EBITDA of DKK 4.1 billion, a year-on-year increase of DKK 1.9 billion in line with our expectations. In Offshore, earnings from our operating wind farms increased by 35% due to the ramp-up of generation from Hornsea 1 and Borkum Riffgrund 2 as well as higher wind speeds.

Offshore also realised higher earnings from construction of offshore wind farms for partners, mainly driven by the construction of Hornsea 1.

Onshore contributed with DKK 0.3 billion in the quarter while Bioenergy was above last year due to the reversal of a provision of DKK 0.3 billion following the acquittal in the Elsam competition case.

In Customer Solutions, we saw lower earnings from LNG mainly driven by extraordinary high earnings from LNG in Q3 2018 and furthermore lower gas prices impacted the accounting value of our gas at storages and thus led to a temporary negative impact in markets.

Our net profit totalled DKK 1.4 billion, an increase of DKK 1 billion year-on-year. The increase was driven by the higher EBITDA, partly offset by higher depreciation from more wind farms in operation as well as the implementation of the new IFRS 16 accounting standard regarding leases.

The free cash flow from continuing operations was negative DKK 6.1 billion. In Q3 2019, cash flow from operating activities came in at DKK 0.9 billion mainly driven by the EBITDA, a tax equity contribution from a partner at the Lockett onshore wind farm and lower gas inventories. This was partly offset by more funds tied up in work in progress.

Our gross investments for the quarter totalled DKK 7.2 billion which mainly related to the construction of Hornsea 1, the Greater Changhua 1 and 2a and Borssele 1 and 2 and last our onshore projects.

If we then turn to slide 14 and our net interest-bearing debt and financial ratios. Our net debt at the end of Q3, 2019 amounted to DKK 12.1 billion. The DKK 7.1 billion increase compared to 30 June 2019 primarily reflected the contribution from the free cash flow as I just described as well as a DKK 0.8 billion impact from exchange rate adjustments.

Our key credit metric FFO/Adjusted net debt stood at 47%, well above the target of around 30%.

Our return on capital employed came in at 29%, a 6 percentage point increase compared to the same 12 months last year. The increase was significantly impacted by the farm-down gains from Hornsea 1 whereas the same period last year was impacted by the farm-down gains from Walney Extension and Borkum Riffgrund 2.

If we then move to the results of the business units starting with Offshore on slide 15.

Power generation amounted to 2.8 TWh, an increase of 0.9 TWh compared to Q3, 2018.

This was primarily driven by the ramp-up of generation from Hornsea 1 and Borkum Riffgrund 2 which together accounted for 0.5 TWh.

Wind speeds for the quarter amounted to an average of 8.5 m/s up by 0.8 m/s compared to last year. This was also above the normal wind speed for the quarter of 7.9 m/s across our portfolio.

For the first nine months of 2019, the wind speeds were 9.0 m/s, which was also higher than the normal wind speed of 8.8 m/s for the portfolio.

EBITDA for the quarter amounted to DKK 3.3 billion, up DKK 1.3 billion on Q3 2018. Earnings from wind farms in operation increased 35% again driven by the ramp-up of Hornsea 1 and Borkum Riffgrund 2 as well as higher wind speeds.

As Henrik mentioned in the beginning of the call, the operational issues at London Array, Borkum Riffgrund 2 and Race Bank have been resolved during the third quarter and going forward, we do not expect further production losses related to these issues.

Earnings from partnerships amounted to DKK 1.2 billion, an increase of DKK 0.5 billion compared to last year. The construction agreements in this quarter primarily concerned Hornsea 1. Finally, the project development costs amounted to DKK 0.6 billion mainly related to development activities in the US and Taiwan.

Free cash flow came in a negative at DKK 6.2 billion for the quarter, a decrease of 3 billion compared to last year and mainly driven by more funds tied up in work in progress due to the construction of Hornsea 1 whereas we had a positive cash inflow in Q3 2018 as we received milestone payments related to Borkum Riffgrund 2.

If we then turn to the results for Onshore on slide 16.

In Onshore, power generation amounted to 0.9 TWh for the quarter and the wind speed averaged 6.6 m/s, which was slightly below the normal wind speeds of 6.7 m/s in Texas for the quarter.

We have a very high availability of 98% across the portfolio. The EBITDA came in at DKK 0.3 billion for the quarter with Sites contributing DKK 0.2 billion positively affected by high peak power prices in Texas in August.

As the Lockett wind farm was completed a couple of months ahead of schedule and therefore was fully exposed to merchant prices, it significantly benefited from these peak prices.

Production tax credit added an additional DKK 0.1 billion and this was partly offset by project development costs. The free cash flow amounted to a negative of 0.3 billion and related to gross investments in Sage Draw, Plum Creek, Willow Creek and Permian Solar, partly offset by the tax equity contribution from our partner at the Lockett wind farm and less funds tied up in other net working capital.

Turning to slide 17 covering the results in Bioenergy. EBITDA came in at DKK 0.2 billion, up DKK 0.4 billion on Q3 2018. The increase was mainly due to the reversal of the provision of DKK 0.3 billion related to the Elsam case. The free cash flow in Q3 2019 amounted to a negative of DKK 0.6, a decrease of DKK 0.4 compared to last year. The decrease was mainly due to lower payables due to higher fuel inventories at the beginning of the period.

If we then turn to slide 18 covering the results in Customer Solutions. The EBITDA for Q3 totalled DKK 0.2 billion, a decrease of DKK 0.3 billion on last year. The lower EBITDA was mainly driven by LNG and our gas portfolio within Markets. LNG contributed with extraordinary high earnings in Q3 2018 due to the utilisation of location spreads and optimisation of physical assets.

The lower gas prices we saw during Q3 2019 resulted in a temporary negative effect from revaluation of the LNG at storage. In addition, we have seen temporary negative effects from oil-indexed LNG purchase agreements that are hedged with a time lag. Consequently, we see a timing difference between the date when the market value of the hedging contract is recognised and the physical delivery date.

The lower EBITDA in Markets was driven by continued lower gas prices in Q3 2019, which has led to a decrease in the accounting value of the gas at storage and thus a temporary negative impact for the quarter. This negative impact will be offset if the gas prices increase or when we sell the gas in 2019 or 2020 as we have hedged most of our gas margins.

In Distribution, EBITDA increased by DKK 0.1 billion, which was mainly due to timing of activities between years.

The free cash flow from operating activities for the quarter amounted to DKK 1.1 billion primarily from lower receivables and lower gas inventories due to the lower gas prices and gas sales.

Slide 19 shows our 2019 guidance and our long-term financial estimates and policies.

On 25 September 2019, EBITDA guidance for the Group was increased by DKK 0.5 billion. We still expect EBITDA to be between DKK 16 and 17 billion for the year.

Our directional EBITDA guidance for each business unit is unchanged relative to the guidance in the interim report for the first half year. Our gross investment guidance is unchanged relative to our guidance in the annual report for 2018.

Gross investments are expected to amount to between DKK 21 and 23 billion. And with that, we will now open for Q&A. Operator, please.

0.45.35

Operator

Thank you. Ladies and gentlemen, if you would like to ask a question, please press 01 on your telephone keypad. If you wish to withdraw your question, you may do so by pressing 02 to cancel. Once again, it is 01 on your telephone keypads to register for a question. And our first question comes from the line of Casper Blom from ABG Sundal Collier. Please go ahead, your line is now open.

0.45.58

Casper Blom

Thank you very much. Two questions from my side please. First of all, now that you lower the predicted output from the windfarms, does that in any way change the economics in the farms, parks that have already been farmed down? Or said in another way, do your partners at these farms now have the possibility to come back to you and say we would like a refund because this is not producing as we were promised? That is my first question. Secondly, as you said Henrik, this is a snapshot and clearly there is an uncertainty in the long-term economics of wind parks. Now that we see a negative revision of the outlook, does that in any way change your return requirements for such parks? Those are my two questions please.

0.46.50

Henrik Poulsen

Thank you Casper. To the first question, our farm-down agreements are done on a shared risk basis so this type of risk is fully shared between us and our partners so there is no basis for any claims against us. And in terms of the snapshot and our return requirements, this does not in and of itself change our return requirements. Our return requirements would typically change in response to changes in the cost of debt and cost of capital or cost of equity obviously. So I don't see this in and of itself changing our return requirements.

0.47.33

Casper Blom

That is very clear, thank you Henrik.

Operator

Thank you. Our next question comes from the line of Deepa Venkateswaran from Bernstein. Please go ahead, your line is now open.

Deepa Venkateswaran

Thank you. I have a few questions. So I think on the news from yesterday, I just wanted to understand how does having larger turbines change the impact of the .... make it better? And the second question is...

0.48.07

Henrik Poulsen

The line is not very good, Deepa, we can barely hear what you are saying.

Deepa Venkateswaran

Hi, is this better? Hello?

Henrik Poulsen

Yes, it's better, thank you.

Deepa Venkateswaran

Hello?

Henrik Poulsen

Yes. Can you hear us Deepa?

0.48.27

Operator

Okay, and we seem to have just lost Deepa's line. So our next question comes from the line of John Musk from RBC. Please go ahead, your line is open.

John Musk

Yeah, good morning everyone. I just have two questions for now. Firstly on the OPEX savings that are partly offsetting some of the negative impacts. Within the 50 basis points move-down in the IRR, how much of those OPEX savings have you put in there versus how much of those will be going against the existing asset base? And then secondly longer term if we, as you indicated, the blockage and wake effects happen as we get more and more buildout, if that sort of accelerates are we likely to see another let-down in load factors in a few years' time as we get more assets built around your existing asset base?

0.49.29

Henrik Poulsen

Thanks John. In terms of the OPEX reductions, those OPEX reductions would translate into improvements across the entire portfolio of offshore and onshore assets and therefore, they will also benefit the seven projects that are in the bucket that we use for the IRR guidance but only with their sort of pro rata share of the total overhead reduction. We have added more neighbouring windfarms into our simulations of the neighbouring wake effect as part of this exercise and on that basis, we do not expect a further reduction of our load factor due to continued buildout of offshore wind.

0.50.22

John Musk

Okay thank you so just to come back on the OPEX, is there any split of that number into the construction portfolio and the existing portfolio?

Henrik Poulsen

The allocation key is the number of ours that is spent on the individual projects so it is allocated with an hourly rate.

John Musk

Okay, thank you.

Operator

Thank you. And our next question comes from the line of Deepa Venkateswaran from Bernstein. Please go ahead, Deepa, your line is open again.

0.50.54

Deepa Venkateswaran

Oh thank you again. I am just checking. Can you hear my question?

Henrik Poulsen

Yes we can Deepa, thank you

Deepa Venkateswaran

Okay, alright. Apologies for that. So my question was firstly what is the impact of moving to larger turbines on the blockage and wake effect we can expect? Is it neutral or does it worsen it or just does it improve the output? Second question is the better availability on one of your turbine platforms. Is it safe to assume that you are really talking about your Hornsea 1 and Borssele 1 and 2, the platforms there? Or is this a wider and impacting more windfarms? And my third question is on the farmdown of Ocean Wind to PSEG keeping in mind the sort of risk sharing you have. What kind of pricing should we expect? Should it be like at cost as you did to Eversource or should it be like the typical model you have been using for financial investors or somewhere in between?

0.51.53

Henrik Poulsen

Thanks Deepa. When we move to larger turbines again we would obviously need real data to fully understand the dynamic of moving to a larger turbine. The expectation right now would be that larger turbine may lead to marginally higher blockage effects. On the other hand, we would expect wake effects to go down on a relative basis to the capacity of the turbine.

0.52.22

Deepa Venkateswaran

Okay, so at best, it is indeterminate now or should we just assume that it will marginally worsen?

Henrik Poulsen

I would for now expect this to be a net zero as we move to larger turbines.

Deepa Venkateswaran

Okay

Henrik Poulsen

And in terms of the better availability of one of our turbine platforms, I am not going to be specific, obviously, you know our assets, you know our turbine portfolio extremely well so there are only that many options of course but I am not going to specify it by name. I am looking to the third question, it was...

0.53.00

Deepa Venkateswaran

Farm-down to PSEG

Henrik Poulsen

To the PSEG yes. Well, it is an ongoing negotiation so we are still negotiating with PSEG on the price for this equity stake so I could not give you any details today.

Deepa Venkateswaran  
Okay, thank you.

0.53.22  
Operator

Thank you. Our next question comes from the line of Kristian Johansen from Danske Bank. Please go ahead, your line is open.

Kristian Johansen

Yes, thank you, so two questions from me. First question, if we look at some of your most recent wins like Ocean Wind and Sunrise Wind which are not included in the portfolio of windfarms where you lower the return assumption by 0.5 percentage point. Should we expect a similar adverse effect on expected returns on these projects or are you still at a stage where you should be able to mitigate this lower production forecast?

0.53.54

Henrik Poulsen

Well, the impact of the changes from this exercise, it varies by project obviously and when you look at Ocean Wind and Sunrise Wind, there is also an impact on these two projects. But I cannot obviously start specifying these impacts at an individual project level but there is an impact. We have also reduced our production forecast for these two projects. We are obviously doing everything we can to mitigate this small adjustment to the production forecast by mitigating through CAPEX and OPEX levers and if we can find ways of optimising the production to bring some of it back, we obviously will. But that is all work in progress so it would be too early for me to share anything specific. But the fundamental economics of the project are still healthy.

0.54.58

Kristian Johansen

Okay so there is no risk on the FID from this?

Henrik Poulsen

Risk of FID on Ocean Wind and Sunrise Wind, no, I do not see a risk on FID.

Kristian Johansen

Okay, that is quite clear. Then my second question is how should we think about your competitive strength as a result of this? I mean in future auction, I assume you will have to take in a lower production forecast which, if you keep your return assumption, would yield a higher bid price and if competition doesn't do the same immediately, will that make you less competitive?

0.55.37

Henrik Poulsen

Well, all other things equal, the answer would be yes. It is quite clear that anyone can win an offshore wind project if they want to sort of just dial up their expectations on specific assumptions including production forecast. So this all comes back to being a disciplined and prudent allocator of capital and our challenge obviously is to make sure that even if we have in our view more prudent and better production forecasts, that we should still be able to win projects in future and have a more robust value creation in our wins. That is our challenge. But it goes without saying that if competition has much more optimistic production forecasts than us, that will obviously in isolation impact our competitiveness. But when you look at it from a shareholder's perspective, Kristian, you also have to think that our primary task is to make sure that we only take on projects where we do indeed create value. It is not in the interest of any shareholder for us to

operate with inflated production forecasts and winning projects on that basis, that is not going to bring anything good to anyone.

0.57.00

Kristian Johansen

Very clear. Thank you very much.

Operator

Thank you. Our next question comes from the line of Peter Bisztyga from Bank of America. Please go ahead, your line is open.

Peter Bisztyga

Thank you, good morning. So my first question regards these higher costs relating to transmission assets for your US portfolio, I am just wondering if you can specify exactly where those cost pressures have come from, is it the cables, is it labour, is it installation costs? And also were those high costs included in your recent bids for Ocean Wind and Sunrise or is there another factor that is going to affect the economics of those projects? Second question, I think you have already answered this but just to double check, if the plan so sell the Ocean Wind stake to PSEG sort of costs on a similar basis that you did with Eversource or is this sort of a farm-down where you could secure a premium? And then finally I am just wondering do you think there is any kind of political angle to the US interior department requiring the BOEM to redo the environmental impact assessments and do you worry that the federal government can curtail some of the very ambitious state level targets for offshore wind development?

0.58.24

Henrik Poulsen

Thank you. When it comes to the higher estimated transmission CAPEX in the US, it comes from a number of sources across the Deepwater Wind portfolio. Some of it relates to export cable, some of it relates to substations, some of it relates to onshore grid upgrades as well as the cable landing, so it is a relatively broad set of factors that impact these numbers. It is not necessarily a surprise that as we mature these projects, we sometimes tend to see CAPEX estimates either moving up or down compared to our original estimates. When it comes to Sunrise Wind and Ocean Wind, we have had visibility on these transmission CAPEX estimates for Deepwater when we submitted our bids, so we have accounted for these higher transmission assets or transmission CAPEX in our bids for Sunrise and Ocean Wind. When it comes to the negotiation with PSEG for an equity stake in Ocean Wind, it is a commercial negotiation where we are obviously taking a number of factors into account including what is still developing into a very good partnership with PSEG who is obviously able to contribute a number of benefits to our position in New Jersey and the Mid-Atlantic market but with that said, it is a full commercial negotiation. As it relates to the interior department's request for BOEM to do this so-called cumulative impact assessment, it will obviously be something that we are eagerly awaiting to see the outcome expectedly early next year. We are not concerned that this is going to stop the large-scale deployment of offshore wind along the US East Coast, the potential is huge and the states along the East Coast, they need renewable energy, they can see that offshore wind is a very competitive solution and they are quite determined to deploy offshore wind. I see this more as a natural step for BOEM to gain a broader understanding of how this offshore wind buildout will impact different key stakeholders along the coast including fishing communities, local communities where we land the cables etc. So there are many stakeholders that you need to consider. You need to have a robust and productive dialogue and you need to make sure that all concerns are listened to and develop a comprehensive framework for how to build out offshore wind as effectively as possible. This is the exercise they are going through frankly speaking that makes sense and it may cost some delays here and there but I don't think it's going to stop the buildout or slow it down as such.

1.01.50

Peter Bisztyga

That's very helpful, thank you.

Operator

Thank you. Our next question comes from the line of Sam Arie from UBS. Please go ahead, your line is open.

Sam Arie

Hello, good morning everybody. Thanks for the presentation as always. I think a lot of good questions asked already so just one from me and it is a bit of a difficult one to formulate but what I want to do is dribble this point about the return guidance that you have given now being lower but the return on capital and EBITDA target being unchanged. And I think we follow that logic, there are some positives at the group level which have had the lower project returns but the project returns are you know over 25-30 year duration I suppose and return on capital and EBITDA is just the next 4 or 5 years. So what you seem to be saying is that the net effect of everything you have talked about today and yesterday is now downsized on numbers at group level for the next 4 or 5 years and what I want to ask is if you think there is any downside actually at all when you go further out. So to be clear, I am not asking you to share your own company valuation but I think that you do run valuation estimates internally and what I am asking is just directionally whether your overall internal enterprise valuation has come down as a net result of everything you have announced in the last 24 hours or actually if it might have stayed about the same or maybe I suppose it is possible it could have gone up. So is that something you could comment on? It would be very helpful. Thank you.

1.03.27

Henrik Poulsen

Thanks Sam. It is quite clear that in what we released yesterday, there are obviously a number of moving parts, some being negative, some being positive. I am not going to give you our own estimate of what is the net present value impact of those different moving parts. It goes without saying that the adjustment to production forecast is a negative number and we have done our utmost to mitigate it as best possible. But I would rather not start sort of extending our view on what the impacts will be because I essentially just end up sort of start building new targets so I think we have already given fairly detailed targets here and we will stand by those targets, that is also why we came out yesterday to make sure that we give you absolutely full transparency and timely transparency but I would rather not start digging further into the details. I think we have given you a number of data points that should give you a pretty good idea as to what the impact is here.

1.04.35

Sam Arie

Yes, okay. I somehow thought that might be your answer but it was worth a try anyway. Thank you very much and thanks for the presentation today.

1.04.44

Henrik Poulsen

Thank you Sam.

Operator

Thank you. Our next question comes from the line of Timothy Ho from Morgan Stanley. Please go ahead, your line is open.

1.04.53

Timothy Ho

Hi, good morning, just a couple of questions from me building on I think some of it has already been asked so the first one. So, this is clearly a very comprehensive review that you have done. Could you provide some more colour please on whether you intend to – how often you intend to do these reviews from here on end? And you refer to this as a snapshot, a point in time. How do you think about the kind of updates on this snapshot as you go along as well? And the second thing is just on mitigation. I think you briefly alluded to some parts of mitigation but is there anything that you can say on formation of windfarms in the future or can the turbine designers help you at all to kind of help reduce these effects? Yeah and if you can provide on the mitigation, that would be very helpful. Thank you.

1.05.38

Henrik Poulsen

Thanks Timothy. I mean, when we came out with the update on the targets yesterday, yes, it is of course a snapshot. I mean, we are operating a very big portfolio of assets and development projects and we see movements in all of those assets and projects on a daily basis so we have an almost endless number of variables that will make this a very dynamic picture. We obviously cannot come out updating you every time we see a change somewhere in that portfolio so we are trying to strike a balance here. We felt the news yesterday, especially because we found these adjustments to our production forecast, we felt it was an important piece of news for our shareholders but also for the offshore wind industry more broadly and we felt that it would be prudent for us to go out and be open and transparent about it. When it comes to the long-term financial targets, it would be – and I say that without making any firm commitments – but I would certainly expect that when we come to the Capital Markets Day in June next year that is currently being planned, that we would give you an update on a like-for-like basis on the targets that we updated yesterday. We may at some point want to move away from those targets, over time they will obviously become less relevant as the portfolio progresses, so we will take a look at giving you an update in June next year, I would expect, and then we may look for some new targets that give you more information. If we remain totally static in our targets, they will obviously become less relevant over time. In terms of mitigation, Timothy, what was the question again, the second question on the layout?

1.07.37

Timothy Ho

Yeah, just on whether it is layouts or can turbines suppliers help you in this regard if we look more into the medium term, just a bit more on potential mitigation to try and up these load factors potentially in the future or keep them static anyway?

1.07.49

Henrik Poulsen

Yeah, I mean you also asked about how are we going to sort of use this exercise that we will be going through here going forward. We have now built these new advanced analytics models that will help us more accurately predict a number of the underlying dynamics in the production and we will obviously continue to use these models and refine them and then we are also looking at if there is any learning from this more granular insight into our production numbers that would allow us to mitigate part of the impact by adopting different layouts of the windfarms, we are looking into all kinds of correlations to see if we can identify ways of mitigating some of the impact that we have seen. But that is a still work in progress and too early for me to say whether we can actually mitigate some of the impact by adopting a different design of our windfarms.

1.08.54

Timothy Ho

And could the turbine suppliers help you in this regard at all?

Henrik Poulsen  
The turbine suppliers?

Timothy Ho  
You know just in regards to its actual design impacts things at all here or is that kind of a side issue?

1.09.09

Henrik Poulsen

Actually, the physical design of the nacelle for instance – again, I couldn't tell you Timothy, for now, we actually did discuss it the other day. We don't think it's a real factor if you think about sort of the size of the actual design of the nacelle we think that is a relatively minor thing in these blockage and wake effects but we will obviously discuss this with our turbine suppliers.

1.09.37

Timothy Ho

Very clear, thanks very much.

Operator

Thank you. Our next question comes from the line of Mark Freshney from Credit Suisse. Please go ahead, your line is open.

Mark Freshney

Hi, hello, three questions please. Firstly on the cost out or the I think it is DKK 5-600 million cost out in central costs I guess most of that will relate to offshore wind. My understanding is a lot of the items within there are things like leases, development costs where you haven't taken FID, surely reducing those costs by 20-25% would have a material impact on your ability to win projects on good returns at the end of next decade. So could you go through that firstly? Secondly on the curtailment issues, I think particularly of things like London Array in Q2, could you talk about the impact that they have had in Q3? And thirdly on wake and blockage effects, you know there is what is within your control which is where you guys have two windfarms together but what if you get other windfarms close to yours? That is something outside of your control so as the seabed gets more congested, is there a risk that somebody else's return partly comes at your expense? Those are my three questions, thank you.

1.11.19

Henrik Poulsen

Thanks Mark. When it comes to the cost reductions, the cost reductions come from costs that fall away as we divest Radius and the residential customer business. There are no cost reductions that relate to offshore lease rights or anything like that. These are mostly costs coming out of our staff functions across the company and as we allocate our corporate overhead into our projects, the projects will of course benefit from these corporate overhead reductions and the majority of our overhead is allocated to the offshore division given it is done on an hourly allocation key. So of course, the majority of these overhead cost reductions will ultimately benefit offshore wind. When it comes to the London Array cable repair campaign, it also had an impact in the third quarter. It is included in the DKK 150 million impact from outages and curtailments that we referred to earlier today. I cannot give you the specific number for London Array in isolation, that would become a bit too granular but we do not expect further losses from this cable campaign at London Array moving forward. When it comes to neighbouring wake effects from windfarms being built by other developers, we have accounted for that in these models that we have been building. We have added in extensive buildout based on our knowledge of all projects currently in progress, not only

our own projects but also projects from other developers so we have tried to account for a broader set of windfarms being built around our own sites so we feel that we have diligently accounted for this.

1.13.30

Mark Freshney

Okay, thank you very much Henrik.

Henrik Poulsen

Thank you

Operator

Thank you. Our next question comes from the line of Marcus Bellander from Nordea. Please go ahead, your line is open.

1.13.49

Marcus Bellander

Thank you, just one follow-up question on the wake and blockage effects. I believe you mentioned, Henrik, that other observers or players have more optimistic estimates on those effects and I guess I am just curious and I realise it is hard to quantify but how certain are you that your model is right and everyone else's models are wrong? And also on the load factor, your new load factor target, is that your best guess or is there a certain element of conservatism included in that? Thank you.

1.14.26

Henrik Poulsen

Thank you Marcus. When it comes to these effects and the reason why we think there is a broader issue across the industry is basically not that we have seen any specific estimates for blockage and wake effects but we have seen other production forecasts for some of our assets and we have seen also indications of production forecasts on projects where we have been competing in a tender or an auction with some of our competitors. And whenever we have done farm-downs, we have also seen third party experts contributing production forecasts as part of those farm-down processes, so we do have a number of data points suggesting that traditionally, external experts, other developers have had a tendency to be slightly more optimistic on the total production outlook than us which is why we believe that we may be looking at an industry-wide slight overestimation on the production forecast. And I will obviously say that to the point you make assuming that we have better visibility on this topic than the rest of the industry and it is obviously for anyone to judge whether to consider that credible or not. I would say we have more operational data to leverage than any other player in the industry and we have spent very significant resources into this project to develop what we would expect to be probably the most advanced models for predicting different underlying variables in our production forecast. So on that basis, I would actually expect that we have better visibility and better prediction power than most other players or all other players in the industry. When it comes to the load factor where we now expect it to be around 48%, that is our best estimate at the moment for the 10 projects included in that target.

1.16.48

Marcus Bellander

Great, thank you.

Operator

Thank you. Our next question comes from the line of Elchin Mammadov from Bloomberg Intelligence. Please go ahead, your line is open.

1.16.59

Elchin Mammadov

Hi there, I have three questions please. The first one is on your guidance. You confirmed you recently increased 16-17 billion EBITDA guidance. However, at the current run-rate, you are set to achieve about 19.5 billion. So my question is what kind of headwinds are you expecting in Q4 or what fewer net positive one-offs are you expecting in Q4 that you haven't had in the first nine months? The second question is on the farm-downs. I mean, besides the Ocean Wind, what other assets are you looking to include in your farm-down policy? If you can update on that, that would be great. And a final one is on Poland, I mean it's early days but assuming you do sign your partnership with PGE in Poland, given it's a 50/50 joint venture, what will be your role and what will be PGE's? So for instance, will you be the one to build it and PGE to operate it or the other way around? So that will be really useful, thanks a lot.

1.18.00

Marianne Wiinholt

Yes, thank you for your questions. On the first question on the guidance, the reason why we have a front-end loaded result development is that all our farm-down gains, more or less, are coming in the first three quarters. We are now very close to being complete with Hornsea 1 and therefore you will not have this farm-down gain in Q4. So that is the reason for that. On your second questions on farm-downs, yes you are right, we are working on Ocean Wind and then it is also Taiwan where we are also out, we are in a process right now and we have said that we expect to farm down probably next year in Taiwan. But except for that, we don't have any active processes on the farm-down side.

1.18.54

Henrik Poulsen

And when it comes to Poland, the exact role split between PGE and Ørsted is still part of the ongoing discussions. I cannot give you a specific answer. We are obviously bringing together quite complementary capabilities and experiences that we would tap into but the exact detailed role split is still to be finally settled.

1.19.19

Elchin Mammadov

Thank you, thanks a lot.

Operator

Thank you. Our next question comes from the line of Klaus Kehl from Nykredit. Please go ahead, your line is open.

1.19.31

Klaus Kehl

Yes hello, two questions from my side. First of all, if I look at your onshore business, you have had a very strong performance here both in Q3 and for the first nine months and especially if I look on the EBITDA line, then I guess you have had an EBITDA margin of above 100%. I guess a big part of that is due to the PTC subsidies that you have received but could you give us any kind of indication of what will be a reasonable long-term EBITDA margin for this business? That would be my first question. Secondly, you have had these curtailment problems throughout 2019 and I guess the full-year figure is now at around DKK 350 million. Could you just confirm what the number is for the full year? And secondly, would it then be reasonable to expect that your EBITDA would go up by a similar number next year? Thank you very much.

1.20.35

Marianne Wiinholt

Yes, on your first question, onshore results, yes you are right, we have had a very strong Q3 driven by these benefits we have had from the high peak prices in Texas in August. The two other quarters have been very much as expected. If you look at EBITDA margin in this business, it is not really a meaningful number because you are right, the reason why we have such a high margin is this PTC, the way we account for them. So just to say that, it's not really the right metric for that business. Then on curtailment, Henrik.

1.21.18

Henrik Poulsen

Yeah, on curtailment Klaus, I mean, at half-year I believe we indicated a DKK 400 million impact from outages and curtailments and we have said DKK 150 million for the third quarter so amounting to 550 million impact for the first 9 months of the year. We have also said that we expect the fourth quarter to be better given that we have resolved many of these issues at London Array, Race Bank and Borkum Riffgrund 2. So there will probably still be some impact, there always tend to be some impacts from outages and curtailments in the portfolio but we will expect them to trend down in Q4. Looking into next year, there will again always be some impact from outages and curtailments but we would hopefully be back to what we would consider a more normal level which hopefully also should be below what we have seen here in 2019.

1.22.22

Klaus Kehl

Okay, thank you very much.

Operator

Thank you. Our next question comes from the line of Iain Turner from Exane. Please go ahead, your line is open.

1.22.29

Iain Turner

Morning everybody. Can I just ask you a couple of questions? On the GE turbines that you have chosen for the US Mid-Atlantic projects, is that purely on the basis of cost or are you adding strategically and trying to bring on a third scale supplier as I think you have done in the past, a strategic purchaser. And then secondly on the Polish projects, could you just outline the attractiveness of the Baltic compared with the North Sea? I mean is it windier? Is it shallower? How does it stack up?

1.23.02

Henrik Poulsen

Thanks Ian, I mean we have suddenly pegged the GE turbine on the basis of its cost competitiveness which obviously both includes the cost of the turbine and the productivity of the turbine and with that said, it has never been a secret that we do believe it would be beneficial for the whole industry if we could introduce and ramp up a third significant supplier of offshore wind turbines and with GE being the preferred supplier for our Mid-Atlantic cluster and as I understand also for the Dogger Bank cluster coming out of UK Round Three, it seems like they have built a meaningful ramp-up volume for the 12 MW turbine. When it comes to the Polish projects, they have very good site conditions. We are actually quite positive on these sites in the Baltic Sea in terms of distance to shore, seabed conditions, water depth and wind speed so overall, we consider them high-quality sites.

1.24.15

Iain Turner

Thank you.

Operator

Thank you. Our next question comes from the line of Peter Bisztyga from Bank of America. Please go ahead, your line is open once again.

1.24.27

Peter Bisztyga

Thanks, just a couple of follow-up questions. You have mentioned that having more prudent load factor assumptions can be a disadvantage in auctions. I am just wondering whether there actually can be any rationale for sharing your analytics capability with other developers perhaps even as a service going forward to make sure that everybody has equally this advantageous information? And then just another quick one. Do you happen to know how close together separate wind farms need to be before wake effects from one project start to impact another one?

1.25.04

Henrik Poulsen

Thanks Peter. On the sharing of the insights that we have generated, it is certainly something that we will discuss and consider how we can best share them with the broader industry. I do believe that it would make sense for us to find ways of sharing this information. That is also why we came out yesterday to make sure that we are transparent and also that we.. make sure that whoever can benefit from these insights should be allowed to. In terms of neighbouring wake effects, you know, I cannot give you a very specific sort of threshold for when you start seeing these wake effects from a neighbouring wind farm, but you would probably be surprised how far out it actually has an effect. Let me put it this way, when you get sort of within 25 km it actually starts to have an impact. We can detect an impact further out, even beyond 25 km, but then it begins to be a very marginal and small, almost negligible impact but as you move within that 25 km boundary and down to sort 10-15-20 km, it begins to have a real impact.

1.26.32

Peter Bisztyga

Perfect, thank you.

Operator

Thank you. Once again if there are any remaining questions, press 01 on your telephone keypad to register and our next question comes from the line of Alberto Gandolfi from Goldman Sachs. Please go ahead, your line is open.

1.26.47

Alberto Gandolfi

Yes thank you and hi, sorry, I joined a bit later so if questions have been asked just please be free just to tell me. I am going to read the transcript but I have two follow-ups. One is just trying to understand in light of what you said yesterday, what should be broadly the actual earnings, let us say EBITDA impact so you talk about, you know, you get 48-50% so let us just assume it should have been in the middle of 49. Now you say 48. Am I right in saying that by 2024, that in theory is less than 1 TWh impact which is about DKK 700 million? And on top of that you are talking about DKK 5-600 million cost savings so on the back of that, I would say your EBITDA will barely move and so I am a bit surprised that that – there was such a big deal in the communication about it, number one, and number two is, you know, you really – I felt yesterday most investors really focused on not just on this but what you said about the return, you know, the perception was the leading offshore developer is catching the return assumption. Now when you get 7.5 to 8.5% originally, the interest rate environment was very different so I mean my point would be when we think about WAC plus spread, has the spread changed at all besides this few million Danish kroner that would say on volumes or not because eventually I suspect that it was blown out of proportion this issue. The second point is now that you think you have superior analytics, does it mean that you need to put more spacing

between each single turbine? Does it mean that you see that your already leased will be able to host fewer turbines to maximise the volume? Does it just mean, how can you basically circumvent this problem not what is under construction because I guess the design is what it is but maybe on the future ones? Thank you.

1.28.47

Henrik Poulsen

Thank you Alberto. When it comes to the EBITDA impact, we did not change the guidance obviously. We kept the target at an average EBITDA growth from our operating sites of around 20% over that period from 2017 through 2023, which obviously indicates that big picture, the negatives and the positives offset each other to an extent where there was no reason for changing the EBITDA outlook so our EBITDA expectation as such is unchanged. I haven't done the math on exactly what 1 percentage point load factor drop would translate into in terms of EBITDA at a future point but obviously, it all comes back to what I said earlier, which is that when you take the bigger picture of positives and negatives, we are not changing our EBITDA outlook and we continue to have strong visibility on that EBITDA growth. When it comes to the returns and we take it down by 50 basis points as I said earlier, it is not least driven by the fact that within that bucket of seven projects, you have a couple of very targeted negative impacts on the Changhua project and Revolution Wind, which is why that particular target is adjusted, which is also one of the reasons why we came out yesterday and you can rightfully say it is a lot of fuss for a relatively marginal adjustment. I would leave that assessment to the market but when we put a target into the market as we did at the Capital Markets Day and we see it changing for one reason or the other, we feel it is incumbent upon us to come out and be forthright and transparent about it. And then we leave it for the market to assess it. If you look at the declining interest rates, you are absolutely right. They have come down probably by a magnitude of 100 basis points since the Capital Markets Day so if we had been guiding on our spread between returns and cost of capital, we probably would not have changed anything so in that respect you are right, but that was not how we set the target back at the Capital Markets Day. In hindsight, maybe we should have but we didn't so that is why we now ...

Alberto Gandolfi

Would you allow me?

1.31.21

Henrik Poulsen

Yes please

Alberto Gandolfi

Forgive me, this is very clear. If you allow me to follow up, are you saying that the main reason for cutting the return is down to interest rates?

1.31.31

Henrik Poulsen

No, no-no. We are cutting the returns because the net impact of the positive and negative developments including the production forecast adjustment leads us to actually lower our return expectation for that portfolio of 7 projects.

1.31.46

Alberto Gandolfi

Okay so it is Taiwan and Revolution Wind but going forward, going forward besides these two projects you would say the impact on any other development are we right in saying in terms of spread really negligible?

1.32.02

Henrik Poulsen

When you look at the spreads and you take into account that interest rates have come down between the Capital Markets Day and today, the impact on the spread would be negligible, yes. That would be a fair conclusion.

Alberto Gandolfi

Thank you

Henrik Poulsen

When it comes to superior analytics, Alberto, I mean again it is too early for us to say exactly how this may impact the way we design future wind farms. That is going to be a key part of the effort as we move forward so whether we will actually move to a different layout, whether we will use different spacing between the positions, it all remains to be seen.

Alberto Gandolfi

Thank you so much.

Operator

Thank you and as there are no more questions registered I now hand back to our speakers for any closing comments.

1.32.57

Henrik Poulsen

Thank you so much everyone for joining. Thank you for a lot of very good questions and thank you for the interest in the company. Should you have any further questions, as always please reach out to our Investor Relations. Have a continued good day.