

Ørsted Investor Presentation

Q4 and Full-Year 2020 Transcription

Mads Nipper

Thank you very much, and good afternoon everyone, and welcome to the earnings call. As you know, I'm now five weeks into my new job and while I'm, of course, still on a very steep learning curve, I must say that I'm really excited to be part of the Ørsted family, which so far has fully lived up to my high expectations.

I've already had the opportunity to visit many parts of the organisation and everywhere I come, the Ørsted people have impressed me with their professionalism, expertise, and not least their deep passion for our vision of a world that runs entirely on green energy.

I also look forward to working with all of you. Our investors and analysts are among our most important stakeholders and I do look forward to hopefully soon being able to meet you in person. If you have not done so already, I would encourage you to watch my introductory video on our company webpage, where I talk a little bit about who I am as a person and leader and answer some of the questions we have received from our analyst community.

Now, let's turn to our annual reports. This is my first set of results for Ørsted and I'm very satisfied with our strategic progress and operational and financial results in 2020. Due to COVID-19, 2020 was an extremely challenging year on many fronts, but we were nevertheless able to maintain our leading position in a global high-growth market and we have continued to build a strong and financially-sustainable pipeline of renewable capacity.

I'm grateful for the support and professionalism of our customers and partners, as I'm keenly aware that only together we can create great things and live up to our high expectations. In 2020, we delivered financial results exceeding our expectations, which proves the resiliency of our business model and is a real testimony to the hard work and ingenuity of our frontline employees. They have been able to keep our assets operational and to make progress on our company's construction products with limited impact from the pandemic. None of these achievements would have been possible without our talented people who remain the most important assets of Ørsted and who have adapted very impressively to the challenges in the wake of the COVID-19 crisis.

Our Group EBITDA in 2020 came in at 18.1 billion DKK, an increase of 4% compared to 2019. Earnings from offshore and onshore wind farms in operation increased by 14% to 16.9 billion DKK, driven by ramp-up of our new offshore and onshore wind farms and higher wind speeds.

These positive developments were partly offset by adverse COVID-19 related impacts and lower earnings from trading related to hedging of our power exposures. Our return on capital employed for 2020 was 10%, in line with our target of an average Group ROCE of around 10% in the period 2019-25.

On the back of our strong financials, we will propose a dividend of 11.5 DKK per share to the annual general meeting, corresponding to an increase in dividends of 9.5% and in line with our dividend policy of increasing the annual dividend by a high single-digit percentage compared to the previous year's dividends up until 2025. In 2020, the Ørsted share yielded a total shareholder return of 82%.

Let me take you through some of the key accomplishments in 2020. In our Offshore business we signed the world's largest renewable energy corporate power purchase agreement with Taiwan-based TSMC for the

920-megawatt Greater Changhua 2b & 4 offshore wind farm, which TSMC will off-take the full output from the project.

We commissioned our first Dutch, and the world's second largest, offshore wind farm, the 752-megawatt Borssele 1 & 2 on time and budget. We've initiated a structured farm down process of Borssele 1 & 2 and expect to sign an agreement in the first half of 2021. We signed the agreement to farm down 50% of the Greater Changhua 1 offshore wind farm to CDPQ and Cathay PE.

In Japan and Poland, we have made good progress with our market entry strategies and have entered partnerships with leading local energy companies. Within our renewable hydrogen activities, we have also made significant progress and are currently involved in eight different projects across Europe.

In Onshore we commissioned the Sage Draw, Plum Creek and Willow Creek onshore wind farms in 2020 and we further strengthened our construction pipeline by taking final investment decision on two onshore wind farms and two solar farms. We are well on our way of achieving 5 gigawatts of onshore renewables by 2025, of which 3.4 gigawatts are already commissioned or currently under construction.

In Markets in Bioenergy, we divested our Danish power distribution, residential customer and City Light businesses as well as our LNG activities, which supports our strategic focus on renewable energy. And lastly, we commissioned our Renescence plant in the UK. We are still in a phase where we monitor the stability of operations and are working on the commercialisation of the technology.

Now moving on to slide four. In Q4 2020, we saw significant strategic progress across our business. We commissioned our Dutch wind farm, Borssele 1 & 2 which brings our total installed capacity in offshore to 7.6 gigawatts and shows we are well on track to meet our ambition of 15 gigawatts of offshore capacity by 2025.

We signed Europe's largest offshore wind corporate PPA with Amazon. For a ten-year period, Amazon will off take 250 megawatts from our 900-megawatt Borkum Riffgrund 3 offshore wind farm, which brings the total contracted share to 350 megawatts for the first ten years of operation. Borkum Riffgrund 3 is expected to reach final investment decision towards the end of 2021 and to be fully commissioned in 2025. With the CPPA agreement with Amazon, we have signed CPPAs for an accumulated capacity of 1.3 gigawatts over the past 12 months across our offshore wind portfolio.

In early December, we entered into an agreement to divest 25% of our 1.1-gigawatt Ocean Wind project in New Jersey to Public Service Enterprise Group (PSEG), and we expect to complete the divestment in the first half of 2021. And as already mentioned, just before the turn of the year, we signed an agreement to farm down 50% of our 605-megawatt Greater Changhua offshore wind farm in Taiwan to partner CDPQ and Cathay PE.

It is encouraging to once again see institutional investors playing an important role in the transition to renewable energy and low emission economies, and the transaction marks a milestone in successfully applying our partnership farm down model in Asia Pacific for the first time.

We continue to make headway into the renewable hydrogen market, now with eight projects and partnerships. We announced our Lingen Green Hydrogen Project with BP for a 50-megawatt electrolysis system in North West Germany to be operational in 2024, and the project will be powered by one of our

North Sea offshore wind farms. We also have made progress with our Green Fuels for Denmark partnership to develop a 100% hydrogen powered ferry.

Finally, we announced our Fuel Cells and Hydrogen Joint Undertaking with ITM Power, Siemens Gamesa Renewable Energy and Element Energy to test a megawatt scale fully marinized electrolyser to start in 2021 and run through 2024. We are well positioned within green hydrogen to capture part of the ambitious government targets such as the EU's 40 gigawatt by 2030.

We see our efforts in pilot projects forming the foundation for a new growth platform, tapping into the need of transforming hard to abate sectors like heavy transportation, steel production and fertiliser production, backed by ambitious policy targets.

Within Onshore we took final investment decision on Old 300, a 430-megawatt solar PV project located near Houston. Old 300 is expected to be commissioned in Q2 2022 and the project will contribute to technological diversity in our business mix.

In November, we successfully secured nominal 15 billion new Taiwan dollar of debt financing through the issuance of unsecured green senior bonds in Taiwan. Our second green bond transaction in the Taiwanese market demonstrates Ørsted's deep-ended collaboration with local financial institutions in creating an active green bond market, and commitment to the long-term development of offshore wind in Taiwan.

In Q4, we received an administrative decision from the Danish Tax Agency, requiring Danish taxation of our British onshore wind farms, Walney Extension and Hornsea 1 in 2015 and '16. We strongly disagree with the decision, which in our view is based on a misconception of the risks and value creation in our business model, and we have appealed the decision to the Danish National Tax Tribunal.

Furthermore, we have taken steps to ensure that the Danish and UK tax authorities initiate negotiations to avoid Ørsted being subject to double taxation and if necessary, by referring the case to an independent arbitration panel. We expect the process to take around two to four years depending on the negotiations between the Danish and UK tax authorities. As for where we stand today, we were recently granted the deferral of the 5.1 billion DKK claim and we continue to believe that we have a very strong case.

For the second year in a row, Ørsted has received the prestigious A score for tackling climate change and is therefore once again recognised on CDP's A list. We are of course very proud to be recognised for our significant reduction of our carbon emissions and our transparent disclosure of our climate impacts.

We are also delighted that the Corporate Knights have named Ørsted the most sustainable energy company and second most sustainable company across all sectors in the 2021 Index of the Global 100 Most Sustainable Corporations in the world. The continued high ranking reflects both our determination in driving a sustainable and profitable business and our commitment to be a catalyst for the global green energy transformation.

It's very important for us to attract, develop and retain the best talent, and we strongly believe in the value of a diverse workforce and we aspire to create an environment where everyone can thrive, perform and grow. Therefore, I'm pleased to see that our 2020 employee satisfaction survey showed a record high satisfaction and motivation score of 78 out of 100, placing Ørsted in the top 10% of external benchmarks in our main markets.

Lastly, let me briefly add a few comments to our newly announced organisational structure. The change will entail moving from a business unit structure to a more functional structure, where the commercially focused functions from the current business units – Offshore and Markets and Bioenergy – will be brought together under the leadership of Martin Neubert, who will become Chief Commercial Officer, Deputy CEO, and member of the Executive Board.

The operationally focussed function will be brought together under a new Chief Operating Officer, as Anders Lindberg has decided to take on the role of CEO for a Swedish company in the rail industry. The new COO will be reporting to me, and as we are well advanced in the recruitment process, we hope to be able to make an announcement soon.

As a consequence of the new corporate structure, Morten Buchgreitz has decided to leave the company. Both Anders and Morten have done a tremendous job during their tenure at Ørsted, and we owe them great gratitude. Onshore will remain a separate business unit. The onshore business differs from the rest of Ørsted when it comes to technological maturity and business model, and we believe that Onshore would be best positioned to realise its full potential as a separate business unit.

We are making these changes in our organisation to establish an even stronger customer and market focus, to further strengthen the focus on EPC and operations and to support the scaling of our organisation as we continue our strong growth trajectory in the years to come.

Externally, we will continue to report Offshore and Onshore financials as we do today. This means that offshore will continue to include our hydrogen activities, while bioenergy, our legacy gas activities, and Renaissance will be reported in a separate segment called Bioenergy and Other.

Turning to slide five, where I'll give a short update on some of our construction projects. At both our offshore wind construction projects, Hornsea 2 and Greater Changhua 1 & 2a, the construction work continues according to schedule. At Hornsea 2, onshore and offshore construction work is ongoing and 38 out of 165 foundations are installed at sea. Once commissioned, Hornsea 2 will be the world's largest offshore wind farm. Similarly, the onshore and offshore construction work is ongoing at our Greater Changhua 1 & 2a project.

We continue to see good progress on our construction projects in onshore business and at Permian Energy Centre we have produced first power, while at Muscle Shoals, the substation and piles are being installed. Finally, the turbine delivery at Western Trail has commenced.

Let's move on to slide six and an update on upcoming auctions and market developments. Last quarter we shared our expectations that we could see global awards of offshore wind capacity up to 30 gigawatts over the coming 15 months with 2021 auction awards reaching a new all-time high.

Starting out in the US, New York had its second RFP in Q4 2020 and awarded the winner in January. While we are disappointed that we were not selected, we are nevertheless pleased that New York has taken yet another critical step in meeting its ambitious clean energy goals and towards the promise of realising a more sustainable future for all New Yorkers. We will continue to evaluate future opportunities and build on our existing commitment to the State and region and we look forward to delivering on our promise of jobs, economic investment, and cleaner air through our South Fork Wind and Sunrise Wind projects.

In New Jersey, the bid window has closed for the 2.4-gigawatt auction and we are now awaiting the award, which is expected to be announced in Q2 2021. New Jersey has become a key State in not just the US market, but the global market as well. When raising the State's offshore wind target to 7.5 gigawatts by 2035, New Jersey Governor, Phil Murphy, reiterated the ambition of making New Jersey a global leader in offshore wind development and deployment.

New Jersey is one of our strategic State partners and we've continued to demonstrate significant progress there, keeping our commitments with recent announcements of: the investment to enable the Paulsboro monopile manufacturing facility, the turbine supply agreement with GE, the completion of the 25% divestment of Ocean Wind to PSEG, and our recent establishment of the Pro New Jersey Trust. We continue to invest in New Jersey and are hopeful for a positive outcome of the current solicitation.

Maryland opened its second procurement window last year, and the results are expected to be announced in the second half of 2021. The remainder of the busy US auction calendar continues into 2021 and we expect additional auctions in Rhode Island, Massachusetts, Connecticut, Maryland, and potentially also New York.

Before moving on, I want to address some of the broader regulatory updates we have seen in the US. We have seen the ball starting to roll again in the Bureau of Ocean Energy Management with BOEM's publication of the draft environmental impact statement (EIS) for our South Fork wind farm and export cable project.

The draft EIS was published in January, a few days earlier than BOEM's deadline and as required by law, it analyses the impact of our proposed product as well as a range of alternatives. BOEM's published scheduled for final approval of South Fork's Construction and Operations Plan (COP) is January 2022, which will allow us to maintain our expected commissioning date of late 2023.

In another hopeful sign of movement, BOEM has recently given notice that they have started the internal federal interagency decision process for issuance of the Notice of Intent for our Ocean Wind project – the so-called Initial Action Notice (IAN). The interval between the Initial Action Notice and the Notice of Intent is typically two to three months. The Notice of Intent is a critical milestone and helps provide a sense of timing as it starts the two-year regulatory clock for BOEM's ultimate Construction and Operations approval.

More generally, we are optimistic that the incoming Biden Administration will support a timely, predictable and transparent permitting regime, and as discussed later, will prioritise the development of offshore wind as a cornerstone of the administration's climate strategy. However, until a new leadership at BOEM and the Department of Interior are firmly in place, we await further clarity on issuance of the NOIs for our remaining advanced-stage development projects.

While we applaud the progress made at South Fork and Ocean Wind, we continue to await resolution on whether BOEM will pursue the consensus development turbine layout in the North East of one by one nautical mile. While the Draft EIS for our South Fork project evaluates a range of alternative layout schemes, the identification of a preferred alternative – representing a consensus of the involved federal agencies – will likely await issuance of the South Fork Final EIS in October of 2021.

Moving on, the US also saw a bipartisan push to extend and expand renewable tax benefits. At year end, Congress extended qualification deadlines for all technologies, extending the Production Tax Credit for one

year for wind, the Investment Tax Credit for two years for large scale PV, and increasing the ITC for offshore wind back up to 30% for all projects starting construction 2017 to 2025.

Furthermore, the IRS expanded the Continuity Safe Harbour, known as the 'Build Window,' for offshore wind from four years to ten years. These changed tax benefits will further support the value creation for some of our already awarded offshore wind projects and reiterates the push for offshore wind as a political cornerstone in the continued renewable build out in the US.

For our Ocean Wind project, the benefit from the increased ITC will go to the ratepayers given the clawback mechanism in the off-take contract. We continue to view offshore wind as bipartisan given its numerous development and sea town revitalisation benefits. We also note that over the last four years, we saw tremendous steps forward as the US offshore wind industry took form.

As the Biden administration takes over, we only expect progress to accelerate, given the outspoken support to offshore wind by 2030, forthcoming COVID stimulus plan that might benefit the renewable industry, as well as likely increases in resources at BOEM. Now more than ever, we continue to see a solid long-term growth and value creation potential in the US offshore wind market.

Looking towards Asia Pacific, Japan opened its first auction in November 2020 for the Choshi, Noshiro, Yurihonjo North and Yurihonjo South promotion areas. The deadline for bid submission is at the end of May and awards are expected in Q4 2021. The auction comprises a capacity of 1.5 gigawatts and is an important first step for Japan to achieve its target of 10 gigawatt of offshore wind by 2030.

In South Korea, we started developing four floating lidars off the coast of Incheon and have progressed well in collecting all relevant data for securing the potential 1.6-gigawatt offshore wind sites. We believe that our projects in Incheon will support a thriving offshore wind industry in South Korea and contribute to the realisation of the government's target of 12-gigawatt offshore wind capacity by 2030.

Finally, in Taiwan we await further details for the next auction round, as well as the announcement of the next auction framework – and now expect the next auction in either the second half of 2021 or the first half of 2022. Our Greater Changhua 3 project of just under 600 megawatts has already secured its Environmental Impact Assessment, which is necessary to compete in future offshore wind rounds. Furthermore, new sites are being investigated.

Now moving on to the recent developments in Europe. At the end of 2020, our Hornsea 3 project was granted consent, demonstrating our ability to work closely with stakeholders when issues arise. In this case, we developed a robust evidence-based kittiwake compensation plan that focuses on the implementation of onshore artificial nesting structures. With a potential capacity of at least 2.4 gigawatts, Hornsea 3 is now eligible to participate in the UK's fourth CfD round, which is expected to open towards the end of 2021.

In January, Poland's Senate unanimously passed the Offshore Wind Act and subsequently the act was signed into law by President Duda. The act aims to award 10.9-gigawatt offshore wind by 2027. In the first phase, Poland's Energy Regulatory Office will directly award CfDs to 5.9 gigawatts of the most advanced projects by the end of June 2021. These advanced projects include the two projects totalling up to 2.5 gigawatts covered by our non-binding term sheet with PGE. We expect to finalise our binding agreement with PGE regarding the Baltica 2 and Baltica 3 offshore wind farms very soon. Poland's subsequent second phase will award 2.5 gigawatt of capacity in 2025 and 2027 through a competitive auction.

Most recently, Denmark announced the terms for the tender of Thor Wind Farm, which is one of three large Danish offshore wind farms expected to be commissioned by 2030. The 800 to 1000-megawatt opportunity will be located in the North Sea, 20 kilometres from shore and together with five other developers Ørsted has pre-qualified for the tender. The deadline for the initial and final tender run by the Danish Energy Agency will be March and November of 2021, with the final decision in December 2021. And in addition to these, we do expect tenders in the Netherlands, Germany and France during 2021.

And with this I'll now hand over the word to Marianne.

Marianne Wiinholt

Thank you, Mads, and good afternoon from me too. Let's start on slide seven, where I will go through the EBITDA for Q4 2020. We realised an EBITDA of 5 billion DKK, an increase of 0.4 billion compared to Q4 last year. It was mainly driven by ramp up from new offshore and onshore wind farms in operation and higher wind speeds.

In addition, the divested LNG activities contributed positively year over year as the provision in Q4 for 2019 was not repeated. In Offshore, the EBITDA for the quarter totalled 4.1 billion, an increase of 0.1 billion. The earnings from operating wind farms was 7% above last year, driven by the ramp up of Hornsea 1 and Borssele 1 & 2. This was partly offset by the adverse COVID-19 related impacts and lower earnings from trading related to hedging of our UK power exposure, which had higher earnings in Q4 2019.

Offshore power generation in Q4 increased 26% due to the ramp-up of generation from Hornsea 1 and Borssele 1 & 2. Availability was 94% – one percentage point above the availability in Q4 19. Wind speeds amounted to a portfolio average of 10.4 metres per second, which were higher than Q4 19, but slightly lower than normal wind speeds of 10.5 metres per second.

We saw adverse COVID-19 related impacts of approximately 120 million on our operational earnings, especially related to the UK power market, due to lower demand for electricity. Earnings from partnerships amounted to -0.1 billion and was mainly related to minor updates regarding finalising construction projects.

In Onshore, EBITDA almost doubled to 0.3 billion, primarily due to the ramp-up from Sage Draw, Plum Creek and Willow Creek. Wind speeds across the portfolio amounted to 8.0 metres per second, which was higher than the same period last year and a normal fourth quarter of 7.7 metres per second.

EBITDA in Markets and Bioenergy totalled 0.6 billion, 0.2 billion higher than Q4 19. The underlying earnings decreased 0.3 billion, driven by lower earnings in gas markets and infrastructure, relating to our gas portfolio where the net positive effect from revaluation of our gas at storage and storage hedges was higher in Q4 19 than Q4 2020.

In Q4 19, we had a provision of approximately 0.8 billion, following the agreement to divest our energy activities. Correspondingly, Q4 2020 EBITDA from LNG was zero. And finally, we had no earnings from distributions, B2C and City Light in Q4 2020 as a result of the divestment in August 2020.

If we then turn to slide eight, and our financial performance and net interest-bearing debt. Net profits totalled 2.2 billion. The increase was mainly due to higher EBITDA and impairment losses of 0.6 billion in Q4 19, primarily related to a write-down of our Renaissance plant in the UK. Free cash flow totalled a negative 3.4

billion in the quarter. Cash flow from operating activities came in at 6.8 billion and was driven by EBITDA and lower receivables.

Our gross investments for the quarter totalled 8.6 billion, primarily driven by investments related to Hornsea 2, Greater Changhua 1 & 2a, Permian Energy Centre, Muscle Shoals, Western Trail and Haystack. And the cash flow from divestments was a cash outflow of 1.5 billion and related mainly to the divestment of the LNG activities. Our net debt at the end of 2020 amounted to 12.3 billion. The increase in net debt during the quarter primarily reflected the negative free cash flow as just described above, in addition to our lease obligations, and hybrid coupons paid.

If we then turn to slide nine, which shows our financial and non-financial ratios. Our key credit metric, FFO to adjusted net debt, stood at 48% for the 12-month period ending December 2020. The metric was positively impacted by the higher funds from operations as well as the proceeds from the divestment of our Danish power distribution, residential customers and City Light businesses.

Return on capital deployed came in at 10% and the slight decline was due to higher average capital employed only partly offset by higher EBIT. Our greenhouse gas emission intensity continued to decline as a result of our continued buildout of offshore and onshore wind, and we remain well on track to meet our Scope 1 and 2 targets of less than 10 grammes CO₂ equivalent per kilowatt hour in 2025. Our target is to be carbon neutral in 2025 by neutralising any remaining minor emissions with carbon offset.

Turning to safety from 2019 to 2020, we saw a reduction of 27% in the number of injuries, and as a result the total recordable injury rate over the last year decreased from 4.9 in '19 to 3.6 in 2020, and thereby well below our 2020 target of 4.2. In 2025, our target is a rate of 2.9 or lower.

So, this concludes the Group financials for Q4 2020. And let's turn to slide ten and the outlook for 2021.

Our guidance for 2021 EBITDA, excluding new partnerships, is 15 to 16 billion. '21 will be an atypical year as we will not commission any new wind farms. We are currently building the world's largest offshore wind farm, Hornsea 2 in the UK, and Changhua 1 & 2a in Taiwan.

But these wind farms will not be completed until 2022. This means that 2021 will not include any production from these two wind farms, while we will have the costs of making them ready for operation.

2020 was also a very strong wind year, which increased our 2020 production and we do not assume this to be repeated in 2021. As in previous years, our EBITDA guidance does not include earnings from new partnership agreements as it is difficult to predict the exact timing of potential farm downs as well as the distribution of income between years if the partnership includes a construction agreement.

In terms of new partnerships in 2021, we expect to close the 50% farm down of Greater Changhua 1 following the agreement announced in December 2020. Furthermore, we plan to farm down 50% share of Borssele 1 & 2 around summer. And finally, we will explore the possibility of a farm down of our solar PV portfolio, following the commissioning of Muscle Shoals in Q3.

While we have not included any gains from the farm downs in our guidance, we have assumed a derived reduction inside the earnings. We had no earnings from new partnerships in 2020 while EBITDA from existing partnerships amounted to 1.6 billion. In 2021, EBITDA from existing partnerships is expected to be

close to zero. In 2020, we divested our Danish power distribution, B2C and City Light businesses, and these contributed with 0.9 billion in our EBITDA for 2020.

These effects bring the comparable 2020 EBITDA for the Group to approximately 15.5 billion, meaning our 2021 operational EBITDA guidance is in line with 2020. We expect that earnings will be lower in 2021 compared to 2020 for both Offshore and Markets and Bioenergy, while we expect earnings to be higher for Onshore. And finally, we point out that 2021 guidance includes a 1.1 IFRS 9 one-time positive impact as we cease to report on business performance principles from 2021 and onwards.

It is important for me to reiterate that we are well on track to achieve our overall EBITDA CAGR, of around 20% between 2017 to 2023, targeting an EBITDA of 25 to 26 billion of operational earnings in Offshore and Onshore by '23. We do expect to see an EBITDA pick-up in 2022 with a full-year effect in 2023 from two offshore projects coming online. The two projects are of course Hornsea 2, Greater Changhua 1 & 2a, and then we will also see contribution from the continuous buildout within Onshore.

Finally, gross investments for 2021 are expected to amount to 32 to 34 billion. This outlook reflects a high level of activity in offshore related to Hornsea 2, Greater Changhua 1 & 2a and our US activities in offshore and our onshore activities covering Western Trail, Haystack, Permian Energy Centre and Old 300.

In addition to gross investments, significant funds are temporarily tied up in the construction of the transmission of assets for offshore wind farms in the UK and offshore wind farms for our partners. These funds are part of our operating cash flow. At the end of 2020, these funds tied up were amounting to 9.8 billion.

During first half of 2021, we expect to divest the Hornsea 1 offshore transmission assets, but we still expect to see a higher level of funds tied up in working progress in 2021 as a result of the continued construction of the transmission assets at Hornsea 2. We expect to divest the Hornsea 2 offshore transmission assets in 2023.

If we then turn to page 11, covering a more detailed outlook for our business units. Earnings in Offshore, excluding new partnership agreements, are expected to be lower than in 2020. Earnings are also expected to be lower than 2020 adjusted for the net effect of the non-repetition of earnings from existing partnerships in 2020 of 1.6 billion and the positive effect of 1.1 billion, related to ceasing the report according to the business performance principle in 2021.

We do not expect any further adverse COVID-19 related impact on earnings relative to 2020.

The positive impact on operational earnings – driven by the last 400 megawatts of Hornsea 1 receiving CFDs from April and full year effects from Borssele 1 & 2, net of the reduction inside earnings from the assumed farm down – will be more than offset by a number of adverse effects.

In 2020, earnings on sites were positively affected by the high wind speeds, as I mentioned, where the year ended at 9.7 metres per second above a normal level of 9.3 metres per second and above our expectations for 2021 of also 9.3 metres a second. The newest tariffs are expected to increase following the divestment of the offshore transmission assets at Walney Extension in mid-2020 and Hornsea 1 expectedly in H1 2021. Earnings from Horns Rev 2 will decrease as the subsidy period ended in October 2020.

And we are in the construction phase of the two large wind farms: Hornsea 2 and Greater Changhua, both of which are expected to be commissioned in 2022, as I mentioned. But we will in 2021 incur OpEx while we are preparing for their operations, and we do not expect any ramp-up generation for these wind farms.

Expensed project development costs amounted to 1.7 billion in 2020. For 2021, we expect expense to product development costs will amount to approximately 2 billion as a natural consequence of our continued expansion of our footprint.

Earnings from onshore wind and solar farms in operation are expected to increase from the ramp-up of generation at the Sage Draw, Plum Creek and Willow Creek, which were commissioned during 2020 and due to expected commissioning of the new wind farms – Western Trail and Haystack – and solar wind farms – Permian Energy Centres and Muscle Shoals in 2021; the latter being net of assumed reduction inside earnings from the possible farm down of our solar PV portfolio. The increased operational earnings will be partly offset by higher costs related to the strategic expansion of the business and an adverse year on year impact from recognition of derivatives.

Finally, our directional guidance for Markets and Bioenergy for 2021 is without the divested Danish power distribution, B2C and City Light businesses which contributed the 0.9 billion to our EBITDA in 2020.

Earnings in the gas markets and infrastructure are expected to be lower than 2020, mainly because the positive effects from revaluation of gas at storage costs by increasing gas prices, especially during Q4 2020, is expected to partly reverse in 2021. Earnings from our CHP plants are expected to be in line with 2020.

Then to slide 12, where we recap our 2021 EBITDA and gross investment guidance, as well as our long-term financial estimates and policies. We are well on track on our capital investment programme and we remain very comfortable with our long-term financial targets.

And on a final note, we will be hosting our Capital Markets Day on the 2nd of June 2021 and depending on the circumstances we are looking forward to seeing you at our office in Gentofte or virtually. We will share detailed information for the day at a later point in time. Until then, please save the date.

And with that, we will open up for questions. Operator, please.

Operator

Thank you. This concludes our presentation, and we are now happy to answer your questions. Please respect only one question per participant and then you can go back to the queue for a second question. If you do wish to ask a question, please press 01 on your telephone keypad now. If you wish to withdraw your question, you may do so by pressing 02 to cancel. So that is 01 to register for a question.

Our first question comes from the line of Peter Bisztyga from Bank of America Securities. Please go ahead.

Peter Bisztyga

Yeah, good afternoon and thank you for taking my questions. So, this one is directed at Mads. Your very helpful introductory video mentions that you see competition as one of the biggest challenges Ørsted faces. So, I'd be interested to hear what the reaction of your team was to the auction results in New York, where Equinor walked away with all of the capacity. I was wondering; were they surprised? Do you have any insight at this stage into why Equinor was so successful? And is there any reason to believe that the dynamics in New Jersey could be different to the to the New York auction?

Mads Nipper

Thanks a lot, Peter. A highly relevant question. I mean, obviously the initial reaction from an ambitious team is always to be disappointed, which I guess we all share, but overall I think it's too early to say anything about the details of why we were not successful and why Equinor managed to walk away with everything. We will of course be analysing that as we always do; both the wins and the losses we have in our auctions. But at this stage it will be another few months before we will have the insight to the prices and any other things that were sort of determining why they won it and we didn't.

We are, of course, very eager to lean into, as we've already done, to the New Jersey auction, and I think we are confident because we believe that then our local content offer in that auction is very attractive. But again, I cannot say specifics about the dynamics, what would be different, because every auction actually has sort of their own dynamic. But it is something that we will be following up on as we get more insight into the offer that meant that Equinor won this.

Peter Bisztyga

Okay, thanks very much.

Operator

Our next question comes from the line of Sam Arie from UBS. Please go ahead.

Sam Arie

Hi. Good afternoon everybody and welcome Mads. Let me just wish you every success in the new role. Obviously, you got an amazing team around you and we are delighted to have the first Q&A with you today. I think the question I was going to ask you very similar to Peter's, but perhaps if you don't mind, I could just build on it a little further. I think I'm right in saying that the company has not been able to win a new offshore

project now since end of 2019? And the oil majors have been a big part of that reason. And when I listen to what they're saying about returns, I hear some of them talking about equity IRRs in the range sort of 6 to 12%. And at the low end of that range, that's implying project returns in the low single digits. And my general question is what's your set view of an equity return of 6% and does that compensate the risk in an offshore project in your view or not?

And I think a kind of related topic here which perhaps you could comment on as well is, you've got an amazing infrastructure at Ørsted to develop offshore wind farms. If you had a slowdown in the pipeline at some point, I suppose there's a risk that you're going to have capacity and teams that you can't keep busy. Does there come a point when it's worth your while to sort of bid projects that break even just to keep everybody busy, keep the supply chain moving forward and sort of still be in the game maybe in a later phase in the market when returns might be more attractive? I'd love to hear your comments on that theme. Thank you.

Mads Nipper

Yeah thanks. Thanks a lot, Sam also for your congratulations. I can certainly confirm that the team is super strong. I'll refrain from talking specifically about the returns, but I think it is – I'll just reiterate that for us – it really is important to continue to be financially disciplined while still being very ambitious in terms of pursuing the auctions. So, we're not going to go into a situation where we will go in to win auctions at no returns because we believe it is a slippery road, and it is also one that is not right for the global leader to go into.

We are not concerned with a market that over the next decade will grow to an estimated six-to-seven times the current size. We are not concerned that we're going to sit with that with an idle organisation on EPC operations. On the contrary. We do, despite – like you say – despite that there will be auctions that we will lose and we have not seen the last lost auction in the next many years still, but we remain confident that we can be competitive while staying financially disciplined and if I take the optimistic glasses on, I still believe that looking into the future we're going to have potentially more challenges ramping up rather than ramping down or keeping our organisation busy. So, let that be my comment to the question at this stage.

Sam Arie

Yeah, really helpful thank you so much and best wishes and good luck again.

Operator

Our next question comes from the line of Kristian Johansen from Danske Bank. Please go ahead.

Kristian Johansen

Yes, thank you and welcome to you, Mads, as well. So, my question is on farm downs and whether you can elaborate a bit on your considerations on a few of your projects. First of all, why are you considering to farm down your PV portfolio? Secondly, on the Ocean Wind project you have now divested 25%; are you considering to divest more? And in terms of the Changhua project, are you in negotiations to farm down the 2a project as well? And lastly, just on Hornsea 2, whether you would consider a farm down here as well.

Marianne Wiinholt

Yes, I will answer that one, Kristian. Thanks for the question. Yes, we are in a way considering to continue to farm down and the ones you are mentioning are exactly the ones we are considering. You can say that we look at farm downs as a flexibility we have in our capital structure. So, if, in a way we win more, we would probably consider doing more farm downs. If we see that we will have a period where we don't need to do it, we have the chance to hold back.

But with the growth we are looking into, and what Mads alluded to before in a way, we foresee that we will probably also farm down Hornsea 2 and probably also the 25 last percentages of Ocean Wind, but it is too early to say. We have not launched the processes. On the Changhua, we will not farm down 2a as a separate project. The regulatory set up in Taiwan means that in a way we probably need to do a farm down when we also have built 2b. So, that's how we look at that.

And then you also asked a question around the solar portfolio. We think actually it is a good thing that we go out and get an external market test of the valuation of our assets. And this – we take the opportunity. We see there is a great demand for these solar assets and we think it's a good and healthy thing for us to go out there and get a market test.

Kristian Johansen

So, just to follow up. So, the assessment of the solar PV portfolio is more reflective of you seeing an opportunity for value creation than it is a risk mitigation?

Marianne Wiinholt

Yes, that's how we look at it. And then of course also with all the opportunities we see within onshore in a way to have a recycling model also for onshore is something that we could also see us using more into the future.

Kristian Johansen

Understood, thank you very much.

Operator

Our next question comes from the line of Deepa Venkateswaran from Bernstein. Please go ahead.

Deepa Venkateswaran

Thank you. Mads, welcome from my side as well. Although I think my question today is going to be for Marianne. So, Marianne, on the accounting change, could you just help understand whether this creates any volatility in the income statement? So, looking back the last few years there's been a swing of 1.5 billion for the last two years, either directions, and so do you foresee something like that in the future? And how do you take that into account for your guidance? Because you clearly will not necessarily know where the commodities will land at the end of the year. So, how do you factor that? And as for '21, what are your assumptions on the mark to market volatility? Thank you.

Marianne Wiinholt

A good question, Deepa. We do not foresee more volatility than we today have in our business performance results. You can say that it's – perhaps we have been a bit lazy in documentation of our hedging because it requires lots of work under the old IFRS 39 to see these transactions as hedging and therefore, in a way to simplify our internal processes, we established these business performance principles.

Now, with IFRS 9, it is not as cumbersome as it was before, so therefore we will do proper hedge accounting and therefore we will not have volatility in the IFRS numbers. So, it will be exactly as today with the business performance numbers.

Deepa Venkateswaran

Just to follow up on that. Also, the 1.1 billion benefit in '21. I see that there should be an impact in '22 and '23. Can you quantify what those numbers are?

Marianne Wiinholt

You can actually see it in our annual report. Just a second, I'll find the page. It is on page 91 in our annual report. There you can see exactly '21, '22, '23.

Deepa Venkateswaran

Okay, thank you.

Operator

Our next question comes from the line of Alberto Gandolfi from Goldman Sachs. Please go ahead.

Alberto Gandolfi

Good afternoon, thanks for taking my question, and welcome Mads. The question is for you actually. I'm sure you have been reviewing internal processes and protocols. It was pretty clear that you're very structured in the way you think from the video you sent out and I was wondering have you noticed in your quest so far, what tweaks, what adjustments could you do to your approach to bidding into the auctions in offshore to maximise your market share whilst keeping a good return?

And I guess that if you can answer as part of that specifically, maybe looking at the 25 gigawatts that are yet to be auctioned in 2021, what would you think is maybe an average outcome for Ørsted or a good outcome? Or maybe a bad outcome? Should we think of you as being 10/15% of the global offshore market from here to 2030? Or should we think of you as being maybe more like 5/6%? Can you help us a little bit navigate the way you're thinking about the global industry and how you fit in it? Thank you.

Mads Nipper

Yes, thank you. Thank you very much, Alberto. I think it's too early for me to say exactly what would be the tweaks that we would need to do again here because the dynamics of every auction are typically different

with a different criteria being weighed in, so I think it simply has to be from auction to auction that we need to just be as competitive as we possibly can.

I would say that we are not very specific saying what does success or failure look like with a record high auction in coming to market in 2021 here. Well, surely, I mean we will be bidding in most – and we will lose some of them, no doubt, but it is obvious that we do want to win but I can't be very specific in saying this is the number of gigawatts that we will only be content with as we go forward.

And if I look forward towards 2030, Alberto, then I think for us, with the incredible growth and also the realistically very intensified competition, we don't have a very specific market share that we absolutely need to hold onto, but it is important for us in this timeframe to stay the global leader, not just in size but also in capability throughout the decade because we do have a clear global leadership position now and that is important for us to stay in that position, even though realistically, probably the share of market will go down.

But I have no doubt that – I'm sure you've all picked that up as well – that local content, local job creation will continue to be more and more important and we do believe that this is an area where we have a deep capability. We have a strong partnership structure that that can make us leverage that even stronger in the upcoming auctions. So, that would be a few perspectives on it. And sorry for not being super tangible or specific on your specific requests.

Alberto Gandolfi

No, that's great. Thank you so much.

Operator

Our next question comes from the from the line of Diana Lucaci from Morgan Stanley. Please go ahead.

Diana Lucaci

Hi there and thank you for taking my question. I was wondering if you could please elaborate a little bit more on the recent restructuring. Why did you deem it to be necessary and in what way are the new business units better positioned for tapping into future growth versus the previous set up which so far has worked very well? And additionally, can you confirm what changes, if any, there will be to financial reporting? Thank you.

Mads Nipper

Absolutely, yes, thank you. Thank you very much. A highly, highly relevant question because it's very, very important to change organisations because you are bored and think that that now a change is necessary. I fully agree that the current structure has served us incredibly well and the focus on the individual businesses has driven a high degree of focus. What we do see is that the customer landscape, not least in terms of CPPAs, is changing quite rapidly, and we expect that that will probably continue to accelerate and we do believe that by leveraging and pooling the resources that are market customer and commercially focuses from the Markets and Bioenergy and the Offshore businesses, that we will create even stronger focus on delivering sort of more holistic offerings to our customers.

And we do believe that we will also have the opportunity to leverage the cross-functional resources that were previously split in three different business units much stronger now so that we essentially have greater incentives internally in how we collaborate. And then I will mention that the gathering of the operationally focused areas, both in terms of operations and maintenance, EPC, but also the Danish CHPs combined heat and power plants. By pooling those resources, we will also get synergies that we believe firmly will accelerate our ability and our reliability of how we operate and construct our assets.

So, it is essential to us, we believe that the pooling of resources and the combined customer focus will simply mean that we can scale our organisation globally, faster and there we believe it's better than to stay in three distinct business units.

Marianne Wiinholt

And on the accounting. On the segment reporting, we will actually not see any changes because since 2019 we have reported the trading – power trading results and power optimisation results – in Onshore and Offshore respectively. So, those will continue unchanged and then we will no longer call it 'Markets and Bioenergy'. We will call it 'Bioenergy and Others'. And there we will include our biomass, CHP portfolio and also our gas activities. So, no changes to external reporting.

Operator

The next question comes from the line of John Musk from RBC. Please go ahead, your line is open.

John Musk

Yes, good afternoon everyone and welcome Mads, from me as well. A bit of a big picture question from me, I guess. The focus obviously at Ørsted, certainly from an investor perspective, always seems to be around future growth and the opportunities that you have between now and 2030 or 2050 or whatever time frame we want to put on it. But in your role, how do you balance looking at the opportunities that you have in the future, whilst also not taking your eye off the ball in terms of day to day operations. Is that a challenge that you you've found difficult since you started? And maybe the new corporate structure we've just been talking about has been introduced in some way to help with that.

Mads Nipper

Yeah, thanks a lot, John. It's a highly, highly relevant question because I think it is for a company that is looking into such an exponentially growing market with new opportunities, new markets, new technologies coming along – it is really important to stay long-term focused in our strategic outlook and how we proactively prepare for what is it that needs to be true. What are the core capabilities that are going to be vital for us in the future.

But at the same time – and 2020 was probably the best possible year to exemplify that – we just need to be incredibly focused on the day to day execution. So, really staying sharp in the auctions, staying incredibly disciplined in how we stay on schedule, on cost, in our major projects is something we simply cannot take our eye off the ball. So, it a classic sort of leadership both and situation where we need to uphold a very long term strategic outlook and systematically build capabilities ahead of the curve because this has – and I can say that because I can't take any credit for it – but the way that Ørsted has had the courage and

capabilities to shape not least the offshore market, is something where we need to simply uphold the same courage and foresight in what it takes to shape the future markets on renewable energy as well.

But really, it has to be balanced with very strong day to day management. And to your point, the focus of Martin's new team on commercial to stay razor sharp on winning our customers and our auctions and at the same time have an organisation whose incredibly disciplined in also executing is something that we believe will enable that to an even greater extent. That's a few perspectives on it, John.

John Musk

That's great, thank you.

Operator

Our next question comes from the line of Casper Blom from ABG Sundal Collier. Please go ahead.

Casper Blom

Thanks, a lot, and nice to meet you, Mads, if you can say that on the phone. I just want to follow up a little bit on some of the previous questions regarding an increased competition and oil majors, et cetera. You touch a little bit upon it in your answer to one question where you mentioned local content, but if you look five years into the future and some of these oil majors have won more projects and then they gain some experience, what is sort of the key to maintaining the leadership of Ørsted and how do you plan to remain the best in the world to build these offshore wind farms? Because I guess the other ones will catch on as well. So can you talk more about sort of the plan on how to maintain the leadership?

Mads Nipper

Yeah, unfortunately I cannot be super specific five weeks into my job, obviously, but I think you're pointing to an absolute key point because if we stand still and just keep up the good work that we've done up until now we are going to be like a sitting duck that everybody would just catch in on. So, for us it is vital to ensure to continue to innovate, to continue to move the bar on how we both win the auctions, but also effectuate the auctions or build the projects and continue to also lower the LCOE and create other benefits that are vital to win.

We are going to have a structured process towards our Capital Markets Day where we will also sort of firm that up and can share more perspectives on that. Not the full thing because some of that would be classified obviously. But we will be working on that because your point is something absolutely vital and we need to stay innovative and courageous in order to be the one to shape the market. Otherwise, we will be caught up with, and then the worst case, the market will essentially be commoditised.

Casper Blom

Well, that sounds interesting. I'll look forward to that explanation in June then. Thanks a lot.

Operator

Our next question comes from the line of Ahmed Farman from Jeffries. Please go ahead, your line is open.

Ahmed Farman

Yeah, good afternoon and welcome from my side to Mads as well. I just wanted to follow up on the comments you made about the Danish tax issue. I just wanted to ask if there are any other jurisdictions within your portfolio where you are concerned about a similar tax issue. Any other sort of specific negative regulatory development. Just to have your thoughts on that would be helpful. Thank you.

Marianne Wiinholt

Yes, I'll give my perspective on that. Thanks for the question. What we have been seeing is that the Danish tax authorities have a view that, like in a way for a pharmaceutical company, all the intelligence, you can say, around the product development has been located in Denmark and that all the value of the project is created in this project development phase.

We really believe that that's a complete misunderstanding of the value creation throughout the value chain within offshore wind, and we also disagree that the brain power, you can say, has only been sitting in Denmark. Quite the contrary, we have actually – for the projects that have been questioned – we have had approximately 50/50 sitting in the UK and 50 in Denmark. So, therefore we strongly disagree with their view. And now it is going through EU arbitration or first negotiations between UK and Denmark. And if they don't agree, it will go to arbitration.

They will also, in a way, look at our other projects, the German projects, and also the other subsequent UK project which is Race Bank but they will not, in a way, decide anything before we have the verdict in a way from the map project – that process that we are currently running. We have taken a view on this and we believe that in a way it is a limited risk for us. And that's also why in a way you will not see a big provisions in our books because if we really believed that we had a weak case, we would of course be forced to take a big provision in the books which we have not done. I hope that answers your question.

Ahmed Farman

Yes, thank you.

Operator

Our next question comes from the line of Lawson Steele from Berenberg. Please go ahead.

Lawson Steele

Yeah, hi everybody, and welcome to the madhouse, Mads. So, I think what I would really like to understand a bit is what I think is important; is to understand how Ørsted can cope with growth. Because if you look at any of the estimates as we all know the market's going to go ballistic whether it's offshore or onshore, wind or solar. So, I'm interested to know aside from finances, because obviously, you can farm down, what – how do you think Ørsted – or what challenges you think Ørsted is going to face on the personnel front and maybe on the supply chain and if you could spit it a little bit between offshore and onshore, that be interesting as well. Thank you.

Mads Nipper

I can certainly share some perspectives and invite Marianne to do that as well. I think the key to any scalability is around the organisation and the talent of the organisation to work really systematically with the core capabilities that we just need to ensure that we, at any given time, are world class on, and that we ensure that we do not only attract but that we really retain and train and motivate our people worldwide.

This also has to do with the with a globalisation, where even though we have very, very deep competencies and capabilities sitting in Denmark, it's really important for us to also over the years distribute those capabilities into our key geographies through sort of a deliberate globalisation process, which we will also be laying out in the coming time.

In terms of supply chain. I mean the strategic partnerships we have with many of our key OEMs and partners – this is really important to continue to build because it's not only us that needs scalability, it is the entire partner network and that also includes our ability to build relations with local partners because again, many governments will surely be looking for local content and that means that both the partnering up and the capability building with local partners will be a critical thing for us to be able to scale in any key market where we both are, but also where we may enter in the coming years.

But, Marianne, any additional perspectives from your side?

Marianne Wiinholt

No, just a perspective on the first thing you said. If you go back a couple of years back, we were probably more concerned about the scalability when it came to our own organisation – the EPC organisation in particular. I think our model has proven to be very scalable and we have seen now establishing big teams in the US, in Taiwan, and we will also establish a team in more jurisdictions going forward, that we are able in a way to split the teams. If we have a big project, we typically split the teams and then they go to other projects. So, we have less concern now actually than we just had a couple of years ago in that respect. And we also see that we have a very, very low churn in offshore and we are able to attract really competent people.

Lawson Steele

Okay, thank you.

Operator

Our next question comes from the line of Mark Freshney from Credit Suisse. Please go ahead.

Mark Freshney

Hello, good afternoon. Thank you for taking my question. It seems like a lot of the focus is on the extreme competition for new tenders, and I think in your video of last month, Mads, you alluded to that. You can see now the value in you guys having bought the US onshore platform, Lincoln Clean Energy, 2.5 years ago. One of the things outlined by your predecessor was a similar kind of platform, an onshore platform in

Europe. Is that still a possibility and a way you could diversify away from a downward spiral or unconstructive returns on new offshore tenders?

Mads Nipper

Yeah, thanks a lot, Mark. It is certainly still very much on the agenda and we believe that the onshore business holds substantial value creation potential. And by the way is also something that is absolutely needed to uphold the speed of the green transformation and our contributions to that.

We don't see it in a way – I mean, of course there is a diversification element in that, but obviously this should not make us take the foot off the pedal in terms of keeping our offshore business incredibly competitive, because even with a very high and over-proportional growth in onshore, it is still vitally important for us that the onshore business, as today by far the biggest business we have, stays hugely competitive. But you're right, further geographic expansion and the first goal into Europe, continued acceleration of our investments in the US, but also exploring platforms in Asia Pacific on onshore is still very much on the agenda, but it needs to be a parallel track to ensuring that we really stay super sharp in the intensifying competition on offshore. But it is of value and we are happy that the onshore is something where we see huge growth potential as well.

Mark Freshney

Thank you very much. Thank you, Mads.

Operator

Our next question comes from the line of Elchin Mammadov from Bloomberg Intelligence. Please go ahead.

Elchin Mammadov

Hi, everyone. Everyone has talked about a lot to do with the competition and whatnot. I wanted to focus a bit more on permitting. Do you think it's a major issue? Because we've seen some problems like Vineyard Wind is still having some issues. You've had some delays with, I think, Hornsea 3 permitting. Do you see permitting as a big problem, or is it just with a few selected geographies that it could be an issue? So, I would appreciate your answer. Thank you.

Mads Nipper

Absolutely. Permitting is going to be increasingly important for us and the stakeholder management, the focus on different stakeholder groups, biodiversity and so on will probably only be more important. And we are actually quite happy with the way, as briefly mentioned in the initial sort of run through, that our ability to really engage with stakeholders in Hornsea 3 to target a deal, in this case with the Kittiwake issue, and construct a dialogue and find a solution that makes us mitigate that. And ending up with a consent.

That, to us, is a really good example. Something that takes time and effort, but it worked really well. And similarly, in the US, the permitting processes have been challenging in the last period, but we are seeing early signs that make us more optimistic now in the US permitting process from BOEM due to – I mean, we

do see our South Fork permitting moving ahead. We have gotten the Initial Action Notice from our Ocean Wind 1, which could be sort of a good sign that the Notice of Intent is slowly starting to move ahead.

So even though it is for us too early to say what would that mean for our more specific updated planning, we will say that we think that the signs from the US are positive, but in general we do have great respect for and are also building capability to engage even more in the permitting processes to ensure that they stay effective. And then, as mentioned specifically on the US, which has been a pain point, we believe that there is reason to be more optimistic due to the resources and leadership change in BOEM.

Elchin Mammadov

I'm glad to hear that. Thank you.

Operator

Our next question comes from the line of Vincent Ayril from JPMorgan. Please go ahead.

Vincent Ayril

Yes, good afternoon. So, obviously most of the questions regarding competition at the moment in the States. The question that I have is on the next step. If at the moment we are looking at the US opportunity, you are starting, and some other players like Iberdrola, to do partnerships more and more in Asia, in Japan, we could see that. So, I would be interested to get your views on the potential we can find in Asia, starting with Japan and basically when will it become potentially material enough to become the key focus for Ørsted?

Mads Nipper

Yeah, Asia Pacific is surely a really important market for us, and I think the partnership – we made the joint venture with TEPCO is a good example of where we partner up with somebody who has a deep local routing and capability. And then we can come along and bring our deep and profound experience and knowledge into the, in this case, the offshore market. So, we believe that partnerships will be really, really important. And as mentioned with TEPCO, that is the first of potentially more partnerships to come in the Asia Pacific region.

But no doubt that Asia Pacific holds huge growth potential. Now Taiwan is obviously the furthest ahead. Japan next and then also our focus on Korea is also something that can turn out to be very promising. And in these cases, in such new markets, partnerships are certainly more than viable. They are in many cases necessary and attractive for us to do.

But Marianne, I don't know if you have any further comments to that?

Marianne Wiinholt

No, I fully agree.

Operator

Next question comes from the line of Vincy Bu from UPS. Please go ahead.

Vincy Bu

Hi, Mads and hi, Marianne. Good morning and thank you for the presentation. My question is for Marianne today. You mentioned – you reconfirmed earlier that the wind site EBITDA guidance for 2023 at around 25 to 26 billion DKK, which is very helpful, but that would also imply about 10 billion DKK growth from the wind site. Can you just break that down for us by the wind farms that are coming online? So, we have Hornsea 2, Changhua and a few onshore projects. Are there any others they are contributing to the target, and whether you're assuming Hornsea 2 and the second Changhua wind farm at 100% or 50% in 2023? Thank you.

Marianne Wiinholt

Yes, you are right. It is Hornsea 2 and Greater Changhua and then it is also Borssele, of course, contributing with full year EBITDA. And then of course you have the onshore which is growing significantly more than what we anticipated when we set the targets. So, you can say you have a negative impact from the fact that we now have chosen to farm down Borssele, but we compensate that through higher site EBITDA from the onshore business.

Vincy Bu

Sorry – can I just follow up on the second part of my questions which is on the Hornsea 2 and the second Changhua wind farm? Any comment on the farm down?

Marianne Wiinholt

Yeah, if we talk about a farm down for Hornsea 2, it will be also a post-construction farm down like we do for Borssele. So that will probably – since it's only commissioned in '22, it will probably be later on if we do a farm down. So, we have not assumed a farm down for Hornsea 2 in this period, to make it clear.

Vincy Bu

Thank you.

Operator

Our next question is a follow up question from Deepa Venkateswaran from Bernstein. Please go ahead.

Deepa Venkateswaran

Thank you. My question is to you, Mads. I've definitely sensed that there's increasing enthusiasm for green hydrogen in your annual report and also your statements. So, I had a question for the two projects that you have a partner on BP and Yara. Could you maybe help understand what is the commercial framework for these projects? Are these companies ready to pay your certain fixed price for green hydrogen? What's the kind of returns and should we expect more of these and will you also give more details of your hydrogen pipeline like you do for offshore wind? Thank you.

Mads Nipper

Thanks a lot, Deepa. Unfortunately, we can't share any specifics on the commercial frameworks for those agreements, but it is clearly the ambition that these are the first steps in potential expansion with both BP and their refineries and also with Yara. And these are discussions that we will have with management, both in light of these projects, but also to say, if and when successful, this is something that we are certainly looking into scaling. And we will also be having dialogues with other companies from harder to abate sectors whether more targeted partnerships can be done to make green hydrogen with Ørsted a part of that solution.

So far, the projects are all sort of at relatively low scale because we do all need to learn in this, but certainly some of our partnerships right now are with the ambition to scale them at a later stage.

Marianne Wiinholt

Yeah. And we are not so progressed that we have a commercial agreement, neither with Yara nor with BP on the agreements we have made with them. That's too early.

Deepa Venkateswaran

Okay, thank you.

Operator

Our final question comes from the line of Lawson Steele from Berenberg. Please go ahead.

Lawson Steele

Yeah, hi. Final question and a half, if I may. So, on Muscle Shoals and Borssele, I wanted to – am I right? I heard that you said that you don't budget a capital gain i.e., farm down but you do take into account a 50% farm down in the EBITDA. That's my first question. Is that right?

Marianne Wiinholt

That's right. That's absolutely right.

Lawson Steele

Okay, great. And then can we talk a little bit about – I know it's early days, but it's early days for all of us more trying to get a grip with it. But do you think that you're going to get the same similar sort of premium on your solar disposals as you have received on your offshore, roughly?

Marianne Wiinholt

It is too early to say. I would not speculate. We are in the process of launching the solar farm down, so I think it's too early. We think there's definitely a market out there and we believe we can get attractive returns on the farm down but I cannot give more than that.

Lawson Steele

Okay, but you obviously infer, Marianne – I think that you're saying that you will get capital gains of some description, which will be significant but you don't know whether they are going to be 50 or 100%. Is that fair?

Marianne Wiinholt

Yeah, that's your interpretation, but –

Lawson Steele

You're dodging the question. Okay, fair enough. All right. Thanks very much. Thanks for the presentation.

Operator

There are no further questions at this time, so I hand back to Mads for any closing remarks.

Mads Nipper

Absolutely, yes. Thank you very much for all your all your questions and also all your welcome greetings; much appreciated. It means a lot to me. Thank you very much for joining the session and let me also just end by saying that I am very proud and humbled that the Board of Directors of Ørsted has shown me trust to succeed Henrik as the CEO of Ørsted. I know from listening into his last earnings call, all the credit that you all gave him, very well deserved.

Creating a world that runs entirely on green energy is a vision that's incredibly close to my heart and I also want to thank the Executive Committee and all of the Ørsted employees that I met for a very warm welcome. And I do look very much forward to joining the IR team on the road and meeting all of you in person once that's possible. Hopefully in the not-too-distant future. But until now we have to settle with the sort of the virtual or the phone setup that I guess we all have gotten used to in the last year.

So, thanks again for your great questions. Stay safe and have a great day or evening wherever you are.