Ørsted CMD

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Transcript



Allan Bødskov Andersen

Good morning, good afternoon, good evening and welcome to Ørsted's Capital Markets Day 2021. My name is Allan Bødskov Andersen, and I'm Head of Investor Relations. We really look forward to today, where we will present the next step in Ørsted's journey towards a world that runs entirely on green energy. I'm here with our Group CEO, Mads Nipper. And, Mads, what can the audience expect from us today?

Mads Nipper

Well, you can expect, first and foremost, a full Ørsted Executive Team that really looks forward. We look forward to telling you about our opportunities, our ambitions, our plans to realise it all, and of course, what that means for our targets going forward.

Allan Bødskov Andersen

And just a few housekeeping points from my side before we start. The slides are available to download – just click the button at the bottom of your screen. We will host a Q&A towards the end of the day, and instructions on how to pose a question will be visible on the screen during the breaks we have planned for today. Without further ado, let's kick it off. The first presenter will be Mads - and Mads will be talking about how Ørsted will realise its full potential as a global green energy major.

Mads Nipper

Let me provide you with an overview of the plan towards realising our full potential as a global green energy major. But before we turn to Ørsted, let's take a look at the external world. We are seeing carbon emissions and temperatures rising at an alarming speed. We can also see that the consequences of climate change are not just for the future. It's happening as we speak today. The risks of some of the catastrophic consequences for the planet and for humanity if we do not achieve the long-term targets and ambitions for the world, the 1.5-degree scenario, are simply catastrophic. That has led us at Ørsted to put up a vision of a world that runs entirely on green energy. You will notice that this is not a vision about Ørsted. This is not about a vision for the company and where we want to be. This is about a vision for a world that simply needs to run on green energy. Because production and use of energy is over 70% of total carbon emissions, and if we don't together create such a world, we're not on a good path. Of course, we plan to use that vision to play our part, to do everything humanly possible, so we as a company can inspire an entire world to support that journey. It is something that means a lot to everything that we do.

Let's take a look at what is needed for the future in terms of the energy system. The energy system will be at the core of the decarbonisation journey of the world, and at

the core of the future energy system as we envision it will be a massive buildout of renewable energy. As a matter of fact, to hit the net-zero ambition for 2050 for the world, we need a buildout of 27,000 GW of renewable capacity. As an example, on offshore wind in Europe alone, we would need 450 GW of offshore capacity. That's a massive buildout of capacity, but also of transmission that is needed to support it. We also need new innovative solutions, such as energy islands or other transnational projects that will create interconnections between different markets, allowing for more efficient use of the energy that is produced. But not all sectors can decarbonise through electrification. There will be hard-to-abate sectors, such as steel, heavy transport and others, that will need renewable hydrogen and green fuels to decarbonise. This is something that happens through the use of lots of the energy that is produced, but this is something which will be a backbone. As much as 12 % of the total energy use by 2050 can come from green hydrogen and fuels. We do need a new and more resilient energy system to cope with as much as 90 % renewable energy coming into the energy systems. That needs storage, we need new digital solutions in order for this to be possible. Finally, we will have a new energy offtaker landscape. This is not just about regions or states. It's also about large corporate offtakers. Everybody needs to do what is necessary to decarbonise, and for corporate offtakers as an example, there will be a need for new solutions that don't necessarily exist today to support that journey.

This means fantastic opportunities for companies like Ørsted, in terms of the market growth. Just offshore alone is estimated to grow to seven times the current size within the next decade. We will still have Europe as the largest market, but we will see massive growth also in the US and Asian markets. Even for more mature technologies, such as onshore wind and solar – and also most recently storage solutions – even that will grow to two and a half or three times the current size. So across existing technologies, a massive buildout, which will support decarbonisation, but also new and emerging markets, like renewable hydrogen and green fuels. This is a market that largely doesn't exist today, but the projections are that this could be at a size of 80-100 GW already by 2030.

So, across everything, there are huge opportunities, and the good thing is that this is being backed very tangibly by both ambitions and policy actions to make it happen. With the examples of the EU and the US, we are seeing new or confirmed targets for decarbonisation, also broken down to, for example, offshore capacity needed. But most importantly, this is backed by investment plans and policy frameworks that will enable everybody – policymakers, companies, and everybody – to lean in and make this happen. Because we cannot do it without each other, without walking in tandem.

Let's take a look at what that means for our aspirations at Ørsted. We have the notvery-modest ambition of becoming the world's leading green energy major. What do we mean by that? Well, it is clearly a cornerstone that we must become one of the largest green electricity producers. To back that, we will remain a global number 1 in offshore. That is our clear, clear ambition. But we also want to build a top 10 position in onshore, and finally, we want to be a global leader in the emerging renewable hydrogen and green fuels market. We should not do buildout of capacity just for the sake of it. We need to and have a clear ambition to remain one of the largest and most value-creating deployers of capital into the green transformation. Because that buildout and value creation needs to happen in tandem, both for us to be able to finance the buildout, but also because, to have the trust of our investors and other stakeholders, we need to ensure that we run a commercial company. With ambitions like that, we simply need the best talent. So, we have an ambition to become the world's leading talent platform, so that we get the very best people, the very best team to support our journey. And then we have a clear ambition not just to solidify and stay where we are in terms of sustainability leadership, because we have had the privilege already last year of being named the world's most sustainable company across all industries – and three years in a row of being the world's most sustainable energy company. But we don't rest on our laurels. We plan to continue to up our ambition, to continue to be a role model for other companies to follow. On that note, it is also our aspiration to not only be a core contributor, but a catalyst for change towards a world that runs entirely on green energy. What does that mean? Well, it means we will constantly strive to do things that others either cannot or do not dare to do, in order to ensure that we inspire others to move towards the change that the world so desperately needs.

If we then take a look at what that means for our buildout ambitions, we do have an ambition to increase our installed capacity from the current 12 GW to approximately 50 GW by 2030. This is about four times the current installed capacity, and it is a massive increase compared to the 30 GW ambition that was launched at our last Capital Markets Day back in 2018. With this ambition, we are also looking at a changed playing field, where we choose to play and grow. Looking at the right side of this slide, you will see that it is completely unchanged, that we have a clear, stated ambition to stay a global leader in offshore – all regions. But we also have an ambition in onshore, now no longer as a new but a strong growth platform in the US. Because we have proven over the past three years that we can have a massive, value-creating buildout, and we plan to continue with that. At the same time, with the recent establishment of a growth platform in Europe, we do plan to have that global expansion. Last but not



least, in renewable hydrogen and green fuels, we will have Europe as the core of our growth platform. That's where we're starting, but that's not where we're ending. We will start in and lean into Europe, but with an ambition to span globally with what we do in that important field.

Let's take a look at what some of the strategic choices are that we have made to support this. In offshore, we are increasing our ambition from a 15 GW target by 2025 to an ambition of 30 GW by 2030. That means that we're accelerating our buildout in the latter half of this decade to 3 GW a year. We will do that through expanding our footprint. We mentioned examples here from the Baltics, Nordics, East Asia, but also other growth markets. Because we have proven that we can open new markets effectively, and we have an intent to continue to do so. But we will also take part and take a leading role in new innovative projects like the Danish energy islands. This is something that could be an absolute cornerstone of the energy systems of the future, and we want to play our leading role. Then we're also making the choice that we want a strong position in floating offshore wind. If we look at the long term, so especially beyond 2030, floating will become a massive potential, and this is something where, if we even beyond that period have a clear intent to be an undisputed leader in offshore, we also want to lean in and drive floating offshore wind.

Turning towards onshore, we are also increasing our ambition there. As a matter of fact, we're increasing it a lot, from an ambition of 5 GW by 2025 to 17.5 GW by 2030. So a massive increase in the ambition level. We will do that through continuing to accelerate our US buildout that has proven that it is very scalable, but also by globalising our platform, starting in Europe. Then on technologies, we're also making the choice to become a multi-technology player. So, and we are seeing examples of this already in the US market, we will combine different technologies. So onshore wind, solar PV, storage, maybe all three of them. This is something we believe will become a huge advantage, and by the way, needed for our customers and offtakers.

And then on to renewable hydrogen and green fuels. As already mentioned, our ambition is to build a global leadership position. The backbone of how we plan to materialise that and realise that is to execute on our already existing pipeline of projects in Europe – which sum up to well over 3 GW of capacity. That will give us not only the initial scale, but also invaluable learnings to be able to scale beyond the execution of those projects. And then we will also lean into selected renewable hydrogen and green fuel value chains, together with some of our offtake partners. That means, in other words, that playing beyond renewable electricity generation and electrolysis is something we will selectively do.

You might ask, "Why doesn't a company like Ørsted just stay with our current majority core business, namely offshore? Why should we go into these new areas?" Well, we believe that the choices we are making have very meaningful synergies and distinct competitive advantages. Starting with maybe the most obvious one: the procurement synergies from simply being a bigger procurer of renewable technologies. That's a very tangible financial ambition and something that we can materialise. But also, we are already today seeing that our customers demand multi-technology solutions. So this is a way to be able to offer to any offtaker a much more integrated decarbonisation solution by having those technologies at hand. But also through a global presence that, through these areas where we already have our different technologies in play, will enable us to create stronger transnational solutions for our customers. And by the way, if we're already present with one technology in one part of the world, market entry can be made a lot easier if we want to go in with other technologies as well. And then very importantly: With our vision, we must see a decarbonisation of the hard-toabate sectors, and the synergies there into large-scale renewable generation are simply so obvious for us to leverage through renewable hydrogen and green fuels.

If we take a look at our financial targets, then our target on operational earnings is still at double-digit growth in EBITDA from operating assets in Onshore and Offshore towards 2027. More specifically, around 12 % is the average growth that we're looking at.

If you turn towards the new projects, then it's also clearly still our ambition to stay a value-creating developer. We plan to do that by having a target range between 150-300 bps. Bear in mind that this is based on the toughest financial value criteria possible, namely with a fully loaded, unlevered life-cycle IRR.

And I'll finish with sustainability. Because on top of financial targets that are, of course, vital for us to get the credibility and the ability to continue to invest, sustainability is also very much at the core of what we do. And we are reconfirming our targets of having an entirely carbon-neutral energy production by 2025, and being entirely carbon-neutral by 2040, including our scope three. Both of those will be based on science-based targets, so fully trustworthy and credible, which we believe, by the way, is what everybody should do.

On top of confirming those targets, we've also taken the opportunity now to take a stand on biodiversity. As you saw at the very beginning of my presentation, the single biggest threat to biodiversity is climate change. But on top of that contribution, by



helping to decarbonise the world with the massive buildout of renewable energy that is needed, we simply also want to ensure that it happens in pact with nature. That is why, no later than 2030, all our new projects must have a positive biodiversity impact. We will start taking actions way before that, but that is a deadline we've set ourselves to say, this is when that must happen. On top of that, we are also announcing, as of now, a ban on landfill for wind turbine blades. With these new ambitions, we plan to uphold a clear leadership on sustainability, of course centred around decarbonisation, but also going far beyond that, which already today has led us to being a leading global sustainability player.

With that, let me finish by taking you on a trip into the real world, more specifically to Taiwan, and even more specifically hosted by my great colleagues Frida and Ulrik, who will show you some of the progress in a video of our Greater Changhua 1 & 2a construction that is happening despite very challenging circumstances, driven by Covid-19, that is still progressing well and headed towards another on-time, on-budget delivery.

Frida Persson

We now want to take you straight to the front line of the execution of the Changhua 1 & 2a project. This is a project that has taken us through the entire spectrum. We have started in the development phase, we're at the EPC phase with engineering, procurement and construction, and at the end we will have the operation, which is also being done by Ørsted for this project. Let's start by showing you the scale and the magnitude of our project, and both the onshore and offshore work that is ongoing. All this has translated into a lot of experience that's being shared. A lot of new jobs have been created, and the local supply chain has been built up. And all this is contributing to the local economy.

Ulrik Lange

To execute the first utility-scale offshore wind farm in APAC, we blend Ørsted's worldclass expertise with the experience and capabilities of our local suppliers and partners. On the supply-chain side, we have pursued an overall strategy of having a global setup. We also have a local supplier in Taiwan that builds and constructs the substation.

Frida Persson

When we started the project some years ago, there was no quay site, but now the quay site has been constructed by the Taichung Port authorities, and we have successfully started using it directly after completion.



Ulrik Lange

We are in the middle of manufacturing turbine towers and transporting them, but we have also reached the very significant milestone of installing the first offshore jacket. The offshore construction will be supported by a wide range of marine engineering, vessel supply and people from home and abroad. We estimate, at peak times, we will have 25 vessels at sea, including 500-800 people working at sea.

Frida Persson

We are working with international and local suppliers. And on the Changhua 1 & 2a project, we are getting 111 locally made towers for the turbine structures. In addition, the nacelles will be clicked locally, here in Taichung Port at the nacelle clicking facility, which is the first of its kind outside of Europe.

Despite the many challenges there are with executing in a new market, and now with the Covid-19 situation, the project team has managed to keep the project on track, on time and on budget. And we are confident that we will deliver first power in the first half of 2022, and we will complete all offshore installation works by the end of 2022 at the agreed FID dates. This is proof of Ørsted's model, its 30 years of experience and the extremely talented team that we have executing this project. Some of our team members have been expatriated to Taiwan or to other countries where we have fabrication ongoing, and many new colleagues have joined the team. They have truly had steep learning curves, and we are working together as a strong team.

Ulrik Lange

We're working in the market with very limited offshore wind experience, but with hard work, a dedicated team and the right approach, all the major permits are now in place.

Frida Persson

From the beginning of the project, we have had a clear focus on safety, and we are here and we're sharing our experience from the offshore wind industry with our new suppliers in the new markets. We do this in many ways. We have our team here on the ground, at the facilities of our suppliers, working together and sharing in our experience in order for them to meet our QHSE requirements.

Ulrik Lange

In addition to creating jobs and building manufacturing facilities, we also train people on the ground. That's because we build to operate, because we want to ensure that we have a solid and a skilful operational set-up to operate our Changhua 1 & 2a wind farms. Moreover, we send local technicians to operating assets in Europe to become



up-qualified. In fact, the first batch of local technicians have just been sent to the UK for an eight-month training course and to get the direct learnings from an operating asset that they can bring back to operate our Greater Changhua 1 & 2a wind farms.

Frida Persson

Executing a global project with a global, diverse team in a new market requires a very strong project culture, and we have created that with the Changhua project. We have truly embraced the local cultures in the new markets, visiting the temples and participating in ceremonies before we start construction works and before we start any offshore works. Finally, we are happily opening many new facilities and factories together with our suppliers, and we take part in the celebrations of the successes. In Taiwan, we have proven that we can scale up Ørsted's EPC model and that we can truly execute successfully in a new market. With this we are on our journey, creating new energy together for a greater tomorrow in Taiwan.

Allan Bødskov Andersen

Thank you to Frida, Ulrik and the rest of the team in Taiwan for making that fantastic video for us here today. Taiwan is a destination very close to my heart. I've been there numerous times to prepare for our first green bond transactions into the local Taiwanese capital market, allowing local Taiwanese investors to take part in the green transformation in Taiwan. Now we will stay within the theme of offshore wind. I'll welcome here on our stage Martin Neubert. Martin Neubert, you are Chief Commercial Officer and Deputy CEO here at Ørsted, and I would like to have you elaborate a little bit on how your business has evolved since 2018, when we had our last Capital Markets Day, and how we are going to realise our ambition of 30 GW of capacity by 2030.

Martin Neubert

Thank you very much for the introduction, Allan. Let me start with three key messages that are really underpinning our new growth ambition for 2030. First, since our last Capital Markets Day in 2018, when I was also standing here in this room, we have built an even stronger platform for growth by regionalising our business and by growing our asset portfolio, by taking in multiple gigawatts in secured and awarded contracts. Secondly, we have secured a substantiated, industry-leading pipeline of very tangible development opportunities, which together with broader opportunities that we are working on, also in new markets, will make us very confident that we can achieve our 30 GW ambition by 2030 without compromising on value creation. Then a 30 GW ambition also means an accelerated buildout from 2 GW to 3 GW post 2025. We have



a unique in-house EPC and operations engine to actually scale and deliver on that task. But Allan, allow me to double-click on each of these key messages.

Let's start by looking into what has happened since the last CMD and take a look at the market perspective. The global offshore wind market experiences an accelerating growth and speed, going from 7 GW per year in annual buildout from 2020 to 2025 to more than 20 GW in annual buildout between 2025 and 2030. It strongly illustrates how exponentially the green transitioning is happening, because when you looked at the market forecast for 2030 three years ago, we were expecting around 100 GW, and now we see an increase of more than

75 %. Underlying that are the tremendous growth prospects for offshore wind, but also the important part that offshore wind plays in the global green transition.

Let's zoom in on Ørsted. We have been in an excellent position over the last three years to really capitalise on that global growth by growing our asset portfolio from 12.8 GW to 17.3 GW of firm capacity. By firm capacity I mean capacity we have installed, capacity we have under construction and capacity that we have secured, where we have an awarded contract. 17.3 GW is absolutely industry-leading, because it is larger by 10 GW, or a factor of 2.5, compared to our closest competitor, which just underlines the undisputable market leadership that we have in offshore wind. On the right-hand side, you can see the details of how we have grown our asset portfolio and matured it over the last three years, starting with 4.5 GW in newly awarded contracts we have taken in, through the large-scale wins we have seen in the US with Sunrise Wind and Ocean Wind, but also through our market entry in Poland, where we have secured, through the partnership with PGE, the Baltica 2 & 3 project.

At the same time, we have been consolidating our leadership position in Taiwan by completing the construction of the island's first offshore wind farm, Formosa 1, together with our partners, and by taking the Greater Changhua 1 & 2a not only into construction, but now also into offshore construction, as you have seen. In addition, we have taken into operation, on time and on budget, a number of European offshore wind projects. Among those, the world's largest offshore wind project, Hornsea 1, and our first offshore wind farm in the Netherlands, Borsselle 1 & 2.

You can see here how the 17.3 GW of firm capacity is distributed across our four regions. As you see, it's an equal distribution among our mature offshore wind regions, i.e. the UK and continental Europe. But we also see an increasing importance and scale of North America and Asia Pacific, which are the new offshore wind regions on the global offshore wind map.

In addition to the 17 GW of firm capacity, we have been able to secure an industryleading, substantiated pipeline of development projects, which is 14 GW in total. Those projects are, for instance, in the UK our Hornsea 3 and Hornsea 4 projects. At Hornsea 3, we achieved an irrevocable consent a few months ago, allowing us to play with a large ticket in the next UK CFD auction. In continental Europe, you can see we don't have a substantiated pipeline because we have already converted the Baltica 2 & 3 projects into firm capacity. In North America, our substantiated projects are the 5 GW of lease rights that we own in the Northeast and in the Mid-Atlantic region. In Asia Pacific, we have our development projects, like Changhua 3, or our greenfield activities in Korea, and our Akita and Choshi projects, where we have just been bidding in Japan's first offshore wind round. It's important to understand that the substantiated pipeline is projects where we have already secured a right, either through a lease, through a consent, through an EIA, or where we, like in Japan, are very close to submitting a bid together with a local partner. 14 GW of substantiated project rights, again, is industryleading, because it's more than double of what our closest competitors have in their development pipelines.

In addition to the 14 GW, we actively work in a larger opportunity space of 38 GW of early-stage project development, which includes, for instance, in the UK, the upcoming ScotWind tender. It includes our Race Bank extension project, our Isle of Man project. In continental Europe, of course, it's in large part related to centralised tenders. There, we cannot achieve exclusivity until after an award has actually been given. So that relates to markets like Denmark, the Netherlands or Germany. In the US, this is related to new lease auctions in the Northeast or in California. And in Asia Pacific, this relates to further development rights in, for instance, Vietnam, Taiwan, Japan or Korea. So this opportunity pipeline is something where we have fewer secured rights, compared to the substantiated pipeline, but it is something we are actively working and pursuing. And it's important to say, these are all opportunities which we realistically believe we can take into construction and into completion within a decade from now. So, these are not projects that are widely going into the 2030s, otherwise this pipeline would be even bigger. So, we look at a totality of more than 50 GW of opportunities for Ørsted Offshore Wind.

In the backdrop of the more-than-50 GW pipeline I just explained, we have set a new ambition of 30 GW by 2030. It's an accelerated ambition, because it means we're not only going to double our installation of offshore wind from 7.6 to 15 GW over the next four years, but we will double it again from 2025 to 2030, going from 15 GW to 30 GW, meaning our annual buildout will increase from 2 GW to 3 GW a year. With the firm capacity that we have of 17 GW, it means we need to secure a total of 12.7 GW in order to achieve our ambition of 30 GW. I am very confident that we are able to achieve

these 12.7 GW leveraging our vast experience and track record of converting pipeline opportunities into value-creating assets. And there we have the 52 GW of opportunity rights. As I said, I'm very confident that we are able to mature and convert the vast majority of the 14 GW, and at the same time get our fair share of the 38 GW opportunity pipeline.

Now you might ask, "Is this 30 GW ambition actually ambitious enough?" We think it is, and it strikes the right balance between accelerating our growth, retaining our market leadership, on the one hand, and at the same time continuing to be very focused on value creation. In terms of value creation, it's important to understand that we, by oversizing our development pipeline, are able to create flexibility for us when it comes to, in an optimal way, developing, sizing and timing our capacity in each of the regions. As you can also see from the slide, our share of the total market is going to go down, which allows us to be selective with the opportunities that we take into our pipeline and take forward to buildout. We apply very stringent criteria when it comes to selecting projects. They obviously need to be financially value-creating within the framework that Mads and Marianne will lay out for you today, but they also need to play to Ørsted's strengths.

We are an organisation with more than 3,000 employees dedicated to offshore wind development. For us, complexity is a strength, complexity on the regulatory side, on the technical side, on the commercial side. These projects need to fit into the scheme, and of course, we want to build at scale. And then we are really looking at, as you saw when I showed you the regions, a balanced portfolio across markets, across projects, across competencies. With all of that, we're going to be able to have not only a leading position by 2030, but also way beyond.

That's actually one of our key competitive strengths – that we take a long-term perspective. For us, pipeline planning does not stop in 2030. We plan way beyond, into 2040. And we like to enter markets at an early stage, really being at the table when shaping market conditions, securing partnerships locally, working with regulators and local stakeholders, securing proprietary project rights. We all do this with the mentality of a total life-cycle perspective, because we firmly believe in it, and we develop to bid, we bid to build, and we build to operate.

There are number of strategic examples I want to give you where we have established an early position in markets and on specific projects with a view to creating gigawatt opportunities in the long run. Here I would like to mention the two Danish energy islands as a good example of that. The regulator currently foresees that these islands

will be established post 2030, but we are very active today, as I'm going to show you a bit later. Or take the Baltic Sea region, where we have established a strong footprint already, both in Denmark and in Poland. We are expanding that into opportunities, for instance, in Sweden, or in the Baltic states where we recently entered a partnership with Enefit. Take South Korea: We have a 1.6 GW ongoing development project in the Incheon region, but that is only a stepping-stone, as we see Korea as a core strategic market with many gigawatts of growth opportunities for us. We just entered last week an MOU with a large industrial player in Korea, namely POSCO. In Vietnam, we set ourselves up with a local organisation and have since last year developed a greenfield project off the coast of Binh Thuan, which once developed will hold more than 4 GW of potential.

Last but not least, floating offshore wind is an important scheme. We see clear prospects for floating offshore wind to exist at a commercial scale towards the end of the decade, which means that we are now preparing for our first floating appearances in the UK, in the US or in Asia Pacific.

Allan Bødskov Andersen

Martin, just a few questions on the pipeline. Clearly a lot of opportunities across our four regions, but I don't see anything in Latin America, and I don't see anything in Australia. So what's your thinking around those two continents?

Martin Neubert

You are completely right, and it goes back to the stringent prioritisation of markets and projects that we have. We see these markets... It's not that they cannot develop and have offshore wind potential, but these markets have a massive amount of land-based renewables that can produce cheap electrons, green electrons. Therefore, we don't see the current potential in these markets to develop new opportunities for us at scale. Therefore, we prioritise the markets that I showed to you.

Allan Bødskov Andersen

Martin, another question we get a lot in the Investor Relations team is around seabed leases and the auctions we've seen. Some of the other players in the industry have been willing to pay very high amounts to secure seabed rights. What's your thinking about our role in future seabed auctions?

Martin Neubert

Of course, new seabed auctions are also important for us. We're not going to shy away from new seabed auctions. But the good thing for us is that we have already



developed this stringent pipeline of opportunities that I mentioned. And in order to deliver on our 30 GW ambition, we are not dependent upon winning new seabed leases now, in a market where a lot of players are currently trying to get a foot in the door. So of course, we will participate in new seabed auctions. It needs to make economic and financial sense for us, and we are not being pushed into a corner, because we have what it takes to deliver on our ambition.

Allan Bødskov Andersen

Thank you for that, Martin. I'll let you continue with our competitive advantages.

Martin Neubert

Of course, we want to build as many of our development projects as possible, though not all. But in order to do that, we need to secure offtake rights. Whether we deliver our green electrons to corporate customers, to states, to national governments, or to our own in-house renewable hydrogen projects, for us, it's important that we are cost-competitive in what we are doing. We are able to be that sheerly because of our scale, our size and the unique platform that we have developed in offshore wind, which comprises an impressive portfolio of assets from more than 40 projects across the different life-cycle stages, more than 1,500 spinning turbines – so a large operating fleet – more than 3,000 dedicated, highly skilled employees that are spread across four regions already today, more than 15 markets and bases around the world in more than 20 different office locations.

The way we think about developing and constructing assets is to always create cross-portfolio synergies, whether that means designing an O&M hub like in Grimsby, in the eastern UK, which is going to be able to operate, in the most effective way, a cluster of 8 GW offshore wind projects once we have built out the entire Hornsea zone, or whether it's taking our 3,000 MW portfolio that we're going to build out in the US towards the middle of the decade – which we look at as one construction train and one construction cluster – or whether it is taking technicians, construction workers and package managers that have worked on the Formosa 1 project and now bring their experiences and best practises to fruition by working on the Changhua 1 & 2a project. More obviously, we are procuring equipment and also services at scale. We are the number-one customer for many of our suppliers, and we are leveraging that in order to achieve the lowest possible cost of electricity. And having constructed and operated offshore wind farms for more than 20 years, we have a huge lake of data that we are actively utilising in the development and construction of our assets.



Allan Bødskov Andersen

Martin, I think this will be a good time just to double-click on the data and analytics. Load factor is a very crucial assumption that goes into our business cases. So having a very good estimate of load factor is very important, to be sure we create long-term value from our investments. So, Ørsted operates the world's largest fleet of wind farms. Combined with unique radar technologies, we have access to unique data to model our load factor.

So, I'd like to welcome Nicolai. Nicolai is one of our wind specialists, and he's part of a larger team here at Ørsted that models load factor, among other things. So, I hope you will enjoy the next few minutes with Nicolai, educating us on load factor modelling.

Nicolai Gayle Nygaard

The load factor is defined as the ratio between the load and the maximum load, which is given by the installed capacity. Normally, we're interested in the average load factor, but for the purposes of this Deep Dive, I will consider the instantaneous load factor to illustrate how it varies, depending on conditions, and how we model it. The load factor translates wind to value, and it's a crucial input to a business case. In Ørsted, we have leveraged our 30 years of operational experience with offshore wind farms, to create proprietary models for load factor estimation. We have a high focus on this, because accurate load factor estimation will de-risk our projects and create more certainty of value creation for our shareholders.

The load factor depends on a number of elements. It increases both when the site mean wind speed increases, and with larger turbines. But increasing the number of turbines in the same area decreases the load factor. This is because an increased number of turbines leads to larger losses from wake and blockage effects. When developing a new site, we first measure the wind. To fully characterise the wind resources, we measure for two full years. But for the purpose of illustration, I'm focusing on a two-week period. From the measured wind speed, and using the manufacturer's power curve, we can predict the power of a single, isolated turbine at the site. A turbine produces more power with increasing wind speed, up to the point where it reaches its rated power.

At higher wind speeds, the turbine gradually rams down its power to protect its mechanical parts. With the power curve, we can convert a time series of measured wind speed into a time series of predicted load factor. The load factor dynamically ranges from 0 in situations with little wind to 1 when the turbine is producing at its maximum power. The load factor for a wind farm will be lower than that of a single,



isolated turbine. This is due to the turbine interaction losses arising from the wake and blockage effects.

Wakes are regions of lower wind speed extending behind each turbine. They arise as the turbines convert kinetic energy in the wind into electrical power. Using sophisticated radar technology, we can measure the complex dynamics of the wakes. These radars were originally designed by Texas Tech University, for tracking hurricanes and tornadoes. They give us detailed insights into the complex dynamics of the wakes. To make accurate predictions of the wind farm energy production, we need to translate these insights into sophisticated models. When we compare our wake modelling with the radar measurements under similar inflow conditions, it is clear that while the model does not capture the minute scale complex dynamics of the real flow, it does a very good job at capturing the average and essential features of the flow. Since the wind speed is lower in the wake than in the free-stream flow, a turbine that is caught in the wake of an upstream neighbour will produce less power. Therefore, the load factor will depend on the wind direction. It is lowest when the wind direction is aligned with the turbine rows in the layout. Therefore, a wind farm's load factor depends not only on the wind speed and wind direction, but also on the turbine layout. In addition, the load factor depends on the surroundings of the wind farm. If there are other wind farms, nearby, they will lead to additional wake losses.

For illustration, we have looked at our Westermost Rough Wind Farm, which has a neighbour 15 km to the south. Even at this distance, the neighbouring wind farm can cause wake losses of up to 30 % in power on the leading row turbines. These wind farm wakes extend over very large distances. As the build-out of offshore wind continues and intensifies, understanding the wakes from neighbouring wind farms becomes increasingly important. In our load factor estimates, we include both all existing and planned future wind farms within a 50 km radius in our calculations.

The next topic I want to address is blockage. Returning to the radar measurements from before and zooming in on a single turbine, we can visualise the flow as seen from above. Despite the random fluctuations caused by the turbulence in the atmosphere, the wake is clearly visible as a tail of reduced wind speed extending behind the turbine. But if we average the flow over half an hour, the turbulent fluctuations disappear, and we can also identify a region of lower wind speed extending in front of the turbine. This is called the blockage effect.

It is caused by the slower moving air in the wake, blocking the oncoming flow, slowing it down. The blockage effect is equivalent to the flow of highway traffic in case of an accident. As cars slow down to safely pass the congestion, it has a cascading effect on

the approaching traffic, which can lead to a queue forming several kilometres ahead of the accident location. Combining the blockage effect from the individual turbines, our model generates a global blockage effect, extending out in front of the entire wind farm. When this is combined with the wake model, we get a full picture of the turbine interaction losses. The global blockage effect has only been recognised as an important loss within the last three

years. There's now a growing recognition in the wind industry that neglecting this loss represents a material bias in energy production estimates. While the loss still needs to be researched further, it is starting to be implemented across the industry. Ørsted installed the first offshore wind farm in the world, Vindeby, more than 30 years ago. Today, we're operating the world's largest offshore windfarm, Hornsea 1, which produces enough electricity to power a million homes. With the world's largest offshore operating portfolio, which spans three continents, we have a unique data set that we can use in validation and calibration of our load factor estimation models. We apply sophisticated data mining techniques, together with automation, to compare the realised production with the modelled predictions. We do this continuously and systematically. The one-of-a-kind radar system and our ability as developer and operator to continuously monitor and improve the performance of our in-house load factor models, enable us to deliver load factor estimates that are best in class.

Allan Bødskov Andersen

Thank you to Nicolai for those insights into load factor modelling. Martin let's now continue with our competitive advantages. Could you elaborate on how our EPC model sets us apart from the industry, and also how we are adapting to a changing market?

Martin Neubert

Absolutely. Nicolai is one of 2,000 dedicated employees in our EPC organisation. And we have, as you can see here, an absolutely outstanding track record in executing and constructing offshore wind projects. You see many here. We have a total of 7.6 GW of installed capacity. And they have been delivered consistently and over many years, in time and on budget. COVID-19 has been a huge challenge for global society. But it also meant quite a bit of disruption in the global supply chain, and in terms of logistics, for us, to bring technicians and construction workers across borders.

But despite COVID-19, we have been able to deliver the Borssele 1 and 2 wind farms in The Netherlands at a record speed, with offshore installation done in just nine months. And this despite the fact that Europe, during the spring last year, was in total lockdown.

Another good example is the coastal Virginia Offshore Wind Project, which we delivered as an EPC provider through our partner, Dominion Energy. For this project, all the components had to be imported from Europe and be installed despite a full lockdown in Virginia.

This just demonstrates how our EPC engine is able to effectively deal with any unforseens and risks and effectively mitigate it. All the things that can happen on a large-scale construction project. With our 30 GW ambition... As I mentioned before, it means we need to scale up and ramp up our annual build-up, from 2 GW to 3 GW per year from 2025 onwards. This is no simple task, but we have an outstanding EPC inhouse organisation, with a lot of deep technical competences, that is able to scale and deliver on this task. And there are many sorts of good examples I could mention here. But let me just select a few.

We have a unique in-house model to innovate and optimise wind farm design. An example of that is our foundations department in engineering that is able to design very cost-efficient, very complex foundation structures that are able to withstand typhoons and earth quakes, as we find them as conditions in Asia Pacific, and here we're able to leverage from our great experience we've collected in Taiwan. Another example is our work that we do together with a Scottish engineering start-up called Pict, where we have actively invested in the company and now are developing and deploying a first of its kind access system to turbines, which allows technicians to not climb up the ladders, as you saw in one of the videos before, but actually being hoisted up with a motion-compensated hoisting system that allows for a faster access for technicians, from the boat to the turbine, but also a safer access. And it saves and prevents a lot of additional steel structures, like the boat-landing structures on the foundations. When it comes to our supplier engagement, we have, over many, many years, been the first to deploy new turbine technology. A recent example is our engagement with GE, deploying and entering into a first commercial contract for the deployment of the 12 MW turbine on our Ocean Wind 1 project. But we also procure equipment and services on the large framework agreements, really leveraging our strong buying power, which secures us not only components and services, but also sort of delivers us services at the lowest possible price, giving us a competitive advantage in terms of levelised cost of electricity.

And then last, but not least, we from Ørsted have been, you know, incremental in terms of developing the supply chain in Europe, and we're leveraging our vast experience from that, now in new markets. And a good example here is what we just very recently announced. That we, together with our partner Eversource Energy, are the first to enter into a charter agreement for the very first US Jones Act vessel that is

being currently built in a yard in Texas, and which we will deploy for our North East program, delivering on the 1.8 GW that we have earmarked to be delivered by 2025. Another example is the foundation factory that we are developing and building together with our tier 1 foundation supplier in Paulsboro in New Jersey. In the last part of my presentation, I would like to talk about how Ørsted will continuously be a leader in the green, global transition. We have pioneered offshore wind 30 years ago. But over the last three decades, we have been a catalyst when it comes to innovation and really pushing the boundaries of our industry. This slide includes a number of Ørsted firsts, where we have really sort of been shaping the industry with what we have been doing.

As an example, our bid into Borssele 1 and 2 in 2016 enabled the offshore wind industry to really get on par, in terms of LCoE, with fossil generation. We were the first to submit a zero subsidy bid in 2017, and again in 2018, in Germany. We have also, over two decades, built many of the world's first large... many of the world's first largest offshore wind farms. At that time, as we were scaling the projects from a few hundred MW into what is now, with Hornsea 1, way above 1 GW. Or entering new markets in the US and in APEC. Or taking the first, final investment decision on our first electrolyser project.

But the energy landscape is changing rapidly. And we see a strong shift in the need for more integrated energy solutions. And therefore, we at Ørsted are very excited to continuously be part of innovating the industry towards more integrated energy solutions, whether we talk about energy islands, whether we talk about integrated hydrogen power-to-X and offshore wind projects or commercial, floating offshore wind projects. And just to mention two examples: I already talked about our strong focus in developing and being part of the development of two of the world's first energy islands, being set up in Denmark. One is the North Sea energy island, which is going to be an artificial island 80 km off the west coast of Denmark. The Danish energy regulator will run a tender for that in 2022, and we are very well positioned for that tender, having partnered up with Denmark's largest pension fund, ATP. The other one is on the other side of Denmark, in the Baltic Sea, where we're going to utilise the existing island of Bornholm to establish an offshore wind hub, where we co-locate large-scale offshore wind with adjacent technology, like renewable hydrogen or power-to-X, and at the same time, use that energy hub to connect multiple surrounding offshore wind markets, which saves a great amount of transmission in the connection cost. Another example is our SeaH2Land initiative at the Dutch-Belgian border. This is an initiative where we have a plan to develop one of the world's largest electrolysers with 1 GW, being powered by 2GW offshore wind being developed in the Dutch-Belgian North Sea.

And here we work with leading industry partners, such as the Zealand Refinery or Yara or Dow and ArcelorMittal that all have large-scale operations in the area and are keen to decarbonize their operations by off-taking renewable hydrogen that is replacing existing fossil fuel hydrogen. This is one of the largest industrial clusters, and we are very excited, with such an initiative, to be part of that. But these vast undertakings are obviously something we cannot do alone, and one of our key competitive strengths is that we have been working for decades with partners and customers of all kinds. We deploy a very flexible partnership model, whether that is with financial partners that we bring into our offshore wind assets, when we farm down typically 50 % of these assets. And here we have seen a large amount of investors repeatedly investing into our assets, whether it's global infrastructure partners, CDPQ, PKA/AIP. But we have also been able to attract first of its kind investors into our assets, such as Norges Bank, who did their very first renewable investment together with us in Borssele 1 and 2. We also work with partners in the co-development of projects. Here to mention our partners in the US, Eversource Energy and PSEG. Or in Japan we work with TEPCO and with JWD and Eurus. Or take Poland, where we work with PGE. And then back to the new energy systems, working with offtake partners from different sectors, helping them to decarbonize their operations, is an important partnership topic for us in the future.

Corporate PPAs have been a topic in the renewable energy space for many, many years, but we have been instrumental in really sort of bringing corporate PPAs into the offshore wind space. And I'm very glad to show you that we have 1.4 GW of offshore wind assets that are going to supply green electrons to large corporate offtakers. We have TSMC. This was our world's largest corporate PPA offtake. Or we take Amazon and Covestro for our upcoming Borkum 3 project. But we also leverage our corporate PPA capabilities

for existing assets, like we have done with Nestle, Danfoss or Northumbrian Water across our European offshore wind asset feed. And you can see how much we differentiate to our peers already, in that space.

But we are not just a partner to corporates. We're also a very strong partner to national and local governments, when it comes to their decarbonisation and sustainability agenda.

As I mentioned, we are always eager to shape a new market, getting into a market early. We support local economic and skill development and contribute to job creation. We establish a strong local presence ourselves, but again, here it's something where we also leverage the very strong presence and history of our partners. And then we secure project rights with an ability to scale them fast, as I showed you before.



Poland is a good example of what we have done. We already established a small team, dedicated to offshore wind development, back in 2018. This team then worked with local policymakers, regulators and stakeholders, to shape the offshore wind framework that finally fell into place at the end of last year. With our partnership with PGE, we are participating very actively in the build-out of the first 6 GW of offshore wind in Poland, namely with the Baltica 2 and 3 project, which is 40 % of Poland's offshore wind target by 2030. So very focused on being a decarbonisation and sustainability partner for national and local governments.

So let me sum up my presentation by telling you that we have a unique platform for growth, and we have set an ambition of 30 GW installed by 2030, which will make us remain the indisputable leader in offshore wind. We have the offshore wind's largest concrete development pipeline, with a high quality and diverse growth opportunities. Cost leadership is absolutely crucial in offshore wind, and we can secure that by providing skill and a very experienced offshore EPC and operations organisation. And as the energy landscape is developing, we will continuously be a catalyst for driving offshore wind innovation and new energy solutions, leveraging our strong partnership model. So, to say it in one sentence: We have the ambition and the ability to accelerate global offshore wind growth and continuously lead this industry forward!

Allan Bødskov Andersen

Thank you so much, Martin. With 17.3 firm capacity and another 52 gigawatt of pipeline opportunities to work with, it's going to be a very busy decade for us. And with all that capacity coming online, and with all the operations we already have, it's a good time to introduce our new Chief Operating Officer, Richard Hunter. Richard had his first day at Ørsted just yesterday, and joining Richard for a short conversation is our Chief HRO, Henriette Fenger Ellekrog. So, Henriette and Richard, please go ahead.

Henriette Ellekrog

Hello, I'm Henriette Fenger Ellekrog, I'm CHRO here at Ørsted. One of my key focus areas is to ensure that we have the very best, diverse talent, and we recently hired such a talent - our new COO, Richard Hunter. Richard will head our newly established EPC & Operations organisation, which is responsible for engineering, procurement, construction and operations of our global offshore wind farms and our Danish combined heat and power plants. And I'm joined here today by Richard in the UK. Welcome, Richard.

Richard Hunter

Hello, Henriette. It's great to be with you today.



Henriette Ellekrog

Richard, you're just two days into the job, so I won't ask you to give your perspectives on Ørsted, but I would be curious to understand why you think that you're such a perfect fit for the role.

Richard Hunter

Okay, thank you for that. Well, firstly I would like to say how happy I am to be joining, and I'm really looking forward to the onboarding and getting to understand the company and the industry more. I, of course, will be inheriting a very strong EPC & Operations organisation, and I'll be relying upon them. At the same time, hopefully I can bring some of my experience as we move forward. In terms of that, my background - I have a strong technical foundation in engineering. I've been a project manager and project director on large integrated engineering projects; projects that involved complex civil engineering in challenging environments and bringing together mechanical and electrical systems with control systems and software to integrate and deliver and commission into operation large engineering projects. I've also got a background in operations and maintenance, in some cases in decades-long contracts, and what's needed in terms to ensure performance, to optimise, to ensure that we continue to drive cost without affecting safety and performance of the system. I've run a global business which was supplying products and projects to more than 50 countries, utilising the full value chain. And a fairly international background. I've spent roughly half my career in Europe and half in Asia-Pacific, and I've led organisations with a very diverse global spread of people. In addition to that, I think I have a commercial mindset as an executive leader, and a focus on financials to ensure that we deliver the business performance that's required, but at the same time to develop the relationships with customers, suppliers, stakeholders, and of course, most importantly, with the employees and the teams within our company. So I'm very much looking forward to bringing some of that experience to bear in this new role and getting on with the job.

Henriette Ellekrog

When you and I interviewed, we obviously discussed the strengths of Ørsted and the future focus areas of Ørsted and of the EPC & Operations organisation. It would be interesting to know - what made you make the decision to join Ørsted?

Richard Hunter

I think firstly, the opportunity to join the leading global green energy major was a big thing. A company that's undergone a significant transformation already and has a

clear ambition and mission within the sector to continue to grow and develop, not just within offshore wind where we're leading already, but into other areas. So that's a key one. Secondarily, together with the EPC & Operations team, I can see that the role and the organisation has a key part to play in the business in the future in delivering the projects that we need to do on time and to cost, and ensuring the operations continue to innovate within the space, so that we can continue to deliver value. And thirdly would be the culture of the company. I researched that a little bit before I entered the process, and through the process for the recruitment, with interactions with our CEO Mads, with yourself and with a number of the other executive team, I think I've got a clear understanding of the culture that you have and what you're seeking to promote, and it's something I want to be part of, so I'm very much looking forward to joining you as part of the team.

Henriette Ellekrog

We're happy to have you on the team. And to put your hire into a greater perspective, allow me to elaborate a little on that. Because it's quite clear that if we're to realise this ambitious growth strategy, we need to have world-class experience teams, and we need to be able to attract, retain and develop the very best talent across in our industry. To do that we'll leverage three things. One is our Danish heritage. So we will work - even though we are truly global - with our Scandinavian leadership, meaning that we'll have low power distance, we'll bust bureaucracy, because that is key to speed and progress. The second thing, which is also quite important and attractive to our talent, is our clear sense of purpose and our vision, which guides everything we do. And thirdly and finally, the knowledge or the history - that we've done this before. We've gone through large transformations through our passion, our perseverance and our discipline. It's quite important to know that we've done this before. So we're happy that you're joining the journey also now, Richard.

Richard Hunter

I'm very happy to be part of it. Thank you.

Henriette Ellekrog

And now it's time for a break. When you come back, we'll welcome Declan to the stage to tell us more about our onshore growth strategy.

Allan Bødskov Andersen

Welcome back after the break. We will continue with our onshore business. Our onshore business has grown significantly faster than we anticipated back in 2018, when we entered the US onshore market. We are a top 5 developer in the US, and we also



recently acquired a European platform. So I'd like to welcome our CEO of our onshore business, Declan Flanagan from Chicago. Welcome, Declan.

Declan Flanagan

Good morning, Allan.

Allan Bødskov Andersen

Declan, I'd like to ask you: how did the business come to where it is today, and how do you see us fulfilling the ambition of reaching 17.5 GW of capacity by 2030?

Declan Flanagan

It's been a period of huge growth since our last Capital Markets Day, which came just a month after the formation of the business unit. Since then, we've been executing on our announced plan of a 5 GW portfolio by 2025. I'm delighted to report we're on track to hit that target three years ahead of schedule, with a 4.7 GW portfolio of operating or in-construction projects by the end of this year. So three years into the business plan, we'll have made gross investments of some 35 billion DKK, creating a diverse portfolio of assets as measured by markets and technology. So now's a good time to revisit our ambition, and as introduced by Mads, our new target is for a 17.5 GW onshore business by the end of the decade. It's an ambitious but also realistic target. It'll involve a run rate of approximately 1.5 GW per annum, a pace of growth we have already achieved. It's a target backed by a development pipeline of over 10 GW, so plenty of inventory, if you will, for the required pace of growth. So that's a quick snapshot of the business, Allan.

Allan Bødskov Andersen

Thank you, Declan. A question we get a lot is around value creation. Value creation between onshore and, sort of, between wind and solar, but also between US and Europe. Could you explain a little more about our approach to capital allocation between technologies and markets?

Declan Flanagan

Yes. Our expansion into solar is obviously one of the more significant portfolio choices we have made in the business, and also our expansion into non-US markets, as you mentioned. So I'll cover the thinking behind those choices. Also, I'm going to cover our thinking around the role of M&A versus our own Greenfield-driven growth. But first, let's start with what our customers want, and our customers want solar. At our last Capital Markets Day, we announced our first large solar and storage project, the Permian Energy Center, in response to the opportunity to serve an existing wind customer. And

that pattern of customer behaviour – buy wind first for price, then seek to fill out the portfolio with solar – is something we see more and more often. As a result, solar has made up 70 % of recent corporate PPA demand in the US, and that's a trend we expect to continue. Most importantly, we've shown we can create value in solar. With 1.4 GW of operating or in-construction solar projects, we've achieved a spread to our cost of capital of 150-250 basis points. So very much in the strike zone. And I would note, and as Marianne will cover in more detail later, when we talk project returns, we mean fully loaded returns, accounting for G&A cost, project soft cost etc. So simply put: our customers want solar, we create value supplying it to them and it's going to be a bigger part of the portfolio going forward. And we forecast our current mix of 70 % wind, 30 % solar evolving to approximately equal share of wind and solar in the 2030 portfolio of 17.5 GW.

I'm going to go a layer deeper in the business now and explain via a project case study how being multi-technology wind and solar makes us a better and more efficient developer. The Helena Energy Center is a 518 MW wind-solar hybrid currently under construction in Texas, near the city of San Antonio. When Helena goes online next year, it will serve customers including Henkel and Target Corporation. Now in this business, access to transmission is often the scarce resource, and a 500 MW plus interconnection point close to load is especially so. But at this location, land use considerations and project footprint made a 500 MW wind farm unfeasible. But our development team was able to structure an optimised wind-solar hybrid that used the available transmission capacity, but also produced a more balanced production profile and generated strong economies of scale. So this hybrid approach is something you will see us do more often, both in terms of new build, but also in terms of in-filling capacity of existing projects. For example, adding solar or storage to existing wind. And on the storage front, we've learned a lot from our recently commissioned 40 MWh battery storage project at the Permian Energy Center. This solar storage capacity in-fill is an interesting value lever going forward. Now let's shift the thinking to markets and geography.

When we announced our ambition for the onshore business the last Capital Markets Day, we were very clear on the global ambitions for the business. And with Europe and APAC scheduled to add up to three times the capacity the US will add by the end of the decade, the rationale is obvious. We've shown with the recent expansion into Europe, we can create value in global markets, again achieving spreads to our cost of capital very much in the strike zone. That being said, it's fair to say our recent entry into Ireland and the UK was at the lower end of our range, as one would expect with the entry price element of a platform deal like that, but we're confident we can expand

margins over time as we accelerate growth of the platform, as we did with Lincoln Clean Energy. We also feel that the highly contracted cash flows and simpler capital structures are a nice complement in the European portfolio, a nice complement to our overall portfolio. All that being said, the US will remain our core market, and its combination of scale and overall risk return mean it will attract the lion's share of investment during the planned period, and we forecast that the US will make up 80 % of the 2030 portfolio of 17.5 GW.

So Europe is another example of us being a good buyer and M&A being part of our growth plans. But what makes us a good buyer? I'll focus on two things: our proprietary deal flow and our ability to move quite quickly when we find a deal that fits. On deal flow, we have a deep network in the US and globally, and it means we see a lot of opportunities. And the majority of what we've done in M&A has come from our proprietary network. As regards moving fast, our funding model, lack of reliance on project finance and our ability to take and to manage merchant risk allow us to move fast where a deal is the right one for us, and also create extra value. For example, by buying a project at late-stage development, but without a PPA and securing a PPA later, and enhancing the business case. In fact, just last week we announced a perfect example of that with a PPA with a group of municipal utilities in the Midwest US, served by one of our wind farms in that region. So M&A has been and can be in the future an important part of the growth plan, but our core competence is very much Greenfield development, and that is where the majority of our projects to date have come from. But what makes a good Greenfield developer?

As we like to say in the business, it takes a village to develop a power project. The core skill when it comes to development is what we call development ground game, and that means managing and understanding all stakeholders, and especially our landowners. So I've got a short video to show you, which is a great illustration of working with landowners on our projects.

[video]

I can't tell you how many times we just got wiped out. We would lose a crop because of wind blowing, and now we're getting paid for the wind blow.

As far as the landowners, just having income, it may be the difference of somebody staying and farming or not staying and farming. If they stay and farm and that's something they can pass down to their kids, just the extra income is just positive.



They may not be for everyone, but the company's easy to work with, the impact to the environment is very small, and I think farmers and ranchers are some of the best stewards of the land. We have to be, because they're not making any more.

You can still farm around the windmills. You can still run cattle around the windmills. If it's in a government program, it doesn't affect that. Basically, it gives you some roads, which in our pastures we love, because we can go check our cattle with new roads that go to the windmills that we didn't have before.

Even the people that don't have turbines, let's say they're getting a new school building. There's a lot of new school buildings that have happened after the turbine. I've tried to take care of what land we have. This seems like a pretty good way to generate electricity to me. It doesn't pollute. We're not damming any rivers, we're not burning coal. This sounds like a really good idea. Use the wind.

Allan Bødskov Andersen

That is a good video that I think also demonstrates how we strive to be good neighbor in the communities we operate in. But let's continue with the presentation. Declan, with the increased competition, how does that impact our ability to secure good offtake contracts?

Declan Flanagan

Yes, it's very much a business about contracted revenue, and in our existing portfolio we have 90 % contracted revenue with over ten years of remaining contract life. It's very much a portfolio approach to offtake with a range of customers from utility, financial, government-backed and, of course, corporate offtake. So let me focus on corporate offtake for a moment. As you mentioned, Allan, it is a competitive market. Next to transmission, which I mentioned earlier, good quality offtake is the scarce resource in this business.

So I'm particularly pleased with our track record in the corporate offtake market in recent years, where we've been able to both increase our average price and also increase the duration of our contracts. But more importantly, we very much focus on continuous improvement in the contract terms and adding new improvements, such as upside sharing mechanisms or downside mitigation. So we now have what I feel is a more balanced share of risk between buyer and seller than perhaps was common in the corporate part of the market just a few years ago. And that, of course, is a natural evolution of this new market, but also reflects the fact that you have so many more corporate buyers at scale in the market than just a few years ago. So great progress on



contracted cash flow, but managing the merchant component of the portfolio is also really important. And earlier this year, we made an organisational change to bring the US trading team into the Onshore business unit – and that's working really well. So we have close coordination between teams working on long-term contracts and those trading in the real-time markets, and that makes us better at both. So that change has worked out really well.

Allan Bødskov Andersen

Declan, we often hear the onshore market being described as a more commoditised market compared to, for example, our offshore business. So how do we stay competitive and create value in a more commoditised onshore market?

Declan Flanagan

Well, I always like to start the competitive advantage question, Allan, with a nod to our track record to date, and the momentum we have built has shown we've got something going for us. But as we look to execute the plan we're announcing today, I think of four pillars of our competitive advantage. Number one, greenfield development culture. This is a group and a business unit where the greenfield heritage is really strong, and that ability to take and to manage well-thought-out development risk is really important. Number two, our global scale makes us a preferred partner. Whether it's equipment manufacturers, global corporate customers, or in the case of the US market, the largest tax equity investors, that global scale and being a preferred partner is a big advantage. Number three, our funding model and our ability to take and to manage some level of merchant exposure allows us to take a portfolio approach to growing the business and to move with a pace that is better than a lot of our competitors. And finally, number four, our global employer brand. We've shown we can attract the best talent in the US market as we've scaled the onshore business there, and we're starting to see that in Europe also. Of course, these four things become self-reinforcing. Focus and purpose attract the best talent, which manages the risks, which creates growth momentum.

As I begin my wrap-up here, Allan, I'm just going to focus on that word "momentum". We're entering a decade where the energy transition is just going to accelerate, and we now have the momentum in the business unit to play a significant role in the onshore segment of that energy transition. The US is going to remain our core focus, but we will remain globally ambitious while always being patient. We have the greenfield development culture to ensure we can create value across the portfolio. We have the talent and the organisation in place, both within the business unit and the integration with the capabilities of the broader organisation. And whether it's US tax



equity, global corporate engagement or business development opportunities in APAC, our Onshore and Offshore teams are working together every day. So it's an ambitious plan, but we have the momentum to achieve it. And so over to you, Allan.

Allan Bødskov Andersen

Thank you so much, Declan. It's certainly going to be a busy decade within our own business as well. So we will now proceed w

ith our programme. The next topic will be renewable hydrogen and green fuels. We believe that renewable hydrogen and green fuels will be one of the cornerstones of the future energy system. So I'd like to welcome Martin back to our stage and let him explain more about Ørsted's approach to this exciting new market.

Martin Neubert

Renewable hydrogen is a topic I personally feel very passionate about. That's for two reasons. Because it's directly and strongly connected to our vision of creating a world that runs entirely on green energy – which does not mean that renewable hydrogen is the silver bullet when it comes to the global decarbonisation, but it will, no doubt, play a significant role when it comes to decarbonising the hard-to-abate sectors, which will otherwise not achieve their net-zero. Secondly, renewable hydrogen reminds me a lot of where offshore wind was 12-15 years ago. At that time, there was a clear proof of technical concept. However, only a few projects had been built, and those were heavily relying on strong subsidy and government support. It was also unclear how fast and quickly the technology could scale, how quickly costs could come down. Also, the entire regulatory framework was rather uncertain. But remember, that was the time when we at Ørsted made very bold moves in order to kick-start offshore wind as a new industry. What is very different to offshore wind in the old days is the global appetite for green hydrogen, which is already significant and has exponentially increased over the last 18 months with current forecasts expecting somewhere between 80 and 100 GW of renewable electrolyser capacity being installed by 2030.

Our ambition at Ørsted is threefold. We want to continue our efforts – and by "continue" I mean that we have been engaging within the hydrogen space already for the last three years to become a global leader in renewable hydrogen and green fuels. We want to execute and expand our current pipeline, which is well above 3 GW already, in close collaboration with our key offtake partners. And we want to pursue global opportunities across all our growth platforms in the EU, in the UK, in the US and in Asia-Pacific.

Ørsted is very well-positioned, and we have a very strong starting point. We also see renewable hydrogen as a natural extension of our business model because we have a proven track record of scaling new renewable technologies. We have vast experience, working together with policymakers, in shaping the regulatory frameworks. We see significant synergies between renewable hydrogen and our large-scale fleet of renewable assets, especially in the interface between the wind farms, for instance, or the dispatch of electrolysers. And our assets are strategically located very close to industrial offtake centres. Then I talked, as part of my offshore wind presentation, about our proven and flexible partnership approach, which is especially important here, because in order to kick start renewable hydrogen, we need to bring the supply and the demand side to work hand in hand together.

Our approach to renewable hydrogen is to focus on specific offtake sectors. Those are refineries and ammonia, because there we see, in the very short term, a high demand for substituting fossil hydrogen with renewable hydrogen. Then we will focus on steel because we are obviously a large steel offtaker ourselves. It goes into our foundation structures and also into the turbine towers. And we will focus on heavy transport, which includes heavy road transport, shipping and aviation.

Our engagement approach is a very structured approach. We establish and mature concrete projects, and we like to go for projects which are not just small-scale one-offs, but actually projects that are strategic, which can be scaled, and which become gigawatt-sized in scale. We have an approach where we work in phases. We obviously want to build something and realise something quickly in order to replicate the learnings to apply once we go and scale up the technology. We are in close dialogue with regulators shaping the framework, and for each of our projects we have a dedicated and specific funding plan, because there is a significant cost gap today between fossil hydrogen and renewable hydrogen. We also work closely with the OEMs across the different electrolyser technologies.

Now let me just spend a minute zooming in on where exactly it is that we play a role in the value chain. Our idea is that we are replicating our approach from offshore wind, which means we want to develop, build, operate and own electrolysers. We have no plans or intentions to invest in specific electrolyser technologies. However, as in offshore, we will work very closely in a partnership approach with the electrolyser OEMs in order to improve the technology, scale the technology and make the right choices for each of the specific projects we have.

We will lean forward in selective parts of the renewable hydrogen offtake side, especially within green fuels — so e-ammonia and e-methanol are two examples to mention here. We have no plans to go into the distribution of renewable hydrogen or green fuels, because this is where we rely on our strong offtake partners to take care of that.

This is a snapshot of our impressive development pipeline that we already have. Far more than 3000 MW of projects. As you see, these projects are across our different core markets in Europe, they are across the different offtake sectors I just explained, and most importantly, they are in partnership with absolute industry leaders in their respective sectors. They are gigawatt-scale projects we have under development, but I'm also very proud and happy to tell you that we are not just developing. We are actually already constructing. That is the H2RES project that you can see here on the slide, where we broke ground just three weeks ago here in Copenhagen. It's a 2 MW electrolyser that will be constructed by the end of the year, fully commissioned in the start of 2022, delivering renewable hydrogen to fuel zero-emission taxis and buses driving in the Copenhagen area. It's also our very first stepping stone for the Green Fuels for Denmark project. That is a project where we work together with Danish blue chips like Maersk, SAS, Copenhagen Airport, DFDS and DSV to realise a 1300 MW electrolyser vision by 2030. The project is dependent upon the realisation of the Bornholm Energy Island, which is expected in around 2030. Obviously, we need a lot of green electrons to fuel that project, but going back to the point that we like to phase things, we have tangible, much earlier short- to midterm phases for this project. Phase one is a 10 MW electrolyser to be established in 2023. Phase two is a 250 MW electrolyser to be established in 2027.

As I mentioned, renewable hydrogen relies on significant funding and government support, because we have a significant cost gap today between fossil and renewable hydrogen. There are different funding pathways that are available to us. There are national funding pools, which we have already utilised, for instance, for the H2RES project in Denmark, but also for the Westküste 100 project in Germany. Then there are EU funding pools. We are active, for instance, in the first EU innovation round with the Lingen Project, where we, together with bp, are in the process of applying for funds, realising the first phase of this project.

And then there is a pan-European EU funding scheme called IPCEI, Important Projects of Common European Interest. I'm very happy to tell you that four of our projects here on the slide are actually in that round. One is the Green Fuels for Denmark project, which has been selected by the Danish government, now going into what is called an

EU match-making process. Then we got great news at the end of last week that both the Westküste 100 project and also the Lingen Refinery project have been selected by the German government in a very rigid selection process to go into EU matchmaking. And we're also applying together with our partner Yara for the Sluiskil project under the IPCEI process. The important thing to understand is that once being successful in the IPCEI process, it not only opens up for more European funding, but it allows for an additional and significant step up in national funding, which is why the IPCEI process is something we are very focused on.

Lastly, I want to say, this is just a snapshot. We're obviously working on many more opportunities, and we're also expanding our opportunity pool into other areas outside Europe. One example I want to give is the MOU we established last week in Korea with an industrial Korean blue chip, POSCO — where we foresee collaboration across offshore wind and also renewable hydrogen. Korea is a super exciting market when it comes to renewable hydrogen because the country has a strategy to put six million fuel-cell cars on the road and also to establish 15 GW of fuel-cells for power generation.

Allow me to double-click on one of the projects I just showed you, namely the Westküste 100 Project. This is a project where we work with ten partners. It's at the refinery of Heide in the very northern part of Germany. The project has, as I mentioned, received national funding for phase one, which is a 30 MW electrolyser. We work together with our partners now to enable a final investment decision by the end of 2021. The 30 MW will allow the refinery to basically substitute all the fossil hydrogen it's using in its processes today with renewable hydrogen – but that is not the end. There is a clear vision here and ambition of all the partners to bring this project to a gigawatt scale. And we're talking something between 700 MW and 2100 MW as the next phase, allowing for the production of green fuels. It's important to know that the refinery of Heide is the exclusive supplier of jet fuel for Hamburg Airport, one of the largest regional airports in Europe. We are very happy to be part of this project because it also brings together partners that can work very holistically when it comes to all the processes, inputs and outputs of the project. Just to give you an example: The 700+ MW project will be fuelled by offshore wind from offshore wind farms in the German North Sea. Then the oxygen that is being produced as part of the electrolysis process will be used by a cement factory close by, which is operated and owned by Holcim, significantly reducing their nitrogen oxide emissions. The CO2 produced at the cement factory will then be rechannelled into the refinery for the production of green fuels. Excess heat that is part of the process will be used by a business partner close by. It just shows how holistically this project is being taken. That's why it's one of the



projects, one of the flagship projects, the German government has selected for their IPCEI process.

To sum up my presentation, Ørsted has the ambition to become a global leader in renewable hydrogen and green fuels. We have significant synergies with our large-scale renewable assets. Our approach is to establish, mature and scale up tangible projects, build upon our extensive experience in scaling up and costing out new technologies and working together with our partners. And most importantly, what I want to leave you with is, we are not only very excited when it comes to renewable hydrogen and green fuels, we are not only well-positioned, but we are already heavily engaged in really kick-starting this important new industry.

Mads Nipper

Thank you very much, Martin. Really exciting to hear about our renewable hydrogen and green fuel plans. Personally, I think this holds a huge potential to become the next leg in our transformation journey. Now after Martin and Declan have taken you through our plans for offshore, onshore and renewable hydrogen, allow me to just quickly take stock before we move on.

We are looking at an energy system that is accelerating its green transformation. It's really important that we see that happen, and it's fantastic to see that that materialises into massive growth opportunities for Ørsted. We have set the aspiration to become the world's leading green energy major, and we are going to do that by balancing a very strong protection and acceleration of buildout within our core business of offshore, while also ambitiously following the growth opportunities in onshore, renewable hydrogen and other areas – innovative areas, such as the energy islands. We believe we are really strongly positioned to materialise that potential, because we do have, in offshore, a clearly industry-leading pipeline that is both concrete and much larger than anybody else's. We have a cost and innovation leadership built over decades, and within onshore, we have a proven ability to scale profitably in our key markets. Within renewable hydrogen, we have a very tangible 3 GW-plus pipeline of concrete projects lined up, and we have a globally leading sustainability position. So all in all, we believe we're very strongly positioned.

Talking about sustainability, I'm joined here on stage by Jakob Bøss, who is our Head of Corporate Strategy and Stakeholder Relations. And Jakob, as I believe everybody knows by now, we have transformed over the past decade from being one of Europe's most fossil-fuel-intensive utilities to now having come very far in the green transformation. So could you share where we are right now?



Jakob Askou Bøss

Well, Mads, we've come a very long way in our transformation. Since 2006, we have reduced our CO2 emissions per kilowatt-hour by 87 %, and we are fully on track to become fully carbon-neutral in our energy production and in our company by 2025. That will make Ørsted the first large energy company in the world to reach that target – all of which is approved by the science-based target that is really supporting the 1.5-degree ambition. So we have really come a very long way.

Mads Nipper

And obviously, it's hugely important to prove to others that this is possible to do as well. But what's the next frontier for us?

Jakob Askou Bøss

Well, if you compare the shift from fossil fuel power generation to renewable power generation, we are taking out 99 % of the life-cycle emissions by shifting from coal-fired power production, which was our core business just a decade ago, into producing one kilowatt-hour based on offshore wind. So that is, of course, the major step that we are taking in shifting the whole technology platform. The remaining part is predominantly in the supply chain, and that is really where we have our next focus.

Mads Nipper

And I guess, for the entire industry and for many, many companies around the world, the key question is, how are we going to do that?

Jakob Askou Bøss

Well, first of all, we've set a very ambitious target, saying that by 2040 we want to be carbon-neutral also in our scope three – so including our supply chain. And by 2032, we are going to take our emissions down by 50 %. So, we have set very ambitious targets. The next thing we are doing is really engaging our suppliers and really bringing them along on the journey. The first thing we've said to them is that by 2025 we want you to run 100 % on renewable energy. That is already today commercially viable, so that is really doable for everybody within that timeframe. The next thing is, of course, the harder part, and that is to drive out the emissions from all the different components and parts of our supply chain. That is why we are working closely with our strategic suppliers to map their emission baselines and then, based on that, to develop roadmaps for each of the components in our supply chain, so that we make sure we work jointly together in driving this huge, innovative effort that is required to bring ourselves and our supply chain fully to net zero by 2040.



Mads Nipper

Now with a strategy that is based exclusively on renewable energy, and also having industry leading ambitions for decarbonising not only our own company, but also our supply chain, have we solved all sustainability challenges?

Jakob Askou Bøss

Well, not quite, because what has happened over the past decade is really that we have been working hard to get renewable power down in price to a now cost-competitive level with fossil fuels. That means that, over the coming decades, we're going to see a massive scaling of renewable energy in our quest to transform the global energy system to renewable energy and fight climate change. In that global scaling of renewable energy, it's going to be tremendously important that we also protect biodiversity. We are going to go out and harvest energy in nature, basically. That requires that, whenever we build renewable energy production, we do that in a way so that we really protect nature. And that is why we are now, as you said earlier today, announcing the target that by 2030 at the latest, all our new energy assets that we'll be commissioning will be net positive in their biodiversity impact. That is going to be the next big frontier for us in our sustainability journey.

Mads Nipper

Yeah, and I just want to repeat how excited I am about us announcing that, because I think it's going to be a vital journey for us to prove that this is not just something that's possible, but it's also absolutely necessary for the industry — and something that will be a prerequisite for scaling the buildout of renewable energy that we all know we need to do. And now, Jakob, for over 15 years you have been part of this journey, as opposed to me. So looking forward, what role do you think sustainability will play for Ørsted in our future journey?

Jakob Askou Bøss

Well, to me, there's no question that our strategic focus for more than a decade on really being at the forefront of the sustainability journey has driven our commercial success. It has driven our fundamental transformation from a business firmly anchored in fossil fuels to now being a global leader in renewable energy. And I'm 100 % convinced that this is going to continue to be a competitive edge for Ørsted as we continue to reach for our strategic ambitions. And it is going to be the right thing to do for the world as well, because we need to limit global warming and create a world where we can all thrive.



Mads Nipper

Thanks a lot, Jakob. Allow me to also just repeat that I think it is so vitally important to continue to drive sustainability leadership for us, both to prove that this is the right thing to do – it's fundamentally right for businesses to play a role where we deliver growth sustainably – and also, having been recognised as the world's most sustainable company last year and the most sustainable energy company three years in a row, I have no doubt that this is a major competitive differentiator and something that will also give us tangible advantages going forward as a company. Now, coming up next is Marianne talking about the financial parts of our plan.

Allan Bødskov Andersen

With my own long background in Ørsted Finance, we now come to the topic that I have been looking forward to in particular, namely all the financial numbers. So, I'd like to welcome to our stage here Marianne Wiinholt. You are our group CFO. Welcome, Marianne.

Marianne Wiinholt

Thank you, Allan.

Allan Bødskov Andersen

Marianne, could you start by taking us through what has happened since 2018 into the funding of our growth ambitions towards 2030?

Marianne Wiinholt

I'd be happy to. First, I will start by going back to the targets we set at the CMD in 2018. We are on track to deliver on all the targets, and what we will do going forward is that we will incorporate these targets into the new ones that we are sharing with you today.

If we then look at the growth, earlier today Mads announced the new ambition of 50 GW of capacity in 2030, and with this ambition, we will step up the investment level significantly. We will go to an average annual investment level of DKK 30 billion in the old plan to now DKK 45 billion in the period up until 2027. This 50 % increase in investments gives a total of DKK 350 billion in investment for the period from now until 2027, and of that we estimate that 80 % will go to offshore and hydrogen, the remaining 20 % to onshore. We will also facilitate further investments of around DKK 100 billion through our JVs and our EPC partnerships, bringing the total enabled investments into green growth to DKK 450 billion.

If we look at how we will fund this DKK 450 billion, we will do that through four sources. First, a significant part will come from the operating cash flow that we generate. Secondly, we will issue more hybrid capital, as the capital employed continues to increase, and we will also issue more senior debt. Then we will also have the DKK 100 billion from JVs and from EPC partnerships. That's the 25 %. And then lastly, we have incorporated here that we will farm down 50 % of each of our offshore wind farms. Not the ones where we already have JVs, but all the rest.

When we look at our key capital allocation priorities, they remain unchanged compared to what we said all the way back in the IPO in '16. And those are that we are strongly committed to our BBB+/Baa1 rating. We honour our dividend commitment, and then we invest large amounts into green growth. If we look at the rating threshold, we have lately seen that both S&P and Moody's have reduced their threshold. And they have done that because of our strong EPC track record, because of our higher degree of diversification and also our very stable earnings. This reduction has allowed us to reduce the FFO to net debt target we have from 30 to 25 %, and this enables us to invest further into green growth.

Then as I said, we are now relying on the partnership model to fund the growth. We have included a 50 % farm down, as I said, on all the wind farms where we don't have JVs already, and this is incorporated into the growth CAGR on EBITDA and also the return on capital employed (ROCE). We see a strong interest in the farm-downs. That has lately been seen in the Borssele 1 and 2 and the Changhua 1 farm-down. And we expect this to continue, also going forward. We will also opportunistically pursue farm-downs within onshore. However, we still see farm-downs as something that gives us flexibility, so we will decide on each farm-down, project by project.

If we then look at our funding model, the funding model remains unchanged. It is a funding model where we rely on balance sheet financing, and we do that to lower the financing cost, and it is also a scalable and flexible model.

To the left of the slide, we have shown the difference between our funding model and project finance, and the big difference for us is that we, through our model, avoid issues with structural subordination, which could become an issue when we defend our current rating.

We also, as I said, see lower funding costs in the developed market. We see a difference of around 100 bps between project finance and our funding cost. And in less developed markets, we see that this difference is even bigger. The model is very



flexible, and we can also act fast, which in many cases is of very high importance to us. Then I would also say that this is important for us given the fact that we can use debt as a risk management tool, which we do to a large extent, and I will come back to that later.

If we then look at how our funding model impacts the risk to equity, I've here in the left part of the slide shown the difference between a single-asset project-financed project and the way we do it, where we have a large portfolio of assets supporting the debt. And here, it clearly shows that the portfolio effects give a significantly lower cost of equity.

If we then compare a project-financed levered project to our funding model and look at the equity IRR, we typically see that with higher leverage, you get a higher IRR, but if you look at the range, the risk, you see that you have much, much bigger space of outcomes if you have a project-financed model. And that we have lately seen in Texas, where the arctic blast meant that several projects failed. So, the risk related to our equity is significantly lower than for a project-financed single project.

Allan Bødskov Andersen

Marianne, this question about our funding model is also one we discuss a lot with our investors. So with the balance sheet financing model we have, does that mean we will never apply project finance under any circumstances?

Marianne Wiinholt

No. Not that we are doing it yet, but we might see circumstances where it is beneficial for us to use project finance. That could be in markets where the JV partner, for example, insists on us doing it, or where that is, in a way, the market standard. We will not do it to a large extent, but you could see limited use of project finance.

Allan Bødskov Andersen

Marianne, we're now moving to a spread to WACC framework for our value creation, and we do see in the industry quite some differences in how that is being defined. So could I ask you to elaborate on how we define our spread to WACC framework when it comes to value creation?

Marianne Wiinholt

I'd be happy to do that. As I see it, this is one of the really key metrics we share with you today. So what we say today is that we have a targeted range spread to WACC at the time of bid, or FID, whatever comes first. And that spread is 150 to 300 basis

points. If I then compare to a levered equity IRR, also including farm-down gains, which many peers are guiding on, and bridge that to our guidance, I will first start by deducting the leverage effect, and then we do not include any farm-down gains. But it's also very important to emphasise that we include the full overhead cost. We also include the full life cycle development cost. And we also include purchase prices, if we have acquired the project. This range of 150-300 basis points applies both to onshore and offshore - both are actually within exactly the same range.

But when you heard Declan earlier today, you heard him talk in quite some detail about the spreads for different geographies, Europe versus the US, and also technologies, while you did not hear Martin share a lot of granularity on that. And the reason for that difference is that in onshore we typically don't participate in these competitive auctions, while we do that in our offshore, and therefore it is competitively sensitive to share that level of granularity.

We might see projects where we go below these 150-300 basis points, and we might also see projects where we go above. But the vast majority of the projects we expect will be within this range. If we then compare the guidance we share with you today with the latest guidance on value creation, which is this 7-8 % IRR for this portfolio of seven projects, we actually see that it is exactly the same value creation. So, the spread on top of WACC is the same, what has changed is the WACC, which has been reduced due to the lower interest rates.

But I also think it's worthwhile to dig a little bit deeper into how we calculate our WACC, because I think this is a very robust way of doing it. We use a market-conform CAPM model, but we differentiate between technologies, so that we don't have the same WACC for solar PV, for example, as we have for onshore wind. In certain less developed markets, we also add country risk. We have previously shared with you that we have done that with Taiwan, for example. And then we also add a premium for merchant risk. If it is a fully merchant project, we add 250 basis points, and if it has less merchant risk, we then scale down that number of basis points.

If I then move on to return on capital employed, we have today updated our guidance here to 11-12 % for the period 2020-2027 versus the old guidance of 10 % for the period up to 2025. There are two differences I would like to emphasise. First, we now include partnership gains. We also did that in the 10 %, but we had very limited partnership gains in that, because it was basically only Changhua where we assumed a farm-down. But you should also take into account that this significant step-up in the investment



level gives a lot of capital employed that does not yield any return in a period of time, so that of course has a negative impact on return on capital employed.

We look into very solid growth. We have today shared a \sim 12 % estimated increase in EBITDA from onshore and offshore operating assets in the period from 2020 to 2027. This average of around 12 % gives an EBITDA estimate of DKK 35-40 billion in 2027. We see that we have quite a lot of certainty around this EBITDA amount, as 85 % of the earnings will come from assets that either are already in operation, under construction or from the awarded pipeline. It's also worth emphasising that we have included these farm-downs in both the ROCE and the CAGR.

Then to a slide we shared for the first time at the Capital Markets Day in 2018. This slide illustrates the high visibility we have on the future earnings. Here we have listed all our projects in offshore - both the ones in operations, the ones under construction, and also the awarded projects. And when we take all these projects and we capacity-weight it, then we get to a number of 15 years of remaining subsidies. And this is exactly the same amount that we had at the last CMD. We also have the same amount when it comes to regulated share of earnings - regulated and contracted - that is now extended to 2027, and it remains around 90 %.

Allan Bødskov Andersen

Marianne, I think this would be a good time to dig a little deeper into our financial risk management. We have seen interest rate increases, we have seen inflation increases, and we have also seen commodity prices - in particular, the steel price - increase quite significantly. So, we do get a lot of questions on how Ørsted is exposed to these risk factors. So, could I ask you to elaborate a little on that?

Marianne Wiinholt

I'd love to do that, Allan. This is a subject very close to my heart. I think we have world-leading competences within risk management, and I will try to share some of the details on how we are exposed to inflation risk, the interest rate risk, the currency risk and also, as Allan alluded to, the steel price. This is the more mid- to long-term part of the risk management. We have the other part of the risk management, which is the hedging of our commodity price exposures, and also our currency, where we use the staircase model.

But starting with the inflation risk, I will just show a small illustrative example here, where in 2021 we invest 100 and we get the return in 2022, and the return is 5 %. In the first example to the left, we don't have an inflation index, while in the second on the

right, we have an inflation index. If inflation turns out to be 5 %, we will in real terms get a return of zero in the example with no inflation index, and we will get the 5 % if we have the inflation index.

If I then dig into how we are exposed to inflation risk, what we have done here is that we have taken a 10-year period from 2021-2030, we have included all our operating assets, all our assets under construction, and all our awarded projects. And those represent the 100 % in this example - or not example, because these are real numbers. Out of this 100 %, 55 % is inflation index, and that comes from the UK ROCs, from the CfD contracts both in the UK and also in Poland. The way we think about this inflation index revenue is that we see this as something we allocate to our shareholders, so that the shareholders buy into an equity which is inflation-adjusted. We then have a small portion of merchant, and then we are left with 35 % of fixed nominal exposure. This exposure comes from the subsidies that we have in continental Europe, the United States and also in Taiwan. And what we try to do here is to mitigate this inflation exposure, which I'll show on the next slide, where we mitigated through debt and hybrids and also derivatives. So in our way of thinking, we pass this inflation risk on to the debtholders. And the remaining net inflation risk we have is very limited.

If we then look at how we are exposed to increasing interest rates, as we have such a high share of inflation index contracts, and we have also hedged a big portion of the fixed nominal, we see that we are very well protected. Here we have shown the correlation between the inflation and the interest rate, and you can see that there is a very strong correlation up until the financial crisis, where you saw that the correlation broke. We have actually benefited a lot from this situation since the financial crisis, but assuming that this correlation is re-established long-term, which we believe it will be, then we will be very well protected, also going forward.

If we then look at how we use debt to hedge our currency exposure, then we try to match the debt that we have and expect to issue up until 2025 with the exposure we have through the FFO. And here you can see that we have a very strong alignment, and this gives us significantly more stable earnings from these hedges.

And then, lastly, I will go through our exposure to steel. We get, as Allan said, a lot of questions around that. First, in a way, how big is this steel exposure really for us? Out of a total CAPEX of 100 %, the steel share is in the magnitude of 4-7 %. We manage this risk for the US portfolio, for example, where we locked in 70 % of this exposure, and we did that a year ago before the steel prices started to increase. We also made a change in the price formula in our contracts, so that we now have a steel price exposure which



is possible to hedge in a liquid market. And then, as always, we continuously work to reduce the level of steel into our construction projects.

So if I were to sum up on this deep-dive into our risk management, I would say that we are very well positioned when it comes to inflation risk, both due to the high share of inflation index contract and also the way we have hedged it. We are not very exposed to increasing interest rates, again driven by exactly the same facts, and we see a very high degree of alignment between our FFO and our debt when it comes to currency mix, giving more stable earnings. And then lastly, the steel exposure is something we handle actively and we have a quite limited exposure to that.

Allan Bødskov Andersen

Thank you very much, Marianne. I actually think it's quite remarkable that at the end of the day, only 15 % of our revenues over the next 10 years will be exposed to inflation.

Marianne Wiinholt

Yes, I agree with that. I think many will be surprised by that.

Allan Bødskov Andersen

I agree. Marianne, is there any final message you would like to leave us with today?

Marianne Wiinholt

Yes, I would like to summarise the new guidance that we have shared with the audience today. So, if I go back to where Mads started today, we have a very ambitious plan: 50 GW of capacity in 2030. That's the ambition. We will then step up the investment level significantly to DKK 350 billion for the period up until 2027. We will invest this money into highly value-creating projects. Today, we guide on the spread to WACC of 150-300 basis points. We will see very strong growth in the period up until 2027, where we estimate an approximately 12 % average annual growth, giving an EBITDA in 2027 of DKK 35-40 billion. And we will do this with a very solid return on capital employed - an average of 11-12 % for the period up until 2027. So, an ambitious plan. It's a plan we really feel good about, it's solid and it is a plan that will deliver a lot of value.

Allan Bødskov Andersen

Thank you very much, Marianne. We will now have a small break, and when we come back, there are two items left. We will have Mads wrapping up what you have heard today, and then we will go into our Q&A section. So in five minutes, we will start with that. Grab a cup of coffee, prepare your questions, and I will see you in five minutes.



Mads Nipper

Welcome back from the break and allow me now to make the final wrap-up of the day. Ørsted finds itself in a very strong and attractive market. Just consider, we are an undisputed market leader in an offshore market that is destined to grow to about seven times the current size in a decade. We have a very strong position in an onshore market which will continue to grow, probably at a pace of 2.5-3 times, and then we are also in a very strong position in a renewable hydrogen and green market that is destined for very strong growth, and to be a core part of the energy system of the future. And we have now told you about our opportunities, about our ambitions and about our plans for those areas. But, let me spend this last section talking to you about why we feel very confident that our plans and ambitions are realistic.

And if we start with offshore, we have a clearly industry-leading pipeline of opportunities. We have proprietary seabed rights, we have a global development organisation, we have very strong growth opportunities that are substantiated and concrete. We are a clear cost leader in offshore as well. We have decades of experience, we have a truly global EPC and operations organisation, we have more than 25 wind farms in operation, and we have unparalleled track record of actually executing on time and on budget. But we're also an innovation leader, and we have proven that over many years. We also have a commitment to continue to innovate through integrated energy solutions, energy islands, and also now in floating offshore.

And within onshore, we've proven with our track record of creating value-creating growth in the US market, and with a very strong growth pipeline, both in the US, but also now in the European market, that this is something which is scalable, which gives us confidence that that's a journey we can continue. If we take a look at the hydrogen market - renewable hydrogen and green fuels. We already have a very strong, well over 3 GW pipeline of concrete and tangible projects that we will materialise over the next decade. That'll not only give us scale, but it'll also give us invaluable learnings that we can take on into a continued scale and growth, first in Europe, but also with very attractive opportunities in the rest of the world.

And if you look at our financial value creation, we clearly have industry-leading risk management. We've also confirmed a target of continuing double-digit growth and operating profit. We have a strong balance sheet finance model, we have low cost of capital, and we have also reconfirmed our around 90 % regulated and contracted share of income. We can't do this alone. So, our leading and also continuing to strive for strong partnerships with every stakeholder - from governments, to corporates, to



finance partners and, in principle, every stakeholder in the ecosystem of continuing to transformation of the energy system, is something where we are very confident that we can take our rich experience into the future.

And then last, but not least, our clearly leading sustainability position globally. As mentioned a few times, we have been named the most sustainable energy company three years in a row, and with an unparalleled track record in both decarbonisation and other sustainability dimensions, we are confident that this is something that we cannot only continue to leverage but accelerate as a competitive differentiator going into the future as well.

And with the totality of these things, we are very confident that our immodest ambition to be the world's leading green energy major is not just wishful thinking, it is something we can actually make happen. And with that, we really look forward to the Q&A, and we will see you in a minute for just that.

Q&A SESSION

Allan Bødskov Andersen

Welcome to the Q&A. We will start right away. First question comes from Deepa from Bernstein. Deepa, please go ahead.

Deepa Venkateswaran

Thank you so much for taking my question. So I have three questions. I hope I can ask all three. Firstly on CapEx. The 450 versus the 350 billion. Can you just help explain, and should I look at the 350 as roughly equivalent to the old 200, which was gross? So maybe if you can just talk about the gross versus net on the CapEx? Secondly, on the returns spread guidance of 150-300, you've highlighted that you're making a number of adjustments, which some other peers don't. So just for us to adjust, could you maybe explain how many basis points it is from the last adjustment, which is the overhead allocation and so on. You know, how many basis points is that? And the last question is again on the returns. So in the 150-300 basis points, is this weighted by your CapEx, or how should we think about offshore within that? Because obviously some of the numbers from the US onshore wind were higher than this range even. So how should we think about offshore within this range? And, you know, I don't know whether you make a difference between developed or emerging markets or something. So just some sense of where offshore should be in that range. Thank you.

Allan Bødskov Andersen

Thank you, Deepa. Marianne, I believe you should start this one off.



Marianne Wiinholt

Yes. Thank you, Deepa, for the question. Yes, on the first one, the 350 billion is comparable to the 200 billion we announced at the last Capital Markets Day. The 100 million that we highlight is the CapEx that is funded by the JV partners or the EPC partners we take in through the partnerships. So that's enabled CapEx, you could say. Then you ask about the spread for offshore.

Mads Nipper

Yeah, that was the last question, but you also asked about the components that are different in our way of looking at our spread. And I think, first and foremost, this is unlevered. Secondly, we are not including our farm-down gains, and then it is fully loaded, meaning that it's with corporate overhead and development expenses. And just to give you an indication of the basis points that you're asking for, Deepa. If you take our corporate overheads and our development expenses, at a rough average, with variations, that would be at the range of around 100 basis points. That part alone. Just to give you an indication.

And Marianne, feel free to supplement me, but for offshore, we don't comment specifically on offshore within that range. It is, as Marianne explained, a targeted range. And that is where you target the far majority of our new projects within that range. But for competitive reasons, we don't comment more specifically on where we would find offshore within that spread.

Marianne Wiinholt

But I think it is quite important to emphasise that the range for offshore and onshore is actually not different. It is exactly the same range.

Allan Bødskov Andersen

Thank you, Deepa. Our next question comes from Rob from Morgan Stanley. Rob, please go ahead.

Rob Pulleyn

Hi. Thank you very much and congratulations on the vision. May I use my question just to try and resolve some of the confusion out there around the underlying EBITDA guide for 2027? And to that end, may we request either the quantum of asset rotation gain in the 2027 guidance, some framework about how we should think about those asset rotation gains or alternatively, could you provide the 2027 EBITDA, assuming 100 %



ownership on these new projects, which I think is really what consensus is probably baking in? Thank you very much.

Allan Bødskov Andersen

Thank you, Rob. Marianne?

Marianne Wiinholt

Yes, I will try to give some colour on that. On the CAGR that we're announcing today, I think it's also important to emphasise the 20 % that we shared at the last Capital Markets Day – that started in 2017. If you have the same 2017 as the starting year and go all the way to 2027, the CAGR would be 16 % and not the 12 % we announced today.

And then if we do not include the farm-downs, the CAGR with the starting point we announced today would have been 16 %. So then I guess you can calculate it yourself. So, it is a very important difference between the CAGR with the farm-downs and without the farm-downs. On the partnership gains, that is not something that we're sharing. As we also said, we would be quite flexible around when we farm-down. That will of course also impact the farm-down gains, so no specific guidance on that today. But of course, the CAGR is completely excluding the partnership gains, as we always do.

Allan Bødskov Andersen

Thank you, Rob. Our next questions come from e-mail. And it's from Tancrede Fulop from Morningstar. "How do you see the offshore wind competitive landscape evolving? Do you think consolidation will happen? And would you play a part in it?" So Mads.

Mads Nipper

Yeah, I can give a brief perspective on that. Of course, it's super difficult to predict exactly how it will evolve. But it is a very attractive market that attracts a lot of new players as well. And it is also definitely an opportunity where there could be consolidation happening - and we can't rule out that we would take part in that either. So yes, we foresee that it will be a dynamic market. Martin, do you have any supplementary comments?

Martin Neubert

Yeah, maybe I should just say, we have been active in the past. When it comes to market consolidation in a market like the US, for instance, where we acquired



Deepwater Wind in 2018 - acquired them as a platform, fully integrated them – the team, and also the asset portfolio. Also, when you look at Europe, many of the projects we are developing, building today, we have acquired and therefore sort of bolted onto our system platform. So M&A activities in this space are very familiar to us in offshore wind - and we're certainly going to expect the same going forward.

Allan Bødskov Andersen

All right. Our next question comes from Kristian from Danske Bank. Kristian, please go ahead.

Kristian Tornøe Johansen

Thank you, Allan. So, two questions from me, please. First one is on the value-creation spread. So, you say this is consistent with what you communicated three years ago, although if we do reflect on the past three years, I will claim that competition has intensified. So, can you elaborate on how you're able to keep an unchanged value-creation spread despite the increasing competition? And my second question is on floating wind. Your commitment to floating wind seems to have changed clearly based on what you communicate today. So, what has made you become more positive on this, and given that you are not a first mover here, how do you plan to catch up with the players who've been looking into floating wind with a higher commitment for a longer period?

Allan Bødskov Andersen

Thank you, Kristian. Mads, will you kick us off?

Mads Nipper

Yes, I certainly will, and I think the second question is probably for Martin. But on the spread for offshore, as Martin said in his presentation today, we do have a very strong pipeline. So, if you add up the total, the 12.7 GW that we still need to fill to get to the 30 GW ambition by 2030, that is to be taken from a substantiated pipeline. A 14 GW and 38 GW of a further opportunity pipeline, realistic for 2030. And that totality, the size and substance of that pipeline, is exactly what allows us to be selective in where we actually lean into projects that are still value-creating. So if we were forced to take everything - if we had to - it would be difficult, because it is a fact that the competitive intensity is increasing. But it is a radically growing market, and as mentioned, the key reason is because we are choosing, deliberately, to continue to be selective, to uphold our financial discipline despite the market competition tightening. And Martin, maybe you could comment on floating?



Martin Neubert

Absolutely. So, on the floating offshore wind side, we have been following the space very closely, and as we have consistently communicated, we have been part of what is happening through external industry bodies like the Carbon Trust Floating Offshore Wind Working Group and the Wind Europe Floating Offshore Wind Working Group. And now we can see that in certain core markets with deep-water conditions, such as for instance in Scotland, or in the US, or in Japan or Korea - all markets where we are very active in developing bottom-fixed offshore wind projects - we see that floating offshore wind has good prospects in terms of being a complementary technology, reaching deeper waters and therefore expanding the footprint of offshore wind. Obviously, it's still very early days when it comes to the technologies, and we have said, we are not investing into an R&D or early-stage demonstration project. But with the prospect over the next ten years that we see floating offshore wind can be commercialised, and our strong track record of having innovated, driven cost out, and industrialised bottom-fixed, we bring a lot of capabilities that we can bring to core here. And then, as I mentioned it in my presentation, we obviously have a very flexible partnership approach. So, where there are certain capabilities that we don't possess, we will obviously find the right partners for those. So, we want to be part of the commercialisation of floating offshore wind. It's not about an early-stage R&D or earlystage proof of concepts, but we want to be part of the commercialisation, because we see clear prospects towards the end of the decade.

Allan Bødskov Andersen

So, thank you to Kristian. The next question comes from Casper from ABG. Casper, please, go ahead.

Casper Blom

Thanks a lot, Allan. And first of all, congrats on a super well-executed day. Very cool set-up. I'm sure that there'll be even more questions about the WACC spread, so I'll go in another direction. I don't think you have mentioned Bioenergy & Other at any point today. Should we read anything into that? And if we shouldn't, how do you see that fitting into Ørsted going forward?

Allan Bødskov Andersen

Mads?

Mads Nipper

I can certainly add a perspective to that. It is not a business that we are aggressively expanding. This is a Danish business. Obviously, it's a very healthily run business. With



the conversion plan, it's fully converted to sustainable biomass by 2023. It's also a very sustainable business, fully supporting our ambition. But it is a value-creating business. We've also seen that this year, and it is one that we will continue to operate. It's one that will remain part of our Ørsted family, but it's not at the very core of our strategic expansion. That's the reason why we are not focusing a lot on that during the Capital Markets Day today.

Allan Bødskov Andersen

Thank you to Casper. The next question is an e-mail from Alberto from Goldman Sachs, and he asks, "How many of the projects under construction, or already secured / substantiated projects, have procurement on a fixed-cost basis? And what is the percentage of procurements that are exposed to rising steel / raw materials? Can you quantify what you accounted in your CapEx for this, and what that will do to your returns?" Marianne, Martin.

Marianne Wiinholt

Perhaps I should start with the more specific part around steel. I showed today that, out of a typical CapEx project within offshore, there is quite a limited exposure to the steel price, 4-7 %. And also, we have secured through fixed pricing a significant part of that. We are also actively hedging that exposure. So it is not something we see as a big exposure for us now.

Martin Neubert

On the portfolio, obviously, for projects under construction, we typically procure and fix all the contracts. 90 % of the CapEx is fixed once we reach an FID. So for our final construction projects, the contracts are all procured. For our pipeline projects, we are working towards an FID for our German portfolio, for instance, where we are in procurement activities right now. We expect an FID towards the end of the year. So we are already sort of there to get to that 80-90 % fixation of the contracts that we have. In the US, there's obviously some time still to go towards an FID. But on the other hand, we have been very early here securing procurement, for instance, on the turbines, as you know, from our Northeast portfolio with Siemens Gamesa and for the Ocean Wind portfolio, with GE on the turbine side. So for those projects, it varies where we are standing with the procurement. The one that is the least mature in this area is the one that we just recently added to our awarded capacity. That is the Polish projects Baltica 2 & 3.

Allan Bødskov Andersen

Okay. Next question comes from Jenny from Citi. Jenny, please go ahead.



Jenny Ping

Hi, thanks. I have one question, and I may sneak a second one in. Firstly, just on the CapEx, if I look at the incremental CapEx-per-megawatt basis, it doesn't seem to be that different from your 2018 CMD guidance of 13.5 DKK/MW. Is that all just because of the additional inflation costs that's coming through, or have you actually built bigger turbines and efficiency gains in that number? Because clearly, this is until 2030. And if I may sneak in a second quick one, what is the net-gigawatt number that you're targeting?

Allan Bødskov Andersen

Thank you, Jenny. Marianne.

Marianne Wiinholt

Yes. On this CapEx, yes, you are right. We are probably not very far from what we guided last time. That is very much driven by the fact that we now build in more expensive areas. For example, in Asia, Taiwan is a good example where we need to have more solid foundations due to the typhoon risk. But also in the new markets that we enter in a way we will have higher CapEx for a while until the supply chain matures. So it is a mixed effect, you could say. In the old days, 13.5 DKK/MW was for mature markets, including Germany and the Netherlands. And then on the net capacity, it's not a number we are sharing with you today, but as we either have partners or are farming down on most of the assets, it is perhaps a bit more than 50 %.

Allan Bødskov Andersen

Thank you to Jenny. Our next question comes from Mark from Credit Suisse. So, Mark, please go ahead.

Mark Freshney

Thank you very much for taking my one question. The 15 GW target in 2025 that you set at the last Capital Markets Day, can you talk a bit about that in light of the 3 GW of capacity on the US East Coast? And when can we expect FID on that 3 GW of capacity, and also commissioning? Thank you.

Allan Bødskov Andersen

Thank you, Mark. Martin.

Martin Neubert

I'm happy to answer that question. We're obviously very much on track to deliver on that 15 GW by 2025 – which includes the 3 GW portfolio. We have seen, especially over



the last couple of months, a huge amount of momentum when it comes to federal permitting – which has been where we saw some roadblocks over the last two years. But we've received – for our Northeast portfolio, for South Fork Wind – we received the draft EIA, our NOIs for Revolution Wind and for Ocean Wind. So we plan to commission the South Fork wind farm by 2023. Revolution Wind and Sunrise Wind by 2025. The same for Ocean Wind. So very much commissioning towards the middle of the decade, 2025. South Fork Wind is a bit earlier, in 2023. And FIDs obviously depend on the permitting timeline, but for the Northeast portfolio, it's going to be around at the end of 2022 or early 2023. For South Fork, it's obviously with commissioning in 2023 – one and a half to two years earlier.

Allan Bødskov Andersen

Thank you to Mark. Next question is from e-mail: "I am curious about how we should think about the cost of equity given your exposure across multiple geographies and technologies. When you talk about the 150-300 bps spread, is that at the corporate level or at the country level?" Marianne.

Marianne Wiinholt

When we look at spread to WACC, we use a local-currency WACC. So it is at the country level. Not that it necessarily makes a big difference, but our approach is that we use a country-specific WACC in local currency.

Allan Bødskov Andersen

Okay. And then our next question is from Peter from Bank of America. Peter, please go ahead.

Peter Bisztyga

Good afternoon, and thanks for taking my question. Can you talk about what you need to see on the policy support side for green hydrogen to make your large-scale projects commercially viable? I guess the question is, is the grant funding that you talked about sufficient by itself, or do you need something on top of that in terms of contracts for difference, feed-in tariffs, or PPAs? Thank you.

Allan Bødskov Andersen

Thank you, Peter. Martin.

Martin Neubert

Obviously, the funding is a very central part, as I just explained in my presentation, because we need the funding and the governmental support in order to close that gap,

which we cannot yet do ourselves, as long as the technology is not really scaled up to gigawatts and matured. Of course, the funding support can come in different ways. It can be through CapEx grants, OpEx grants. We also encourage that the demand is incentivised because we need to work on both supply and demand in parallel. But then when you look at renewable hydrogen, especially in some of the markets, we see very heavy grid charges, tax levies, etc. where we need to establish a level playing field. That's a huge regulatory task to make sure that renewable hydrogen is not disadvantaged compared to fossil-fuel hydrogen – which is not subject to the same levies, grid charges, etc.

Mads Nipper

If I can just add to that, Martin, I think, in general we don't see a one-size-fits-all way to support it. It is exactly as you were saying, there need to be the grants combined with some kind of support, either on the offtake side or generally to make it competitive. Because we all know that what's going to drive competitiveness in the technology towards the end of the decade is the scale. But in order to get to scale, we need to get that going. We think and we are really happy to see that progress – not least in Europe now with the IPCEI process that Martin referenced. That is starting to gain traction. We hear about tax credits in the US. So I don't think we point to one way of doing it, but it is something where it really is critical, and somewhat urgent, not only for a company like us, but overall for the technology to get to scale – and we see that momentum picking up as we speak. And there are many ways of doing it.

Allan Bødskov Andersen

Thank you to Peter. Our next question is also from e-mail. It is from Alex Craig from Leading Alpha Consultation: "You have provided guidance in the past on expected CapEx per megawatt for your offshore investments in Europe and the US. How is CapEx per megawatt expected to develop as you accelerate project development offshore in the second half of the 2020s? What are the most important drivers of further progress in this area — which is surely necessary given the necessary evolution of offtake prices?" So I guess it's Marianne or Martin.

Marianne Wiinholt

Yes. We will see that the cost of electricity will continue to decline. That's also something that we have built into the forecast. It is very much driven by the fact that we still expect to get larger turbines. But, of course, it's not the same steep curve that we have seen historically. But we have seen that BNEF has an estimate, and they expect, I think, a 23 % decline over the next period. So that's well in line with our expectations.



Allan Bødskov Andersen

Thank you. The next question comes from Dan from Carnegie. Dan, please go ahead.

Dan Togo

Thank you for taking my question here. Maybe some elaboration on hydrogen. You're looking into a pipeline of these 3+ GW as it stands right now. Let's say, if we have a Capital Markets Day again in 2024 or 2025, how big a pipeline would you be looking into then? Just to get a feeling of where you see the market and your ambitions. And maybe also a little on your risk perception. What kind of return requirement do you have on these hydrogen projects? Thanks.

Allan Bødskov Andersen

Martin, will you kick us off?

Martin Neubert

Happy to. So obviously, as I showed in the slide, there is an expectation in terms of the market growing to 80-100 GW in installed electrolysers, and we see with the EU having a target of 40 GW and many of the leading EU countries within this space backing that up by commitments. So no doubt, we do expect that our 3.5 GW pipeline will grow. Actually, it is growing almost every week or month now. No doubt. In terms of the return target, that's too early to say, because we are at a very, very early stage. We are basically just building the first business cases. We also need to see what funding regime we can tap into. So I'm not able to give a target on that. What is very clear is that we obviously reflect our relevant cost of capital – given the maturity of the technology – in our capital costs. That I can say. But I can clearly state that we expect that pipeline to be significantly bigger when we meet again, whether in a year or in two years' time.

Allan Bødskov Andersen

Thank you for that. Our next question is also from e-mail: "In US onshore, what are your expectations in terms of tax credits or even direct incentives going forward, and is there a risk to your 17.5 GW ambition if the current scheme isn't prolonged?" Declan, will you answer that one?

Declan Flanagan

Sure. Well, the first thing I'd say is that the plan we're announcing here today is based on current legislation, not anticipating any extension to or change to the mechanism around the tax credits. So it assumes the current glide path for wind and solar, which sees the credits fall off in 2025. That being said, there are a couple of vehicles right

now, legislative vehicles looking to both extend wind and solar tax credits, and also a lot of talk on a direct pay, a move to a direct pay for the tax credit – as distinct from it being a redeemable tax credit. Any combination of that could further accelerate the market, and so it would be a positive. We're also very focused on tax credits expanding to cover things like battery storage and transmission, both of which would accelerate the growth of the market. But the plan we're announcing assumes existing law and the existing schedule of expiry of the tax credits.

Allan Bødskov Andersen

Thank you. Another written question: "Can you please clarify whether your 2027 EBITDA includes capital gains from divestments? I don't think this was fully clear." Marianne.

Marianne Wiinholt

I think I answered this in the beginning, but no, it does not include any capital gains. So it is the EBITDA from the operating wind farms and solar PV – both offshore and onshore.

Allan Bødskov Andersen

All good. Next question comes from Elchin from Bloomberg. Elchin, please go ahead.

Elchin Mammadov

Hi there, can you hear me okay?

Mads Nipper

Yes, we can.

Elchin

Fantastic. I have a question on your 2030 offshore wind target of 30 GW. If you add your firm capacity and most of your substantiated pipeline, you already get to more than 30 GW by 2030. So the question is - is there opportunity to increase that further? Is it too conservative a target, or do you think we should be sticking with that for now?

Allan Bødskov Andersen

Thank you, Elchin. Mads?

Mads Nipper

Yes, thanks a lot, Elchin. It is a target that we have obviously spent a lot of time on, zooming in on what the exact right level is. You're right, there could be even more



opportunity, but as I briefly alluded to before, when we evaluate the totality of the pipeline, and given the market conditions, we believe that we are striking the right balance, while continuing to up our ambition, being very aggressive, solidifying our position as an undisputed leader in offshore, while still creating meaningful value from our projects. So, really striking the balance between expansion and continuing to create value. Martin said it, but it is an important reminder to say that in the back half of this decade, we are actually upping our buildout ambitions by 50 %, so from two to three GW. That's not a small thing. So we will be accelerating already, and we do believe it is still an ambitious target, but it's also one that allows us to continue to create value.

Allan Bødskov Andersen

Good. Our next question comes from John Musk, RBC, it's a written question. "You highlighted some sensitivities to interest rates. What are your farm-down assumptions, and how are these impacted by increasing interest rates, and more supply of projects that can be farmed down?" Marianne?

Marianne Wiinholt

Yes, a couple of reflections on that. The first one where we are already planning to farm down is Hornsea 2, which is of course a big one. There we have an inflation index contract, which as I talked about previously, protects us to some extent against increasing interest rates. So that we don't see as an issue. We also try to match our fixed nominal contracts with fixed nominal debt, and if we see increasing interest rates, we have that fixed nominal debt, and we will be able to unwind that, and then gain the part that we would not get from the partner. So, also with the large interest and our risk management policy, we feel that we are on the safe side. And then, just one additional comment also - if we see increasing interest rates, we will also bid in based on a higher WACC going forward, so in a way this risk only applies to the ones where we have not yet farmed down, and we have already bid at a low interest rate level.

Allan Bødskov Andersen

Thank you. Then another written question from Ahmed Farman from Jefferies. "Could you expand on your strategy or plans around floating wind opportunity? It hasn't been extensively covered in the presentation, so is it not an area of huge focus currently? If so, why?" Martin?

Martin Neubert

I just highlighted that for us, floating offshore wind is something we've been closely following without actively investing. The technology is still at an early R&D, proof of



concept phase, you could say. But we absolutely see the prospects for floating offshore wind becoming complementary towards bottom-fixed. In core markets where we are already active, whether in the UK, especially Scotland, whether in the US with California, whether it is Korea or Japan, where we're very active. Therefore we are engaging now, and as we see the technology has absolutely the prospect for commercialisation, where we bring a huge amount of experience and track record in innovating, costing out and industrialising bottom-fixed, which we think we can bring to bear here.

Mads Nipper

And if may add, Martin, I think it's important to underline that even though we have, as Martin says, gone from observing to now engaging, it doesn't mean that our experience from primarily bottom-fixed is not highly relevant, because these large-scale EPC projects, like Martin says, the cost-out, engaging with partners - because right now, there are multiple technologies, and of course, we would want to engage with relevant partners in this as well, but we can bring a lot to those partnerships. So by combining what we have from decades of experience in large-scale EPC bottom-fixed, and both the operations and the constructions, and engineering of that, combined with a more specialised partner, this is something we believe does not put us behind in any way compared to the maturity of the technology. So we are very confident that the ambition of a leading position, or a strong position, in this market is very doable, despite the fact that we have primarily observed this through ourselves and our organisation so far.

Allan Bødskov Andersen

All right. Next question is also from the mail. "You previously mentioned a US solar PV fleet farm-down. How is that progressing, and how does that impact the guidance metrics you provided?" Declan?

Declan Flanagan

Yes, we launched a farm-down of some of our solar projects this year, and it's been very well received with a lot of investor interest. A couple of the projects in that portfolio are in Texas, and obviously in February we had an extreme weather event in Texas, which caused a lot of electricity market impacts obviously, and then subsequent to that potential for legislative intervention in the market. I would note that has largely, in our view, now passed satisfactorily. But that created a little bit of uncertainty in the market, which caused a little bit of hesitancy in the investor universe. We're always very patient when it comes to any transaction, and farm-down is no different, so we're not in any hurry to consummate a transaction, when there's a little



uncertainty in the market. So it's possible that we let that slip into 2022, which wouldn't have a meaningful impact on any of our guidance.

Allan Bødskov Andersen

All right. Next question is also from the mail. It's Sam Arie from UBS. "You mentioned the Danish energy island projects a few times, which could be very significant. I'm just wondering: How have you thought about those in your new targets today? I think one of them is a 200 billion DKK investment end-to-end, so quite big and lumpy. And just wondering if maybe we should think about the energy islands as a separate opportunity on top of the core GW and CapEx guidance, or on the other hand if you need to secure at least some role in the energy islands to hit the new guidance you've given today?"

Mads Nipper

I can kick that off, Allan. A couple of really important perspectives: When this is referenced as an up to 200 billion DKK in CapEx, this is for the total thing. This is for the island, what's on the island, and for the up to 10 GW of wind around it. And what we're talking about leaning into now is the island itself. And you might ask: "Why be part of building an island?" Well, it's because we believe that the full process of being deeply experienced and learning through being engaged in that project will give us invaluable strategic learnings for potential later scaling. But that project that we are now planning to bid in with, together with our partner ATP, is only a fraction of the 200 billion. So this is really important to say - it's not about that scale. And bear in mind also that the commissioning of both the Bornholm and North Sea energy islands is primarily or probably post-2030, so it actually does not significantly impact our guidance in any way in this guidance period.

Allan Bødskov Andersen

Thank you to Sam for that question. Our next question comes from Aymeric Parodi from J.P. Morgan, also a written question. "On hydrogen: When do you expect these projects to contribute to the P&L, if you can quantify this at this stage?" Martin?

Martin Neubert

It is too early to say. They're early-stage development projects. Obviously, we have the one construction project being H2RES. However, that's a very small project. We expect the first ones as I mentioned, the first phases, like for the Westküste 100 project, to become operational towards 2025, but as it is very early-stage, to form a view on the business case, the whole regulatory regime, how we are going to fund these



projects, is too early. We have not included anything in the guidance. It's too early to talk about that.

Allan Bødskov Andersen

Okay, next question, also from the mail. "Will wind turbine installation vessel availability or other parts of the supply chain be a bottleneck for offshore wind deployment as the industry scales up?" Mads, will you?

Mads Nipper

Yes, I can give that a first shot, and Martin can supplement. Generally, as we referenced, this is a market that grows substantially, and every part of the supply chain will need to gear up with it. We have seen an impressive agility in the supply chain to be able to follow, and we don't sit with visibility that there's going to be definite supply chain bottlenecks in either installation vessels or in other parts of it. Can that happen as we significantly scale up to hit the almost 170 GW by 2030? Certainly, it can, and the way that we address that is to really ensure that we have framework agreements, to have early commitments, to ensure that we also help our supply chain partners to build our further capacity. I think the example of us helping some of our Tier 1 suppliers to open new capacity in new markets, like the US, with our partner EEW in Paulsboro, New Jersey, as an example of that, where we enable the supply chain to help to gear up. So there are multiple ways to mitigate that, but it is an industry challenge, and it is one that we need to take seriously, but we feel very comfortable that we, as a developer, together with our supply chain partners of all kinds can navigate that.

Allan Bødskov Andersen

Thank you. The next question is from Brad Langston from Southpoint. "Corporate PPAs: With carbon prices on the rise and spot power prices in Europe above some previously subsidised auctions, do you see that market shifting from a sealed-bid, hypercompetitive environment towards a market where your scale and expertise makes you the preferred counterparty for major corporate PPAs? And in such an environment, would you expect IRRs to expand beyond the competitive IRRs you have laid out through 2027 today?" Martin?

Martin Neubert

I can certainly talk about the corporate PPA market in Europe where we have been very active in terms of our new assets, like Borkum Riffgrund 3, which is our first zero-subsidy project. As I mentioned, we plan for an FID later in 2021. And here we have been very active in the corporate PPA market, entering into fixed-price corporate PPAs with, among others, Amazon or Covestro for that specific project. We certainly see an



increasing demand from corporates when it comes to long-term procurement of their sustainable electricity demand through corporate PPAs, always with a view that they want to be part of additionality, basically funding and securing a project that adds in the renewable energy space. So we clearly see a rising demand, and that also shifts the need for subsidy regimes or support regimes, as we have seen with CfDs, we have seen large chemical players like CSF or Covestro formulating their strong demand for corporate PPA offtake. So there's a clear change in the landscape that we are seeing. And it's not only in Europe. We have done the world's largest PPA in Taiwan with our Changhua 2b & 4 project. The full output of that project will go to TSMC, one of the largest semiconductor foundries in the world, securing their decarbonisation journey and the targets they have set themselves.

Allan Bødskov Andersen

Our next question comes from John Buckland from Waverton. "You say that government support development of regulatory frameworks and demand-side incentives, taxes etc. are urgent. Please expand on this. What is meant by "urgent"? Is there a timeline by which funding has to be forthcoming? What would be the consequence of appropriate regimes being delayed or not becoming available?" And I guess this is also in the context of hydrogen.

Mads Nipper

It is, and I believe I used the expression "urgent". It was not in relation to our pipeline of projects - that they would be obsolete or not relevant or not doable if it doesn't happen in the short-term. Let me make that very clear. It was that, for example, through industry initiatives like the Green Hydrogen Catapult, where we are an active partner, there's a clear target of getting to a competitive level with grey hydrogen towards the end of the decade, by 2030. To get to this approximately two-dollar price tag. So when I was referencing the urgency of the policy framework, it was in relation to that. So it was more in the context of a decarbonisation journey that needs to happen in the context of our net-zero plan for the world, but nothing that is critical for any of our nine pilot projects. Just to make that very clear.

Allan Bødskov Andersen

All good. Next question comes from Dominic Nash from Barclays. "Developing new offshore projects going forward, will Ørsted increasingly use JV structures, in particular local partners, or do you see hitting the 30 GW target by developing 100% own projects with subsequent sell-down or through net contributions?" Martin, I guess it's you again?



Martin Neubert

Happy to answer that question. It's obviously a combination. We have quite a successful track record in going into new markets, where we haven't done business before, and teaming up with strong local partners - whether it's in the US, whether it's in Japan, whether it's in Poland with PGE for instance, the largest energy company in Poland with a huge track-record in the energy landscape in Poland. Whenever we enter new markets, a partnership is a way for us to ensure strong local presence from day one and the local know-how that our partners have built up over many decades. At the same time we are growing our portfolio in mature markets, where we're very well established, for instance in the UK or in Germany or, of course, in our home market or the Netherlands. These are markets where we can develop projects one hundred per cent on our own, and then seek a partner to bring in post-FID or post-construction. So it's going to be a mix. In Taiwan, you have seen that. We teamed up for the island's first offshore wind farm, namely the Formosa 1 project, leveraged those learnings through the development, and now also through the construction. And here, we developed the Changhua project on our own, and farm-down, then post-construction start. So it's going to be a mix of different models we can apply.

Allan Bødskov Andersen

Thank you to Dominic for that question. We're now coming to the last question for today. It's from Sofia Savvantidou from Exxon BNP. "A lot of other utilities already have exposure on all renewable technologies – offshore, onshore, solar – and they actually also have hydro- and gas-fired generation, so they can offer integrated offerings to countries and corporates and can structure PPAs and take merchant risk. With what you have announced today, it seems to me like you are sacrificing a big part of your leadership gap in offshore wind as your market share drops from 30% to an incremental market share of 15% in order to catch up to other utilities on other technologies. So could you help us understand a bit better what is Ørsted's competitive advantage from this point on, compared to other players that have been doing onshore and solar and batteries for years? And also, what makes 17.5 GW of onshore capacity by 2030 the right number?"

Mads Nipper

I can certainly kick that off. I think it's very important to highlight, first and foremost, that there's not a sacrifice or compromise in relation to the very core of our strategy of being a leader in offshore wind. We are not building this up to say: "First and foremost, we want to be an integrated energy solutions player, and how much is left for offshore?" It's the other way around: Offshore is at the centre stage and core of our strategic journey. And this 30 GW ambition has been the very first thing where we've

said: "This is what we believe is right to create value." And then we have seen that value-creating opportunities in onshore led by Declan and the team in the US are also very value-creating. It's scalable, and it's something we believe, not only strategically, but also financially, is very meaningful for us on the journey. We're not trying to catch up with somebody who's in the lead, but we're seeing that the shaping corporate market means that especially cross-technologies, such as offshore-onshore wind, solar storage and then also, to come, hydrogen and green fuels — that will be something where we can offer very competitive solutions to those corporate partners. So we believe that we're actually hitting the sweet spot here, with really staying a clear leader in offshore, not sacrificing anything we otherwise want to do, while significantly strengthening ourselves in cross-technology, including being a leader in an emerging market we believe will be a cornerstone in the energy system of the future.

Allan Bødskov Andersen

This was our last question. So this brings us to the end of the CMD. Should you have any further questions, please do not hesitate to reach out to the IR team.

Mads Nipper

Thank you so much for being with us today. We really appreciate your time, and also a big thank you for great questions that keep us on our toes.

Allan Bødskov Andersen

So thank you for now and have a great day.