Ørsted Capital Markets Day 2023

Transcription

8 June 2023
Good morning, everyone and welcome to Ørsted’s Capital Market Day, 2023. My name is Rasmus Hærvig, and I’m the head of the investor relations team. We are very pleased to have you all with us here at the Science Museum, and all you joining us at the web stream. Safety is an integrated part at everything we do at Ørsted. That applies to everywhere we are, so it also applies here today. So, before I will let Mads onto the stage, I will do a safety briefing.

There are no alarms or drills planned for the duration of our event. So, if the alarm sounds, please don’t use the lift, but follow the security personnel who will guide you down the staircase, and into the muster points which are found outside the group entrance. The fire exits are labeled to your left, my right.

Throughout the day, we will host six presentations, and we will show you three different videos, and the total programme is scheduled for around four hours. At around 11:30 we will have a coffee break which will take place downstairs, and the final hour is reserved for a Q&A. And after the Q&A session, everyone at the Science Museum is invited for lunch, and networking downstairs. So, thank you, all of you for coming, and for joining us, and I hope you will enjoy the programme.

Good morning, and a very warm welcome to all of you in the room, also to all of you joining us online. It is fantastic that you’re with us, and we are happy that you’re going to spend the next four hours with us. We live in an industry which is extremely attractive, important, and enjoys a huge support from everybody. We live in an industry which enjoys huge support, is hugely attractive and is extremely important. And we are convinced as a company that we can create growth, that we can drive significant value creation, and then not least that we can continue to shape that industry in a direction where it becomes even more scalable. And we are extremely happy in my team to tell you about this in this very venue, in the Science Museum, because this is where lots of children around the world, young people, are indeed coming every year to learn about creativity, ingenuity and innovation. And that's exactly some of the traits that we deploy when we drive towards becoming the world's green energy major. And we will spend the next hours telling you about just that. Without further ado, we’ll take a look at the broader world that we live in, and the executive summary is we are not on the path that we need to be to going towards a net-zero world by 2050. We are not on the path to 1.5-degree scenario. Another fact which is undisputed is that the energy sector, so the production, and consumption of energy is the very, very centerpiece of whether we will succeed to create a livable planet or not.
And if we don't, not to spell doom and gloom, but fact is that both human beings, our nature, and our planet will suffer unrepariable consequences for millions, if not billions. And at the same time, even if you're against all expectations, would not care at all about some of those devastating consequences, even the economic consequences of inaction would be terrible.

But the great news is we have that action and we have the opportunity to do something about that as an industry, as humanity, but also for us as a company. We can influence that direction of travel. And if we look at the vision that we have, that we launched already many years ago, that is a world that runs entirely in green energy. And you will notice, as I'm sure, this is not a vision about Ørsted, this is not a vision about us as a company. This is a vision about a world that we are a contributor, or a catalyst for change becomes possible.

It may seem inconceivable, it may seem extremely difficult, but we are firm believers, it is indeed possible. And we are in an industry right now in renewable energy which is undergoing fundamental change, even in recent times. And what I'll share with you is that most of those challenges and changes are actually to the benefit of a company like Ørsted. And if you look at it, just the recent very tragic events with a war on the European continent, and many other events and the following energy crisis, now means that renewable energy rollout is no longer just about climate policy, it is also very much about affordability, and energy security, and that means that the political support, essentially both from regulators but from everybody in society is bigger than it ever has been. And that is materializing into tangible support schemes like the Inflation Reduction Act, like the Net-Zero Industrial Act in Europe, and many other things around the world.

We are seeing some dramatic developments. Both in terms of cost of capital, but also in CAPEX inflation, which leads to an unavoidable increase in levelized cost of electricity. As we will share with you in the rest of this programme, that also means that the preparedness of customers and states to pay more for that energy is definitely also there, and in that sense, is a manageable consequence. But what is some of the underlying things that are good about the increasing LCOEs that that needs to happen? Because I'm sure that all of you are aware of, we don't have a healthy and scalable supply chain today, but with increasing LCOEs, with the inflation that may seem like a big challenge right now, we are also creating a healthy and scalable industry which will have the financial performance, and the capitalization to scale to what needs to get done in the coming years.

We are also seeing that the society around us is continuing the journey of electrification, and even in the hard-to-electrify sectors, such as shipping, steel, and others, we are also seeing that the real tangible demand signals for renewable molecule-based solutions, as my colleague Olivier will talk about, is increasing extremely steeply coming from virtually almost nothing.
And last but not least, some of the other dramatic developments happening in our industry, which we also see as a good thing, is that some of the necessary complexity that we are seeing with such as systems integration, and also protecting nature, or biodiversity as we roll out renewable energy, are adding a level of complexity which plays to the strengths of an experienced, and capable player like ourselves.

So even those developments are indeed dramatic and profound, not least over the last 12 months. We are in a position where we think by far the majority of these plays to the strengths and will create an even greater opportunity set for a company like Ørsted. And that also means in totality, that the growth that we are looking at is even bigger than what we told you about in the Capital Markets Day a couple of years back. The little numbers that we have in the light blue boxes behind me, shows what we estimated both for offshore, onshore, and not for Power-to-X, because that number has grown so much. But essentially now we are looking at six times the current size of installed capacity in just seven years in offshore.

We are looking at just with the expectations compared to two years at doubling, a further doubling of onshore capacity, not least driven by very profound initiatives like our Inflation Reduction Act, which of course means that the thrust we have behind rolling out the renewable energy is even bigger and the opportunities that we have here are massive. And speak to your company, which majority of our business is still offshore, just looking at the North Sea Declaration that recently happened with the countries around the North Sea, that alone is an ambition of 120 gigawatt by 2030. That’s a huge, huge opportunity set for a company like Ørsted. And of course, we won’t do that alone, but being able to get a fair share of highly value creating projects is something we think is more possible than ever before.

We are also looking at coming from a position where we have delivered on what we have promised at our last Capital Markets Day. And if you look at capacity growth, in offshore, we’ve delivered an increase in awarded capacity of over 7.5 gigawatt, including the world’s to-be largest offshore wind farm Hornsea 3.

We have also continued our very successful farm down model with a net sell down of 2.2 gigawatt of capacity, with a continued approximately, or even above 100% net present value retention. And although that might seem small, we also think it’s ground-breaking that we managed to take one of the very few final investment decisions in Power-to-X, with what we firmly believe is one of Europe’s, if not the world’s largest e-methanol facility, albeit only with 70 megawatt. But right now, in Power-to-X, there’s a lot more talk than action, and we believe in action much more than talk.
That has led us to a position, which we also expected, as an absolutely undisputed number one in offshore wind. As a matter of fact, our total portfolio, if you look at what is in operation, what is under construction, and what is awarded, is more than twice as big as number two. A position that has not weakened since our last Capital Market Day, despite the massive industrial growth.

We are also seeing that our journey to become a very significant regional player in onshore is continuing, and we are seeing that what we had ambition to be namely a market share buy in Power-to-X is indeed also happening. And very importantly, not least for the audience that we have today, we are also on track on the targets that we set out financially. We are on track to deliver the approximately 50 gigawatt we said, but also, a meaningful over-delivery on the earnings growth, the annual EBITDA growth, which is now an estimated 15 %, compared to the around 12 % that we targeted. And this is a comparable period, so up to 2027. And likewise for return on capital employed where we targeted 11 to 12 %, right now we are looking at approximately 15 %.

So, what those inflationary effects and the power price developments have done, is that despite some of the cost increases we are seeing, we are seeing a very meaningful uplift in revenue, and therefore also in the earnings. And we are also, very importantly, on track despite the events where we were ordered to keep our last coal-fired power plant alive for an additional year, we are also on track to deliver on our scope one and two net-zero ambition by 2025, which is the most ambitious target of any decent-sized utility in the world.

And we are looking to create value in every single dimension of our portfolio. If you look at our portfolio in total, in these four buckets, if you start on the left behind me, that is our operational portfolio, and that is where, that’s a key driver obviously, of value creation in that I just talked about, with the meaningful over performance. That is where inflation indexing, that is where higher PPA prices, and higher power prices are driven higher revenue, and therefore significant additional earnings than what we had expected.

But also, in the under-construction portfolio, where we have approximately 5 gigawatt, that is where that entire portfolio is comfortably within our guided range of 150 to 300 basis points spread to WACC, with an unlevered, fully loaded lifecycle IRR. And this is something that is extremely important to us, that you as our investors can trust that when we take a final investment decision, we are creating value.

The awarded portfolio that we have, where we have not yet taken FID is obviously, and that’s not a surprise to anyone, where we have some of the bigger challenges, and that will be the US portfolio. We will come back to that. That is where we have a fixed nominal offtake price, and have had a higher cost of capital, and higher CAPEX inflation. That is where we are committing firmly to take all the...
actions needed, and that is both in terms of our supply chain, and regulatory, but also taking active choices to reconfigure projects, like for example, we announced recently our Baltica 3 project, and as Rasmus will tell you about, that project was actually NPV positive, but just not good enough to take an FID, which is why we took a decision to reconfigure the project. You’ll hear more details about that later.

And then the last bucket is what we have not yet won yet, but that is where we have well above 100 gigawatt of high-quality pipeline to pick from. And we are recommitting, as we’ll tell you later, we are recommitting to an absolute industry-leading 150 to 300 basis points spread to WACC, and we are also committing and convinced that we can deliver a future portfolio which will deliver within that, not least due to the fact that the prices and the revenue is also going up, delivering higher absolute IRRs despite the higher cost of capital. So all in all, across all these four buckets, convinced that we are in an extremely strong position to drive value creation.

But as I mentioned, let me take a little bit of a deeper dive into what are we doing with the awarded portfolio, which is where we are fighting the hardest to ensure that we come to the place we want them to be. Where we are working intensely with our supply chain. And for some of these projects, quite honestly, we are going back to our major and most important suppliers, saying, “You need to help us find additional cost savings that can improve these projects.” That’s an active dialogue that’s been well received, professionally received, and our suppliers are leaning in to say, “What can we do to ensure that we get to a better cost position in light of the CAPEX inflation that we have seen?”

But we are also in continuous dialogue with the regulators, and a very tangible examples of that would be the Power Act from Maryland, where recently the State of Maryland, where we have our Skipjack project approved, that there will now be a full pass-back of Inflation Reduction Act benefits, which of course is a huge uplift, because previously there was an 80% pass-back clause of those benefits to the ratepayers.

So we are seeing that the heavy lifting we are doing on the regulatory front, actually delivers tangible benefits. And as you may have noticed, we’ve also, as late as yesterday, officially filed a petition to get a retrospective inflation indexing for the Sunrise project in New York, which would be a meaningful uplift to the OREC price, should that be approved. We continue those dialogues, and do clearly meet a strong reception, and understanding that something needs to happen.

We are also generally pursuing revenue optimization, because in some cases there will be a limit to how much we can do about the CAPEX but the revenue optimization, driven by the merchant flexibility that we have, but also driven by driving highly value creating power purchase agreements with big companies. And I will mention just one which I think is an interesting data point, namely that we've
seen just over the last 12 months, the PPA levels, price levels have gone up by 50 to 60%. Even in light of the weakening, the softening power prices that we’ve seen recently, we are still at very meaningfully higher PPA levels than we have seen before, which is yet another strong indicator of us being able to deliver stronger revenue. And some of these projects we still have that opportunity.

As I mentioned, we are reconfiguring some of our projects, and is will typically be those where we have limited sunk costs, and where we still have some flexibility on the timeline. Examples of that would be Baltic 3, but also our Ocean Wind 2 projects in the US, which David will come back to.

Last but not least, and that may be a new word here from us, but we’re also explicitly saying if we cannot get our projects to sufficient value creation, then therefore not be a responsible user of our investors’ money, then we are prepared to walk away from these projects. We will come back to that throughout this, but not least in David’s presentation, because this is primarily a US challenge.

Now as we look at the position, we have both for the awarded portfolio, but also in general, we find ourselves in a uniquely strong position to continue to drive competitive advantages, and drive growth. And if you look at the commercial dimension first, our ability to continue to develop and drive highest quality pipeline is something we have absolutely no doubt is industry leading, not least in offshore, where we are obviously both the biggest and the most experienced player in the world.

We have seen just since the last Capital Markets Day, our total pipeline go up by 70%. That’s a very massive increase. You’ll also see us, and we talked about that quite a bit, continue to be extremely disciplined in our bidding. So, we chose not to bid, for example, in Massachusetts. We chose not to bid in Taiwan round 3.1. We did not bid on California seabed, we stepped out in time in the New York Bight seabed lease auctions. And we also have recently decided to step down our market development activities in Vietnam, because we do not believe that compared to the other opportunities that we have, that Vietnam is a sufficiently attractive market. It’s still a really important supplier market. But for market development, we are pulling back from that, to prioritize other areas with higher value creation potential.

We are also very confident in our proven, flexible financing approach, i.e., our farm down model. As I mentioned, we have farmed down effectively 2.2 gigawatt at very high retention rate, and we see no reason, and we have no indications that is weakening, despite the obvious tighter capital markets that we are looking at.

Last but not least, and this is something we believe will only be more important in the future, our relations to the corporate partners, to strategic partnerships with the likes of Amazon, with BASF. With Amazon, we are doing PPAs and we have other really exciting initiatives. With the carbon capture and
storage project that we won, Denmark's first and largest, where we'll capture more than 400,000 tons of biogenic CO\textsubscript{2} every year. We made the world's largest negative emissions offtake agreement with Microsoft, with over 3 million tons of biogenic CO\textsubscript{2}. As you are surely aware, we have the world's largest corporate PPA, with TSMC, for 920 megawatt, and we are convinced that continuing to not only trade with those partners but innovate new solutions that will benefit what we do across technologies is something that is a unique capability that we possess.

If we turn to the EPC and operations area, we are in a position where both our technical skills, but also our execution ability are very strong. My colleagues Virginie and Richard will come back to that in much more detail. But I'll just mention that despite the fact that the delays that we have had on Changhua projects 1 and 2a, but also on Hornsea 2 obviously have raised questions, saying, "Is Ørsted losing its execution ability?"

And we would argue every day of the week that this is not the case, and just take Hornsea 2 as an example. Under extremely challenging circumstances where we had an Omicron outbreak, it was hard to man the ships, we had extreme weather in February. With all of those factors, we managed to be only two months delayed on the world's largest offshore wind farm. And as a matter of fact, we were the only UK infrastructure construction project without one single day of shutdown during the entire COVID period.

So I will claim that we still have a clearly, and market leading execution ability, which we'll continue to leverage, and continue to strengthen. And as mentioned, we will come back to that. And very important, and it may be even more important than it's ever been before, our longstanding relations to our supply chain is extremely important. Virginie will tell you more about it, but we have a very high share of contracted CAPEX already booked, and with price certainty, going into the portfolio we need to build.

And both the trust that we have with the relations, both also the scale we can offer, and the technical capabilities where we lean in to help our supply chain scale. And we have multiple examples of what we have done to not just get our fair share of the total capacity, but also how we help the supply chain scale to the greater good of the entire scalability of our supply chain.

And last but not least, I will mention something that has become increasingly clear in its importance, is the regulatory strength that we have. The way we can work with regulators to create a more scalable, a better, and a more attractive condition for our industry, and for Ørsted, not least in the US, but also examples in Poland, where we work with our partner, PGE, and other industry actors, to ensure that we can EUR-denominate the income which will significantly lower the risk-adjusted cost of capital.
So all in all, with these as examples, you can trust us to both continue to have, deploy, and develop the absolutely market-leading capabilities that we assure that we have. And if you look at our ability to deploy those capabilities, we have recently taken a decision to restructure the way we go to market, or in essence, we are now looking at the world not primarily in technology, so in offshore and onshore and Power-to-X, but we integrated onshore and offshore into three regions.

Americas, Europe, and Asia Pacific. And why are we doing that? It was simply because to ensure we are seeing that the markets are becoming increasingly different, and we have been extremely successful for years exporting, you can call simplified, a North Sea model for offshore, taking that to other parts of the world. But due to political priorities, local considerations about supply chain, it's becoming increasingly difficult, and different to navigate.

And by giving a much higher degree of empowerment to our regional setups across technologies and leveraging those synergies, we can work much closer both regulatory, but also commercially with customers, bringing us closer to the customers in each of those regions, with, as mentioned, a higher empowerment to the CEOs and the teams of each of the three regions. And at the same time, we are choosing to keep our EPC organisation as a global organisation, which will marshal the scale, but also the deployment of the capabilities, which would not be wise to copy everywhere, because the capabilities you need to deploy a massive infrastructure project on time, and on budget are not that different. But working with your customers, your stakeholders, your regulators is indeed very different.

So that is how we find the best of working with market proximity. But at the same time, also to ensure that we work with scale, and deploying the capabilities we build up over several decades. We are also keeping our Power-to-X organisation global because that is a market that does not exist. As it said on my previous slide where I talked about growth, this is a market that has less than one gigawatt of operational electrolyser capacity right now. We aim to be a catalyst for making that happen, and we aim to work with offtakers that are many cases really global, and that means that a global model where we can deploy learnings across the world, because we don't have the regional scale yet, is something that we believe will bring us in the best position to successfully deploy, but also scale in a risk mitigated way, the new technologies, both on electrolysis, but also working with offtakers. And if we use green fuels, the synthesis processes.

And let's take a look at the choices we are making, starting with offshore. Offshore, extremely important that we have absolutely no doubt about our ambition to stay and strengthen our position as a global leader. We are not concerned about that, that'll not be the case, because as I mentioned, we are well over twice as big as number two today, and we uphold extremely high ambitions to ensure that we continue to drive and shape that market.
We will be extremely focused on value creation. We'll have a disciplined bidding approach, and we will also ensure as we already announced a couple of years back, to dive into a focused, and prioritized deployment of floating technology. We have the UK, Spain, and Norway as our priority markets right now, but we'll also keep our eyes open to high potential opportunities in Asia Pacific.

And on onshore, we will be looking at continuing to strengthen ourselves as a significant regional player. US will continue to be our main growth market in onshore, but we are also choosing to play in the top priority European markets. And as a matter of fact, the five markets that we are prioritizing, four of those are the four largest markets in Europe, and we believe there's very big potential that, not least in wake of the energy crisis that we, even though it doesn't feel that way, surely still have in Europe, and that holds a huge potential which we are already seeing materializing, in significant value creation, and a strongly increasing pipeline, as Rasmus will come back to.

And we are also very happy about the diversified earnings that we have due to both the different load profiles, but also the different timelines that we are all aware of are between onshore and offshore. And not least on Power-to-X, we will be a market shaper, or as we said a few times, we'd be a catalyst for change, and we would do that in a risk sensible way. So, we are not going out from zero to several gigawatt, and saying, "We will build the huge projects right away."

As Olivia will tell you about, we'll actually take a very risk mitigated approach to the small and medium-sized projects, to ensure we get the learnings to scale, and we will be very selective in the way we do this. We will be working in a few European countries, and the US, in a hub structure, which will ensure that we will actually create impact where we choose to operate, and we'll primarily focus on renewable hydrogen for industrials, not least in Germany. And then we'll focus on e-methanol, which also, a recent report from Shell showed is probably the most scalable of the near-term fuels that we could see for example, for a sector like shipping.

Let us take a look at what that means in terms of the plan that we have. So, the total self-funded plan, and I want to reiterate that, the total self-funded plan, is one that is still at the 50, approximately 50 gigawatt. It is largely unchanged. As a matter of fact, it is completely unchanged on the 50 gigawatt, but we are doing some adjustments in the technology mix behind that.

And you will notice that we are now being explicit for the first time on Power-to-X, where we say around two gigawatt of operational electrolyser capacity, which may not sound like a lot, but considering that the total global electrolyser capacity is well below one, it is not unambitious, but still something we believe, and are convinced can be done in a risk mitigated, and a wise way. And you will also notice, obviously, that offshore going from approximately 30 gigawatt to now approximately 28 gigawatt.
And you could say, "So is this because you needed to find something for Power-to-X? Or is it because, cannot afford it within your capital structure? Fact is that this is a direct result of us taking a very high priority to value creation. So, when we say we choose to reconfigure a few projects, that also means that we do not, right now, have a known timeline for those projects, and we do not want to let ourselves be forced to do projects that we are sure we could grow with, but would not create sufficient value for our investors.

This is a reflection that we are convinced we can deliver approximately 28 gigawatt of value creating offshore, and we are strong believers of the long-term value creation in offshore. We have no doubt that this is the case, and we'll come back to, in greater detail, why we believe that is the case. But right now, towards 2030, we believe this plan is the best we can deliver, focusing on value creation, which is an absolute top priority right now. We'll have Europe being the biggest region, in terms of CAPEX, closely followed by the US.

If we look at what CAPEX, surely not a surprise, because I'm sure you've been flipping the deck from this morning. We are looking at an approximately 475 billion DKK investment programme. This is one that will surely make us one of the largest green energy investors in the world, if not the largest. And you will still see that approximately 70%, so by far the majority, goes into offshore.

So, even though we are deploying capital to Power-to-X, even though we are still very ambitious on onshore, there's no doubt that the majority of our CAPEX deployment is still in offshore. And by the way, in offshore that delivers a very high degree, continued very high degree of contracted, and known earnings for the future. This is an area where we will be ambitiously driving forward, and we are convinced that we can do this in a value creating way.

In terms of our value creating ambitions, as I mentioned, we are firmly committed to an industry leading 150 to 300 basis points spread to WACC. And I want to reiterate, even though I'm sure it is known to you, based on the unlevered, fully loaded lifecycle IRR, we are not in a position where we can compare those return requirements to those of our peers.

Daniel will give you more detail about it, but if we actually take out those DEVEX and fixed costs, this is not a comparable figure. This is a very, very ambitious value creation range. And we are convinced we can do that because the absolute IRRs that we can deliver are some where we are already now seeing the data points coming. I mentioned the 50 to 60% PPA levels going up, but also just a data point from the recent Irish OREC auction in offshore. That was at 86-87 EUR/MWh. That's a totally different level than we've seen, for example in the UK. So strong indications that we are seeing those price levels go up. Then the earnings that we are looking at, I'll take you back just briefly to remind you that what we communicated last time at our CMD was an approximately 12 % earnings growth
towards 2027. We are now looking at a meaningfully higher earnings growth towards 2030 and we are also looking at a higher return on capital. And this is, as Daniel will tell you more about with a very high degree of certainty. We have a very high share of those operational earnings already with a clear visibility, although it is seven years out into the future. We believe very healthy returns based on also assumptions that the value we will create from the new projects and where we will get to with our existing projects is something that will be strongly value creating. And let me now turn to another extremely important priority, namely sustainability.

Sustainability is at the very core of our strategy. It is not something we do on the side. It's not a department. It's at the very core of how we actually do things, and we continue to be an absolute leader in terms of the ambitions that we set. I already mentioned the scope one and two, carbon neutrality by 2025, we were one of only seven companies in the world across all sectors who got our net-zero 2040 plan science-based approved. We'll show you a video with my colleague Ingrid later actually what we do but also on nature-based, so on biodiversity, we already announced previously that we will do no projects where we do not have a net positive biodiversity effect. And we as late as a couple of days ago announced also that not only ban of landfill of turbine blades, but also of solar panels where we will already now be working with partners to have the technical solution to make that reusable.

On the social dimension, just one example of that, we have an ambitious 40/60 split between gender, with the underrepresented gender, and that is both at total employee base but also at all leadership positions. On the governance side, we will only be deploying sustainable green financing and we have all of our projects taxonomy-aligned. Those are only examples of our industry-leading ambitions and we are taking action to drive these. Just a couple of examples would be the global partnership that we have done with World Wildlife Foundation, which is focused on creating both measures but also to create tangible and scalable action, not just for us but for the entire industry on ocean biodiversity. Our oceans are not in a great shape and we need to do something about that in a way that is scalable. And likewise, with the Nature Conservancy, we've donated a thousand acres of rare long grass prairie as part of one of our solar projects to the Nature Conservancy for conservation.

And that's not something we do for philanthropy. That is because we are convinced it's both the right thing to do, and because we believe this will be an ever more important part of creating both competitive advantage, differentiation and the acceptance both of our customers and our investors. Talking about ocean biodiversity, I'm extremely proud to announce that we are now the first energy company in the world who is issuing a blue bond, so focusing the capital that we raise, €100 million, on ocean biodiversity activities and decarbonising the maritime sector. Specifically targeting that and this is something that we need a lot more because we need to have scalable financing to deploy into not least ocean biodiversity and making our oceans healthy, and we are proud to once again be a world's
first on something we believe will be a massive factor in scaling something that's going to be extremely important for all of us.

Before the I finish, let me talk about people because without people, without the talent in the organisation with the partners we work with and also with our customers, we are not able to deliver what we need to. We take lots of very tangible and industry leading initiatives. And I'll just give you a few data points around that. We have a global graduate programme with a limited number of positions. We got 4,200 global applicants from all over the world for that. That was a 50% increase over the year before, and this is an indication that the number of top-quality people who wants to work for the industry leader, who is one of the very few absolute pure players in renewables, is massive. But also for the people we already have working for us at all leadership levels, we have systematic programmes for how to develop, train and challenge that talent.

This is something that we are convinced is an absolute top rate across any company in the world. This leads to also us focusing very much and saying, "So what is the attrition that we have?" Because as most companies during the pandemic saw, this curve is saying, "First, nobody left and then everybody left." We had what I think Harvard Business School called the Great Resignation. We are seeing that steadily come down and that is also a result of the well above benchmark that we have in employee motivation and satisfaction. Last but not least, I'll mention that on diversity, equity and inclusion, we take lots of initiatives including having what we call employee-driven inclusion networks, which is a way to mobilize and engage our employees from all over the world in ensuring that we become an even more inclusive workplace. And with that, let me sum up what I'm essentially telling you in this very first part as an appetizer to the rest of the programme.

We will, in our business and not least in our offshore business, be driving towards a very selective approach with a very strong focus on value creation. We will maintain, if not strengthen our global leadership in offshore wind in all three regions. We will continue to strengthen our position as a significant regional and selected player onshore and continue to be a market shaper in Power-to-X. We will deploy our massive pipeline, well over a 100 gigawatt pipeline, to ensure that we deliver the approximately 50 gigawatt of operational capacity per year. And that will, by the way, not just be 50 gigawatt that's comparable to everybody else, but because a majority is offshore with much higher load factors, we will be significantly one of the biggest producers of green power in the world even though we might not have the highest gigawatt number in installed capacity due to the technology mix that we have.

Last but not least, we will deliver significant earnings and capital return growth, and, as Daniel will tell you more about, we will also uphold and prolong our dividend commitment to give that certainty for our investors as well. All of this to become what we clearly aim to be, namely the world's leading green
energy major. And with that, let me hand over the depeche and move on. We will be going into the rest of the programme, so hope that this at least gives you an overview that you know the overall direction of travel before we go into more detail. Thank you very much.

Ingrid Reumert, SVP & Head of Global Stakeholder Relations

Blades, towers, foundations, cables, vessels, all fundamental in building new offshore wind farms to provide the world with the green energy it needs. But producing steel and blades and powering vessels are sources of greenhouse gas emissions. As we accelerate the build out of green energy, it is vital to reduce these emissions in our supply chains. In fact, this is one of the biggest challenges we face to meeting our industry leading target of building net-zero wind farms by 2040. To overcome it, we need to take action with our partners. As the world’s largest offshore wind developer, we can lead our industry by creating incentives for our suppliers to invest in low carbon technologies. That is why we are partnering with our strategic suppliers to mature and test low carbon solutions in our wind farms so they become commercially scalable. We are focusing on the major emissions drivers across the life lifecycle of a wind farm from blades and towers to foundations, cables and vessels.

Let’s have a closer look at the industry first solutions we are developing with our partners to tackle emissions. The largest source of an offshore wind farm’s carbon emissions comes from the steel that goes into its foundations. By using renewable energy when manufacturing foundation components, we can address this issue. We are pleased to announce that we are now partnering with Dillinger to develop the world’s first low-carbon foundations made with renewable hydrogen and scrap steel. The second largest source of emissions comes from the fuels used by the vessels at our offshore wind farms. To address this issue, we will be testing crew transfer vessels that run on electricity and e-methanol. We will operate them at full scale in our wind farm operations at Barrow and Lincs in the UK. Many of the blades in operation today need to be recycled soon, but blades are made of composite materials that are difficult to recycle. This is the biggest circularity challenge facing our industry.

To address this, we are pleased to announce that we are entering an industry first partnership with Vestas. Vestas has developed a new technology that can break down the composite materials in existing blades and use the recovered epoxy resin to manufacture new blades. When ready, we will procure and install these blades made with recycled materials in all future wind farms where we collaborate. When looking at an entire wind farm, these solutions have the potential to significantly reduce emissions. Together with our partners, we are driving the integration of new low-carbon solutions in a cost-efficient way and building the capabilities to continue future-proofing our world-class operating model. Ultimately, these initiatives will enable us to meet future customer demand for decarbonised wind farms.
Hello, everyone. My name is Rasmus Errboe. I am the CEO of our European business. I have been with us for a little bit more than 11 years in many different roles, most recently as the regional head for continental Europe. I will spend my time today giving you a strategic update on how we are doing in Europe as of now. And I would like to start out by giving you a snapshot overview of our portfolio, so as it stands right now, and then followed by a quick walkthrough of what we have achieved since the last Capital Markets Day. We constructed the first wind farm offshore in the world more than 30 years ago and we have today 27 operational wind farms across Europe. That makes us a major green power producer and it also makes us the undisputed regional leader of offshore wind in Europe. But what it also does is that it allows us to compete from a position of strength and we do so due to the depth of our capability and also simply due to the size of our portfolio.

We have roughly 18 gigawatt of what we call firm capacity in Europe right now. Little bit more than 15 offshore, one gigawatt onshore and two gigawatt in our Danish bioenergy business. Before I go through the list here, I would like to leave you with one point. During the last couple of years, we all know that Europe has been going through unprecedented turmoil in the energy markets and to me it speaks quite a bit to our capability as an organisation that during this period of time, we have been able to deliver on all of our key milestones, and it gives me personally a very strong conviction in our ability to continue to deliver going forward. What I will do now is start looking ahead. I would like to take you through our four key strategic priorities for Europe for the next 12 to 24 months.

First of all, we will deliver on our awarded portfolio with sufficient value creation, i.e. Hornsea 3 and Baltica 2 and 3. I will of course come back to that. Number two, we will win up to six gigawatt of offshore wind capacity and we will do so using multiple different avenues, so centralized tenders, decentralized tenders, greenfield, open door, developer-led build-out, finding the best way to the most value creating green electrons for Ørsted. Number three, we will leverage the onshore platform we have now established throughout the last two years and deliver another three gigawatt of value creating growth. And then finally, we will lead the structural shift that we are seeing right now towards more corporate-led demand and deliver on our strategic corporate partners’ decarbonisation needs. I will now double-click on number one, starting with Hornsea 3.

We continue to progress Hornsea 3 and we expect to take FID during 2023. On value creation, we expect the value to progress towards our guided range through lever maturation and, in general, further maturation of the project on scope, schedule and cost. I am firmly convinced that we will get there and there are specifically three areas that we are spending a lot of time on right now. First of all, on the whole CAPEX part, we are working hard with our suppliers to get the needed robustness in the case and get a very high proportion of secured CAPEX on price and also on volume, building further
on the two thirds that we had secured at award last year. Secondly, we should remember that this is a massive offshore wind farm that is part of the biggest offshore wind cluster in the world. That also means that we see significant scale benefits on this farm and we continue to build on that. And to illustrate my point with an example, our OPEX per megawatt on this offshore wind farm is more than 25 % lower than what it is on Hornsea 2, driven by turbine scale but also the cluster effects. Last but not least on revenue, we have a CfD contract here that provides you with a lot of flexibility in terms of what you can do on corporate PPAs, on delaying the CfD. Especially on corporate PPAs, we have an option in the framework to basically pass back up to 25 % of the CfD and then either take that merchant or through corporate PPAs, which we would obviously only do if it would improve our business case. So with all of these things, as I said before, that gives me a strong conviction that we will get there.

Moving on to Baltica 2 and 3 in Poland, so the other half roughly of our awarded capacity, we entered into the JV on this project two and a half years ago roughly. So in other words, just before the world, in terms of the energy market, fundamentally changed in Europe and also very much in Poland in terms of the depreciation of the Zloty. But fortunately, due to our leading development capabilities, we were able to see the writing on the wall very, very early on these projects.

And together with our partner, PGE, and other incumbents, we managed to agree with the Polish government to make some very fundamental changes to the CfD with retrospective effect. Due to these changes, we are now at a place where we see sufficient value creation in Baltica 2, so that is 1.5 gigawatt out of the 2.5, and we are moving that project forward according to plan towards expected COD in ’27. As Mads also alluded to, on Baltica 3, the story is slightly different. Here, despite the fact that we actually do see a positive life cycle spread to WACC on this project, we have decided together with our partner to take a step back because it simply did not meet Ørsted’s requirements and reconfigured the project, taking advantage of the fact that we have flexibility on the timeline with the CfD the way it is. And more specifically, what we are doing right now is three different things. First of all, we are reopening the permit. We are seeing if we can reconfigure the project, potentially get a bigger turbine. We are cancelling and retendering significant scopes, again leveraging the flexibility on the timeline, and then finally, we recently won another 210 megawatt of awarded capacity in Poland together with our partner PGE, and we are exploring whether we can construct that together with Baltica 3 and then have a slightly bigger project which would benefit the business case.

That was an update on the awarded portfolio and I would now switch on to strategic project number two, double-clicking on how do we get to the best and most value creating green electrons for Ørsted. Before I get into the details, I will just take a step back and provide you with a little bit of context. There is no doubt, as Mads also alluded to, that we are standing at the brink of a new era for offshore wind in Europe, no doubt about it, but for me personally, I actually don’t spend so much time thinking about
whether the number behind me in 2030, installed capacity, will be 130 or 140 or 150. In all scenarios, the growth will be massive.

So where we do spend our time is finding the best gigawatt in this space. Two words on the regulatory framework, overall, we are pleased with what we are seeing across Europe with the multiple packages that has been coming out of the European Commission. It is an evolution. It is not a revolution. But as said, overall we are pleased with the direction of travel. Where I would instead like to spend a good deal of my time is to give you some insights into, “How do we think about the markets? How do we manoeuvre in this space of opportunity?” Because the way we think about markets is that it is much, much more than a flag on a piece of paper. You need to carefully think about where you are and why. We focus our bottom fixed offshore wind growth in five core markets. The UK, the Netherlands, Germany, Denmark, and Poland, centered around the Irish Sea, the North Sea and the lower part of the Baltic Sea region. And to give you an indication of the numbers, we spent roughly 80 % of our DEVEX in ’23 in these markets.

That also means the vast majority of our time and our attention. We also are active in what we call new adjacent markets for bottom fixed offshore wind. So that would be Ireland, Belgium, Norway and Sweden. And here we spent roughly 20 % of our DEVEX. But zooming in on the way we think about this, so we carefully think about where we want to be. When we look at a market, we obviously look at the attractiveness. “What is the robustness of the pipeline? What is the political stability? What is the transparency of the system?” and so on. But what we also really test ourselves on before we go in and also when we decide to stay is our ability to be a market-shaper, not a taker, either in our own rights or together with our partners. As you see with us partnering up with ESB in Ireland recently, BASF in Germany in their home market, I will come back to that, PGE in Poland, the national incumbent, CIP on Danish open-door, that’s an important part for us to be a shaper.

Then finally, what we also look for increasingly much actually, when we look at our portfolio is not to be blinded by the tenders. I will come back to the tenders, but we are looking for multiple avenues to the growth. We are looking for, as I said before, different kinds of auctions, greenfield, developer-led build-out and so on. Another thing that has fundamentally changed in Europe due to the same drivers, of course, in the last couple of years is the sheer volume of gigawatt for bottom fixed offshore wind that is being tendered out in the short term. In the markets that are relevant for Ørsted, as I mentioned before, for the rest of ’23 and for ’24, we will see a total of roughly 44 gigawatt being tendered out, so an average of 22 across the two years. And a good question to me would be, “How will you make sure that you can win that in the most value creating manner?” And my answer to that would be four-fold. First of all, our leading development capabilities. We have been doing this longer than anybody else. We have seen opportunities.
We have seen more opportunities in Europe and globally than anybody else when it comes to offshore wind. We have a distinct capability to assess the opportunities and also do it early, see the risks and also see the opportunities and more importantly, to price the opportunities effectively. As a few examples, the view you might take on AEP, annual energy production, the view you might take on the LCOE curves for the coming years, the view you might take on your ability to generate value from the merchant exposure, the value of the green electron or the molecule, those assumptions can make or break your business case in an afternoon. We know what we’re doing. This is, I think, a very important point for you to be aware of here. Secondly, on partnerships, we have the right partnerships in place, development partnerships, but also offtake partnerships. We have an ability to make them work for the longer term.

And then finally, as Richard and Virginie will also talk about, we simply just have scale that we can leverage across our entire value chain, but also simply in our market presence, synergy cases as an example. Moving on, I would like to spend a little bit of time on floating before I then conclude on, “What does the pipeline look like for us in Europe for offshore wind in the coming years?” The one-liner on floating is that things are going according to plan. We are delivering on the strategic trajectory that we set two years ago. We are building our organisation. We are staging our capability-building and we are building a portfolio with a lot of optionality pre and post 2030, which is very important to us. More specifically, what we have done is that we have also here decided to focus. We are in three markets. We are in Norway, the UK and Iberia. We have secured gross 1.1 gigawatt in the UK of leases that we are now maturing together with our partners, and we have entered into four development partnerships in the markets that I just mentioned.

And then finally we have also entered into a technology partnership with Acciona in Spain. If you put this together and give you a consolidated view on offshore for Europe towards 2030, we have a little bit more than 15 gigawatt in a firm capacity. We have an ambition to get to 19 to 21 gigawatt by 2030 installed in the water, and that would mean that we have an ambition to get up to six gigawatt of offshore wind. We can do that from a pipeline of roughly 65 gigawatt of opportunity, roughly 40 gigawatt in the core markets that I mentioned before, and then the remainder in our adjacent new markets. To me, this is a very, very robust pipeline. Moving on and going into strategic priority number three, which is on onshore. We have now, you can say, set ourselves up completely in Europe on onshore during the last couple of years, and we have done that centred around the two platform acquisitions we have done, one in Ireland and UK and one in Germany and France. On top of that, we have entered into Spain in our own right and have entered into smaller development partnerships in Spain.

I am incredibly pleased to see that we now have a team of almost 200 people working solely on onshore in Europe, and we have management teams in our onshore business with an average tenure of more than 20 years doing exactly this. As said, we are present in five markets and as Mads also
alluded to, that constitutes the vast majority of the growth that we will see in Europe across onshore, and when I say onshore, it is, of course, onshore wind, storage and solar. In terms of how we have been doing, we have increased our installed base with more than 30%. We now have 500 megawatt installed and we are delivering very safely within our guided range in terms of value creation, both for our projects under construction and our awarded portfolio. Looking at the pipeline and our onshore value proposition. As said, we have roughly one gigawatt of firm capacity now, and we will add another three to our pipeline towards 2030, installed capacity. We will do that from a pipeline of nine gigawatt roughly, and that is a number that has significantly increased in the last couple of years.

In terms of our substantiated pipeline, that is predominantly onshore wind, but in our opportunity pipeline you will see a roughly 50/50 split between onshore wind and solar and storage because we firmly believe that that is the right direction for us to take. I can come back to that. Our value proposition, in one line, is our ground game. We are incredibly close to our markets. We have people on the ground who have been there for a very long time and who has been developing and executing onshore opportunities. And then we have, as I said before, the right partnerships in place. And then finally, an important part of the, "Why?" on onshore for us in Europe is the ability to move towards more integrated solutions across wind, solar, and storage to alleviate the grid constraints, which is an increasingly big issue, but also, frankly speaking, to meet the needs of our strategic corporate partners who are looking for profiles like that.

And that brings me to strategic priority number four and the last one. We are convinced that, over the next couple of decades, we will see a fundamental structural shift from, you can say, government-led demand into more corporate-led demand. In the future, what the customer would like to see is the developer's ability to deliver the green electron at the right place, at the right time, with the right price and with the right profile, and you can only do that if you have an integrated portfolio and an integrated capability. And also here, we are strategically focused. We really spent the time thinking about, "Where do we want to be?" We have decided on focusing on only the largest strategic corporate partners.

We have some criteria for that, companies that are shapers in their industry and then we are focusing on global tech, steel and chemicals. Just to put these numbers in perspective for you, as a rule of thumb, the demand numbers we see here roughly equates to a thousand gigawatt of offshore wind globally. Just to put it in perspective, the demand is huge. We are already very well on the way. It's not just a strategic commitment that we have, something we have decided to do, only we are doing it. We have entered into more than a gigawatt of corporate PPAs, predominantly within these sectors, in the last couple of years in Europe. Also predominantly offshore, which distinguishes us from our colleagues in the industry quite a bit. And also, just as a data point, roughly two thirds of those corporate PPAs have been entered into with strategic corporate partners, Amazon and Covestro. We have also concluded
an equity partnership with German chemical company, BASF, the biggest one in the world in their home market to develop offshore wind together. And then finally, we are collaborating quite a bit with our strategic corporate partners on more scalable green solutions. An example of that collaboration is, for instance, as Mads also alluded to, when we are doing carbon capture with Microsoft.

That brings me to my final slide. Four key takeaways from me. First of all, we are a major green power producer in Europe. We are the undisputed regional leader for offshore wind and we compete from a position of strength. Number two, we will deliver on our awarded capacity with sufficient value creation. Number three, we are extremely well-positioned to get the most valuable gigawatt in Europe, due to our capability and the size of our pipeline. And then finally, we are strategically committed to continue to work with our strategic corporate partners on meeting their decarbonisation needs in Europe and also globally.

Thank you very much for your time. With that, I will pass on to my dear colleague, David Hardy, who will now give you an update on where we are in US. Thank you.

David Hardy, EVP & CEO of Region Americas

Hello everybody. My name is David Hardy and I lead Ørsted’s business in the Americas. I’m excited to be here today with all of you in London and to tell you a little bit about the progress we’ve made in the Americas region and the prospects that we have ahead of us. But first, maybe a short introduction on myself. I’ve been with Ørsted since early 2020 and throughout that period I’ve primarily led our offshore business in the Americas, until the reorganisation last November, where my scope was expanded to include all of Ørsted’s activities in the Americas. Prior to Ørsted, I spent approximately 10 years in senior executive roles with wind turbine OEM, Senvion and Vestas, both in the US and internationally. I lived in Germany for three years and prior to that I spent 20 years with primarily GE and the US Navy.

Now I’d like to tell you about Ørsted Americas. Since joining the US market in 2015, Ørsted has made significant progress in its footprint and prominence in the market. We’re the only pure play developer in the US to have an installed base of onshore wind, onshore solar, energy storage and offshore wind. We’re one of the largest deployers of capital and we’re a sought-after thought leader on the clean energy transition. You can see from the chart behind me, that we have an impressive installed base and a large portfolio of projects under construction and in development.

I’d now like to just take a couple minutes and talk about some of the progress that we’ve made since the last Capital Markets Day. The first item on the list, that I’m most excited about, is that we’re actually building, as we speak, America’s first commercial scale, offshore wind farm, the South Fork Wind Farm, 132 megawatt project off the coast of Long Island, New York. We actually expect to put our first
foundations in the water within the next days. Super exciting. We've also matured our three near-term, awarded portfolio projects. We'll talk about those more later, but we've matured them through the development cycle, we're approaching FID and have primarily cleared all the boundary conditions needed to take FID. And we've also been awarded two gigawatt, two new projects, in our offshore portfolio.

On the onshore side, we've added two gigawatt of operating assets and we have 1.6 gigawatt under construction. We've signed 24 corporate PPAs and we're now entered in five US power markets. We also, last year, announced the first farm-down of our onshore portfolio, where we were able to retain a hundred percent NPV on the farm-down assets. This was a 2.8 billion DKK transaction or 410 million USD transaction, and it's important for two reasons. One, it demonstrates the value that we're able to create in our onshore business in the Americas, and two, it demonstrates that we can take our farm-down model into the US, even with the complex capital structure with tax equity. Last, we've built a regional platform for growth going forward. When I joined Ørsted in early 2020, we were approximately 150 people across both parts of our business. Today, we're over 700 people in the Americas. So we're building a team to take us into the future.

Now I'd like to talk about the important, market-shaping legislation that occurred in the US last year, of course, this is the IRA. And I know many of you know a lot about the IRA already, but I just want to share a few specific examples of what it means to Ørsted. This is the largest investment in green energy in America. The expanded and extension of the current tax credits will lead to significant growth for onshore and offshore renewables. The new tax credits for energy storage and P2X will expand these benefits even further.

You've seen charts like the one we have on the right-hand side, this is a chart from Bloomberg New Energy Finance, that talk about the growth, but maybe you don't appreciate the longevity that the IRA creates for the US market. For the first time, we have a 10-year runway of opportunity for us to really, as an industry, think strategically and build the long-term supply chains we need to have a more fruitful energy transition, long-term energy transition, as well as build a more stable renewables energy environment. If you've worked in renewables in the US, like I have for the last few years, it's been quite cyclical and now hopefully we've got a little bit of stability in policy.

Last comment is that Ørsted isn't just a beneficiary of the IRA. We actually helped shape the IRA. We gave tangible input to policymakers about how best to reduce the carbon emissions in the US and how to create the environment for business that would lead to long-term success of the industry. Today, we're still shaping the implementation of the IRA as all the tax guidance hasn't actually been released from the US Treasury. Two important points of the IRA that I want to highlight; the energy communities benefit and the local content, domestic content benefits. We see these as really
influential additions to our market here in the US and that they'll really make a difference to the long-term, offshore wind and onshore industry, but can actually help us in the short-term as well and can maybe play a significant impact to improving our awarded portfolio in offshore. Especially given the market leading investments we've made in the domestic supply chain in the US in the last five years.

Now I'd like to go on and talk about our priorities for the region. We have four key priorities for our region. The first is that we're very focused on maximizing value on our existing offshore wind portfolio. I probably spend 80% of my time on that. We'll come back to that later and talk about it. We're also keen about the future of offshore wind in the US and we're bullish, we're long on the opportunities that we see there. We need to be shaping our market leading position and make sure that we're prepared for that next market phase. We see the benefits of the IRA and we're growing our onshore business to take advantage of those and to build the next generation of customer solutions, integrated solutions like Rasmus just spoke about. And last, I think it's important for us to shape the market for the long term and ensure a stable marketplace for Ørsted in the Americas. I'll come back and talk about all four of these as I go through the rest of my presentation.

So first, as I said, offshore wind is very important to us and we're targeting to achieve three to five gigawatt of install base by 2030. As we think about our existing and future portfolio for offshore wind, we're making strategic decisions and the first strategic decision that I'd like to share with you today is the decision that we've made to focus solely on the mid-Atlantic and northeast markets of the East Coast. We see these as the best markets in the US for the following reasons. Those states need offshore wind in order to meet their decarbonisation goals. Those states have high-capacity targets today and we expect those capacity targets to grow. The leases in those areas have good environmental attributes: wind speed, water depth, access to shore. We think that's important. And last, we believe that we can build a synergistic hub for offshore wind, taking advantage of our stakeholder relations that we've built, the supply chain that we're building and of course the operation and maintenance phase of the projects as we build this hub out.

Next, I'd like to talk about our existing awarded portfolio, but before I talk about the projects, I want to just spend a minute and make sure that you understand how strong our existing portfolio is vis-à-vis other portfolios in the US. Our existing portfolio comes with some fundamental advantages to others. This is anchored in the fact that we were early to buy our leases. We have some of the best leases in the market and we paid very low prices for those original leases. We start from a position of strength just from the leases that we have. Additionally, we've got some of the best offtake agreements. If you compare the portfolio of offtakes that we have across the States, it's very strong versus our competitors. And last, as you'll hear from my colleagues Richard and Virginie, we leveraged our EPC organisation to really take advantage of our global scale and our supplier relationships to make early commitments to turbines and vessels before the latest cost increases. A large portion of our existing
portfolios, capital commitments and CAPEX, we secured early in time through framework agreements and other advantages that we have.

So now I'll talk about our awarded portfolio. The first three projects on the top of the list, we call our near-term awarded portfolio. I'm going to come back to those. I have a whole separate slide on those. We're going to spend a few minutes on those. Next, we have Skipjack Wind, which is our Maryland project. While the official COD date of Skipjack Wind is 2026, there's a probability that this project could be delayed due to queue reforms in PJM, which is the transmission system that the project connects into. And if this project is delayed, we'll use this time to improve the project. Today, this project is NPV positive, but it's not exactly where we want it to be or in our targeted range. This is an active project that we're still developing and like I said, we'll use this extra time, from a project delay, to continue to improve the project and get it into our guided range.

Next, we have Ocean Wind 2. You heard Mads talk about Ocean Wind 2 earlier. This is a project that in order for us to ensure that we get value creation, we've decided to reconfigure and we're in active discussions with the State of New Jersey about what that means. It could mean project delays, different technology or other value adding activities.

Now I'm going to talk about our near-term awarded portfolio. I'm going to spend a few minutes on this slide, so bear with me. The takeaway of this slide is that we have confidence that we can create value in a forward-looking basis for the near-term awarded portfolio. Let me tell you what we mean by that. So first, it's important that I explain our current view of these projects. The current view of these three projects is that they are NPV neutral, or slightly positive from a lifecycle analysis calculation. But let me explain exactly what that means. First off, we're using our WACC framework, which is market dependent and technology dependent. This WACC framework has been very heavily affected by the +250 basis point risk-free rate increase of the 10-year treasury note in the US. The WACC is much higher than at the time when these projects were awarded. That's the first assumption that you have to understand.

The second is that we've, through our EPC organisation, have basically got commitments, secured the CAPEX, for almost all of the scopes for these three projects. Although those scopes are secured, that doesn't mean that we're not done working with our suppliers to try to continue to reduce cost, re-engineer, optimise, et cetera. We're still working on that, but we've got a ceiling on the cost side. We're also making an assumption of a 40 % ITC for all three projects. Now, with the latest guidance from Treasury, not all the projects actually meet the requirements for 40 % ITC, but we believe that through our strong relationships with the Federal Government and the dialogues that we're having, that by the time the final guidance comes out, all three of these projects will qualify for either the energy community or the domestic content additional 10 % bonus ITC or maybe both.
And last, embedded in our calculation are some additional changes to the ORECs. As Mads alluded to earlier, just yesterday, we filed a petition with the State of New York, the Public Service Commission, who’s the regulator, and we asked them to retroactively apply some attributes of the New York 3 RFP back retroactively to Sunrise (*CORRECTION*). These include inflation adjustment calculations and grid upgrade cost sharing. We don’t know the outcome of that, but we have high confidence that the state will support us. Last, or in addition, we’ve been in discussions with New Jersey about making sure that we can get the full pass-back of the IRA tax credits to Ocean Wind 1. It’s all of these assumptions that go into our neutral lifecycle IRR for these projects.

You might ask the question, if these projects are lifecycle neutral, why would you keep investing David? And I have three answers for you. The first is that we’ve made some significant investments already and when we look at the forward IRR, using that as a basis for our calculation and decision making, the next kroner, dollars that we put into the projects, will be value creating. And there’s a lot of capital still to be deployed on these three projects. We see that as an important metric and a way for us to think about these projects. Secondly, the fact that we’re investing in these projects and continue to invest in these projects, the states and Federal Government in the US want these projects to be successful. They need these projects for their decarbonisation goals. It is our continued investment that is leading to them working with us to retool the offtake agreements and open up new tax credit opportunities for us. So it’s a little bit of a virtuous cycle.

And last, I would say that there’s a strategic benefit for us to build these projects, and I’ll come back to that in a little bit more detail. But before I go on to the next slide and talk about the strategic value of building these projects, I want to just reemphasize one really important point that Mads made and that Daniel will make. And that is that our standard going forward is still our fully loaded unlevered lifecycle spread to WACC of 150 to 300 bps. For projects like Skipjack and Ocean Wind 2 and our new bids in Rhode Island and New York, that will be our standard. We just see the opportunity with these three projects, for the reasons I just stated, to use this forward-looking IRR as our benchmark, but that won’t be a precedent going forward.

So now, talking about the strategic value of building these projects. I see six things that will be a benefit to Ørsted going forward if we build these projects. First is of course that we have our big pipeline of opportunity where we can bid in the future. If we build these projects, we’ll also get some unique learnings from building the first projects and operating the first projects in the US; installing turbines in US waters, building the first HVDC system, working with stakeholders, et cetera. Also, the work that we’re doing builds our reputation and our credibility, and that’s really important in our industry right now. We also keep our commitments to local communities to build supply chains and as a first mover with labour. And finally, we’re making investments in infrastructure ports and in supply chains, and by building these projects and completing those investments, those will give us a competitive advantage
going forward with access to these infrastructure and capacity slots of local content, which is important for future domestic content requirements for additional tax credits in the US.

So why is all this strategic investment important? It’s because we believe in the long-term benefits and the long-term opportunity in offshore wind in the US. Why are we bullish on offshore wind in the long term in the US? It’s because the market’s improving there. Like I said, the states and Federal Government want to see the success. The Federal Government’s funding resources for permitting. The IRA will add value to projects going forward. On the state side, New York, Rhode Island, Massachusetts, New Jersey, they’ve all changed their next phase of RFPs to include inflation adjustments and other cost sharing mechanisms to de-risk those projects for us. We see the market as something that’s improving and maturing in a place where we want to be in the future.

And that leads us to our recent announcement of the acquisition of Eversource’s half of our so-called Lease Area 500. This is a lease that we’ve known for a long time. It’s a great lease. It has again, good access to shore, nice shallow depths and some of the strongest wind and lowest wake in the US. So it’s a very competitive lease and we think that we also got a very good deal compared to other prices paid for leases recently. It will allow us to build up to four gigawatt in this new improving market and we’ve already bid 2.3 gigawatt into New York and Rhode Island.

And now, as the sole owner of this lease, we can be strategic about if we bring in a development partner if we win these bids or if we wait and farm-down these after we’ve de-risked them. Like I said, with these two bids, Rhode Island and New York, of course, we’re going to stick to our targeted returns of 150 to 300 bps lifecycle, fully loaded unlevered spread to WACC. And we’re confident that not only these projects, but all the future projects, will be able to hit our targets in the US.

I’d now like to shift to our onshore business. It’s a very important part of our business in the US and for Ørsted overall. We’re on track to deliver 13.5 gigawatt of onshore capacity by 2030. In addition to the 5.7 gigawatt of projects that are in operation or under construction, we have a large pipeline; 8.6 gigawatt of substantiated pipeline and 16.4 gigawatt of opportunity pipeline. This is a combination of onshore wind and onshore solar and storage.

This year in 2023, we’ll continue to expand our substantiated and opportunity pipeline as we move into our core markets. So those pipelines will grow this year. And in addition to our greenfield pipeline, which I’m describing here, our commercial team is out in the marketplace scouring the market for good opportunities through M&A to augment our greenfield, so that we can create the best value for Ørsted in onshore. I’m confident that we’ll continue to create value and continue our track record of success in the onshore business in the US and that this will be an important part of our business going forward.
In order to show the value of onshore, I want to just take a minute and give you two case studies on things that we’ve done in the US on the onshore side. But before I do, I want to highlight the strong success that we’ve had since our acquisition in 2018 of Lincoln Clean Energy. We’ve added 3.3 gigawatt of onshore assets in operation and more on the way obviously with the construction pipeline we have. And our returns are tracking above the initial expectations of the proforma of the transaction. So this has been a very great success for Ørsted and I’m very proud of the Americas onshore team for the progress that they’ve made.

Now onto the two case studies. The first is a project called Sunflower Wind. It’s a late-stage construction project in Kansas, onshore wind, 214 megawatt. This was a project that we bought as part of a acquisition portfolio, and at the time, both we and the seller attributed very low value to this project. But after we bought it, we reconfigured the project, we leveraged our supply chain relationships and our origination capabilities, and we were able to create a project that’s well within our value creation framework. This project will be CODed just later this year. So great success for a project that we paid almost nothing for.

Similarly, but different, Eleven Mile. Eleven Mile is a 300 megawatt, solar project with 300 megawatt, four hour battery system, a combined technology system. This is for our utility customer, SRP in Arizona. The utility was trying to permit a gas-fired power plant and they weren’t able to get their permits through, and so they were scrambling to try to make up this capacity for their demand growth. And they came to Ørsted and we were one of the only companies at the time that could complete the project, this complex project, in the short timeline that they wanted to have the project online by summer of 2024. Due to some of our supply chain relationships and we were able to quickly make a deal with them, make a deal with our suppliers, use our engineering and procurement resources to bring this project to fruition. So this is an example of us fulfilling a customer need in these integrated solutions. This is a third-largest battery in America, so this isn’t a small storage project. I think these two case studies show the capabilities that Ørsted is building in the onshore business. And again, I believe that this will be an important part of our equity story going forward.

Now, I’d just like to talk quickly about a few capabilities that we’re building in the region. After the integration last November, we of course saw synergies across our business as we expected, but two things have really come forward. One is our ability to leverage the combined technologies to build these complex, next generation, multi-technology solutions. We see this as an emerging trend and something that our customers are asking for, and that as one business in the region we can really take advantage of. And second, of course, as one integrated business, we can talk with one strong voice to customers, suppliers and probably most important, stakeholders. You’ve heard me talk about throughout the presentation how strong we are in our stakeholder management in the US and I think we’re the best actually at that in the US. It’s important for Ørsted overall, and you heard Rasmus talk...
about the work that they've done in Europe, and of course we're going to do that in Asia and everywhere, but in the US, well in the nascent industries of offshore wind, standalone storage and P2X, it's even more important that we shape the industry. We'll continue to do that. I'm confident that we can win bids, shape the industry and actually achieve the results that we want if we're strong in our stakeholder management.

I'll just conclude with a few key highlights and reemphasize some of the things I already said. First, as one of the largest employers of capital in the US, we're very well positioned to take advantage of this exciting market. Second, we're very focused on creating value on our existing offshore portfolio and preparing for the next generation of offshore wind in the US. And last, we see the benefits of the IRA. We'll continue to grow our onshore business, leverage our customer relationships and solve our customers energy transition needs. Thank you very much. I'll now turn it over to Per, via video, to talk about our APAC region,

Per Mejnert, SVP & President APAC

The Asia-Pacific region, it accounts for more than half of global greenhouse gas emissions and is extremely vulnerable to the effects of climate change. It's also home to many countries with excellent potential for offshore wind, with good wind speeds, skilled workforces and industrial capabilities. We are seeing governments set ambitious green goals and with over a third of all RE100 companies based in this region, we know there is high corporate demand for clean power. Towards 2030, more than 30 gigawatt offshore wind could be installed in Asia-Pacific, and this could double to over 60 gigawatt by 2035. I'm confident about the long-term green transition in the APAC region.

Let's take a look at the leading role Ørsted is already playing here. With almost two gigawatt offshore wind capacity in operation or under construction, we are the leading developer in Asia-Pacific and have the most mature pipeline. We are present in the markets in Asia-Pacific with the highest potential for offshore wind projects and we are also positioning ourselves, through our engineering and sourcing hubs. Taiwan is the home of our APAC headquarters and the regional front-runner for offshore wind. Across Taiwan, Japan, and Korea, we have a multi-gigawatt project pipeline. We have paused our market development activities in Vietnam, but still see this as an important supplier market.

Earlier this year, we submitted a feasibility license application for Australia's first offshore wind zone, off the coast of Victoria. We have struck a careful balance between building a local presence and retaining a cost-efficient setup in our markets. While we do see longer term potential for onshore wind and solar, our current focus is offshore wind in Asia-Pacific. In Taiwan, we are due to commission the final turbines for the 900 megawatt Greater Changhua 1 and 2A offshore wind farms. This year. And this past March, we announced the board's final investment decision to build our second batch of utility scale projects, the 920 megawatt Greater Changhua 2B and 4 offshore wind farms.
We take our responsibility to prioritize value creation seriously. For example, we did not bid in the previous round in Taiwan. We took stock of the limitations set by the regulation, including project size and content restrictions, and concluded that we could not make the projects investible at that point. However, I feel positive that improvements to the framework in Taiwan this year will ensure further successful buildouts of offshore wind. Ultimately, there are fundamental reasons why greater Changhua 2B and 4 is viable. This is a large-scale project with full flexibility on local content requirements and long-term stable revenue based on an offtake agreement. Working in partnership has been at the heart of making it happen. We have utilized Ørsted’s network of regional and global supply chain relationships to optimise our capital expenditure. Most significantly, we secured the world’s largest corporate power purchase agreement of its kind with TSMC, Taiwan’s semiconductor giant. TSMC will off-take the full production of our 920 megawatt wind farm for a fixed price 20 year term. For Ørsted, this landmark agreement confirmed our belief that CPPAs alongside supportive regulatory frameworks are a key part of the future success for renewable energy. We have started project construction and will be ready to deliver clean energy for our partner, TSMC, on time.

Looking ahead, we will apply the learnings from our projects in Taiwan and around the world to our multi-gigawatt APAC pipeline. We are building a strong reputation as a reliable green energy partner to governments and corporates to catalyse Asia’s green transition.

Olivia Breese, SVP & Head of Power-to-X

Good morning everyone, and thank you for coming back so promptly from your coffee break. My name’s Olivia Breese and I’m the CEO of our Power-to-X Business. I’ve been with Ørsted since 2012 in a variety of commercial leadership roles across strategic joint ventures and M&A, market development and commercial innovation. All highly relevant areas for this very new element of Ørsted’s portfolio. So I’m looking forward to taking you through how we at Ørsted see the emerging Power-to-X market, how and where we will create value and then looking in a little bit more detail at our development portfolio and pipeline and in particular at FlagshipONE, the e-methanol project we took a final investment decision on in December of last year.

But first of all, why is Power-to-X important? Well, if you believe in a world that runs entirely on green energy, then you of course want to decarbonise as much as you can with green electrons. But you cannot get to net-zero only with electrons because approximately 30% of global emissions come from the hard to abate or hard to electrify sectors such as heavy transport, heavy industry, and chemicals and these sectors need different solutions.

For these sectors we have Power-to-X. And Power-to-X is the umbrella term for taking renewable electricity and the cost of renewable electricity constitutes approximately 50% of the outturn cost of green hydrogen. So you take your renewable electricity, you either turn it into green hydrogen through
electrolysis or you further synthesise that green hydrogen and you create e-ammonia or you add biogenic carbon and you create e-methanol or ultimately e-kerosene. And both hydrogen and ammonia are already significant energy carriers across the world. Indeed, in 2021, there were already 91 million tons of hydrogen being used, but all of that hydrogen pretty much was fossil-based hydrogen. And so with not only that very, very strong existing demand, but also the additional demand which comes from these new verticals, you can see that the demand growth for renewable hydrogen and its derivatives is only continuing to grow until 2050.

Now as Mads said, we’ve shown you charts like this before, except the difference between this chart and the chart that we showed you in 2021 is the number on the far right, that’s continued to grow. The thing that hasn’t changed is the number on the far left. Over the last two years, we’ve not seen significant tangible movement in terms of actual production of hydrogen and e-fuels. There have been a couple of notable FIDs, obviously, including ours, but there has not been the fundamental shift towards tangible action that everybody was expecting in 2021. But we are confident that 2023 will be the year when we start to see that tangible action. And there are a couple of reasons for that. The first is that there are, now, very strong regulatory commitments both coming out of the US with the IRA and in Europe with the green hydrogen bank where we are seeing actual money being put in support of the production of green hydrogen.

Also in Europe, we are seeing demand being incentivised, mandated to decarbonise not only through EU ETS and the REDIII directives, but also through refuel aviation and maritime. In addition, we are seeing forward-leaning demand sectors, so private actors taking tangible steps now to decarbonise. And you’ve heard my colleague Ingrid talk about Dillinger’s approach to decarbonising green steel using green hydrogen. Our partner Maersk is similarly taking a very forward-leaning approach to decarbonising their shipping operations. They’ve ordered 19 dual-fuel vessels, vessels that run both on e-methanol but also on conventional bunker fuel. And that’s only a small proportion of the total number of more than a hundred ships which have been ordered across the industry to be delivered before 2028. With those clear market signals and the demand, you can see why we consider that Power-to-X has the ability to create significant value to Ørsted and it will really do that in two ways.

The first is through absolute standalone value. With the demand opportunity that I showed on the previous slide, you can see that we will be able through our Power-to-X business to access new and growing demand verticals. That in and of itself is a very significant opportunity, but it also allows us to expand our decarbonisation offering to our strategic corporate partners. You’ve heard both David and Rasmus talk about our conviction that the future of offtake will not be government-led, it will be private actor-led, and that is even more true for Power-to-X than it is for renewable electricity. And so our ability through our Power-to-X business to meet the needs of our strategic corporate partners, not
only through electrons but also with molecules, that for us is critical. It also allows us to maximize the value of our assets on an end-to-end basis.

For our renewables assets, that means that we can direct the renewable electron to the most value creating end-use, whether that is the grid or it's Power-to-X depending on demand and price signals. It also offers us an opportunity to use the captured carbon from our bio plants in Denmark to use that captured biogenic carbon to produce either e-methanol or e-kerosene. Finally, Power-to-X enables large scale renewables to build out both as a significant source of demand for renewables, but also as an alternative route to market for very large-scale renewables where perhaps the grid is insufficient to allow those electrons to go to market or to transport them to market in their current form.

It is this value creation that underpins our ambition for Power-to-X. Our ambition for this new business, my ambition for this new business is to catalyse the decarbonisation of hard to electrify sectors and to do this by leveraging Ørsted's pioneering DNA to grow a scalable Power-to-X platform in Europe and North America by 2030. Now that's a very dense ambition statement, so I'm just going to unpick it for you a little bit. I think perhaps the most important word on the slide actually is scalable. You've seen from my slides, you heard from Mads, this is a sector in its infancy. It truly hardly exists today. So our ambition for this decade is to be ready, is to be ready to meet the demand which we expect at large scale towards the end of this decade and into the 2030s.

We're confident that we will be able to do this, that we'll be able to scale ourselves, that the industry will scale to meet us, and that we'll be able to do that in line with our target returns. And the thing that gives us the most confidence in that is that even today, even in this very early phase of the market, our under-construction portfolio across Power-to-X and carbon capture that is within our existing spread to WACC requirements.

The other two important points on this slide. The first is the point about the hard to electrify sectors. We are deliberately looking to electrify as much as we can because we believe that that is the most efficient way to reach a world that runs entirely on green energy, but also because that way you use hydrogen and ultimately e-fuels only where it is essential, only where it is most value creating. Our target offtake will be steel, it will be chemicals, it will be shipping for the rest of this decade.

And then Europe and North America, we look very much to Europe and to North America for this decade because that is where we have the existing portfolio of electrons. That is where we have a very, very strong production fundamentals and also importantly very strong demand. And we believe in our ability to be able to install approximately two gigawatt of electrolyser capacity across Northern Europe and North America by 2030 and also within those markets to continue to develop a pipeline of approximately four gigawatt. And how are we going to do this?
Well, we have the right experience and capabilities within Ørsted today to scale Power-to-X. First of all, as you’ve heard extensively this morning, we are a leader in optimizing power generation. Now why does that matter for me? Why does that matter for Power-to-X? Well, because as I said at the beginning, the cost of power is 50% of the outturn cost of green hydrogen. It’s about 35% of the outturn cost of e-fuels. And so large scale, low cost, high availability, low risk power, that is critical to any Power-to-X business that is looking to deliver at scale. And I know that I can rely on my colleagues to deliver me that.

The second thing is that the electrolyser market itself is in its infancy and we are very, very accustomed to scaling technology. When we first installed the turbine, it was 0.5 megawatt. Now we install 14 megawatt turbines. We know how to optimise the supply chain as it scales up. We know how to work with it and we know that we have found value in doing this before and doing it successfully. Thirdly, we're building capabilities in adjacent technologies. Mads has already mentioned our success in the Danish carbon capture and storage tender with Microsoft as our carbon credits offtaker. The capabilities we will build in delivering on our obligations in that tender, they will be critical if we are to deliver both e-methanol and ultimately e-kerosene at scale.

Now, the Power-to-X value chain is a long one and I’ll come on in a minute to talk about how we see ourselves playing in that value chain but critically to do so successfully, we will need partnerships, we'll need equity partnerships, we'll need offtake partnerships, we'll need supply chain partnerships and our global ability not only to execute on partnerships on joint ventures, but actually as Rasmus said, to really live in them, to really make sure that they create value for ourselves and for our partners over the lifetime of an asset. That is a really important capability for us in this business. And the other critical thing is our ability to sell the molecules that we produce. Now we've executed more than 55 corporate PPAs globally, and that gives me the confidence that we will be able to deliver similar value creation through the sale of molecules.

And finally, but perhaps the most important, we have an experienced team and that experienced team has deep technical capabilities. We have more than a hundred people within the Power-to-X business and within the wider Ørsted who are delivering on our pipeline of projects who have profound expertise in project development and origination in process engineering, critically, in process safety. But we are not going to be developing our Power-to-X projects in the same way as we develop our offshore wind projects. We're not going to be building the deep technical expertise at every single stage of the value chain that we have done for offshore wind.

Given the length and complexity of the Power-to-X value chain, we are going to focus our capabilities both on those areas where we're already very strong, obviously renewables, also on offtake and we're going to build the capabilities where we believe that having in-house abilities will either allow us to
create asymmetric value, to really reduce risk or alternatively to have access to critical control points. And so that's the electrolysis, it's the capture and usage of biogenic CO\textsubscript{2} and its operations. And for the rest we expect to continue to work very closely with the supply chain or we expect to partner. We expect to partner potentially along the value chain, partnering for both for capabilities and also for capital.

We're going to be doing this, as I said, across Europe and North America. Our development approach is very deliberately to focus our development on specific hubs. In Denmark and in the Netherlands, we are developing in each case an up to a gigawatt hub of green hydrogen. In Scandinavia, particularly in Sweden, we will be developing an e-methanol business. In the US, particularly in ERCOT, we will be delivering e-methanol and towards the end of the decade also e-ammonia.

The choices of these markets reflect not only the strong production fundamentals but also the existing demand that we see in these markets and also our market leading platform of corporate relationships that we are able to leverage here. To put that into a little bit of context, this is what we're doing in Denmark and Denmark is, as I said, one of the markets where we are developing a hydrogen hub. That starts with our H2RES project at Avedøre, only 2 megawatt, but we expect this year to take in a final investment decision on a 10 megawatt hydrogen project also at Avedøre and then relatively rapidly to scale that towards the end of the decade so that in 2030 or a little bit beyond, we're talking about a gigawatt of project in Denmark producing whatever the right molecule is at that stage in the market.

That is not something that is possible to know today, but we will be able to produce hydrogen, methanol, kerosene, as the market requires then. Finally I'd like to turn to FlagshipONE. FlagshipONE is the e-methanol project we took a final investment decision in December of last year. As Mads said, it's one of the largest methanol projects in Europe. Even though the electrolyser is only 70 megawatt, it's going to produce approximately 50,000 tons of e-methanol a year and to put that in context, that is equivalent to decarbonising one ocean-going large container ship for an entire year.

It's a good example of how we're going to exist with our suppliers. So we are acting as the end-to-end integrated developer and we're looking very much to experience suppliers, Siemens, Topsoe, Carbon Clean to deliver their critical components. It speaks also to the already existing value creation potential within Power-to-X, that this is a project where we have seen the offtake prices in the discussions that we're having with offtakers increase by approximately 35 % since we started having those dialogues in 2022.

Finally, also, it's a critical steppingstone for future projects. The ability to actually have steel in the ground to learn from that steel in the ground is already delivering very rapid learning loops, which we're
benefiting from across the portfolio. Before I hand over to my colleagues Richard and Virginie, I’d like to conclude by saying we are confident that we will be a market shaper and a significant player in Europe and in the US with this ambition by 2030 and that is because of our ambition married with tangible action. It’s because of the value creation we already see today in our portfolio in which we believe we will be able to carry forwards towards 2030. And it is because of the existing capabilities within Ørsted as a whole that we have and that we are building and which we believe we can continue to leverage as we scale. So Richard, thank you very much.

Richard Hunter, EVP & Chief Operating Officer

Hello and good morning. I’m Richard Hunter. I’m the Chief Operating Officer of Ørsted. You could say that I’m responsible for the delivery engine of the company. I’m going to talk today about EPCO and I’ll be accompanied by our Chief Procurement Officer, Virginie Van de Cotte. A little bit about me. I have over 30 years’ experience in large, complicated infrastructure and businesses based upon strong engineering and project delivery competencies.

We will talk about EPCO and we’ll do that largely in the context of offshore wind. So first of all, let’s talk about where we’ve come to date. We are the world’s leading offshore constructor and operator. As Rasmus has already highlighted. We delivered the world’s first offshore wind farm, some 30 years ago. Whether you look at the number of farms constructed the capacity installed or indeed the number of farms in operation, we are the number one with some distance to the number two. If we look at most developers, they only have a fraction of the experience that we have and many don’t have any experience at all at this point in time.

Now, just to move on to what the EPCO acronym stands for, we’re going to talk today about four areas of the business. Our engineering and design capabilities, our procurement and supply chain, our construction delivery and execution capabilities, and of course how we add value through the operational lifetime of the assets. We have experience across all of these areas and it’s based upon a very strong talent pool that we’ve built up over time that covers each of the four areas and is also driven by a very strong digital capability that is delivering tools and analytics to our overall business.

But what is the context that we’re doing this in going forward? We are seeing increased complexity in wind farms and within the energy system as a whole. As part of that, they’re also being incorporated into much more complex energy systems as we go forward. Early wind farms were relatively simple, a few turbines, a single connection to onshore, relatively limited use cases and operational complexity. Now, these are very large. They’ve incorporated significant offshore assets, many connections to the onshore, and indeed they’re have a scale to be strategically relevant at a national level.
We're also combining those now with other elements of the energy system. Whether it's storage solutions, offshore offtake or elements of Power-to-X as Olivia's highlighted, these are continuing to add to the complexity and the use cases that apply to our projects. We have the deep competencies around the component level, the package level, but that's not enough. You have to be able to integrate this within the wider energy system and ensure that you are delivering the overall performance of a wind farm in that energy system.

In doing that, if you don't have those competencies, any developer that thinks that they can procure some turbines, a transmission system, some vessels and just put them together, will have a great deal of difficulty commissioning into service an operationally compliant wind farm. We, in Ørsted, have those capabilities. We have the experience to be able to do that and to deliver across the piece. So let's just dive a little bit into those.

Firstly, our engineering and design competencies, we continue to add value project by project in what we're doing and continuously improve. We have some examples here in terms of ground risk assessment. On our Hornsea 3 project, we've achieved something of the order of 50% savings versus previous projects in our geotechnical analysis. If we look at foundations on our Hornsea 2 wind farm on a like-for-like basis compared to Hornsea 1, we've saved around 15% of the foundation steel.

With our transmission systems and capacity, we've continuously evolved project by project to increase the output that we can achieve. Just looking at one of our recent development projects by the latest thermal analysis and cable design technology, we've been able to remove the risk of curtailment due to temperature in operation. That means an increase in the maximum capacity output of the wind farm of more than 10%. And we continue to lead the market in terms of our offshore wind farm modelling and performance. We're now achieving supreme accuracy in our predictions of yield across wind farms. And our models are entirely based on long range wake effects that are really quite significant now in what we're able to do. Those long-range wind effects, many of the other developers are only now waking up to the implications of. With that, we're going to move along and talk about supply chain, and I will hand over to Virginie.

Virginie Van de Cotte, SVP & Chief Procurement Officer

Thank you, Richard. I wanted to say good morning, but in fact it's good afternoon. Let me first introduce myself. My name is Virginie Van de Cotte, I'm Chief Procurement Officer. Before joining Ørsted, I was working for Alstom at Bombardier where I had global leadership positions in procurement, supply chain and operations. By the way, I don't have a cold, I just have a voice that's easy to remember. I would like to share with you how we work and also why we have a leading position in supply chain.
Now, we are a preferred partner for the supply chain because of our unique value proposition. Let me pause for a moment and let us reflect on what is really happening in the supply chain in our industry. You've all heard that there is a concern of an imbalance between supply and demand. We see many developers running to suppliers to try to secure capacity. On the supplier side, we see that there's a concern that some of the developers will not be able to take off the committed demand.

As a result, key top suppliers are becoming very selective with whom they want to work, but Ørsted is always amongst the preferred suppliers, and that is really because of our scale and the pipeline that we have. They also recognize the strong experience that we have to build successfully wind farms in line with our commitments and especially appreciated by the suppliers is what Richard already has mentioned to you. It's our in-house capability, because in that way we jointly collaborate with our suppliers on innovation, but also continuous improvement to create and get more value out of our solutions while we're driving and committing on sustainability. You've heard Rasmus and David mentioning that we’re going to need 17 gigawatt from now up to 2030. So the question is, how do we secure capacity?

It is really a combination of project-specific contracts and long-term agreements. As a precursor in this industry, we've built strong relationship with our suppliers. In fact, we've grown together in this industry and through those strategic alliances, we have put ourselves in a favourable position to secure capacity and lock prices for core products. Let me talk to some of our core products. Turbines and foundations, we have secured more than 50% of our demand, equivalent to 10 gigawatt. We also monitor very closely what is happening on steel. And we are in a unique position as we have secured 400,000 tons yearly capacity of steel, which is above 80% of what we need up to 2030.

We also see an increased demand on cables. And for that reason, we've proactively locked in excess of 4,000 kilometres of cables and through the long-term agreements, we've also secured heavy-lift vessels for about 10 gigawatt. Again, about 50% of what we need. It is important to highlight that the long-term agreements do not only secure capacity, but also give us the contribution to price certainty. I'm really pleased with this breadth of strategic alliances that we and our team can give to our project team and development team the certainty and the visibility that no other developers can match.

We do not only secure capacity through long-term agreements; we also continuously develop the supply chain to get more access to capacity and at competitive costs of course. We have shown that we are front runners in developing critical supply chain in our industry. Again, through the unique technical capabilities that we have and the close collaboration to the suppliers. A notable example that I like to share is with Cadeler where we have supported them on their journey to become a really full transportation and installation vessel suppliers and on our side also securing more of that heavy-lift vessel capacity.
But we also have track record of accelerating supply chain built out in critical markets. I’d like to share an example in the US where we have facilitated construction of a fully American-made wind installation vessel. I’ve been talking a lot about long-term agreements, but it’s also the long-term agreements and the visibility that we give to our suppliers that allows them to really take the investment to these decisions to expand production facility. And again, a nice example there is SeAH that would by us giving them the demand, they have accelerated and taken the investment decision of a new state-of-the-art facility on foundations in the UK.

It is really the supply chain alliances that we have and that unique ability to continuously develop the supply chain that gives us that flexibility to really secure the CAPEX while we are developing the design of our projects. On the left side of the slide, you have a representation of the CAPEX of the wind farm with the percentage representing the major categories that we have. You can also see that per category, we have quite a broad scope of supply base and as we are further developing and designing the projects, we lock in our more detailed contracts so that when we come into FID, we have secured almost all of our CAPEX.

There’s a small portion, maybe a question that you will get. What do we do not secure. And we have, of course, some provisions and contingencies that we also add. Our focus is not only securing capacity, but we also have a leadership role in catalysing the sustainability in our industry. In fact, in order to achieve the net-zero 2040 greenhouse gas emission targets, we cannot do it without our suppliers. Therefore, we also feel that we have the responsibility to help our suppliers to accelerate investments in green production. And again, we do that by giving them long-term visibility and also the necessary commitments so that they can do the investment in sustainable production.

From an emissions perspective or environmental perspective, steel is the challenge because it represents 50% of the wind farm lifecycle, greenhouse gas emissions. As my colleague Ingrid already shared in the video, I would really highlight again the agreement that Ørsted and Dillinger have signed, which is really a ground-breaking long-term agreement that enables Dillinger to accelerate investment in lower carbon production. And again, as Ingrid mentioned, we will also develop together the first foundations for the offshore industry based on renewable energy, hydrogen and scrap steel.

I really like to share that the moment of signing that agreement is a proud moment that I will never forget in my career. It’s a really strong contribution to the decarbonisation of our industry. To conclude, I’d like to reemphasize that we use and we leverage our leadership position to secure capacity on competitive terms and to ensure that we can deliver on our projects. Thank you, and over to you, Richard.
Richard Hunter, EVP & Chief Operating Officer

Thank you, Virginie. Let’s now talk about our construction projects and some of the challenges that we face when we’re doing those and how we overcome them. Now we all know that COVID-19 posed unique challenges in so many ways, and I’m going to look here at the two major farms that we had under construction during that period. If we turn to Hornsea 2, and Mads has already mentioned it, we faced very significant lockdowns and spikes during our main installation season and throughout the commissioning period. In addition, the in-time delivery from our worldwide supply chain to this had many logistical challenges due to COVID. Despite all of that, we were able to commission with only two months delay.

Turning to Greater Changhua 1 and 2a. Again, COVID had even more extreme impacts here with more than one year of effective lockdown of installation. We were not at times able to bring workforce into Taiwan and even when you could, there was very extensive quarantine periods and we had difficulties exchanging crews on vessels. Despite all of that, we have 97 turbines installed, which is more than any of the comparators. And yes, with one year delay, that’s still only about half what other developers have seen.

But let’s put those unique challenges, also, into the context of our overall portfolio. We have an unparalleled track record of delivering projects on time and to budget. Even with Hornsea 2 and Changhua 1 and 2a, these projects are still adding value to our business.

Looking forward, the current market constraints and the extreme period we’ve seen in the last 12 months has had some impact in our ongoing projects. But by contracting early and by partnering with the supply chain as Virginie has set out, we’ve been able to mitigate and manage the significant proportion of that.

Moving from construction, we obviously go into operation. We get the maximum output from any given wind farm. Looking here, you can see that we continue to increase the share that we are self-operating within the industry and that is continuing to deliver significant value to the wider business. Here you can see in terms of availability, which clearly higher availability results in more output and revenue, and in terms of the cost of our operational activities. We’re driving this using our significant modelling capabilities, our advanced analytics, which are continuously evolving, and we’re able to harness innovation and synergies across our portfolio to continue to drive value in our ongoing operational activities.

Let’s look in a little more detail at that. As turbine sizes have continued to increase as the industry matures and as we’ve built our operational experience, we’re seeing continuous optimization of operating costs. Looking at the latest 11 megawatt generation of turbines, we don’t expect to use any
more hours to service these than we do for the six megawatt generation. We’ve increased automation and digital activities utilizing drones and robots to do a significant proportion of our inspections. Not only is this driving efficiency, it means we have far fewer manual activities within confined and challenged spaces within a turbine.

And of course with that world-leading install base of wind farms in operation, coupled with the hub structure that we use around our core markets, we’re able to realise significant synergies across the operating portfolio in things like logistics, warehouses, et cetera. All continuing to drive the market leadership in terms of both the operational cost and as we referred to earlier, the actual performance of the wind farm.

In summary, we have the unrivalled experience and capabilities to execute the energy systems of the future, the engineering competencies, the supply relationships and procurement methodologies, the best-in-class delivery of projects and of course that unique operational experience across a very wide installed base. And we’re able to combine that with a comprehensive understanding of what it takes to commission a wind farm into operation against all of the technical and market requirements that exist and all while continuing to incorporate sustainability.

We are best placed to deliver these assets into service on time and to budget. With that, I’d like to thank you for your attention. We will now go to a short video hosted by our Head of Strategy and Innovation, Varun.

**Varun Sivaram, SVP & Head of Strategy & Innovation**

At Ørsted, we believe leading on innovation is key to leading the world toward a future powered entirely by green energy. Innovation gives us an edge in our core offshore wind business and we’re also investing in breakthroughs to integrate even higher penetrations of renewables into the global energy system and decarbonise the world economy.

At any given moment Ørsted’s scientists and engineers are incubating more than 100 R&D projects that strengthen our competitive advantage. For example, we’ve designed, built and patented the industry’s first unmanned survey vessel, which uses onboard LIDAR to accurately predict offshore wind generation at prospective sites.

Right now, it’s 210 kilometres off the Danish coast in the North Sea. It’s withstood storm waves of over nine meters and can spend a year out at sea remotely operated from shore. In each of the next five months, we’ll build a new vessel, and the new vessels will survey waters over 300 meters deep to scope out the best sites for floating offshore wind, a key innovation priority for Ørsted.
Beyond in-house R&D we’re actively building partnerships and investing in the thriving global Cleantech ecosystem, spanning cutting edge university research, to innovative start-ups. Take our PICASSO project with Oxford University, we’ve long been the industry leader at designing the most efficient monopile foundations for offshore wind turbines, using less steel while ensuring reliable operation.

For two decades, we’ve managed to do more with less. While our turbines have grown larger and more powerful, if not for our design breakthroughs, our foundations will be 500 tons heavier and have to embed five meters deeper into the seabed. Now we’ve partnered with leading Oxford researchers to prolong this trend. We’ve developed an unprecedented understanding of the cyclic stresses foundations face across different soils, so we can use cost-effective monopiles even as turbines grow and water depths increase.

Outside of academia, we’ve invested in dozens of disruptive start-up technology companies. For example, take one of our portfolio companies, Spoor, which powers data collection on bird flights near offshore wind farms. We’ve deployed Spoor at two sites, harnessing sensors and AI to accurately track birds and in the process demonstrating that the risks of collision are already low. Like Spoor, innovative start-ups around the world look to bring on Ørsted as a strategic partner. So we launched the Propel Program to capitalise on this strong interest.

In our most recent round, we selected just eight out of over 150 companies that pitched us technologies from storing green power to decarbonising industry. Renewable energy will be the centrepiece of a clean energy transition, but our technology leadership extends beyond wind generation.

Just last month, the Danish Energy Agency awarded Ørsted a landmark contract for our carbon capture and sequestration, Kalundborg Hub. We’ll capture biogenic carbon dioxide from our Danish combined heat and power plants and store over 400,000 tons of CO₂ every year in the Norwegian North Sea. And in one of the largest carbon-removal offtake agreements by volume in the world, we’ve joined forces with Microsoft, which has agreed to purchase nearly 3 million tons of durable, high quality, carbon dioxide removals, a clear demand signal to scale up this emerging technology.

Now a key focus area of our innovation initiatives is excellence in digital technologies and artificial intelligence. We’re already developing a suite of powerful capabilities unlocked by generative AI and building on our track record of pioneering AI advances. Take operations, Ørsted sends drones down into the confined spaces of our offshore wind turbines below the waterline to monitor corrosion and structural integrity. Our drones take thousands of pictures and our in-house AI models geolocate and stitch the images together to automatically detect corrosion using deep learning neural networks.
We also deploy drones and AI to inspect the insides and outsides of our turbine blades. These digital advances keep our wind farm availability at industry-leading levels and we can cut down on the cost, time and risk of sending manned crews out to sea.

For every business function, Ørsted's built a dedicated digital laboratory which creates cutting-edge tools like our Smart Bidding application, which harnesses AI for advanced weather prediction and real-time power trading. Indeed, the era of predictable power prices is behind us, as the energy transition accelerates. With more renewable surging onto the grid, Ørsted is proactively investing in the technologies we'll need to store and use the green electricity we generate.

We're already a leader in deploying energy storage at massive scale, like our 1,200 megawatt hour battery at our US Eleven Mile project, but we're also investing in long duration energy storage through partnerships with Energy Dome and High View Power. Aside from storage, we've signed an MOU to locate high performance computing data centers exclusively for artificial intelligence alongside our US wind farms.

As AI training and inference drive an explosion in the demand for computing, Ørsted will be a leader in powering innovative end uses that have the flexibility to use green electricity, when we produce it.

Finally, we're pioneering P-to-X as a flexibility solution that produces clean fuels from green electricity. We've partnered with Newlab, a cutting-edge technology incubator in the historic Brooklyn Navy yard. There, we're building the world's first floating P-to-X R&D platform, comprising of modular architecture to test and demonstrate emerging technologies to produce store and use green fuels.

Back in Europe our project Oyster brings us full circle back to our core, as the world's offshore wind leader. With funding from the European Union, we're demonstrating a combined wind turbine and electrolyser system for offshore hydrogen production. Leadership is earned and we don't take ours for granted. As the global energy system transforms, Ørsted will remain at its forefront. We're not waiting for the future, we're inventing it.

**Daniel Lerup, EVP & Group CFO**

Good afternoon everyone. Great to see all of you here today. I'm Daniel Lerup, the group CFO and I've been with the company for almost 15 years. I will be taking you through the financials, an area where we have seen great progress despite the challenging macroeconomic environment that we are in right now.

If we look at some of the key metrics that we put out in connection with our last Capital Markets Day, we are still on track to delivering on roughly 50 gigawatt of capacity in 2030. And yes, we have seen
that costs are going up, but despite that we are still seeing a meaningful outperformance on our ROCE and EBITDA for the business plan period we guided on up until 2027.

So what's driving this outperformance? Let's start by taking a look at our EBITDA up until 2027, where we've seen a significant upside of roughly 20% compared to what we were looking at, at the last Capital Markets Day. The key drivers for that are, first and foremost, the very balanced portfolio that we have with a very large degree of inflation-indexed revenue contracts which is benefiting a lot from the inflationary environment that we are in.

Then we've been engaging heavily with key stakeholders and regulators, meaning that we've also seen good progress in the support that we are getting from that side. I think, the Polish changes is a good example of that, the pass-back in the US and of course the general Inflation Reduction Act benefits that we are seeing and as David said earlier, we are assuming that we'll be able to secure at least 40% ITC either through the energy community adder or the domestic content adder.

Then we are also seeing that the mix of merchant exposure that we have in our portfolio, our ability to manage that through corporate PPAs at higher levels, but of course also the upside that we have from the open merchant exposure is also a benefit when we are looking at the numbers in this period. This is an increase that we have a good visibility on as 90% of that earning in 2027 is from assets in operation, under construction, or from the awarded portfolio.

This is despite the fact that we are actually seeing a little bit of reduction in the net generating capacity over that period. Again, back to the fact that for example, Baltica 3 is not included in this period anymore. So EBITDA up with roughly 20% and our gross investments are up with less than half of that, so below 10% increase we see on our gross investments. We've seen an impact from the general cost inflation in this period adding up to roughly 15% of cost increase, a little more than 50 billion DKK. But then we've also, due to our strict focus on maximizing value in our projects, also seen that there are some projects that we are now reconfiguring and therefore are not in this period anymore.

So there's roughly one gigawatt less assumed in this period which roughly equates to Baltica 3. So EBITDA up with 20%, our gross investments up with less than 10%, which of course means that our ROCE is also looking better in that period. We are looking into an average ROCE for that period of roughly 15%, mainly driven by the increasing EBITDA. But we are actually also seeing that our capital employed is going down in that period compared to last Capital Markets Day, which is again pulling the ROCE up. And that's through our hedge liability management and also due to the fact that we are seeing more tax equity investments given the increase tax credits that we'll be able to get through the Inflation Reduction Act.
Then just a reminder, when we talk about ROCE and put out ROCE targets, we include a lot of CAPEX for the projects that we will be constructing in that same period, meaning that you have a lot of CAPEX in that period that is basically not generating any earnings. If you adjusted for all of that and only looked at the ROCE for the operating portfolio, you would have a return on capital employed of roughly 18%.

If we then take a look at the projects that we have matured towards operation since the last CMD, we have divided it into two buckets. The first bucket is the European and APAC projects, and then we have the US projects in the other bucket. Across these two buckets, we are seeing that IRRs are going up. In Europe and the APAC bucket, we are seeing that IRRs are going up due to the inflation adjustments, due to our regulatory engagements, and the changes that are coming out of that, and also our ability to manage the merchant elements in these projects.

We've seen that our risk-free rate, the one that we use in our WACC, has gone up with more than 250 basis points over that two-year period. Despite that, we still have a very healthy value creation in that portfolio of projects where the weighted average spread to WACC is within our guided range of the 150 to 300 basis points on a lifecycle level.

As Rasmus, said earlier on, Hornsea 3 is also in this bucket and here value is not where we want it to be, but we believe that through maturing the key value levers that we can progress it towards our range of 150 to 300 basis points.

Then we have the US projects where the lifecycle spread to WACC is roughly neutral. And that of course hurts my value creation heart that we are in such a situation, but we have built a really strong foundation that will create a lot of value for us in the future through the connections that we've made with the regulators, through the infrastructure that we are sitting on, through the scale benefits and synergies that we will get for future projects. The most rational way to look at this going forward is on a forward-looking basis. That is only on these near-term projects that has been hit by a lot of challenges over the last couple of years.

And if you take that perspective, the rational decision is to progress these projects as we expect that the additional investments that we will be putting into these projects will be aligned with our value creation targets of the 150 to 300 basis points.

When we then look into new auctions and tenders, we stay committed to our industry-leading return target of the 150 to 300 basis points on a lifecycle basis, fully cost loaded, unlevered. Remember, this is a very ambitious target that we are putting on ourselves, both due to the level, but also due to how we calculate this because we include all DEVEX cost, all acquisition cost, fully allocate all of our
overhead. We don't include any divestment gains and we don't include any trading optimization gains in these numbers, and that is why this is an industry-leading return requirement.

And then you can ask, "Okay, why do you set it so high? Are you not missing out on opportunities?" Yes, we might miss out on opportunities, but we want to make sure that we get the right projects with the best value creation and this is why we have this focus.

The investment programme up until 2030 that we will be applying this framework on is an investment programme of roughly 475 billion DKK up until 2030. So we are now extending our business plan period up until 2030 in order to make it more simple with all of the metrics that we have out there to align them more towards 2030.

The lion's share of our investments will continue to go into offshore wind, roughly 70%. This is where we see the biggest value creating growth for our company, and this is also where we have the largest competitive edge.

In onshore, we continue to see a lot of great value creation opportunities, very much helped lately by the Inflation Reduction Act, the growing regulatory support in Europe, but also due to the fact that onshore has a much faster time to market than what we are seeing in offshore and therefore de-risking the CAPEX risk in the onshore business.

Then we are allocating roughly 5% of our capital to, you can say hopefully, the future of Ørsted. We are taking a balanced approach to P-to-X, making sure that we don't jump into the deep end. But we will be building our capabilities over the next couple of years and decades in this area. We think it's a balanced entry to allocate roughly 5% of our capital to that area. If we dig a little bit into the maturity profile of our CAPEX and zoom in on the offshore part, we will be spending roughly 335 billion DKK towards 2030 on offshore.

Roughly half of that will be spent on the assets that we already have under construction and on the near-term awarded portfolio. We have a very high cost visibility on that part of CAPEX as roughly 90% of that CAPEX is contracted.

If we then move on to how will we find the sources to make all of these investments, then we will see that the operating cash flow continues to be the foundation of our sources accounting for 40%. That of course gives a lot of comfort given that 80% of our earnings is coming from regulated and long-term contracted earnings on an average horizon of 16 years. So we have a lot of visibility on the key element of the sources.
Then the farm-down model will continue to be a key element of funding for us. Tax equity, roughly 15 %, and then we expect to increase our net debt with roughly 15 % of the sources that will be going into these investments.

On the farm-downs, we have an unrivalled track record. We basically invented the farm-down model within offshore and it’s something that we’ve been doing for more than a decade. We raised 200 billion DKK through the farm-down model and made more than 20 farm-downs. Last year where we had a more volatile tumultuous financial market, we were able to raise 30 billion DKK from three farm-downs at NPV retentions above 100 %.

In our business plan towards 2030, we are assuming 20 billion DKK in proceeds every year from the farm-down model. It’s significantly less than what we raised last year, and we are in the market right now with several transactions, we continue, as we always have, see a lot of demand and we see good prices. This is an assumption that we are very comfortable with.

We are assuming, we expect, to be able to farm-down at NPV retentions still at around 100 % NPV retention, but we of course put in a little bit of conservatism when we add the proceeds into our business plan.

The other key funding model is of course our centralized financing model when it comes to debt. We fund our projects on our balance sheet, which gives us a lot of flexibility and also very competitive terms. We are the leading issue of green bonds and as of today we are also the first to start leading the blue bond financing market, an area that we believe would unlock a lot of capital in the future. So we are happy to take the first step, still on good terms, to take on the learnings and start educating the market on this so that we continue to get competitive financing, which we have today, which we will expect to see also in the future.

We have a very prudent approach to our liquidity management, and we use undrawn committed facilities to back that up, which significantly lowers the cost in order to have that strong liquidity balance that we have of roughly 100 billion DKK. Then we have access to a wide range of financing sources being both hybrids, senior bonds, export credit, super nationals and so on. That ensures that we have good terms and good pricing whenever we go to the market.

We have the lowest refinancing risk in the industry. Our current debt portfolio has an average maturity of around 10 years, which of course gives us a lot of comfort the rate exposure that we are sitting with. We have deep access to the capital markets on long-dated issuance and we continue to see a lot of demand, more demand than what we see in our peers. Oversubscription of 3.6 times in the last many
issuances that we’ve made. And we continue to see very low new issue premiums on the debt that we raise.

Then we also have a dividend policy today that increases yearly with a high single-digit up until 2025, and we are getting close to that period. With the business plan that we are putting forward today, we want to extend that dividend period up until 2030. So from 2026 up until 2030, you’ll have very good visibility on the dividends and they will be growing with a mid-single digit every year up until 2030.

We know that dividends are important for many of our investors, and we also think it’s a sign of discipline that we are handing back some of the earnings that we are making. With this dividend we are paying out over that period, roughly 30 % of our earnings. The capital that we have at hand we will be investing roughly 85 % of that into value creating opportunities and 15 % of that we will be handing back to all of you, our investors. And we think that’s a quite good balance considering all of the opportunities that we have.

We can make a dividend policy that far out because we have that visibility on our earnings and we have a strong balance sheet. Today, we have a quite significant headroom. On our FFO to net debt, we are above 40 %. We, of course, over time want to fully utilize our capital structure and we will see investments go up over the coming years, meaning that we will see our capital structure coming down. But we have put in conservatism and we are at roughly 30 % FFO to net debt where we have a target of roughly 25 %. We remain committed to our BBB+ rating. We will deliver on our dividend policy and of course, committed to that. We don’t need any new equity in order to deliver on this business plan, it is fully self-funded.

So how will our earnings grow towards 2030? We are looking into an earnings growth of roughly 13 to 14 % on EBITDA, getting us to a range of roughly 50 to 55 billion DKK in EBITDA in 2030. Again, in order to simplify things, we’ve decided to change from the previous long-term earnings guidance where it was offshore and onshore assets in operations. We’ve changed that to group EBITDA, excluding new partnerships so that it basically aligns with our one-year financial EBITDA guidance.

Had we kept the old method, you would’ve seen roughly the same growth in our earnings ending up roughly the same place because what we are now adding in is the earnings from P-to-X, Bioenergy and others and a little bit of, I would say, existing construction agreement gains at that point in time. Which will be largely netted out by also including all of our overhead and all of our DEVEX of roughly 5 billion DKK.

So there is a net positive impact from this of a couple of billion DKK. It’s nothing that changes the overall metrics in this. This is a growth that we have very good visibility on as 75 % of that EBITDA is
coming from operating assets under construction and from our awarded portfolio. It’s a net capacity of 27 gigawatt that’s delivering this. That EBITDA will also help support our return on capital where we will expect an average ROCE of 14% over that period, very much driven by all of the assets that will be coming into operation. As you will see, the ROCE for this period is a little bit lower than for the period up until 2027. Two key factors driving that, as the years go by, we are assuming power prices that go down actually throughout the entire period. From 2027 until 2030, we assume that the power prices decrease with roughly 20%, so that’s of course something that is dragging the number down. Then of course, as we invest more and more, it will of course dilute some of the historic, very good return on capital projects that we have in our portfolio, some of the very high CfD projects that we have in the UK.

What gives us comfort that we can deliver on this? Well, we have a strong focus on risk management and we are managing all of our financial exposures, but there are three key areas that I would like to go into. One thing is our prioritisation of inflation indexation. Roughly 50% of our revenue has this inflation indexation, and it’s long-term contracted. Then we have 30% coming from, again, long-term contracted revenue, but fixed nominal. This is mainly from the US portfolio and from Taiwan. And then we have 20% remaining merchant exposure, which in our mind, gives a good balance between merchant and the highly regulated earnings. If we go into the inflation adjusted contracts, revenue contracts that we have, this is something that we incentivise in the business, as we see it as a very good protection against cost inflations and increasing funding costs.

Actually, if you look at all of the revenue contracts that we have today with the inflation indexation, and look at how have they increased in value, nominal value, since our last Capital Markets Day, the increase is 65 billion DKK, and that is not a future value. The lion’s share that comes from the actual inflation that we’ve seen since the last Capital Markets Day, up until today.

This basically more than outweighs the cost inflation that I showed you earlier on gross investments, and then, in the future this, inflation protection can counterweight changes in the rate environment, if that is driven by inflation.

We give a relief in our WACC to projects with inflation protection, again, to incentivise that, as we see lower risk in those projects, and then we very much promote inflation protection in our dialogue with regulators, where we have been very successful in Poland and also Rhode Island, New York, Massachusetts and expectedly, many more of the auctions to come. This is one of the key areas that reduces risk in our business, so that is why we spend so much time with regulators, ensuring that they understand this.
Then, as I showed before, we have roughly 30% of our revenue coming from long-term fixed nominal contracts, which of course exposes us towards interest rate increases. How we think about that is that we have a fixed rate, long-term, fixed rate depth portfolio, and that roughly matches the fixed nominal exposure that we have from our assets in operations and under construction.

Then we have an awarded portfolio that we are maturing towards funding. Here we are using interest rate swaps in order to provide some protection against the interest rate exposure that we have on that part, and we are roughly 25% covered, and you will see that in increase as many of these projects mature even more.

Then we have the merchant part. On average, towards 2030, it’s only 20% of our earnings that comes from the merchant power exposure, 80% from the long-term contracted earnings. In our mind, that creates a really good balance, and it’s a good protection against the ‘wrong way’ risk, meaning that when wind is not blowing too much, we have low production impacting our regulated earnings. You would often see that power prices then go up, giving us a protection of the steady base of our earnings. We are getting this better natural balance through the new hedging framework that we have talked about at previous earnings calls. It will help reduce the downside risk in the framework with more than 20% percent on our earnings, reduce collateral with more than 50%, and we will see more than a 50% reduction of the IFRS effects that we also unfortunately had to spend a lot of time on over the last year, and we will see significantly fewer month where we are overhedged.

So, what we want to deliver is the roughly 50 gigawatt of installed value creating capacity, self-funded, without any new equity. We will uphold our industry-leading return requirement of 150 to 300 basis points on a fully cost loaded lifecycle perspective. We have a strong risk proposition, with a lot of earnings coming from inflation indexation and a good coverage of our interest rate risk through our debt portfolio and interest rate swaps. We see a very good growth towards 2030, of 13 to 14% in our EBITDA and ROCE of 14%, and then we are extending our dividend policy until 2030.

A very attractive risk return profile, with a financially disciplined growth ahead of us. Thanks a lot for that, and I will now hand over to Mads to wrap up.

Mads Nipper, Group President & CEO

Thank you very much for hanging in there. I’m sure it’s been a pretty intense three hours for all of you, with lots and lots of information. We’ve been really looking forward to sharing all of that with you, and now we really look forward to getting your questions and some real dialogue. But before we go there, allow me just to make sort of the almost impossible task of wrapping up three hours into just one slide of key messages.
But maybe most importantly, now you’ve gotten the opportunity to meet also many, not all of but many of, but many of my senior leadership colleagues. The rest are in the room, but hopefully this gives you also an impression of people being very close to the subject matters that we do indeed work with on a daily basis.

Now, the most important thing we’ve been trying to tell you over the last three hours is, by 2030, we will be the world’s leading green energy major. We will be deploying our position and our unique capabilities to be one of the largest electricity producers in the renewable space at all.

We will also very, very importantly, be deploying the potential of our total portfolio of well over a hundred gigawatt, combined with a very strict financial discipline and focus on value creation to ensure that we firmly commit to and deliver on our industry-leading 150 to 300 basis point spread to WAC.

We will to be deploying 475 billion DKK, almost half a trillion DKK into delivering approximately 50 gigawatt of operational capacity by 2030, and even though that is largely unchanged, that is still one of the most ambitious buildout plans at all in our industry.

We are firmly committing to and upholding our targets to stay and strengthen our position as a global offshore leader, extremely important to us, whilst at the same time continuing the journey to be a really strong and significant player and onshore in the chosen regions, and be a market shaper in Power-to-X.

We will ensure that we do all of this while delivering very strongly on our financial results. Daniel just shared it, 13 to 14 % growth in our operational earnings, around 14 % return on capital, and bear in mind, with a very high visibility to the earnings and cash flows we have ahead of us.

Strategically very important that these integrated renewable solutions that we can deliver and will deliver, combined with our ability to innovate new decarbonisation solutions with our corporate customers, would be a key strategic leg on our journey going forward in all regions, but not least, also in the European region, as Rasmus told you about.

We are now extending our dividend commitment with a continued growth in dividends, whilst not compromising the strength of our balance sheet with a fully funded plan and ensure that we uphold and protect our credit rating.

Last but not least, we are very determined and dedicated to uphold and continue to shape a global sustainability leadership, which is not something we do on the side, it is who we are, it is what we commit to, it is what we shape. So, with that, I invite my colleagues on stage to take your questions.
We will just do a very quick reset up here with some tables, but otherwise we really look forward to taking your questions. Thank you very much.

**Rasmus Keglberg Hærvig, Head of Investor Relations**

All right, we are now ready for the Q&A, and I want to remind everyone that is with us here at the Science Museum that if you have a question, please raise your hand, and then either Valdemar or Sabine, we’ll reach you with a microphone. Please state your name and company before asking a question, and please respect only one question at a time, so we ensure we can fill out the crowd. If you participate via the livestream or want to have a question without attribution, write an email to ir@orsted.com, and then I will have it sent to my screen. So without further ado, let’s get started. And I think we have over here with Valdemar.

**Harry Wyburd, Exane**

There you go. Okay, thank you. I’ve won the question lottery. I guess it’s a pretty big question, and I’m sorry to ask such a narrow financial question after such a comprehensive presentation, but on the capital raise, clearly as a self-funded plan, are you saying anything about future capital raise intentions though? Should we assume this is basically effectively a lockup now until your next CMD, where you perhaps revisit targets in one or two years’ time, and that we’re not going to have any capital raise until then? Thank you.

**Mads Nipper, Group President & CEO**

I think what we firmly say is that we have a plan now, and that is the plan we believe in, and that is fully funded, and we continue to believe this is a very ambitious plan, and we are very confident in our ability to deliver that with the current capital structure that we have.

**Deepa Venkateswaran, Bernstein**

Hi, Deepa Venkateswaran from Bernstein. So my question is, we do see quite a difference in the way you’re looking at Hornsea 3 versus the US under construction portfolio, when on the face of it, the US projects do have a higher offtake price, and then even with the inflation adjustment, the UK one looks challenging. So could you explain what’s driving your differential approach between the UK and the US?

**Mads Nipper, Group President & CEO**

If you could maybe there, Rasmus, if you could start by commenting specifically on Hornsea 3.
Rasmus Errboe, EVP & CEO of Region Europe

Absolutely. The reason we are confident in the value creation on Hornsea 3 is because of partly the levers on revenue that we are looking at now. It is the robustness that we are starting to see on CAPEX, and it is also very much, as I talked about, the scale of the project. Specifically on the revenue levers and what makes me confident saying that I'm firmly convinced that we will, over time, progress towards our guided range, which is, you can say, different than what we are saying in the US, since we are talking life cycle here, is in particular the flexibility around the CfD. So we can do corporate PPAs up to 25 % of the entire wind farm if we'd like. We can also decide to keep that merchant. We are working on storage, also on revenue in connection with the onshore substation. We are working on behind-the-meter initiatives also on revenue, so we basically see a range of levers that makes me confident saying what I am.

Daniel Lerup, EVP & Group CFO

And then, maybe to add, remember also that we are penalizing the US projects for having the fixed nominal revenue structure, which again, then when you compare them, gives a benefit to a Hornsea 3 project.

David Hardy, EVP & CEO of Region Americas

Maybe just one comment from me as well. The US projects were bid and won many years ago. The Hornsea 3 project was just bid and won last year, so we've had more time for the inflation and interest rate adjustments to affect our projects. And of course it's a new market, and while many of the things that have impacted us are generic global things which just happen to be affecting our large US portfolio, there are for sure some bespoke issues in the US that have led to some of the cost increases, et cetera.

Louis Boujard, Oddo-BHF

Yes, thank you. Sorry, good afternoon, Louis Boujard from Oddo-BHF. So my question would be the following. I think that you mentioned in your presentation that you take some relief on the work competition, doubly on the basis of inflationary contract. Could you elaborate a little bit on this topic and maybe give an idea of the magnitude of the kind of relief that you could take in these assumptions?

Daniel Lerup, EVP & Group CFO

No, I don't want to give you a specific number, because that's of course something that is a bit sensitive also when we are bidding into auctions, knowing what kind of relief that we give. But again, if you look up in most academia and how they view inflation, and how it protects projects, I think you would get a pretty good idea.
Kristian Tornøe Johansen, SEB

Kristian Tornøe, SEB. David, in your presentation you mentioned that the three near-term US projects do actually not qualify for the 40 % ITC as current guidance stands, so what needs to happen for the 40 % to breach? And does that also mean that when you say that they are value neutral right now, it's actually under the assumption that future guidance supports this uplift?

David Hardy, EVP & CEO of Region Americas

Yeah, thanks for the question. First, to clarify the second part of your question. Yes, the value neutral from the lifecycle return standpoint does assume a 40 % ITC across all three projects. Right now, we have preliminary guidance on these two extra bonus ITCs, 10 % each, and given that preliminary guidance, not all three projects qualify for 40 %, but we've been in discussions with very senior people in Washington DC, in the White House. They understand the challenges that these projects have, and they also recognize Ørsted's leadership in starting to build this industry in the US. We believe confidently that as they come out with their final guidance, that we can get these projects to qualify for one or the other, or potentially both of these extra 10 % ITC bonuses.

Peter Bisztyga, Bank of America

Yeah. Hi, it's Peter Bisztyga from Bank of America here. Thank you very much for your presentations today. I was particularly interested in the Power-to-X stuff. I think that we haven't heard that much detail about it before, but I was wondering, in your 2030 targets, with the 2 gigawatt, what assumptions have you made, or indeed, what assumptions do you need regarding government support mechanisms, tax credits, some sort of subsidy, or are those targets based on a fully commercial arrangement? So we'd be very interested to hear a little bit about how the economics work from that perspective. Thank you.

Olivia Breese, SVP & Head of Power-to-X

So, the 2 gigawatt that we're looking at, we expect that to be, broadly speaking, evenly split between Europe and the United States. Of course, in the United States, the projects will benefit from the Inflation Reduction Act. In Europe, we expect them to be able to benefit from all sorts of things. Any one of the patchworks of support mechanisms that Europe is offering, whether that's the EU Innovation Fund, we already have IPCEI funding for the early phases of both the Dutch and the Danish projects in our portfolio, and also expect to put projects into the European Hydrogen Bank auctions as and when those start. So there is significant public funding available, and we will be looking to tap it to the extent possible, along with other pools of capital, as those become available, and we do see significant interest in investing in this relatively new sector from third parties as well.
Sam Arie, UBS
Hi, it’s Sam Arie here from UBS. Thanks so much for the presentation, I thought it was excellent, and I want to ask a question about the financial equation, because obviously you’ve done some magic today to make sources and uses of cash all add up, so well done, Daniel. And my question is for you, particularly on the farm down element of the plan. I suppose it’s great news, but a little bit surprising that you’re so comfortable with, I think you said 20 billion proceeds from farm downs every year through the rest of the decade, when obviously some of the projects are a bit challenged and rates have gone up. So, can you tell us, in aggregate, what is the NPV to CAPEX assumption that you have on your farm downs to get those 20 billion proceeds every year through the plan?

Daniel Lerup, EVP & Group CFO
Yeah, thanks for the question, Sam. Remember, we’ve been in this market for more than a decade. We have deep relationships with all of the key infrastructure investors and pension funds, and they are very hungry to get ownership in these assets, and we get that confirmed year over year, over year. And as I said, we are very active in the market right now and we see good demand, so we have no reason to believe that we can’t continue with that.

On the NPV to CAPEX multiple, again, it’s very project by project specific, so it’s a very difficult multiple to give. In essence, what ends up being the gain that you make, depends on what is the value creation spread on top of the WACC for the individual project as we are seeking to get this 100 % NPV retention. Meaning that, for example, on a Hornsea 3 project, where we know we are looking into a higher spread to WACC compared to the US near term portfolio, you would then see a higher gain on a Hornsea 3 project compared to the near-term offshore US projects. But the level of the WACC doesn’t define whether it makes sense to make the divestment or not. If we can crystallize value upfront at 100 % NPV retention, basically retaining all of the NPV, and go out and reinvest that into 150 to 300 basis points, then it makes sense. Then it’s our value creating circle that we’ve created, and we are confident that we can continue to do that.

Rob Pulleyn, Morgan Stanley
Thank you, Rob Pulleyn from Morgan & Stanley. The focus on value creation is very clear and I think comprehended by everyone, and I’d just like to ask within that, the 28 gigawatt installed target for offshore wind by 2030, you’ve being quite clear, if projects do not stack up, and you mentioned a few, you would walk away from them, which seems very reasonable. And so the question is, how many gigawatt can you walk away from and still get to that 28 gigawatt? And should be the message, which I think was there, but let’s clarify. Is that 28 gigawatt therefore a minimum that you will deliver, because you could of course turn these projects around and win several of the auctions upcoming. Thank you very much.
Mads Nipper, Group President & CEO
Thanks a lot, Rob. The plan that we have now with the 28 gigawatt of offshore is the best balance focusing on value creation across all the technologies that we have. Right now, like we said, previously our plan was around 30 gigawatt, now we are saying 28. Not least, you’ll also have noticed the variation in what especially Rasmus and David said, that we have quite a bit of a regional variation, and that is simply because we want to ensure that we have the flexibility in our portfolio.

We are reconfiguring a couple of projects right now, which means that right now that timeline is not known, which essentially is a key reason for us also bringing that down. It may well be that we can still construct those by 2030, but right now we are not taking that assumption. So we want to say offshore has gone through a challenging period. We are firmly convinced and sure that we can continue to create value within our guided range in the future, on the future projects, and we could surely grow faster, but right now the balance that we strike with the 28 is something we feel very confident that we can deliver with the value creation.

And then, we right now assume that we won’t change that plan, but should that happen, especially the flexibility between the regions could of course happen, so that’s why David said 3 to 5. But if, for example, if we come out with strongly value creating winds, which it would be in both New York 3 and in Rhode Island, we would then have a situation where we would say, does that need a rebalancing to Europe, or how do we do that? That’s the flexibility we need to have in our plan, but right now this is the best estimate we have, and it’s the best plan that we have at hand with exactly the 28.

Ahmed Farman, Jefferies
Hi, Ahmed Farman from Jefferies. Thank you for the presentation and all the details on the business plan. My question is actually on the awarded projects in Europe. Can you give us some further granularity on where do you see the IRR to WACC spread on the three awarded projects in Europe, and how much visibility do you have on that from today’s perspective? Which I presume is a function of how much CAPEX you have locked in and the regulatory and mitigation factors. Thank you.

Rasmus Errboe, EVP & CEO of Region Europe
Absolutely. Thank you for the question. I of course understand exactly where you are coming from. In terms of our expectations for value creation on Hornsea 3, it is as we’ve talked about, that we do see that we, over time, would be able to progress the project towards the guided range. The other projects in our awarded portfolio, that would be Baltica 2 and Baltica 3. On Baltica 2, we see sufficient value creation, and Daniel has been very clear throughout the day about what that means. And on Baltica 3 that is not the case, even though it is lifecycle positive spread to WACC, it’s not good enough for us
right now, which is why we have taken a step back and reconfigured so that it can meet our requirements to value.

**Mads Nipper, Group President & CEO**
If you took a look at the total portfolio that Daniel showed in Europe and APAC, that total portfolio is within our guided range, and we have both Hornsea 3 and the awarded portfolio within that.

**Rasmus Errboe, EVP & CEO of Region Europe**
Correct.

**Mads Nipper, Group President & CEO**
So that is included in the Europe and APAC portfolio, which is within the guided range.

**Rasmus Keglberg Hærvig, Head of Investor Relations**
All right, I think we'll take one question with the inbox and the question reads, "How do you want to ensure the availability of enough offshore installation vessels for your plan, given the evident shortage projected over the next years?"

**Mads Nipper, Group President & CEO**
Virginie, would you take that?

**Virginie Van de Cotte, SVP & Chief Procurement Officer**
Yeah, so as I mentioned, we work in different methodologies. One is long-term agreement, which we have already in place for about 10 gigawatt. We also do project specific, because in some countries we have also EU tender to follow, but we are also in very active dialogue with several suppliers on vessels for the remaining capacity.

Now, it is important to also see and understand that it's not only about securing a vessel, we are also, at the same, time looking at what is the development of the technology, because as we go towards the end of the decade, in larger turbines of foundations, then we might need a different mix of vessels. So we are in active dialogue with several vessel suppliers to further secure capacity, but I'm really confident with what we have already in the long term, and also with the amount of vessels that is coming into the market in the next four years.

**Dan Togo, Carnegie**
Dan Togo, Carnegie. A question on the 27 gigawatt you plan to have net to contribute to EBITDA in 2030. How is that distributed among the assets?
Daniel Lerup, EVP & Group CFO
That’s not a detail that we have in there, but the starting point is that we divest everything, farm down everything, down to 50%. So you can basically take the gross capacity and then subtract 50%, and then of course the biomass fired power plants are also in there, and we are not looking to farm down those, so that’s why you are a little bit higher than what would otherwise give you roughly 25 gigawatt.

David Hardy, EVP & CEO of Region Americas
And Daniel, maybe just one thing, just for the benefit of the audience, those three near-term US projects, were in a JV in those projects already, and they’re already 50% owned by Eversource who’s announced that they want to exit the JV, but someone else will step into that 50%.

David Paz, Wolfe Research
Hi, David Paz from Wolfe Research. Just a question, David, on the US projects. You were asked about the bonus tax credits assumed in the value neutral, but you also noted changes or continued progress on OREC terms. Are any assumed changes in that value creative? So in other words, do you need to have changes to those OREC terms to maintain value neutral?

David Hardy, EVP & CEO of Region Americas
Yeah, to reiterate what I said earlier, these projects have experienced a lot of turmoil between rising inflation, interest rates and supply chain bottlenecks, so to get back to value neutral on a life cycle basis is, we think, very impressive, but it does require certain assumptions, and we highlighted in the presentation that we do need some adjustments to the ORECs, primarily the request that we’ve made to the State of New York, which again, we’ve been working with them for six, seven months, and feel confident that we’ll get the support we need in order to make the adjustment to that OREC. And likewise, we need to make sure that we get the full benefit of tax pass-back on our Ocean Wind 1 project, which again, we’ve been speaking with the State of New Jersey for a while, and we expect resolution on that relatively shortly. So we have high confidence that these assumptions that we’re taking will come true, and yes, that will take us to a lifecycle neutral NPV on those projects.

Dominic Nash, Barclays
Thank you. It’s Dominic Nash from Barclays. Thank you for your presentation. The question I’ve got is a clarity one, please, on the 50 gigawatt target and the 475 billion CAPEX programme. Can you just confirm again that the 50 gigawatt target is gross of JVs and EPC partners, but a 475 billion CAPEX looks like it’s net of the JV partners. Could you give us some sort of numbers as to what you think the net gigawatt that you will be developing, developed by 2030 will be, and/or also what the gross CAPEX number is? I think in the last Capital Markets Day, I think it was a 450 to 350, and I think the 475 is compatible with the 350, isn’t it?
Daniel Lerup, EVP & Group CFO

Yeah. So it's correct. So we don't have JV CAPEX in there and we don't have the CAPEX that the partner contributes with after we've done a construction agreement farm-down. The way you should think about it is that when you look at the two buckets, near-term awarded projects and the pre-2030 projects that is not in the near-term portfolio, that we assume that we take roughly 60-70% on average of that CAPEX. So you would have to add roughly 50% on top of those two numbers in order to come to a gross, gross number that we in the last Capital Markets Day called the 'Green Investments'. In order to simplify things we kept that out, but it's roughly that magnitude.

Jenny Ping, Citi

Thanks very much. It's Jenny Ping from Citi. I guess just a follow on from that, if I look at your onshore and offshore CAPEX numbers and look at the gigawatt that you are looking to deploy on the back of that, the onshore numbers look incredibly high and the offshore numbers look incredibly low on a EUR per megawatt basis. Is that just because of the gross net element? Or is that also because of excluding cable costs and net of ITC et cetera? If you can clarify that, that would be great.

Daniel Lerup, EVP & Group CFO

Yeah, I think if you did the change that I talked about before where you include the JV impact and the construction agreement CAPEX part on the offshore, then you would get to a more meaningful multiple than just taking the numbers there and dividing it by the capacity in there. And on the onshore part, I don't know whether you want to comment on it, but there is of course an element of conservatism in our numbers, but we think it's a good level when you're considering the long-dated CAPEX assumptions.

Meike Becker, HSBC

Meike Becker from HSBC, thank you for the presentation and taking my question. I have one on the new markets you outlined in your strategy and how you select the markets. Could you take Spain as an example to elaborate a little bit more in detail what you like about the market and how you think about it? Thank you.

Rasmus Errboe, EVP & CEO of Region Europe

Absolutely. Thank you very much for that. The reason that we have decided to move into Spain recently are manyfold, so we basically have applied the framework that I talked about before. That being said, we don't see Spain as a core market, so we had these five Northern European core markets where we spend 80% of our DEVEX. Spain is in the other bucket. The reason that we are happy being in Spain right now is that we see a lot of potential both on the onshore side in particular on solar and storage, but also on floating. We have the right partnership in place with Repsol so we have the ability
to shape. Especially on the solar side, we see scale and we see potential for speed. Hopefully when we are on the other side of the upcoming Spanish election, that this is an area where we can see our pipeline of 9 gigawatt of onshore picking up quite fast.

**Tancrede Fulop, Morningstar**

Tancrede Fulop from Morningstar, thank you for the presentation. A question on the US. US Utilities are generally sceptical about offshore wind and your current partners are seeking to sell their stake. Don’t you think it might be challenging to find partners in future projects? For instance, if you win New York 3 or Rhode Island?

**David Hardy, EVP & CEO of Region Americas**

Yes. I think the decision to partner with US utilities was a wise one at the time. It was before I was at Ørsted, but we were new in the US market. We wanted local incumbents that could help us with the ground game and the stakeholder engagement. At the time, the returns looked promising to these utility investors, but over time, as the projects got delayed and the Trump administration, they started to experience challenges. But we realised that those partners maybe as much as we all get along and we like each other and we supported each other, it wasn’t really the right business profile for them. They’re used to regulated returns, primarily transmission regulated returns. So now you see our US utility partners wanting to exit offshore wind. Both of them explicitly said that they’re pro offshore wind and they want to support the offshore wind buildout in the US but they want to do the onshore transmission upgrades needed to accept offshore wind.

It’s just really more about business models and their comfort with an IPP business model versus a regulated return and a new technology. Likewise, I think in the meantime we’ve built a very strong stakeholder engagement corporate affairs team and so we have a ground game in New Jersey, in New York, in Connecticut, in Massachusetts, and of course in Washington DC and we think that we’ve built a very strong brand and very strong capability in that area.

We’re confident that we can build these projects now without those JV partners and as we think about who will step in to Eversource’s position, for example as a JV partner, we have look-through rights and we’ve been in coordination with them all the way through so we know which types of investors are looking at that position and we’re comfortable that there will be a new buyer relatively soon. Likewise, now we own a hundred percent of Ocean Wind 1 and again, at some point when it’s appropriate we’ll probably do a farm down of that project and again, we’ll control who the investor will be, but we would have confidence that we could find an investor for that as well.
Rasmus Keglberg Hærvig, Head of Investor Relations

All right, we'll take another written question. This one is coming from Alberto Gandolfi from Goldman Sachs. On a like-for-like basis, you are essentially targeting a project IRR over WACC of 200 to 400 basis points. You also said you want to be disciplined in future auction. Does that mean that for now we should think about more mid to upper end of this range?

Mads Nipper, Group President & CEO

No, I think what we are doing is we are firmly committing to that range and depending on where we are, depending on the risk profile of this and depending on the opportunity set, we will go no further in specifying rather than that it is within that range which we again, commit very firmly to delivering it. That's as close as we can get it.

Firmino Morgado, Man Group

Firmino Morgado from Man Group. I guess it's a financial question but with a three-part question. I mean the way that I value an investment first is the volatility of the top line or the earnings and what I'm trying to assess is that, how volatile is your top line? What's the percentage of your revenue that is tied to PPAs? And how sensitive these PPAs are to inflation or whatever merchant power prices? If I may, I mean the oil companies normally give a sensitivity to oil price, 10% up at 10% down. What I'm trying to get is that if merchant prices move up 10% or down 10%, how much your revenue will be sensitive.

The second part is, I mean you show a very interesting chart of the OPEX coming down with scale and then you have these also target of I think it's 13 to four 14% EBITDA growth. So what I'm trying to assess is that how much of that operational leverage is really tied into this margin expansion that you can have in the future? Because wasn't clear to me that if these 13 to 14% already tied in, into your potential of margin expansion. And the last part is, I mean in terms of the PPAs, you have these 55 corporate PPAs globally. What's the maturity of these PPAs and your ability to sign more PPAs? Is it a question that, can you sign much more or you want to keep that 20% open to merchant prices. And if I may, the farm-downs, is there any way...

Daniel Lerup, EVP & Group CFO

No, I think we'll start with those.

And please, only one question. I think I will try to answer these questions. So first of all, when it comes to our revenue and EBITDA, 80% is coming from regulated and long-term contracted earnings with an average lifetime of 16 years. So we have a very strong foundation and visibility on that 80% of our earnings and the revenue. Through that, you also get a sensitivity in the sense that we've said what the EBITDA is in 2030 and then you will know roughly 20% of that is from merchant exposure and
roughly 80% of that is regulated and contracted earnings and then you can work with the power prices. A rough sensitivity is that on our offshore portfolio, if you lower merchant prices with 20%, it’s a little more than a billion. And if you shift the power curve down 20% throughout that period, it is roughly one percentage point on ROCE.

On the OPEX question that you had, I think it’s important to be aware of that, when you look at the full value of a especially offshore wind park, optimizing and using synergies and scale on the OPEX is of course extremely important and we have a lot of levers there that we are working with that is adding value, but usually the gross margin on an offshore wind farm is close to 80%. So it’s not the OPEX that’s going to drive a lot of the EBITDA growth that we are looking into or optimizing, that is very much due to new assets coming online, inflation adjustments, working with the regulators.

Then on the corporate PPA part, as I said, roughly 16 years of average remaining lifetime on that. And again, it’s an area where we are very active in the market and I don’t know Rasmus, if you want to put a couple of comments on how we see the European market on corporate PPAs.

**Rasmus Errboe, EVP & CEO of Region Europe**

I can absolutely. We have entered into almost a gigawatt of corporate PPAs. Remember that the starting point of them is typically when the wind farm comes online. n this case when it’s a German wind farm, starts in ‘25. When you talk about the maturity and the lifetime, that’s your starting point. So when we for instance say that we have a 25-year corporate PPA with BASF, it starts in ‘25. And you see maturity on all of our European offshore wind corporate PPAs of more than 10 years. We seek to ensure also back to what Daniel has been talking about, that going forward they are all indexed and also, they are all as-produced. We see, final comment, increasingly strong demand in that market and we see prices coming up relatively dramatically.

**Frank Siu, Cardano Risk Management Ltd**

Frank from Cardano, I only have one question. On inflation-indexed revenue, you mentioned that in the US and Taiwan contracts, they are fixed nominal. Do you see any potentials for them to be inflation indexed?

**Mads Nipper, Group President & CEO**

The retrospective inflation indexing that we are looking at for Sunrise specifically, that we put in a petition is essentially neutralizing what has happened and that will give us a meaningful uplift in the OREC price that we have gotten. Apart from that, getting back now and renegotiating generally on these projects, I would say that the likelihood of that, apart from what we have done would probably be relatively slim. Bear in mind that for example in Taiwan, the headroom that we had in our business case, that even after the inflationary impact, which by the way has been smaller in Taiwan, then we
are still seeing a very meaningful value creation there. We're saying the US projects is again, sorry David, but that is again where we are seeing the main challenge, is that, is where on Sunrise, which is that's where we have the best chances of getting that inflation indexing retrospectively, but also bear in mind that we have other regulatory levers which would help those business cases, especially the IRA benefit pass-back.

Daniel Lerup, EVP & Group CFO

And it's clear to all customers, both states, governments and corporates that the developers want more inflation protection. That's why we've also seen the changes in Poland, in Rhode Island, New York and also the upcoming Massachusetts auction.

Vincent Ayral, JP Morgan

Yes, good afternoon. Vincent Ayral from JP Morgan. Thank you for this very good presentation and actually they were very good questions actually from my colleagues before. So I'll go to a follow-up on the previous multistep question, but don't worry, it's just on the commodity exposure here. I think I heard during the presentation that you assume power price reset by about 20%, some minor guidance. I'd like to understand how that works out with the power market reform we have in Europe in general. So we got it in Europe, likely to get it in UK as well over the timeline to 2030. So what are you assuming regarding this power market reform? How do you see it coming level and timeline? Any colour on this would be extremely appreciated. Thank you.

Daniel Lerup, EVP & Group CFO

Yeah, so I think on the power price assumptions, what we do is that we use forwards in the front usually two to five years in our modelling and then we move to a fundamental in-house model, and we are assuming decreasing power prices throughout the period. Power price is going down with roughly 40% as of today until 2027 and then a further 20% down from ’27 to 2030.

Mads Nipper, Group President & CEO

Any comments on the power market reform?

Rasmus Errboe, EVP & CEO of Region Europe

Yeah, I can add a little bit. The basic assumption is that the marginal pricing model that we currently have in Europe will continue to exist. So that's an underlying assumption which we are quite confident about. Then obviously also on the very short term we see this month that also governments around Europe are looking into whether or not to prolong the cap, there are few exceptions, but overall, we also see due to the easing of the power price spike, that we see the caps being released. But fundamentally for the long term we assume that marginal pricing will continue to exist.
Mark Freshney, Credit Suisse

Hello, it's Mark Freshney from Credit Suisse and I apologize in advance David, for coming back to your three problem children and also asking you mean questions, but on timeline for the US, the three, Sunrise, Ocean Wind, and Revolution, when can we expect the BOEM consents? When can we expect the discussions with the IRS to complete? And when can we expect with the PSC to get agreement on the ORECs, et cetera? Because you've spoken a lot about returns and you've given a lot of information there, but just in terms of timeline, that's arguably the bit that we don't have.

David Hardy, EVP & CEO of Region Americas

Yeah, I don't think it's a hard question, so thanks for asking. Really our expectation is that we will be able to meet all the requirements for the boundary conditions for FID by the end of this year for all three projects. They'll be staggered a little bit, ideally Ocean Wind 1 first and then Revolution and then Sunrise, hopefully FID by the end of the year. That kind of tracks the permitting milestones, the federal permitting milestones, which are public, you can go find them on the BOEM dashboard, but we expect our permits, our final federal permits for those three projects to all come later this year. On the resolution of some of the assumptions. It's my expectation that we should be able to have some resolution with the State of New Jersey relatively soon. I would maybe hedge and say this summer but could be faster than that.

On the resolution with the State of New York, it's our expectation that if we follow their kind of regulatory process, we should have feedback from them by October. It could be delayed, but the fastest we could have feedback from them through the PSC is in early October. That will align with our FID on Sunrise, so we'll know the answer on that. Then likewise on final guidance from the IRS, it's our expectation that, that would be probably late summer Q3 as well. So we're trying to line up these FIDs with the permitting milestones and other boundary conditions along with the shoring up of the business cases and that's how we see this playing out over the next half of the year.

Daniel Lerup, EVP & Group CFO

And maybe just to add one thing, as you call it, the problem child and of course something that we are working very hard on but taking a top-down portfolio view on this, these US projects account for a little more than 10% of the investment plan that we have. So it's of course important that we work to further optimise the value creation in those projects. But on a portfolio level, it's around 10%.

David Hardy, EVP & CEO of Region Americas

They're my babies, they're not my problem children, I love them all.
Richard Alderman, BTIG
Richard Alderman, BTIG. Just following on from Jenny’s question earlier in your answer to that in terms of the conservative nature of your assumptions on CAPEX per megawatt for onshore and also Vincent’s question just now. If you’re assuming power prices are falling progressively in Europe and elsewhere through the decade, what are your assumptions on ASPs for turbines, particularly in the next one to two years? Where do you see the peak in that process? Is the first one.

And then just listening to your answer, I appreciate we’re in a high inflation environment and at the moment you are turning on significant offshore capacity, so clearly that does drive your EBITDA margin depending on what your power price assumptions are on costs, et cetera. But if I take you back to the Capital Markets Day when we were last in Copenhagen two occurrences ago, one of the interesting things you said then, was that you plan to take quite a significant proportion of your third-party O&M contracts with the turbine manufacturers back in-house. Do you still plan to do that? Because as we go into that lower power price environment, that would make a meaningful difference if you are describing what you are saying at the moment in terms of your cost savings are as good if not better in terms of running a 15 megawatt turbine as opposed to a 6 megawatt turbine.

Mads Nipper, Group President & CEO
I don’t know if we can answer specifically on the assumptions but maybe on how we work with the forward-looking outlook on inflation. If you could give some comments to that and you could comment on taking the contracts in. Richard?

Virginie Van de Cotte, SVP & Chief Procurement Officer
I don’t know if I understood the question completely because you were also referring of us taking the ownership of the turbine.

Richard Hunter, EVP & Chief Operating Officer
The average selling price of the onshore turbines. How we see the development going forward.

Rasmus Errboe, EVP & CEO of Region Europe
That’s not an assumption that we should give.

Mads Nipper, Group President & CEO
No, not specifically, but maybe what we could do Virginie, is to give a perspective on how we work with the forward-looking view on the pricing and the CAPEX inflation. So how we secure that? If you could give a general comment on that.
Virginie Van de Cotte, SVP & Chief Procurement Officer

Yeah, no, I mean general we have a cost model, which is a model that not only look at the cost of the CAPEX, but all the data that we have gathered over the years and then also coming in, the technical data that our engineers are giving on the average energy production of a turbine. So that is in fact all in our model and then we can, through that model, look about eight years to 10 years ahead. It is quite a complex in-house model based on cost, technology, data of the field and the information that our engineers work very closely with, with our suppliers.

Richard Hunter, EVP & Chief Operating Officer

And coming up to the taking in-house of the operations. I think as we’ve highlighted here, we’ve continued to do that and we see that, that has been adding value to us. I mean, going forward, the key thing is that we operate in the correct manner, the overall wind farm. We are not against if the suppliers are able to deliver competitive offerings around the turbine itself, then in the right circumstances we might take them as the maintainer of a turbine. But it is again a value question. But the overall flexibility of how we operate at the moment and the level of maturity in the OEMs at the moment in the offshore space means that we are still getting good value out of doing the whole thing ourselves. But I’m sure that they will continue to mature their offering income with interesting concepts that we would of course consider going forward for the actual turbines themselves.

Lars Heindorff, Nordea

Lars Heindorff from Nordea. A question regarding farm-downs and the ROCE target of 14%, if I try to back out the historical farm-downs get to average ROCE around eight, 9% and now you say that you expect around about 20 billion on a yearly basis going forward. So just want to hear your view on what kind of ROCE ex farm downs, which are by nature a bit lumpy and unpredictable you’re expecting?

Daniel Lerup, EVP & Group CFO

Yeah, so it’s not a number I have for you and we can of course come back to some consideration on that. I think what’s important to be aware of is that we are assuming that the gain part will of course be lower in the future as many of the historical farm-downs were based on much higher CfD levels, much higher IRR levels. The level of gains in ROCE is relatively going down as we move into our 150 to 300 basis points range.

Rasmus Keglberg Hærvig, Head of Investor Relations

I think we have time for one or two more questions. Here and here.
Jenny Ping, Citi
Thanks again. Jenny Ping from Citi again, just going back to the farm-down number, the 150 billion DKK, I was intrigued in the presentation, you talk about selective more than 50% farm-down. So what does that assume in that 150? Does it assume straightforward 50/50 or are you assuming further than 50%? Thanks.

Daniel Lerup, EVP & Group CFO
There is an element of taking an opportunistic approach to farm-downs and JVs. That means that on some of our assets we could potentially see ownership going below the 50%. In less-established markets or for example in P-to-X. So in P-to-X we are assuming a minority share, meaning that here we will for some of them go below 50% and some, we will be at roughly 50%.

Rasmus Keglberg Hærvig, Head of Investor Relations
All right. And one final question.

Mark Freshney, Credit Suisse
I have a question for Olivia. In the P-to-X industry, what everybody wants to know is what you can say about the pricing on the contracts you have with Microsoft for the negative emissions. What can you say on the pricing regarding that?

Mads Nipper, Group President & CEO
Not much Mark.

Daniel Lerup, EVP & Group CFO
Other than it’s good.

Mads Nipper, Group President & CEO
I’ll say that we cannot go into the specific pricing, but it is that contract that enabled us to give the winning bid to the Danish Energy Agency and win that 430,000 tons a year. So that unfortunately is as close as we can get it.

Rasmus Keglberg Hærvig, Head of Investor Relations
All right, on that note, we will end the Q&A and I will hand over the word to Mads for final words and then afterwards invite all of you to join us for lunch and networking downstairs.
Mads Nipper, Group President & CEO

Yes, and I won’t take more of your time. Essentially we are already a little bit over time, so a big thank you to all of you for prioritizing to be with us and an even bigger thank you for your trust in our company. We are fully convinced and fully committed to delivering on the path that we have laid out today. I can say I feel privileged to have the best possible team behind me to do just that. Thank you very much for your time. Thank you very much for your trust and we look forward to the continued dialogues over the coming days, weeks and months. Thank you.