EVERCORE ISI

Energy | Sustainable Technologies & Clean Energy

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Coverage and Ratings

Ticker	Rating	Price Target	Current Price*	Up/Downside
ENPH	Outperform	$184	$150	23%
NOVA	Outperform	$52	$38	36%
PLUG	Outperform	$42	$27	54%
RUN	Outperform	$87	$52	67%
TPIC	Outperform	$65	$50	31%

Recent Energy Disruption Thematic Reports

1) Carbon Capture is the Next Big Thing (01/13/2021)
2) ALL ABOARD THE HYDROGEN HYPE TRAIN (10/13/2020)
3) Deep-dive on Digitalization in the OiL Patch (06/01/2020)
4) LNG Week Deep-dive reports (02/06/2019)
5) LNG Week Deep-dive webinar (02/06/2019)

Summary Table of Contents

THE ENERGY TRANSITION

Launching on Sustainable Technologies & Clean Energy

"Before Elvis, there was nothing." We live at a unique point in time with the majority of the world in agreement on the need to decarbonize. This is catalyzing a movement that was already afoot; the transition to new, sustainable energy sources. Green rebuilding stimulus, technology advances and climate concerns have set the stage for an acceleration in this Energy Transition. In addition, in the U.S. Biden's EV incentives in the infrastructure bill and new EPA regulations expected in July should accelerate EV adoption. **This report details the key drivers and contours of this transition, the technologies being harnessed and the scale of the economic boom underway. This is an investment mega theme.**

Time To Accelerate. It is this author's view that industry, utilities, renewable project developers and policymakers are moving too slowly to accomplish the agreed upon goals. An acceleration is needed now and at scale. This is a transformational effort; a complete energy, industry and mobility system overhaul. We see similarities to the oil shale revolution in the United States which in a decade the oil industry drove U.S. production higher by 3x, greatly benefitting consumers and the global economy. This type of scaling of renewables and electricity is likely to happen this decade. We are not climate alarmists. **However, we believe this transformation of the global economy will create enormous investment opportunities.**

The Size Of Transition Is Large. To meet 1.5% by 2050 The Int'l Renewable Energy Agency (IRENA) estimates installed renewable energy gigawatts need to increase 10x to 27k GW from 2.5k GW today for the mix of electricity in the energy pie to grow to over 50% in 2050 from 21% today. This includes the share of renewables in electricity generation expanding to 90% from 25%. To achieve this the world needs to install ~840 GW/year compared to the ~200 GW/year in recent (record) years. The annual costs are estimated at $4.4 trillion/year, well above 2019's $1.8 trillion and represents $133T from 2021 to 2050.

Catalysts Ahead. *If 2020 kicked off the Climate Decade, 2021 is the accelerant.* The next three major catalysts for our vision of the Energy Transition are **1)** President Biden's Climate Summit on April 22nd-23rd, **2)** the revealing of the Intergovernmental Panel on Climate Change (IPCC) "assessment" in October 2021, and **3)** the 2021 UN Climate Change Conference in Glasgow in November 2021. The countries which signed the Paris agreement submitted initial nationally determined contributions which will be updated during this event (updated every five years). **We expect these NDCs to be dramatically enhanced, refined, and strengthened.**

The Driver Is Market Forces. The drivers of Energy Transition are generally mistaken by many as the major driver is economic, not climate-related. The cost of renewables moves in one direction, lower. Wind and solar are cost competitive with most fossil fuels. The final catalyst has arrived for these to accelerate: energy storage tech. The birth of true energy management destroys the intermittency argument against harvesting nature's energy. For EVs, battery technology continues to advance and parity is near. EVs also benefit from the end of ICE engines as countries phase out the technology; the visible hand at work.

Skin In The Game. We are launching coverage of Sustainable Technologies & Clean Energy along with 5 stocks. This includes Enphase, Sunrun and Sunnova in Solar, Plug Power in Hydrogen and TPI Composites in Wind. **We are adding RUN to Evercore ISI's Best SMID Long Term "Core" Ideas.**

Portfolio Manager / Executive Summary

#	Key Tenet of Our Call:
1	The current confluence of climate policy, lower costs for renewables, and new technologies have made Energy Transition equities a multi-decade, investable theme.
2	We are calling for a rapid disruption of the energy landscape starting now. Our call is supported by our thematic research on oil and gas digitalization, the hydrogen economy, and carbon capture as the next big thing.
3	The tidal wave of sustainable-investing funds is well known, however, we believe it is early innings for investors.
4	Our bullish call for Energy Transition themes and renewable energies is predicated on the trillions of dollars in required annual spending between 2020 and 2050.
5	Key energy technologies likely to lead are: a) solar, b) wind, and c) hydrogen. Batteries, energy storage, electric vehicles, and numerous other technologies will also play a major role.
6	Supported by our thematic views, we are initiating on Enphase (ENPH), Sunrun (RUN), TPI Composites (TPIC), Plug Power (PLUG), and Sunnova (NOVA). These reflect Energy Transition-themed "Best of Breed" for wind, solar, and hydrogen. All five are rated Outperform.
7	Our mega call is not without risk. Supportive climate policies may not materialize and valuations are higher based on normal measures of value. However, we believe numerous climate policy catalysts and improving cost curves should provide fertile ground for exponential renewable energy demand growth over these next decades.

Welcome to Energy Transition

We live in unprecedented times. Yes, every journalist has made that statement about 2021 and certainly last year but we believe the statement applies to every year of the current century. The velocity of change is increasing. Markets are pricing future expectations at an accelerated rate and the world and human beliefs are diverging *and* converging at rates which would have terrified our ancestors. The awesome power of new technology that Industry is employing is upending business, our way of life, our human-to-human interactions, our expectations, and the basis of modern society itself. However, with this velocity a brighter vision of the world and society is forming. And the utopian vision is clear. While utopia exists nowhere the push towards this vision is strong. The younger generations of Westerners are increasingly focused on global sustainability. These, of course, are several generations which directly benefitted from the creation of modern living standards whose wealth was derived by the hydrocarbon age. The irony is not lost on this author; however, the conviction that their forefathers exploited nature's bounty to extremes is palpable. Nowhere in this report will we make a call on that belief as it's unnecessary and not investible. As the famed poet and sometimes rock star Bob Dylan wrote "The times they are a-changing."

Change is a constant in the world of Energy; coal overtook wood in the 19th century and ushered in the age of Industrialization, hydrocarbons displaced whale oil and created an era of mass transportation, major global progress and wealth building, while natural gas and renewables are now edging out coal. What is unique at this precise moment in time is a catalyst has arrived. This catalyst was not wanted, was not welcome, and we were not prepared. But as this author watches mass vaccination programs unfold and a world begin the healing process, the immense power of human ingenuity is awe inspiring. An offshoot of the pandemic is an acceleration in this Energy Transition as policy makers embedded green energy in stimulus and rebuilding programs, and ESG investing and societal pressures to decarbonize have changed the narrative. These trends, coupled with several renewable technologies advancing to parity with the economic costs of hydrocarbons, created an environment ripe for disruption.

In this report we lay out our vision for this Energy Transition. We explore all the levers the world is pulling to slow warming, reduce GHG emissions and invent the future society and social contracts. We also introduce coverage of five Transition Technology companies and initiate on the Sustainable Technologies & Clean Energy space. We are not environmentalists. We are certainly not environmental alarmists. In fact, we believe alarmism is doing more harm than good to the Transition narrative. We come from the traditional oil and gas world and we continue to cover the Oil Service & Equipment group. This is a group which provides the critical technologies to decarbonize the oil and gas business. Because we have a long history covering the "picks and shovels" of the oilfield, we believe we bring unique perspective to the world of New Energies. We also believe the "picks and shovels" transition technology companies will be the superior investments during this multi-decade investment mega theme.

This emerging world needs technology, infrastructure and most importantly, scale. As the Oil Service industry provided this for the oil and gas industry for the last 150+ years so will the Transition Technology companies provide for the brave new world which is emerging. When it comes to All Energy there is no escaping the desires of nation states and political actors. As All Energy is the lifeblood of the economy it is also Power. With Power comes struggle. The world may be getting smaller, however, three dimensional geopolitical chess is becoming more challenging. We explore the role of nations and national and regional desires as well. This includes the extremely important roles of the United States and China for these two will determine the fate of the world in this century. Lastly, any work on the Transition must also include a discussion of the role ESG and Impact Investing will play. While our task is large we intend to simplify the themes and our views for investors.

James C. West
EVERCORE ISI
Senior Managing Director
Sustainable Technologies & Clean Energy Research

Is Energy Transition "Internet 1.0"?

Guest Editor Mark Mahaney

Mark Mahaney is Evercore ISI's Head of Internet Research and a Senior Managing Director.

Mark has covered Internet stocks for more than 20 years, most recently at RBC Capital Markets. He is consistently recognized by Institutional Investor for his research, including thirteen years as a "top 3" ranked analyst and five years as a #1 ranked analyst. Prior to RBC, Mr. Mahaney worked on both the sell-side and the buy-side, including with American Technology Research, Morgan Stanley and Citibank. He began his career in management consulting with Deloitte & Touche and with the U.S. Department of State, the U.S. Senate and the Office of the U.S. Trade Representative.

Given the clear parallels between the dawn of the internet age and this Energy Transition we asked our colleague Mark Mahaney to weigh in. Mark has covered internet stocks for over 20 years and he was there at the beginning for boom, the bust, and is here today for the tremendous boom that continues. We found his insight particularly prescient.

On the grounds of Graceland, Elvis Presley's estate, is a sign with this quote from John Lennon: "Before Elvis, there was nothing."

Occasionally there are individuals or movements or technology shifts or economic changes that have truly dramatic impacts on the world around them. They make what came before them look quaint, outmoded, and even irrelevant. The King did that. So too did the development and then the commercialization of the Internet. The impact of the Internet on the world – economically, culturally, socially, politically – has been simply astounding.

Reading James West's report, it's hard not to reach the conclusion that current transition towards sustainable, clean energy is in the same relative development stage as the Internet was in the 1.0 period. The end market opportunity is hard to quantify with precision, but it is almost certainly enormous, given how wide-ranging the impact of this energy transition will be. On the global economy. On societies. On lifestyles. Etc…

The commercialization of the Internet created several enormous winners and many, many losers. Enormous winners? Yeah, seven of the ten largest companies in the world (by market cap) are exclusively or substantially based on providing Internet-based solutions and services. This took 25 years to come true, but it did come true. Given the size of the market opportunity and the global impact this energy transition could have, it's not irrational to believe that over the next 25 years it too could produce enormous opportunities for truly innovative companies and the investors who correctly identify them.

Along the way, there will surely be blood. From the many, many losers. There will be flash-in-the-pans, rogue upstarts, dramatic business model transitions, surprise recoveries and pivots, and market cap destruction and creation. Persistence, grit, objectivity, leaps of faith, and luck will all come in handy. So too will this report.

Mark S.F. Mahaney

We believe there will be a few winners and a lot of losers. There will be consolidation that picks apart the bones of those that fall and some of those bones will be diamonds in the rough that become core to the dominant players. Some established players with resources will successfully reinvent and a small number of upstarts will emerge as 'sustainable unicorns'. Disintermediation and integration will play out across a sector that touches the entire economy.

Our mission statement is to identify the opportunities and the truly innovative companies which will produce enormous investment opportunities.

Wind: Rotating From Land to Offshore

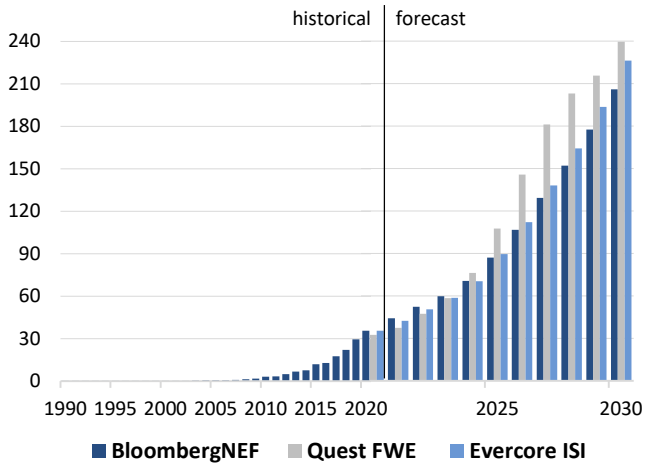
Increasing Scale and Industrialization. While wind energy has been harvested for thousands of years, it has only been the last 20-30 years the technology has been applied at scale. The wind energy market is increasingly global and offshore, with the latest wind turbines setting new records for power generation and efficiency. The combination of improved material science, digital technology and artificial intelligence, economic incentives, and political will have dramatically reduced cost and increased energy efficiency from wind. Cost advantageous over most forms of energy, government subsidies in the form of feed-in-tariffs (FiT), production tax credits (PTC), and green certificates are beginning to abate. However, wind should continue to receive substantial financial, policy and commercial support over the next several years.

"Renewables are considered one of the primary fuels to satisfy the world's growing energy demand and wind is a vital component. Many countries are looking-to offshore as a more beneficial effective environment to harvest larger volumes of wind energy. Historically, offshore wind farms are primarily developed with 'Bottom-fixed' structures in relatively shallow water, near-to-shore. As 80% of the globes strongest wind resources lie in waters beyond the reach of Bottom-fixed (~60m), Floating wind technology is increasingly accepted as 'the future' of offshore wind." ***– Paul Hillegeist, Quest Floating Wind Energy Global Floating Wind Market and Forecast Report, 2021-2034***

Rotating From Land to Offshore. As noted earlier, onshore additions are peaking with BloombergNEF forecasting a record 73 GW of wind capacity additions this year. This is a 12% increase from the near 66 GW installed in 2020, with growth driven by 20 GW (+6 GW Y-Y) of additions for EMEA and 21 GW (+4.5 GW Y-Y) for AMER. BNEF expects additions to drop off in 2022 to 62 GW, but we are taking a more cautious view renewed COVID-19 headwinds from the spread of new variants, as well as new and extended lockdowns, will delay some planned 2021 installations to the right. Meanwhile, offshore growth is poised to accelerate in the coming years. We forecast annual offshore wind capacity addition increase by an 18% CAGR over the next decade, increasing total capacity from 35 GW to 226 GW by 2030. Our estimate is slightly above BNEF 206 GW estimate but below QuestFWE 240 GW estimate based on more than 400 offshore projects currently, as we believe there could be delays as the supply chain (WTIVs) race to keep up.

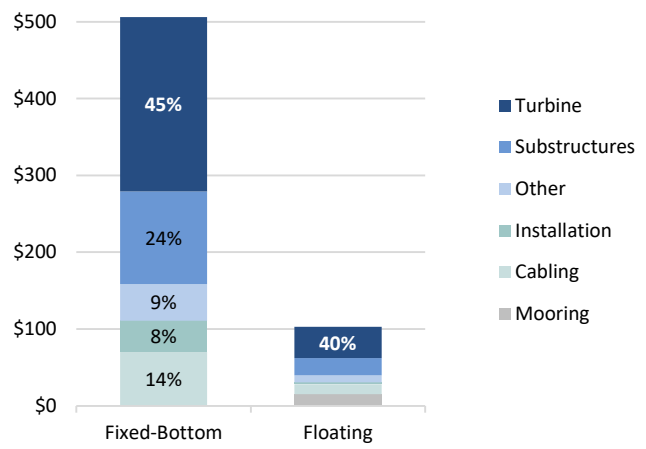
Floating Wind Is Just Beginning. From 33 GW online currently, QuestFWE forecasts $609B TAM from more than 200 GW of capacity additions from potential contract awards through 2032. About 85% of potential offshore capacity additions are in shallow-waters of up to 50-60 meters, with fixed-bottom turbines accounting for the majority of near-term demand and almost all existing offshore capacity. Floating offshore wind is still an emerging technology with only a few projects to date accounting for a modest 65 MW. However, QuestFWE is tracking $103B in TAM from 31 GW of capacity additions and this figure is sure to grow as floating wind turbines average about 700bps higher than fixed-bottom wind (58% vs. 51%). Despite substantially higher costs for installation and maintenance, offshore wind is keeping pace with onshore wind with LCOE tracking in line relative to the installed base. At the current total installed base of about 35 GW, LCOEs for offshore turbines of around $115/MWh are on par with the historical onshore average back around 2010. A number of factors will impact the direction of LCOE, but the pace of technological change, rate of global deployment, financial support, and synergies between onshore and offshore applications suggests further declines in the years ahead.

Figure 206: Offshore Wind Capacity Additions (GW)



Source: BloombergNEF, QuestFWE, Evercore ISI Research

Figure 207: Offshore Wind TAM Through 2032 ($B)



Source: QuestFWE, Evercore ISI Research

Installation + O&M Are Costly Offshore

Universal Truths. Larger turbines, taller towers and longer blades are key for driving down LCOE. Not only are fewer machines needed to reach the same target output, but developers enjoy significant savings from lower installation and O&M costs. All major components (tower, blades, nacelles) are transported and assembled on site. While the supply chain for onshore wind is highly developed with significant competition among an established group of suppliers, high barriers of entry exist offshore where more specialized equipment and vessels are required for installation. The cost for offshore installation and O&M is also significantly greater, with incremental costs for laying foundation and subsea cables that do not exist onshore.

"Since 2016, offshore wind has pushed LCoE reductions well in excess of 60%." – Quest Floating Wind Energy, Market and Forecast Report 2021

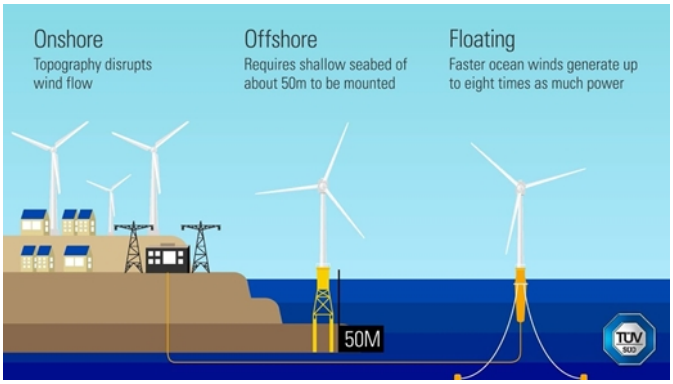
Offshore Growth To Accelerate. Growth for wind energy is rotating from land to offshore with BloombergNEF forecasting offshore wind capacity to grow by a 19% CAGR this decade from a cumulative 36 GW in 2020 to 206 GW by 2030. Bottom-fixed offshore wind (BFOW) structures are found near the coastline in water depths of up to 50-60 meters, which addresses about 20% of offshore wind resources. Monopile foundations dominated designs over the last decade, but since 2017, Equinor has been leading the development of floating offshore wind (FOW) which targets 80% of offshore wind resources in deeper water. More consistent wind energy is found further from the coastline, which in addition to larger capacity wind turbines of 12-15 MW (20 MW is next) is driving the emergence of the floating wind industry. Only 13 projects exist currently representing 84 MW of capacity, but floating wind could begin to take off in the later part of this decade and beyond as costs continue to fall from increased scale and industrialization.

Local rules, regulations and maritime laws like the Jones Act which requires vessels be U.S.-built, flagged and crewed could delay growth in offshore wind.

Installation Constraints. Given changing weather and wave conditions (winter, hurricanes, typhoons), specialized vessels are required to install offshore wind turbines such as bulk carriers with heavy lift cranes and subsea robotics (ROVs). Utilizing much of the same technology and expertise as the offshore oil and gas industry, special attention is given to weight and precision in the installation of four major items (foundations, turbines, cables and substation) for bottom-fixed offshore wind farms. However, only a handful of wind turbine installation vessels (WTIVs) are capable of handling the newest equipment of 12-15 MW. New vessels are being constructed to coordinate with turbines to be delivered between now and 2025, with China recently moving ahead to convert some jackup rigs to WTIVs. Existing vessels are also being upgraded with new cranes to handle higher lifting height requirements. Further innovations are likely over time in vessel design (catamarans), fuel source (fuel cell and electrolyzer for hydrogen), and other efficiency aspects as installation is one of the most costly components of offshore wind.

Offshore Growth Ambitions. Offshore wind is the fastest growing segment of renewables, with the U.S. the fastest growing market while U.K. is the largest (for now). Although the U.K. has plans to quadruple capacity from 10 GW currently to 40 GW by 2030, and 75 GW by 2050, China is expected to overtake the U.K. as the largest offshore wind market by the end of the decade from third place currently. China could add 67 MW from eight floating demonstration projects by 2025. South Korea's Green New Deal also targets attaining a "top five" status by 2030 with the country working towards 25 GW of capacity. Overall, the Quest Floating Wind Turbine Index is tracking more than 400 offshore projects currently, with Asia leading by project count while Europe leads in terms of planned capacity additions.

Figure 230: Progression from Onshore to Offshore and Floating



Source: TÜV SÜD, Evercore ISI Research

Figure 231: Variety of Vessels Required for Offshore Installation

Source: Freight Waves, Evercore ISI

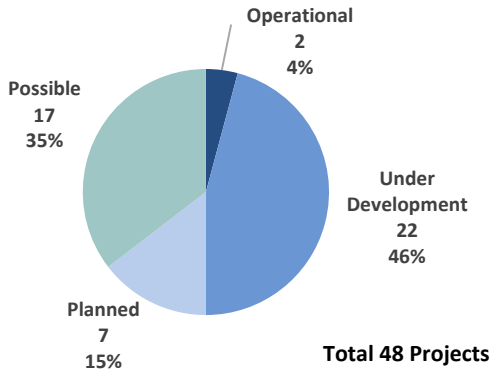
The U.S. Is The Fastest Growing Market. From a very low base of only two operational pre-commercial developments, the U.S. is the fastest growing offshore wind market currently. There are 22 projects under development in the design and pre-construction stage accounting for 14 GW of new capacity, with almost all from 17 fixed-bottom projects in commercial phase while five floating projects are demonstration or pre-commercial pilots. Another 7 and 17 projects are being planned or are possible for another 4.7 GW and 10 GW respectively, increasing the total U.S. offshore installed based to 28.9 GW by 2030. This is slightly below President Biden's plan to jumpstart the offshore wind industry with the development of 30 GW by 2030 from 42 MW currently. Work is underway with five projects receiving a final investment decision (FID). Permits have been approved for Maine Aqua Ventus I while a lease has been granted on Vineyard Wind, but PPAs have not been confirmed, bidding for key components has commenced, survey work has started, and financing has been secured for all five projects, which could add a total of 1,720 MW to the U.S. offshore installed based by 2025. The proposed hub heights for these five projects range 100-109 meters while the rotor diameter ranges from 152-167 meters, which is similar to the 100 meters hub height and 150-154 meters rotor diameter of the two operational projects currently but below the 100-150 meters hub height and 164-222 meters rotor diameter of 17 other projects under development but not yet reached FID. Larger turbines should operate at a higher capacity factor, lowering the LCOE of offshore wind from about $115/MWh currently. **Overall, the U.S. BOEM estimates there could be 1.5 TW of offshore wind potential commercially developed from the country's coastline in water depths within 50 meters.**

Figure 232: U.S. Offshore Wind Farms

#	U.S. Wind Farms	State	Capacity (MW)	Turbines (# x MW)	Online Year
Operational					
1	Block Island	RI	30	5 x 6	2018
2	Coastal Virginia Offshore Wind	VA	12	2 x 6	2020
2	**Total Operational**		**42**		
Under Development: Design and pre-construction phase					
1	Maine Aqua Ventus I	ME	10	1 x 10	2023
2	Revolution 1	RI	400	50 x 8	2023
3	Revolution 2	CT	304	38 x 8	2023
4	Vineyard Wind	MA	1,680	140 x 12	2023
5	Cademo (VAFB) A	CA	20	2 x 10	2024
6	Empire Wind 1	NY	816	102 x 8	2024
7	Lompoc	CA	40	4 x 10	2024
8	MarWin	MD	268.8	32 x 8.4	2024
9	Ocean Wind	NJ	1,080	90 x 12	2024
10	Skipjack	DE	120	10 x 12	2024
11	Sunrise Wind	NY	880	110x 8	2024
12	Virginia Wind Energy Area Phase I	VA	855	57 x 15	2024
13	Cademo (VAFB) B	CA	20	2 x 10	2025
14	Kitty Hawk Ph 1	NC	800	80 x 10	2025
15	Kitty Hawk PH 2-3	NC	1,600	160 x 10	2025
16	Mayflower	MA	804	67 x 12	2025
17	Mayflower Floating Demo	MA	10	1 x 10	2025
18	South Fork	RI	126	15 x 8.4	2025
19	Virginia Wind Energy Area Phase II	VA	855	57 x 15	2025
20	Empire Wind 2	NY	1,260	84 x 15	2026
21	Virginia Wind Energy Area Phase III	VA	855	57 x 15	2026
22	Beacon Wind	MA	1,230	82 x 15	2027
22	**Total Under Development**		**14,033**		
7	**Total Planned**		**4,679**		**2023-27**
17	**Total Possible**		**10,115**		**2024-30**

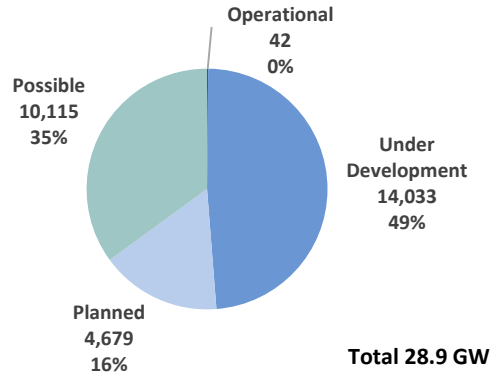
Source: Quest Floating Wind Energy, Evercore ISI Research

Figure 233: U.S. Offshore Wind Farms by Status



Source: Quest Floating Wind Energy, Evercore ISI Research

Figure 234: U.S. Offshore Wind Farms by Capacity (MW)



Source: Quest Floating Wind Energy, Evercore ISI Research

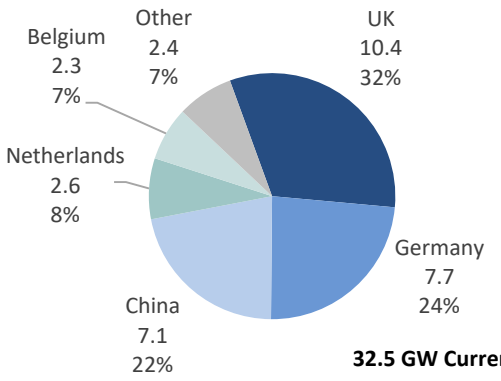
Europe Leads The International Race. Quest Floating Wind Energy estimates there are 32.5 GW of international offshore wind capacity currently, slightly below the BloombergNEF estimates of 35.6 GW. Based on Quest estimates, the U.K. leads with 10.4 GW, followed by Germany 7.7 GW, China 7.1 GW, the Netherlands 2.6 GW, and Belgium 2.3 GW. Fixed-bottom dominates but there are six floating projects online currently, including the lone commercial floating wind farm—the Hywind Scotland—for 30 MW of capacity comprised of five 6 MW turbines that averaged a 57% capacity factor in its first operating year (2017). Northern Europe pioneered offshore wind technology and is leading the international race with 68 projects accounting for 38 GW of capacity under development, followed by Asia with 54 projects for 12 GW while Southern Europe lags with four demonstration projects for 87 MW. Fixed-bottom should continue to dominate for the foreseeable future at 80% of all projects under development and 95% by capacity, but 2.3 GW under development are from 26 floating projects including eight commercial projects for 1.8 GW. Overall, there are 126 projects under development accounting for 50 GW of new capacity between 2021 and 2030. New markets for offshore wind projects under development includes Australia, Ireland, Italy, Poland, and Sweden. From six floating projects accounting for 64 MW currently, Quest estimates there could be 127 projects adding 35 GW of capacity by 2034, including two projects undergoing installation in the U.K. and Norway currently for a total of 135.5 MW. In total, there are another 90 and 147 international offshore projects being planned or are possible for another 50 GW and 83 GW respectively, which could increase the international offshore installed based to 215 GW by 2030.

Figure 235: International Offshore Wind Farms

#	10 Largest Int'l Wind Farms	Country	Capacity (MW)	Turbines (# x MW)	Online Year
Operational					
1	Hornsea One	U.K.	1,218	174 x 7	2019
2	Borssele 3 & 4	Netherlands	731.5	77 x 9.5	2020
3	Borssele 1 & 2	Netherlands	752	94 x 8	2020
4	East Anglia One	U.K.	714	102 x 7	2020
5	Kriegers Flak	Denmark	604	72 x 8.4	2021
6	Beatrice	U.K.	588	84 x 7	2018
7	Hohe See	Germany	497	71 x 7	2019
8	Borkum Riffgrund 2	Germany	448	56 x 8	2019
9	Horns Rev 3	Denmark	406.7	49 x 8.3	2019
10	Merkur	Germany	396	66 x 6	2018
	Total Operational		**32,500**		
Under Development: Design to construction and commissioning phase					
1	Hornsea Three	UK	2,310	231 x 10	2025
2	Sodra Midsjobanken	Sweden	2,100	300 x 7	2027
3	Star of the South	Australia	2,000	250 x 8	2024
4	Norfolk Vanguard	UK	1,760	88 x 20	2026
5	Norfolk Boreas	UK	1,760	88 x 20	2029
6	East Anglia Three	UK	1,400	100 x 14	2026
7	Sofia Phase 1	UK	1,400	100 x 14	2026
8	Hornsea Two	UK	1,386	165 x 8.4	2022
9	Doggerbank A	UK	1,235	95 x 13	2025
10	Doggerbank B	UK	1,235	95 x 13	2026
126	**Total Under Development**		**50,120**		
90	**Total Planned**		**20,197**		**2022-32**
147	**Total Possible**		**82,665**		**2022-34**

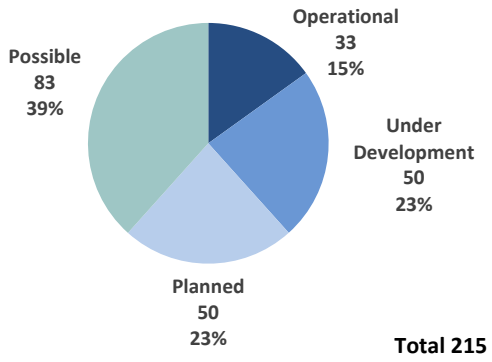
Source: Quest Floating Wind Energy, Evercore ISI Research

Figure 236: Int'l Offshore Wind Capacity (GW) by Country



Source: Quest Floating Wind Energy, Evercore ISI Research

Figure 237: Int'l Offshore Wind Farms by Capacity (GW)



Source: Quest Floating Wind Energy, Evercore ISI Research