Denmark moves forward on North Sea ‘energy island’

AFP/ Copenhagen

Denmark has said that it has approved plans to build an artificial island in the North Sea that could generate wind power for at least 3mn households.

Parliament in June adopted a political environmental framework aimed at reducing the country’s CO2 emissions by 70% by 2030, which included plans for the world’s first “energy hubs” on the island of Bornholm in the Baltic Sea and in the North Sea.

On Thursday, parliament went further by approving a plan to place the North Sea hub on an artificial island, with a wind power farm that will initially supply 3GW of electricity.

That could later be scaled up to 10GW – enough for 10mn households – according to the ministry of climate, energy and utilities, much more than needed for Denmark’s population of 5.8mn.

“Clearly this is too much for Denmark alone and this also why we see this as a part of a bigger European project,” Climate Minister Dan Jorgensen told AFP, adding that Denmark wanted to

also export excess energy to the rest of Europe.
Plans also include the use of “electrolysis” to extract hydrogen for use in the production of renewable fuels for things like maritime transport.
The island, “the largest construction project in the history of Denmark”, is to be majority owned by the Danish government in partnership with private companies and is expected to cost around 210bn Danish kroner ($34bn, €28bn).
Rather than a traditional offshore wind power farm, the island will function as an “energy hub” allowing connections from other countries’ wind power farms and cables to efficiently distribute the incoming energy.
Its final size is yet to be decided but it is expected to cover between 120,000-460,000sq m, according to the ministry.
The total number of wind turbines has not been finalised either, but estimates range between 200 and 600 units at “a previously unseen scale”, with the tip of the blades reaching as high as 260m (850’) above the sea.
While the project is a step in the plan to provide enough energy to electrify Denmark, Jorgensen also said they hoped the project could offer guidance for bigger countries looking to transition their societies in the face of climate change.
“We know that as a small country, only responsible for about 0.1 percent of the world’s greenhouse gas emissions, it doesn’t matter that much to the climate what we actually do in Denmark,” he said. “We hope that it will have a bigger influence by influencing others.”
The project’s next steps include environmental impact assessments and talks with potential investors, so construction is still some years off.
According to the ministry, initial construction is likely to begin around 2026 and finished sometime between 2030 and 2033.

Overcoming climate challenge to human development

By Kanni Wignaraja/New York

In his autobiography, Singapore's founding father, Lee Kuan Yew, told the story of how leadership and grit transformed a tiny nation on a sandbar into an open, competitive, and prosperous metropolis.

In the decades since, Singapore has been governed by a famously efficient and graft-free political class, and it now boasts a highly skilled workforce. In the United Nations Development Programme's latest Human Development Index (HDI) – first conceived 30 years ago by the Indian Nobel laureate Amartya Sen and the Pakistani economist Mahbub ul Haq – the country ranks eleventh out of 189 overall.

But when the HDI is adjusted to consider carbon dioxide emissions and so-called material footprint (which measures the share of global extraction of raw materials in a country's final demand), Singapore's rank drops by 92 positions. No country has ever managed to reach a high level of human development with low resource use, and Singapore, having

virtually no natural resources of its own, imports almost all of the commodities it needs. There is nothing unusual about this; Singapore is emblematic of growth across the planet. But the natural environment cannot sustain this form of growth and development.

The intense pressure that our current development models are putting on local ecosystems is perhaps most clearly illustrated by the Covid-19 pandemic. A tiny pathogen has laid bare massive vulnerabilities and gross inequalities in even the strongest and most prosperous societies, with economic and social imbalances reinforcing the damage inflicted by the pandemic. As the disease spread, we learned that the collective action needed to confront such a challenge becomes far more difficult when domestic divisions and international rivalries prevail over global solidarity.

But while Singapore-style development is not sustainable, nor is it feasible to reframe development as a trade-off between people's livelihoods and saving trees. That is a central argument in the UNDP's new Human Development Report (HDR), which examines new or underused pathways to achieving human and environmental well-being. In the future, we must encourage countries to pursue prosperity while minimising their carbon footprint by applying the knowledge, science, and technology now at our disposal.

The report reimagines the future role of governments, but it is clear that they will not bear sole responsibility for the vital choices that must be made in the coming years. The HDR also calls for a socially and environmentally responsible private sector that regards embracing nature as being in its own interest and helps to reshape norms and incentives for climate action.

Four important areas for action stand out. First, cities – which account for 85% of energy output and 75% of CO2 emissions (estimates vary) – now need to pave the way for green renewal. The HDR highlights a role for cities as theatres for green action: pricing the true social cost of carbon, protecting green spaces and planting trees, and

cleaning waterways and seas of the plastic garbage that is devastating marine life.

Second, in addition to action by cities and national pledges – including in the Asia-Pacific region – to become carbon-neutral over the next few decades, ordinary citizens must adapt their ways of life. The HDR urges people to reconsider what they value highly, and to change what they consume and how they produce, commute, and invest. This is not impossible. Throughout history, we have seen that social norms and behaviour can change. Tobacco use, for example, has become socially stigmatised, leading to a decline in smoking, and mask-wearing has become the norm in many places during the Covid-19 pandemic.

Third, while behavioural change can stem from hard incentives (say, higher tobacco taxes) and regulations, it can also be inspired by collective calls to action, such as those urging large and small institutional investors to finance new green technologies.

Private money must match public funding, reinforced by plugging local and international tax loopholes and withdrawing unnecessary subsidies. The subsidy on fossil fuels alone costs the world economy $5 trillion a year. In the Asia-Pacific region, such subsidies can equal more than 50% of a country's health or education budget. The right taxes on carbon, financial transactions, and extreme wealth can raise an additional $200 billion annually for green investments, according to the Sustainable Development Solutions Network's report on SDG costing and financing for low-income countries. Financial constraints clearly need not impede the transition to a green economy.

Finally, we must understand that nature is not our adversary. The HDR documents 20 cost-effective actions related to forests, wetlands, and grasslands that can lead to 37% of the mitigation needed to keep global temperatures within 2°C of pre-industrial levels. Reforestation alone accounts for two-thirds of this potential. Recognising and protecting the local communities that are nature's stewards will be key. The

contribution of the Amazon’s indigenous peoples to preserving forest storage capacity, for example, now equals the per capita greenhouse-gas emissions of the top 1% of global emitters.

Sen and Haq’s original index of human progress introduced a new way to measure how well societies manage to reach their potential. When adjusted for planetary stress today, however, the index shows how their choices are being radically constricted. Instead of passively awaiting our fate, we must use our knowledge, reason, and agency to establish new development models and shape our collective fortunes. — Project Syndicate

* Kanni Wignaraja is UN Assistant Secretary-General and UNDP Regional Director for Asia and the Pacific

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Solar Stocks Have Been Thriving—Here’s Why That Could Continue

The solar industry has been on a tear. Several stocks in the sector hit all-time highs last month. Investors seem eager for more solar companies to go public. But is this surge more sustainable than prior booms?

Earlier boom times ended painfully. Several renewables companies went public in 2014 and 2015—or spun off their operating power-plant units—amid a clean-tech wave. But the collapse of SunEdison Inc.—the world's largest renewables company before its 2016 bankruptcy—stung the solar industry. Some investors began prioritizing profitability over growth. No solar companies went public in the U.S. between late 2016 and early 2019, according to Bloomberg data.

Now, clean-tech companies are going public at a dizzying pace. Since October, at least two solar companies have gone public via initial offerings and another agreed last month to do so through a merger with a blank-check company. They join several electric-vehicle and battery companies that have also gone public with special purpose acquisition companies. There have been 32 clean-tech SPAC deals over the past 12 months, according to Pavel Molchanov, an equity analyst at Raymond James.

One big reason: It became clear early in the pandemic that solar wouldn't just weather this difficult time, but possibly thrive during it. By mid-December, the U.S. was projected to install a record 19 gigawatts of new solar capacity last year, according to Wood Mackenzie and the Solar Energy Industries Association. Meanwhile, a sustainability-focused index that includes some solar companies, the WilderHill Clean Energy Index, last year surged more than 200%, topping the 58% gain in 2019. California-based SunPower Corp. rose as much as 14% on Friday, and is up about 70% this year. And the underlying drivers propelling clean tech look sturdy in the near-term: supportive policies in Europe and the U.S., a push to green electric grids as well as trillions of dollars in funds focused on the energy transition.

"It's a mega-trend that's essential for the future of this world," says Jeff McDermott, head of Nomura Greentech.

But the success and future promise of the industry doesn't mean that solar has become an easy business for executives—or for investors. Active Solar, for instance, was the best-performing stock-picker in Europe last year with a 183% return, but did so after twice losing most of its investors' money. Guinness Atkinson Asset Management, an investment management firm, found that the total rate of return of the median stock among solar-equipment companies was 98% last year, but -32% in 2018. In fact, among all of the clean-tech sub-sectors it studied, the total rate of return for solar equipment was the lowest between 2010 and 2020 at 65%.

Installation "volumes are going through the roof, but profitability can be quite different," Molchanov says. "We have seen countless companies that have grown revenue rapidly over the years but profitability has been pressured." There remains "relentless commoditization including margin compression" that affects multiple solar segments, including modules, inverters and power-supply agreements.

The overlapping trends of decarbonization and electrification—plus the struggles of oil—attracted many investors to solar last year. That's a far cry from 2016, when the experience of SunEdison soured many on the industry. The company had fueled its ascent on financial engineering and cheap debt before its 2016 bankruptcy.

Nearly five years later, the price of solar power has fallen markedly, such that the resource is now the cheapest in many markets. (This is obviously a plus for solar's competitiveness, but not necessarily the best development for manufacturers). Solar companies are increasingly confident that investors will reward them for focusing on just a few things—power-plant ownership, installations, panel-making, or components—rather than feeling the need to be vertically integrated like once before.

One major change is how clean power and other climate-forward businesses are now seen outside the industry. More than ever before, these companies are seen as a financial opportunity—not just good public relations.

— With assistance by Drew Singer, and Will Wade

Green Energy Firms to Help Power Spanish IPO Revival in 2021

Spain’s national stock market, home to a solitary listing in 2020, is gearing up to host a flurry of green energy providers in the coming months.

At least four companies including Repsol SA are working on possible initial public offerings of renewable assets in Madrid, according to people familiar with the matter. Driving the trend is an increasingly environmentally-conscious investor base and a national government intent on generating power from sustainable sources.

“The public market is paying more than the private sector for these types of assets now. This is in stark contrast to 18 months ago,” said Inigo Gaytan de Ayala, global head of equity capital markets at Banco Santander SA. “Time is of the essence and first-mover advantage is critical. Companies want to move swiftly and make the most of this favorable window.”

Companies that produce renewable energy have raised $336 million via IPOs on European exchanges over the last 12 months, according to data compiled by Bloomberg. By far the largest listing came from Soltec Power Holdings SA, a green power generator and manufacturer of certain devices for solar panels.

Soltec's was the only IPO on a Spanish exchange in 2020, when the coronavirus crisis kept many companies and investors away from public markets. The deal pipeline is looking decidedly healthier this year, with Capital Energy, Opdenergy SA and Ecoener Emisiones all weighing plans to list in the country in the spring, the people said, asking not to be identified discussing confidential information. Two other privately-owned renewables firms are also considering IPOs, one of the people said.

Representatives for Capital Energy and Ecoener said the companies were analyzing possible IPOs, though no final decisions have been taken. Spokespeople for Opdenergy and Repsol declined to comment.

Political Push

"The strong level of activity Spain is currently enjoying in the renewable segment is probably a combination of different factors," said Angel Arevalo, global head of advisory at Banco Bilbao Vizcaya Argentaria SA. Among these, he said, are the country's large renewable resources, falling generation costs and "strong local political commitment to alternative energy."

Spain's government has been working to boost renewable power in its generation mix from around 50% today to 70% by 2030, and 100% before 2050. Last month, Spain held its first power auction in four years and awarded 3 gigawatts of new wind and solar capacity. The country is set to become a recipient of European rescue funds to help rebuild its economy in the wake of the Covid-19 pandemic and a large allocation of these could go to clean energy projects.

"Spain is structurally a great base for renewable companies, particularly for firms that focus on solar energy given climate," said Jerome Renard, head of European equity capital markets at Bank of America Corp. "The country saw investments in that industry very early on, and therefore benefits from a

whole ecosystem of expertise.”

So far in Spain, stock performance from the sector has been stellar.

Shares in Soltec have risen 137% since it went public. Grenergy Renovables has also more than doubled from when the Spanish power producer moved from the country’s alternative market to main exchange in late 2019. BBVA’s Arevalo said renewables in Spain were offering “better returns for investors compared to other geographies.”

Mainstream Asset

Investment banks are also preparing to pick up more mandates tied to sustainable energy initiatives. Gonzalo Garcia, co-head of investment banking at Goldman Sachs Group Inc. in Europe, the Middle East and Africa, said in a January interview that the shift toward renewables would be one of the key market themes for banks this year.

Capital Energy is working with Goldman Sachs and UBS Group AG to gauge investor interest ahead of its potential share sale, a person familiar with the matter said. Repsol is working with JPMorgan Chase & Co. on its renewables IPO plan, people said.

Representatives for Goldman Sachs, JPMorgan and UBS declined to comment.
“In the past, renewables used to attract specialist investors with a focus on the energy sector,” said Renard at Bank of America. “It has now become completely mainstream, reaching a much wider base of investors.”

Carbon-Neutral Or Green LNG: A Pathway Towards Energy Transition

LNG producers have started to look for ways to minimise or counterbalance their carbon footprints, says Dr Hussein Moghaddam, Senior Energy Forecast Analyst, Energy Economics and Forecasting Department

According to the latest, 2020 edition of the GECF Global Gas Outlook 2050, the demand for natural gas is expected to rise by 50% from 3,950 billion cubic metres (bcm) in 2019 to 5,920 bcm in 2050, as gas remains the cleanest-burning hydrocarbon. In spite of that, meeting global targets for climate change mitigation is one of the biggest challenges. Significant emissions are released through the combustion of gas to drive the liquefaction process, while any carbon dioxide (CO^2)

detached before entering the plant is frequently emitted into the atmosphere.

Subsequently, investors, regulators, and customers exert mounting pressure on the gas industry, as it needs to do more to accomplish climate objectives and focus on reducing emissions.

More than 120 countries have already developed a climate risk strategy that sets target to reduce greenhouse gas (GHG) emissions to net-zero by 2050. As natural gas has a central role to play in mitigating carbon emissions, LNG producers have started to look for ways to minimise or counterbalance their carbon footprints, thus ongoing LNG decarbonisation efforts are likely to expedite. Accordingly, top LNG producers, traders, and consumers have indicated their plans in order to decarbonise the LNG supply chain. This is being done in two ways: by offsetting emissions from individual cargoes retrospectively, as well as by building low-emission liquefaction terminals. As a result, the “Green LNG” term has appeared as a new product within the LNG industry.

The carbon-neutral or Green LNG market is an emerging prospect whereby “Green” indicates either the reduction of GHG, or the offset of GHG emissions, linked to some, or all elements of the LNG value chain – from production of upstream gas and pipeline transportation, to liquefaction, transportation, regasification, and downstream utilisation of natural gas.

Companies in the LNG value-chain can diminish GHG emissions in numerous ways. For instance, by using biogas as feedstock; by decreasing emissions from upstream, pipeline, and liquefaction facilities; by applying renewable energy to power their liquefaction plants; respectively, by using carbon capture, and storage (CCS), or carbon capture, utilisation and storage (CCUS) technologies by reinjection of CO^2 into the subsurface after it had been detained during the processing of the feed gas before liquefaction.

Therefore, it should be taken into account that carbon-neutral does not mean that the LNG cargo generates zero emissions, rather that LNG sellers can counterbalance their GHG emissions by obtaining offsets to compensate for all or part of their GHG emissions or the utilisation of carbon credits, which reinforce reforestation, afforestation or other green projects.

It is worth nothing that last year the leaders of the G20 endorsed the concept of the circular carbon economy (CCE) and the GECF is the part of this process. The CCE aims to include a wide range of technologies such as CCS/CCUS as a way to promote economic growth and to manage emissions in all sectors.

In contrast, Qatar Petroleum (QP) is the company that applies a combination of strategies to reduce its emissions. Its future LNG production will be low-carbon based, as the company is building a CCS facility alongside its 126 mtpa liquefaction capacity expansion by 2027.

As part of its new sustainability strategy, QP has announced that its aim is to reduce the emissions intensity of its LNG facilities by 25% by 2030. The capture and storage of CO^2 from its LNG facilities of about 7 mtpa by 2027 is another goal. Furthermore, QP aims to drop emissions at its upstream facilities by at least 15%, as well as cut flaring intensity by over 75% by the end of this decade. Additionally, by 2030, QP is attempting to abolish routine flaring, and by 2025, the company would like to minimise fugitive methane emissions along the gas value-chain by establishing a methane intensity target of 0.2% over all of its facilities.

In certain supply contracts of the company, environmental considerations are incorporated as well. In November 2020, QP signed the first long-term deal with “specific environmental criteria and requirements”, which was designed to minimise the carbon footprint of the LNG supplies with Singapore’s Pavilion

Energy, and to provide 1.8 mtpa of LNG over a 10-year period.

In order to fulfil the objectives of decreasing GHG emissions, CCS also helped the case in Australia. Chevron is the operator of the 15.6 mtpa Gorgon LNG offshore Western Australia and has injected more than 4 million tonnes of CO2 in the CCS facility since its commissioning in August 2019.

Meanwhile, NOVATEK has embraced a long-term methane emissions reduction target by 2030 in Russia, mainly to diminish methane emissions per unit of production by 4% in the production, processing and LNG segments. Moreover, the company aims to decrease GHG emissions per tonne of LNG produced by 5% [5]. In this regard, NOVATEK and Baker Hughes, which provides engineering and turbomachinery at Yamal LNG, signed an agreement to introduce hydrogen blends rather than solely running methane from feed gas into the main process for natural gas liquefaction to reduce CO2 emissions from NOVATEK's LNG facilities.

Bio-LNG will have a significant role in the coming years to form the heavy road and water transport in the Netherlands. The construction of the first Dutch bio-LNG installation was launched in Amsterdam last November. Renewi (the waste management company), the Nordsol (for processes the biogas into bio-LNG) and Shell (to sell this bio-LNG at its LNG filling stations) have developed this project. Biogas is made up of roughly 60% methane and 40% CO2. An additional CO2 cutback takes place due to the recycling of the CO2 by-product in the market, which results in a 100% CO2 neutral fuel [7].

Inpex, which is Japan's biggest oil and gas producer, has recently disclosed its strategy to become a CO2 net-zero company by 2050 by developing its renewable and hydrogen energy together with the utilisation of carbon capture technologies. Japan has also stated in October 2020 that the country would become carbon-neutral by 2050.

Two major LNG importer regions, namely Asia-Pacific and Europe, have already set policies regarding long-term decarbonisation targets. It is worth noting that most of the carbon-neutral LNG cargoes have been supplied by companies are in Asia to a certain extent, where carbon policies and investor pressure are fairly fragile.

According to the 2020 Edition of the GECF Global Gas Outlook 2050, it is forecasted that LNG imports to Asia will increase to about 800 bcm (585 mt) by 2050, and with 71% of global LNG imports, the region is set to be the driving engine for global LNG demand growth. As concerns with air quality rise in numerous Asian countries, the most realistic solution to attain a decarbonised society in the future by minimising the level of CO2 on a global scale, is the combination of natural gas and renewable energy. Thus, emissions and cleaner-burning fuels are going to be the centre of attention.

Europe could be the predecessor for carbon-neutral LNG in the long-term, by sticking to its new methane strategy, which was revealed by the European Commission (EC), and in accordance with their 2050 carbon-neutral goal. Importantly, the EC suggested LNG producers to engage with their international partners to explore possible standards, targets, or incentives for energy supplies to the EU.

Which part of the LNG value-chain should take responsibility?

An LNG seller will probably need to diminish and offset GHGs, which emphasises the need for robust offset markets in order to be completely carbon-neutral through the entire LNG value-chain.

Accordingly, this highlights challenges for legacy LNG projects with limited means to decrease carbon, making them dependant on expensive market mechanisms. LNG producers have to keep the balance between the competitive fuel pricing and the expensive emissions reduction initiatives. Therefore, the

question of who pays the additional costs to produce Green LNG is yet to be decided.

As noted, the balance of carbon emission is feasible for any LNG facility and can lead to carbon-neutral LNG cargoes. Although, this is probably not a sustainable long-term process and does not directly cope with the project's emissions, it is a good transformation for general LNG decarbonisation.

However, the GECF proposes that both sellers and buyers have to contribute to achieving emission targets. The discussions with respect to these issues should involve all LNG industry players, such as sellers, buyers, traders and policymakers, respectively. A more focused perspective that targets minimising emissions in upstream and liquefaction might be more feasible for LNG producers. This will also associate with the already ongoing efforts from them, as they have to control their carbon footprints under more pressure from the public and investors.

In conclusion, as LNG demand keeps expanding, the demand for Green LNG will grow as well. Green LNG can help ensure that natural gas preserves its role as a crucial part of the energy mix, supporting climate goals over the energy transition period. As stated in the 2019 Malabo Declaration, at the 5th GECF Summit of Heads of State and Government in Equatorial Guinea [10], the GECF Member Countries, reiterate the strategic role of the development, deployment and transfer of advanced technologies for more effective production, and the utilisation of natural gas to enhance its economic and environmental benefits.

Senate shift paves way for straight-talking US climate reforms

LONDON: Democratic Senate seat wins in the state of Georgia have given US President-elect Joe Biden a “green light to move forward” on some key shifts in national climate policy, such as much greener pandemic stimulus spending, US policy analysts said.

With Democrats now in control of the Senate, “it’s a huge, huge difference”, Nigel Purvis, CEO of the Washington-based Climate Advisers policy group, told the Thomson Reuters Foundation.

“This almost doubles what he can do – he has a whole additional range of tools and levers at his disposal,” said Purvis, who has worked with three former US administrations on climate policy.

Biden has proposed a $2-trillion, climate-smart economic stimulus plan, for instance, which he would not have been able to get through if the Georgia election had turned out differently. “Now he has a real chance,” Purvis added. Biden’s thin Senate majority means he is unlikely to be able to pass a single comprehensive climate change bill, which would require the approval of 60 per cent of senators.

But many measures related to raising or spending money – including stimulus funding for things like electric vehicle infrastructure, or incentives for farmers to sequester more carbon – can win approval with a simple majority.

Biden should, for instance, now be able to back his plans to mainstream climate action into all government agencies with cash to make that possible, said Christina DeConcini, director of government affairs at the World Resources Institute (WRI).

“There are limits for sure, but it’s … a green light to move forward,” she said. “I really think this is a new day for climate in the United States.”

Talking jobs

How shifts in climate policy are framed for a country politically divided on the issue will be crucial to Biden’s success in bringing change, the analysts said.

Gina McCarthy, former administrator of the Environmental Protection Agency under President Barack Obama and Biden’s nominee to become the first national climate adviser, for instance, speaks more about the need for a “cleaner, stronger, more resilient economy” than about climate change.

“We know clean energy supports millions of jobs in the United States and it can support millions more,” as well as saving money and improving people’s health, she told an online event in November.

To get people behind climate action, governments “need to give citizens and communities a better life today” – not just promises that future catastrophes will be avoided, she added.

Rachel Kyte, a former UN special representative on energy and dean of the Fletcher School for Law and Diplomacy at Tufts University in Massachusetts, said McCarthy and other Biden cabinet picks excel at talking about the need for climate-friendly reforms “in language ordinary people can understand”.

“They will find a very main-street narrative for why these are common-sense policies” – and that could galvanize broader bipartisan support, she predicted.

Alden Meyer, a strategic adviser with independent climate change think-tank E3G, noted that during the last fiscal crisis in 2009, the Obama-Biden administration crafted a stimulus package that included $90 billion for clean energy technology.

Biden’s pick for energy secretary, former Michigan governor Jennifer Granholm, in that crisis helped negotiate a rescue of the US auto industry that included an agreement by Detroit to adopt much more aggressive fuel economy standards.

Such “green strings” on stimulus cash will be needed to help drive effective climate action in the United States and globally, climate analysts say.

“This is not new territory for Biden,” Meyer said. “He knows this game very well. He gets this, he feels this in his bones.”

Pressure from the left

Another challenge for Biden, the analysts said, will be keeping onboard factions of the Democratic Party – such as the youth-led Sunset Movement – that are demanding swift, immediate and aggressive action on climate threats.

The Sunrise Movement has already told Democratic Senate leaders it expects “an enormous green spending bill on day one”, Kyte said — and that desire for rapid change may be at odds with efforts to sell climate action to a broader US audience.

Yet, despite paralysing political polarisation on many climate-related issues, a few hints of possible bipartisan compromise have emerged in recent months, the analysts said.

Stimulus and relief packages passed in December included policies that could help set the stage for decarbonisation of the US economy, such as tax incentives for clean energy and carbon capture technologies.

Congress also agreed, with bipartisan support, to phase out hydrofluorocarbons (HFCs), powerful climate pollutants used in air-conditioning and refrigeration equipment.

As well, a Democrat-controlled US Congress is likely to work more closely with the cities, states and other bodies that have driven US climate action during global-warming skeptic President Donald Trump’s administration, said WRI’s DeConcini.

US businesses — a growing number of which have adopted net-zero emissions goals, or are having to adhere to tougher climate policies in other countries where they work — also increasingly want consistent, clear climate policy, she said.

“At some point, the desire to just stay the course — because they see the future on the wall and because it’s good for their bottom line — will become so strong it will provide the political momentum for the U.S. to move toward a decarbonized economy,” she predicted.

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Green Boom’s Hottest Trade in 2021 May Turn Out to Be Utilities

(Bloomberg) — After a bumper year for Europe’s renewable-energy stocks, underappreciated utilities shares are now gaining support from the market as 2021’s hot sector to play the clean power transition.

Helped by government policies such as the European Union’s Green Deal and investors’ environmental, social and governance concerns, renewable assets have strongly outperformed traditional utilities peers this year in the Stoxx Europe 600 Index. Turbine maker Vestas Wind Systems A/S has almost doubled in value, while U.K. electric company SSE Plc is up less than 3%.

Some strategists warn that opportunities in wind and solar

stocks may be more uneven in 2021 as valuations appear stretched. Utilities may be a lower-risk way to buy into green energy growth than renewables equities, said Ursula Tonkin, head of listed strategies at infrastructure investor Whitehelm Capital Pty Ltd.

“Over the long run, the tortoise will likely outperform the hare,” she said. “For every new solar, wind or battery installation, the grid has to expand to accommodate it.”

While coronavirus-pandemic winners such as tech shares are losing favor in the latest vaccine-fueled stock rally, sustainable companies have stayed in favor, also helped by November’s U.S. presidential election victory for Joe Biden, who pledged a clean-energy agenda. Still, utilities as a whole have gained only modestly so far this year.

Many utilities have positioned themselves to capitalize on opportunities in green energy after “cleaning up” their portfolios in the past few years, said Sam Arie, an analyst for the industry at UBS AG.

“We’ve gone from a world five years ago which didn’t really have climate goals in view to one where now those are the most important goals across all the sectors,” he said.

Investors will have to be more selective, with next year unlikely to be as “exceptional” as 2020 for the renewables segment, said Louise Dudley, a global equities portfolio manager at Federated Hermes Inc. Stocks such as Orsted A/S trade at about 53 times estimated earnings, versus 19 times for the Stoxx 600 Utilities Index. The Danish offshore wind-farm developer was recently downgraded at Bank of America Corp. and Royal Bank of Canada.

Investors are giving “insufficient credit” to utilities like SSE, Germany’s RWE AG, and Portugal’s EDP SA that balance spending on renewables with defensive earnings flow from electricity networks, RBC Capital analysts said in a 2021

outlook note for the utilities sector. Analysts tracked by Bloomberg see 16% upside for RWE and 6% for EDP, while average price targets are for at least 11% declines for Vestas and peer Siemens Gamesa Renewable Energy SA.

Another plus is attractive payouts. Investors would struggle to find another industry that delivers utilities' highly predictable, strong earnings growth alongside comparatively high dividend yields, UBS's Arie said.

Still, while 2021 may involve a "bumpier ride" for renewables, valuations for Vestas, Orsted and peers aren't likely to slide as their business growth forecasts are so positive, Whitehelm Capital's Tonkin said.

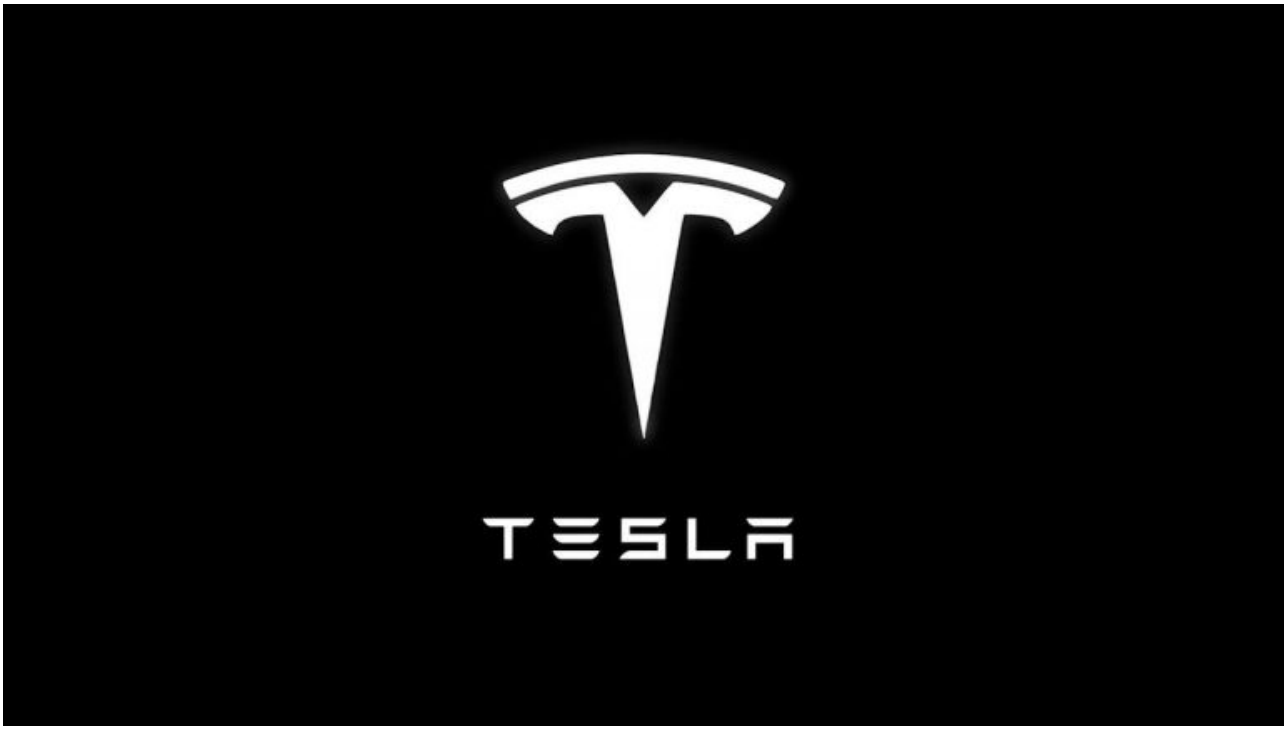
Green Competition

An additional concern for the pure renewables industry in 2021 is increasing competition, both from utilities ramping up spending and oil companies aggressively investing in green energy. This could pose a "real threat" to the economics of wind and solar, said Ulrik Fugmann, co-head of the Environmental Strategies Group at BNP Paribas Asset Management.

Others, however, are sanguine. James Smith, fund manager at the Premier Miton Global Renewables Trust, said oil companies that "seek projects simply for the sake of it" would put returns at risk at a time when the sector must strike a balance between operating core crude-oil assets, executing the shift to renewables and paying dividends.

The energy market "needs to grow very aggressively in the next two decades" to reach regulators' emission-cutting goals, said Harry Boyle, a portfolio specialist at sustainability-focused fund manager Impax Asset Management. "There should be ample room for all actors."

Tesla market value tops $700bn for first time



ew York: Electric carmaker Tesla closed trading on Wednesday with a market value topping $700 billion for the first time.

The latest surge means the company is worth more than General Motors, Ford, Toyota, Honda, Fiat Chrysler and Volkswagen combined.

Tesla's share price ended with a gain of 2.8 percent to $755.98 for a total value of whopping $717 billion. That came after the stock saw a more than 700 percent ascendance in 2020 – a gain some analysts viewed as inflated.

The auto industry disruptor led by Elon Musk wowed Wall Street yet again over the weekend, reporting annual car deliveries of 499,550, just shy of its 2020 target of half a million, but well above analyst estimates.

The disclosure capped a year that saw Tesla report a series of profitable quarters and join the S&P 500, establishing the company as one of the world’s most valuable businesses and elevating Musk to the second-wealthiest person behind Amazon CEO Jeff Bezos.

While industry analysts do not expect another massive surge in value this year, they remain optimistic about the company’s sales prospects, even if the cars remain out of reach for many buyers.

The optimism comes as construction continues on new Tesla factories in Texas and Germany, which will join existing plants in California and Shanghai that are ramping up production.

Musk has expressed determination to cut the price for Tesla’s electric cars, which currently start at $37,990 in the US market.

The Tesla chief is developing battery design, material and production innovations that combine to cut the cost per kilowatt hour by 56 percent.

That should enable Tesla to field a $25,000 model in “three years-ish,” Musk said in September, adding, “it is absolutely critical that we make cars that people can actually afford.”

And US sales could be helped by President-elect Joe Biden’s commitment to green technology to combat climate change.

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https://www.gulf-times.com/st

ory/679889/Companies-taking-strong-climate-action-up-46-this-

Bloomberg /London

The number of major companies who've disclosed their environmental impact and aggressively committed to reducing it has increased 46% from last year, according to a new analysis by a leading environmental-disclosure platform.

The top companies on the CDP's annual "A List" for environmental action grew to 313 this year. The list, which was updated on Tuesday, consists of companies who received CDP's top score for environmental disclosures and policies on climate change, forest conservation and water use.

The list's expansion comes towards the end of a year where climate risk has taken prominence in financial markets. In April, an analysis by Morningstar showed sustainable funds were relatively well-placed to endure the coronavirus turmoil, withstanding the market's March freefall much better than conventional funds. From 2025, UK companies will have to

disclose how much they're exposed to risks caused by climate change, following a November decision by the Chancellor of the Exchequer Rishi Sunak.

Climate action also pays off. An index which tracks CDP's A List saw an average annual return that was 5.3% higher than competitors over the past seven years. The Stoxx Global Climate Change Leaders, which measures the performance of companies on CDP's A List Index relative to the Stoxx Global 1800, has climbed about 13% since the start of 2020.

"Organisations that are able to take sustainability as a strategic imperative can adapt to this new future," said Nina Seega, research director for sustainable finance at the Cambridge Institute for Sustainability Leadership. "We're no longer discussing whether we'll transition, but how we'll transition – and which companies will be the best at it."

Most companies only disclosed data to CDP that reflected their impact on the climate, concentrating on emissions reductions, but some went further. Of the 9,600 companies that reported this year, only ten scored A ratings across their disclosures related to climate change, forests and water-use. They included Danone, L'Oreal SA, and Philip Morris International – the controversial tobacco giant has reduced emissions from its operations and along its value chain by 42% since 2010.

The number of companies which disclosed data to CDP rose by 14% this year from last year. More A List companies are based in Europe than any other continent. Japan is home to more of the top companies than any other country – with 66 of the 313 companies based there. Among them, car manufacturer Honda reached 100% renewable energy at its European and South American plants last year and KAO Corporation, the chemicals and cosmetics company, introduced an internal carbon pricing mechanism to encourage energy savings.

"We have the wind in our sails," said Dexter Galvin, global director of corporations and supply chain at CDP. "Now, we need these pioneers to inspire the sluggish majority of corporates if the private sector is to take a leadership role when climate targets ratchet up at COP26 next year," he said,

referring to the global climate talks set to held in Glasgow in 2021.

Countries seen needing to invest $55tn to reach emissions target

Global economies will need to invest as much as $55tn through the middle of the century to meet an emissions goal and contain warming of the planet, according to a report by a group of executives from energy-intensive companies including ArcelorMittal SA, BP Plc and Royal Dutch Shell Plc. Reaching the net-zero carbon emissions target by 2050 will require large-scale electrification of industries, buildings, and transport, as well as the use of hydrogen and biofuels in areas that can’t be electrified, according to the Energy Transitions Commission. Using less energy to produce more and

recycling material will aid the efforts. Building renewable power plants will take up a bulk of the estimated investment.

More frequent and severe natural calamities across the world have heightened the need to contain climate change and end the use of coal and other fossil fuels while expanding clean energy. That’s forcing some of the biggest fossil fuel users to recast their energy mix and adopt greener sources of power. The Intergovernmental Panel on Climate Change said in a 2018 report that reaching net-zero CO2 emissions by mid-century will be key to limiting global warming to 1.5 degrees Celsius above pre-industrial levels. Humanity is on course to miss that mark, with the World Meteorological Organization saying there is a 20% chance that global temperatures will breach the limit in at least one of the next five years. The decarbonization strategy will involve phasing out of coal-fired plants, according to the report. Those that remain should be used as a peaking or a seasonal back-up to renewable power and should be retrofitted with carbon capture and storage. The report highlighted some challenges on the way. China, the world’s biggest coal user, “is not yet on a clear path towards a net-zero economy and new coal investments are continuing despite evidence that renewables are now highly competitive on a new-build basis in most of China’s provinces,” it said. The nation can become a fully developed, rich economy with net-zero emissions by 2050 by rapidly deploy- ing renewable power projects and reducing its dependence on coal, according to the report. The country needs to double annual investments in solar and as much as quadruple investments in wind energy, along with accelerating the use of clean energy in industries and residential heating. India, the second-biggest coal user, is likely to see consumption of the fuel peak between 2027 and 2030, before gradually sliding down, Ajay Mathur, a co-chair at Energy Transitions Commission, said in a phone interview.