

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. Greenergy 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 (CO²) 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 CO² 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 noting 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 CO² 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 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.”

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Tesla market value tops \$700bn for first time



New 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.

<https://www.gulf-times.com/story/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

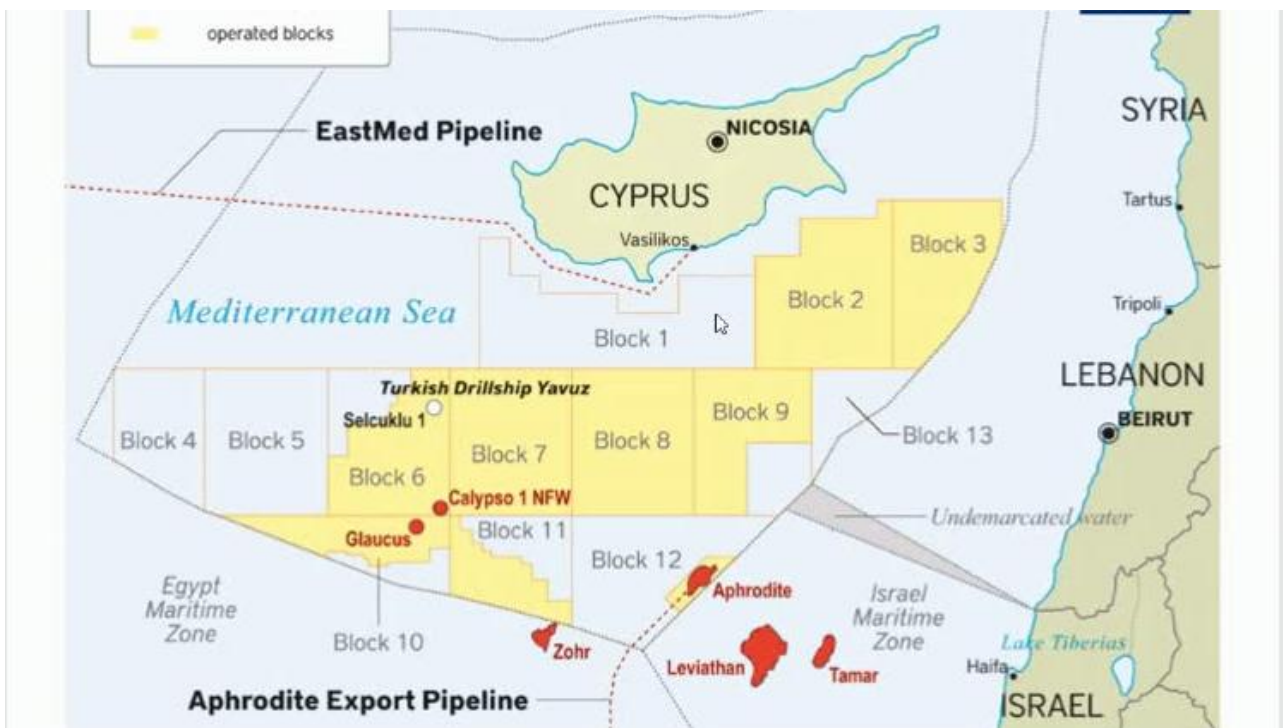


Global economies will need to invest as much as \$55tn through the middle of the century to meet an emissions goal and contain warming of the planet, according to a report by a group of executives from energy-intensive companies including ArcelorMittal SA, BP Plc and Royal Dutch Shell Plc. Reaching the 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 deploying 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.

Différents Maritimes en Méditerranée Orientale: Comment en Sortir



Les différends de frontières maritimes en Méditerranée orientale empêchent l'exploitation raisonnée des récentes découvertes énergétiques dans la région : un nouveau livre montre comment résoudre pacifiquement les conflits frontaliers maritimes.

L'ouvrage se présente comme une feuille de route pour aider les pays côtiers à exploiter les ressources offshore

Un nouveau livre de l'expert en politique de l'énergie Roudi Baroudi met en lumière des mécanismes souvent négligés qui pourraient aider à désamorcer les tensions et débloquer des milliards de dollars en pétrole et en gaz.

“Maritime Disputes in the Eastern Mediterranean: the Way Forward” («Différends Maritimes en Méditerranée Orientale: Comment en Sortir») -distribué par Brookings Institution Press- décrit le vaste cadre juridique et diplomatique dont disposent les pays qui cherchent à résoudre les conflits de frontières maritimes. Dans ce livre, M. Baroudi passe en revue l'émergence et l'influence (croissante) de la Convention des Nations unies sur le droit de la mer (CNUDM), dont les règles et les normes sont devenues la base de pratiquement toutes les négociations et de tous les accords maritimes. Il explique également comment les progrès récents de la science et de la technologie, notamment dans le domaine de la cartographie de précision, ont accru l'impact des lignes directrices de la CNUDM en éliminant les conjectures de tout processus de règlement des différends fondé sur celles-ci.

Comme le titre l'indique, l'ouvrage se concentre en grande partie sur la Méditerranée orientale, où les récentes découvertes de pétrole et de gaz ont souligné le fait que la plupart des frontières maritimes de la région restent discutées. L'incertitude qui en résulte ralentit non seulement l'utilisation des ressources en question (et le réinvestissement des recettes pour lutter contre la pauvreté et d'autres problèmes de société), mais augmente également le risque d'un ou plusieurs conflits meurtriers. M. Baroudi fait toutefois remarquer que, tout comme ces problèmes et leurs conséquences existent dans le monde entier, leur résolution juste et équitable dans une région pourrait contribuer à restaurer la croyance qu'ont les peuples et leurs dirigeants dans le multilatéralisme, et servir ainsi d'exemple.

Si les pays de la Méditerranée orientale acceptaient, en vertu des règles de la CNUDM, de régler leurs différends de manière juste et équitable, écrit-il, “cela donnerait une chance de démontrer que l'architecture de sécurité collective de l'après-guerre reste non seulement une approche viable mais aussi une approche vitale... Cela montrerait au monde entier

qu'aucun obstacle n'est trop grand, aucune inimitié si ancrée et aucun souvenir si amer qu'il ne puisse-t-êtré surmonté en suivant les règles de base auxquelles tous les États membres des Nations unies ont souscrit en y adhérant: la responsabilité de régler les différends sans violence ou menace de violence".

Le livre rappelle, de manière générale et spécifique, qu'il existe des leviers permettant d'uniformiser les règles du jeu diplomatique, une contribution utile à un moment où l'ensemble du concept de multilatéralisme est attaqué par certains des pays qui ont autrefois défendu sa création. L'ouvrage est écrit dans un style engageant, empruntant à plusieurs disciplines -de l'histoire et de la géographie au droit et à la cartographie- le rendant accessible et d'intérêt pour tous, des universitaires et des décideurs politiques aux ingénieurs et au grand public.

En attendant sa parution papier, ainsi que sa traduction en français prévue dans les prochaines semaines, le livre est disponible au format e-book. Dans le contexte actuel qui a forcé les maisons d'édition à adapter leur stratégie de lancement, l'ouvrage a fait l'objet ce jeudi d'un lancement organisé par TLN via zoom, avec la participation autour de l'auteur, de deux représentants éminents du Département d'État américain – Jonathan Moore (premier sous-secrétaire adjoint principal, Bureau des océans et des affaires environnementales et scientifiques internationales) et Kurt Donnelly (sous-secrétaire adjoint pour la diplomatie énergétique, Bureau des ressources énergétiques).

Ενα Νέο Βιβλίο Δείχνει τον Δρόμο για την Ειρηνική Επίλυση των Διαφορών Αναφορικά με τα Θαλάσσια Σύνορα



Ενας Οδικός Χάρτης Μπορεί να Βοηθήσει τα Παράκτια Κράτη να Επωφεληθούν του Υποθαλάσσιου Πλούτου

ΟΥΑΣΙΓΚΤΟΝ: Ο ειδικός σε θέματα ενέργειας, Ρούντι Μπαρούντι, στο νέο του βιβλίο αναδεικνύει μηχανισμούς μείωσης της έντασης, οι οποίοι συχνά ξεχνιούνται αλλά μπορούν να βοηθήσουν στην εκμετάλλευση πετρελαίου και φυσικού αερίου αξίας δισεκατομμυρίων δολλαρίων.

Το βιβλίο *Διαφωνίες επί των θαλασσίων Συνόρων στην Ανατολική Μεσόγειο: Μια Πρόταση Επίλυσης* διανέμεται από το Ινστιτούτο Μπρούκινγκς και σκιαγραφεί το εκτενές νομικό και διπλωματικό πλαίσιο το οποίο διατίθεται για χώρες με διαφιλονεικούμενα θαλάσσια σύνορα. Ο συγγραφέας Ρούντι Μπαρούντι συζητά την αυξάνουσα επιρροή του Διεθνούς Δικαίου της Θαλάσσης υπό την αιγίδα των Ηνωμένων Εθνών (United Nations Convention on the Law of the Sea – UNCLOS), οι κανόνες του οποίου αποτελούν πια

την βάση για την επίλυση όλων, σχεδόν, των διαπραγματεύσεων και συμφωνιών στην θάλασσα. Εξηγεί, επίσης, πως οι πρόσφατες εξελίξεις στον επιστημονικό και τεχνολογικό τομέα – και ειδικά στην χαρτογράφηση ακριβείας – έχουν αυξήσει περαιτέρω την επιρροή των κανόνων του Διεθνούς Δικαίου της Θάλασσας, αφαιρώντας κάθε ενδεχόμενη ασάφεια από οποιαδήποτε διαπραγμάτευση που βασίζεται στους κανόνες του Δικαίου.

Το βιβλίο εστιάζει στην ανατολική Μεσόγειο, όπου οι πρόσφατες ανακαλύψεις υδρογονανθράκων ανέδειξαν το γεγονός ότι τα περισσότερα θαλάσσια σύνορα της περιοχής παραμένουν ακαθόριστα. Η αβεβαιότητα την οποία δημιουργεί αυτή η κατάσταση όχι μόνο καθυστερεί την εκμετάλλευση των πόρων και την διοχέτευση του πλούτου προς όφελος των κοινωνιών, αλλά δημιουργεί και κινδύνους θερμών επεισοδίων και πολέμων. Τέτοιου είδους προβλήματα υπάρχουν σε όλη την Γή. Ο Μπαρούντι σημειώνει, ωστόσο, ότι η δίκαιη επίλυσή τους σε μία περιοχή μπορεί να ενδυναμώσει την εμπιστοσύνη στους πολύπλευρους μηχανισμούς σε κάθε περιοχή.

Σε περίπτωση, σημειώνει, που οι χώρες της ανατολικής Μεσογείου συμφωνούσαν σε μια δίκαιη επίλυση των διαφορών τους με βάση το Διεθνές Δίκαιο, «θα ήταν μια έμπρακτη απόδειξη ότι η μεταπολεμική αρχιτεκτονική συλλογικής ασφάλειας παραμένει όχι μόνο εφικτή αλλά και απαραίτητη... θα απεδείκνυε σε όλον τον κόσμο ότι κανένα εμπόδιο δεν είναι τόσο μεγάλο και καμμία ιστορική εχθρότητα τόσο βαθιά ριζωμένη ώστε να μην υπερσκελίζεται από τον βασικό κανόνα στον οποίο συναίνεσαν όλα τα μέλη των Ηνωμένων Εθνών με την συμμετοχή τους σε αυτόν – την ευθύνη να επιλύουν τις διαφορές τους χωρίς την χρήση ή την απειλή βίας.»

Το βιβλίο μας υπενθυμίζει πως υπάρχουν μοχλοί οι οποίοι μπορούν να αμβλύνουν τις διπλωματικές ανισότητες, και αυτό είναι ιδιαίτερα χρήσιμο σε μια εποχή όπου η όλη ιδέα της πολυπλευρικής προσέγγισης βάλλεται από τις ίδιες χώρες οι οποίες την δημιούργησαν. Ο τρόπος γραφής του βιβλίου ζωντανεύει ένα θεματικό πλέγμα ιστορίας, γεωγραφίας, δικαίου

και χαρτογραφίας, καθιστώντας τα θέματα αυτά προσιτά στο ευρύ κοινό στο οποίο απευθύνεται, καθώς και σε πολιτικούς και διπλωμάτες.

Ο Μπαρούντι εργάζεται εδώ και τέσσερις δεκαετίες στον ενεργειακό τομέα. Ανάμεσα στις πολυεθνικές εταιρείες, κυβερνήσεις και διεθνείς θεσμούς που έχει συμβουλέψει στο διάστημα αυτό συγκαταλέγονται τα Ηνωμένα Έθνη, η Ευρωπαϊκή Επιτροπή, το Διεθνές Νομισματικό Ταμείο και η Παγκόσμια Τράπεζα. Οι εξειδικευμένες γνώσεις του βρίσκονται στους τομείς του πετρελαίου και φυσικού αερίου, τα πετροχημικά, τον ηλεκτρισμό, την ενεργειακή ασφάλεια και την μεταρρύθμιση του ενεργειακού τομέα για να αντιμετωπίσει περιβαλλοντικά ζητήματα, την αγορά του άνθρακα, τις ιδιωτικοποιήσεις, και τις υποδομές. Είναι Διευθύνων Σύμβουλος της ανεξάρτητης συμβουλευτικής εταιρείας Qatar Energy and Environment Holding, με έδρα την Ντόχα του Κατάρ.

Το βιβλίο αυτό είναι απόσταγμα πολυετούς προσωπικής έρευνας, ανάλυσης και υπεράσπισης θέσεων του Μπαρούντι. Την επιμέλεια του κειμένου ανέλαβε η Debra L. Cagan, (Distinguished Energy Fellow, Transatlantic Leadership Network) και ο Sasha Toperich (Senior Executive Vice President, Transatlantic Leadership Network).

Το βιβλίο *Διαφωνίες επί των θαλασσιών Συνόρων στην Ανατολική Μεσόγειο: Μια Πρόταση Επίλυσης* εκδίδεται από το Transatlantic Leadership Network (TLN), μια ένωση δικηγόρων, παικτών του ιδιωτικού τομέα και αναλυτών οι οποίοι στοχεύουν στον διαρκή εκσυγχρονισμό των σχέσεων Ηνωμένων Πολιτειών και Ευρωπαϊκής Ένωσης. Η αρχική μορφή του βιβλίου ήταν ηλεκτρονική. Τώρα διανέμεται από τις Εκδόσεις του Ινστιτούτου Μπρούκινγκς, που ιδρύθηκαν το 1916 για την έκδοση ερευνών του Ινστιτούτου, το οποίο θεωρείται από πολλούς ως το πιο αξιосέβαστο ινστιτούτο έρευνας των ΗΠΑ.

Πολλοί εξειδικευμένοι παρατηρητές πλέκουν το εγκώμιο του βιβλίου. Παραθέτουμε λίγα αποσπάσματα:

Douglas Hengel, Professional Lecturer in Energy, Resources and Environment Program, Johns Hopkins University School of Advanced International Studies, Senior Fellow at German Marshall Fund of the United States, and former State Department official: “Μέσα από αυτό το στοχαστικό και γλαφυρό βιβλίο, ο Ρούντι Μπαρούντι μας δίνει ένα πλαίσιο... το οποίο μας δείχνει τον δρόμο προς μια δίκαιη και ειρηνική λύση... οι χώρες της περιοχής, καθώς και η Ευρωπαϊκή Ένωση και οι Ηνωμένες Πολιτείες, θα έπρεπε να ασπαστούν την προσέγγιση του Μπαρούντι.

Andrew Novo, Associate Professor of Strategic Studies, National Defense University: “... Ένα καλά ισορροπημένο, καινοτόμο και θετικό μήνυμα το οποίο μπορεί να βοηθήσει πολλά θέματα να προοδεύσουν που δεν φαίνονται να επιδέχονται επίλυση. Χρησιμοποιώντας το Διεθνές Δίκαιο, γεω-στοιχεία υψηλής ακρίβειας και μια ισχυρή οικονομική λογική, ο Μπαρούντι προσφέρει ένα πειστικό επιχειρήμα υπέρ ενός συμβιβασμού, εφόσον, φυσικά, οι εμπλεκόμενες πλευρές θέλουν να ακούσουν.”

**Green energy's \$10tn
revolution faces oil crash
test**



In 2014, when the price of oil last crashed, the world's governments had no agreement in place to fight climate change. The following year leaders signed the Paris accord. Green investments have soared since then. Some \$1.2tn has been poured into renewable energy, and global electric vehicle sales reached 2mn last year. Bloomberg NEF expects as much as \$10tn poured into clean energy by 2050. The accord also marked a cultural watershed, with emissions targets now policed by a growing environment movement that's shaping politics from Germany to India. In a sign of the times, activist Greta Thunberg and Tesla Inc founder Elon Musk are now two of the most famous people in the world. So when this week Saudi Arabia and Russia joined in a price war that wreaked havoc on global markets already rattled by the coronavirus, it looked like the major oil-producing nations reasserting their supremacy in the short term. Instead, it may prove to be another step in a longer-term trend towards ending oil's power to hold the world to ransom. The price of a barrel of oil remains an important economic indicator. But the relentless push to move away from fossil fuels suggests that its geopolitical impact is likely to be softer than in the past, with the imperative to combat global warming assuming its place. "The impact of the oil price on broader economic growth has been decoupling ever since the 1980s," said Shane Tomlinson, deputy chief executive officer at environmental think tank E3G. "We could see exceptional movements in the oil

price in the next few months, but I don't think that changes the fundamental need to address climate change." Oil's fall to some \$35 a barrel from \$55 just last week has major implications for addressing climate change. Low prices incentivise more use of oil; it squeezes the budgets of oil companies, putting clean-energy projects in doubt; and some governments feel pressured to prop up struggling oil companies. All that drives up emissions, which is bad news for global warming. However, if low prices are sustained this time, there might be big positives for fighting climate change. Renewable energy is a more mature industry than five years ago. As it becomes a less risky investment, it has attracted big investors who are showering a lot of cash and building some projects that rival the capacity of conventional power plants. At the same time, oil exploration is becoming less viable economically, with an increased risk that even those projects that go ahead no longer yield good returns and with worries about stranded assets growing. "Now it doesn't make sense to reduce your investment in renewables if the oil price crashes," said Mark Lewis, head of sustainability at BNP Paribas Asset Management. "It's more logical to reduce your investment in oil." That reality points to a broader change in investor sentiment since Paris that affects companies and governments alike. A number of large investors have come together under groups such as Climate Action 100+ to demand companies put sustainability at the heart of their business models, and that isn't likely to change. Tesla has effectively become a proxy for how the green economy is viewed by investors. Musk has demonstrated that a mass-market electric car is viable, prompting all the major carmakers to follow his lead. He's building his latest plant outside Berlin, in a show of his intention to take the fight to the heart of Europe's leading luxury car producer. Tesla is after all the world's second-most valuable carmaker by market value after Toyota Motor Corporation. For governments worldwide, pressure for policy measures has mounted as the issue increasingly resonates, in part due to the kind of direct action and media

campaigning espoused by Greta Thunberg. Low oil prices offer one reason to heed that voter call, since it's a good time to end fossil-fuel subsidies or to raise taxes on consumption of fossil fuels. Such a move can also help avoid the sorts of destabilising anti-government protests seen in France, Iran and Ecuador when energy-price increases were proposed. It could even be done in a way that "protects or even benefits poorer households and communities," said Helen Mountford, vice president of climate and economics at the World Resources Institute. The goal of reaching out to "left-behind" communities is a dynamic driving policy from the post-Brexit UK to South Africa and swathes of Latin America that suffered waves of unrest late last year. During the last down cycle, between 2014 and 2016, when oil briefly dipped below \$30 per barrel, India cut annual fossil-fuel subsidies from \$29bn to \$8bn and even raised taxes on consumption. Some of the money raised was diverted to renewable-energy subsidies, after setting an ambitious goal to deploy as much as 175GW of mainly solar and wind power by 2022 – about twice the power generation capacity of the UK. "Many countries are pursuing electrification and decarbonisation to make them less dependent on the volatility of oil markets," said Adnan Amin, former director general of the International Renewable Energy Agency. "This kind of event will only reinforce that momentum." Also since 2014, the power of Opec's 14 nations to shape the market has been weakened by the impact of US shale production. (Opec's Vienna base is home to an Austrian government that now includes the Greens as junior coalition partner.) The US – which is not a member of the group – became an oil exporter again on the back of its shale revolution, surpassing Russia and Saudi Arabia in 2018 to regain its status as the world's biggest producer. President Donald Trump has cheered America's energy resurgence as an example of taking back control. However, the collapse in oil prices weakens the shale industry's ability to pump at a profit and even pushes some of the producers toward bankruptcies, adding to economic uncertainty surrounding the virus that may hurt

Trump's re-election bid, says Amin. Since Trump unilaterally pulled the US out of the Paris agreement, it could yet tilt the presidential race in favour of a candidate more in favour of climate action. In Brussels, meanwhile, European Commission President Ursula von der Leyen doubled down on European Union plans to achieve climate neutrality by 2050, despite the emergence of what she called "unforeseen challenges." "Today it's no longer the question if there will be a European Green Deal or whether the EU will become climate-neutral but the question is how we're proceeding and how far-reaching will the transition be," Von der Leyen said on Monday. That stance is understandable given that EU citizens say they want the bloc to focus on tackling climate change and preserving the environment as its No 1 priority, according to a recent Eurobarometer survey for the European Parliament. "Clearly we cannot ignore what's going on globally," said EU Environment Commissioner Virginijus Sinkevicius on Bloomberg TV. The global "climate emergency didn't go anywhere."