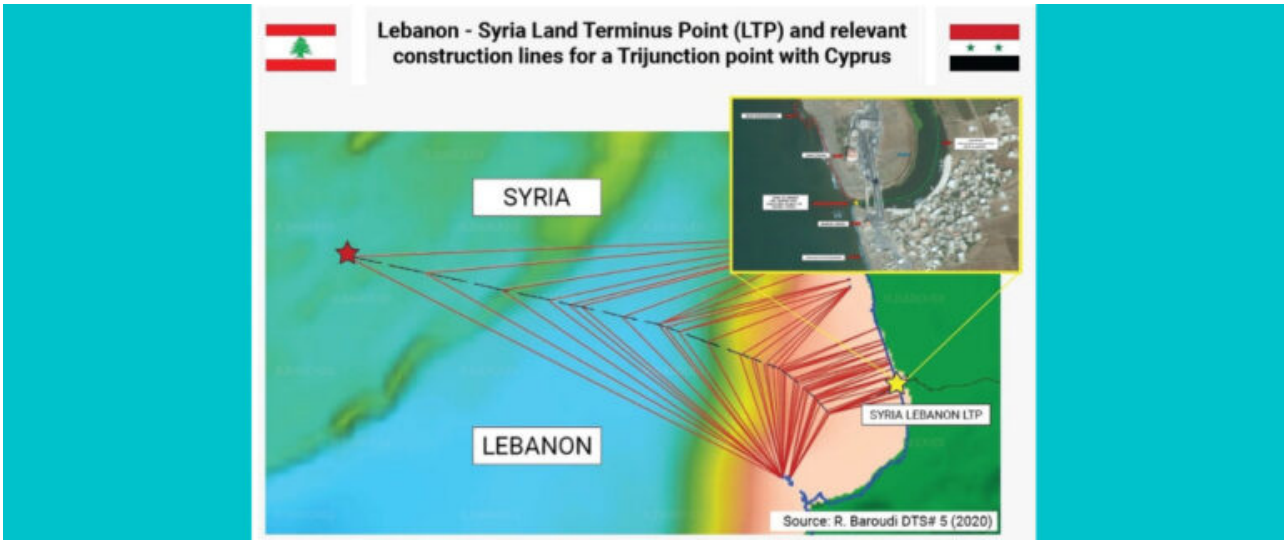
Lebanese – Syrian Maritime Boundaries: Solutions Are Ready



By Roudi Baroudi

Lebanon's maritime boundaries with Syria have become a popular topic for public discussion of late, and that is a good thing. After all, the more our citizens know, the better-equipped they will be to identify national interests, and therefore to demand that elected officials pursue those interests above all other considerations.

This is only true, though, if the citizens in question have both correct information and a basic understanding of how international relations are conducted. Otherwise they risk being tricked by those actors, both Lebanese and foreigners, intent on furthering their own commercial, diplomatic, geostrategic, personal, and/or political ambitions at the expense of Lebanon's national priorities.

Anyone seeking to sort out the back-and-forth over this latest chapter of Libano-Syrian relations should keep the following in mind:

– While certain political circles in Lebanon have been estranged from Syria's current government in recent years,

relations between the two countries – not just national and diplomatic, but also economic, social, and family – go back millennia. Whatever disagreements come and go, the relationship is very much a brotherly one within the larger Arab family, and however much they may be at odds with one another, brothers are always there for each other when it matters most.

– Syria is not a party to the United Nations Convention on the Law of the Sea (UNCLOS). It is, however, both a brotherly country and an observer state, and it should be kept in mind that the standards and practices of UNCLOS have become the norms by which maritime boundary disputes are resolved, whether by treaty, arbitration, or the verdict of a suitable international court.

– The length of the maritime border between Lebanon and Syria is approximately 53 nautical miles; between Lebanon and Cyprus, approximately 96 nautical miles; and between Lebanon and Israel, approximately 71 nautical miles.

In late March, Syrian news outlets reported that a Russian company, Capital Limited, had been contracted by the Syrian government to carry out offshore hydrocarbon exploration and development in Block 1, a parcel of seabed along the country's maritime border with Lebanon. Almost immediately, certain Lebanese politicians and Arab media sounded alarms to the effect that Syria was infringing Lebanon's rights, but what is certain is that Block 1 is located in the 100% neutral temporary natural line neutral, according to UNCLOS rules. However, according to global exploration information on global oil and gas concession areas for 2018, 2019, and 2021, and as expected by oil industry specialists, the Syrian blocks have not changed: they have the same dimensions and positions as when they were announced by the Syrian government.

– According to the UN Table of Claims for 2011, Syria's legal maritime claims are as follows:

Territorial sea = 12 nautical miles

Adjacent areas = 24 nautical miles

Exclusive Economic Zone = 200 nautical miles

– If we look at the Lebanese blocks, we find that they also overlap with the Syrian blocks.
– Over the years, Lebanon and Syria have signed approximately 40 reciprocal agreements in various fields, including some related to the sharing of river waters common to the two countries, including the Assi (also known as the Orontes, or the Mimas) and the Kbir (also known as the Kbir al-Janoubi, which forms much of the northern border between the two countries. This lands border ends at the spot along the coast where the Kbir empties into the Mediterranean Sea, and where the countries have agreed a Land Terminus Point (LTP) at the mouth of the river, as shown on the accompanying map.

Given all of these facts and the overlap between Syrian and Lebanese claims, and in light of the geographical proximities, the numerous signed conventions between them, and their historically fraternal relations, the two countries could easily draw an equidistant line extending from the LTP to the trijunction with Cyprus, about 53 nautical miles offshore. The Lebanese Armed Forces recently did a tremendous job in a much more challenging task, preparing for and conducting negotiations over the far more contentious southern border with Israel, so reaching a deal with the Syrians should be relatively straightforward for the LAF.

With all due respect to those focused on the maritime border with Syria, given the relative ease with which that deal can be made, the more urgent task right now is to preserve our rights along the southern border with Israel, this by amending Decree No. 6433 of 2011 and submitting the new coordinates, as allowed for by Article 3 of said decree, to the United Nations.
The Lebanese and Syrian governments can quickly solve the maritime border problems as long as the LTP line between the two countries is defined and the islands opposite the two countries are officially and unambiguous. As a bonus, a solution to this issue also could also open the way to a just

and speedy demarcation of the boundary with Cyprus.
In the same context, so long as the objective is related to the energy sector, and considering the difficult economic and humanitarian situation facing Lebanon, the concerned Lebanese officials also should negotiate with their Syrian counterparts to quickly reactivate Law No. 509, issued on July 16, 2003, authorizing the conclusion of an agreement to sell gas between Lebanon and Syria. The Lebanese side should communicate with Egypt as well, in order to implement Decree. No. 15,722, issued on November 14, 2005. This decree endorsed a memorandum of cooperation between the Lebanese Ministry of Energy and Water and the Egyptian Ministry of Electricity and Energy authorizing the import of gas from Egypt. These two moves would enable Lebanon to cover at least some of its natural gas needs, whether from Syria or from Egypt via Syria, which would allow the generation of cleaner and more affordable electricity at the Deir al-Ammar power station, which was designed to run on gas but has burned diesel for most of the time since its commissioning in 1998.

In light of the fact that some 2 million displaced Syrians are still sheltering in Lebanon because of the continuing war in their homeland, there is good reason to hope that Damascus might adopt a humanitarian perspective by providing the gas on a grant basis (actual or de facto), which would help the Lebanese gain both savings and sustainability. In this scenario, the Lebanese population would derive all the benefits of the Deir al-Ammar station’s 400-megawatt capacity during a very difficult period, but the Lebanese state would not be pressured to repay, giving it time and space to restore economic and fiscal stability. Some will object that US sanctions on Syria make such a deal impossible, but there is nothing stopping Lebanon from applying for the same kind of humanitarian exemption that Iraq received in order to purchase Iranian oil. All that’s needed is for Lebanon’s most influential politicians to set aside the infighting for the sake of an urgent national need.

Total keen to participate in bid for entering North Field East (NFE) project with QP: Bouyer

French broad energy company Total, which has been present in Qatar since 1936, looks forward to participate in the bid for entering the multi-billion dollar North Field East (NFE) project with QP, said Matthieu Bouyer, managing director, Total E&P Qatar and Total country chair in Qatar.

In February, Qatar Petroleum (QP) took the final investment decision for developing the $28.75bn North Field East Project (NFE), the world's largest LNG project, which will raise Qatar's LNG production capacity from 77mn tonnes per year (mmtpy) to 110 mmtpy by 2025.

"HE the Minister of State for Energy Affairs Saad bin Sherida al-Kaabi mentioned in February that the results should be

known by the year end. We are mobilised and would definitely like to be associated with this giant expansion," Bouyer said in an interview with Gulf Times in Doha.

Total, which has been active in all areas of Qatar's energy sector, from exploration and production to refining, petrochemicals and marketing of lubricants, is a founding partner of Qatargas and a founding member and leading partner of Dolphin Energy.

Speaking about Total's short and mid-term strategy, Bouyer said, "In our current joint ventures, we are on the verge of launching large scale projects… so we are putting a lot of efforts to support them as much as possible in the project definition and execution phases in order to secure future energy production for the State of Qatar.

"Our short and mid-term strategy involves diversification of our business and implementing the group strategy in Qatar through renewables in particular."

Bouyer was quick to emphasise the importance Total attaches to safety of its staff and operations.

"Although Qatar has been managing Covid-19 remarkably well, our clear daily priority is to keep our staff and operations safe amid the pandemic crisis. Beyond the Covid risk management, we expect the highest level of safety in a context of fatigue and weariness."

Bouyer sees a "bright" future for liquefied natural gas and Qatar's LNG industry as a whole.

"Economists and market analysts believe LNG holds significant growth prospects in the long run. Natural gas stands out as a transition fuel, to replace coal in particular, thereby reducing emissions.

"Two major economies in Asia – China and India have been witnessing increasing demand for LNG… even in 2020 in the middle of the most unprecedented crisis the world has faced."

"At Total, our goal is clear – more energy and less emissions. Our ambition is to be Net Zero by 2050 together with society", Bouyer said and noted "to achieve this, we base our strategy in particular on two growth pillars – LNG and renewables. We

are one of the top leading players in LNG. That said, as a broad energy company, our portfolio comprises not only oil and gas, but also power, mainly from renewables."

To anchor this strategy, Total will propose to its shareholders in May this year to change its name to become 'TotalEnergies', Bouyer said.

Praising Qatar's efforts at developing its LNG industry, Bouyer said, "In the last 25 years, Qatar has become the largest LNG exporting country with more than 77mn tonnes per annum annum (Mtpa) of high quality LNG capacity.

In February, Qatar launched the biggest LNG project worldwide – North Field Expansion, with an additional 33 mtpy with high environmental standards. And they are working to further increase this with a future phase – North Field South that is planned to be put online right after.

"So definitely, LNG has a role and will be the main contributor to Qatar energy development, looking forward."

Total is the shareholder and sole operator of Al Khalij offshore oilfield. In 2016, Total won the bid for Al Shaheen offshore oilfield, resulting in North Oil Company, established as a partnership between Total and QP.

Total is present in five downstream joint ventures (JVs) in Qatar, three in petrochemicals (Qapco, Qatofin, RLOC) and two in refining (Laffan Refineries 1 and 2).

Total supported Qatar to build the first ethane cracker in the Middle East at Qapco.

"Since then, Total has been involved in many upgrades or expansions of the downstream sector in Qatar, supporting its JVs and their projects with secondees and specialised technical services," Bouyer said.

Total Marketing Qatar has a prominent market share for lubricants in Qatar for automotive, construction, industrial and marine customers.

The Total Research Center Qatar at QSTP has leading edge and innovative research projects related to sustainable development, marine biodiversity, biofuels, and solar energy.

Total said its commitment to sharing its expertise is fuelled

by its aim is to develop home-grown solutions to its local operational challenges, thus supporting and contribution to Qatar’s vision of developing a knowledge-based economy.
TRC-Q also acts as a bridge between industry and academia to bring innovative solutions to our operations, he said.

Big brands join $1bn forest conservation push for SE Asia

Major household brands and palm-oil buyers Nestle and PepsiCo have backed a scheme that aims to invest $1bn in forest conservation across Southeast Asia over 25 years. The Rimba Collective, developed by Lestari Capital, a Singapore-based impact investment firm, will fund projects that protect and restore more than 500,000 hectares (1.2mn acres) of tropical forests in Indonesia and the region. “By linking conservation

funding directly with company operations, it has the potential to be a game-changer for forest protection and restoration," Michal Zrust, Lestari Capital co-founder, told a virtual launch event this week. The initiative will complement eff orts by other groups to build more sustainable palm-oil supply chains, he added. In 2020, tropical forest losses around the world equalled the size of the Netherlands, according to monitoring service Global Forest Watch.

Green groups blame production of commodities like palm oil and minerals for much of the destruction of forests, as they are cleared for plantations, ranches, farms and mines. Cutting down forests has major implications for global goals to curb climate change, as trees absorb about a third of the planet-warming emissions produced worldwide, but release carbon back into the air when they rot or are burned. Forests also provide food and livelihoods, and are an essential habitat for wildlife. Indonesia is home to the world's third-largest tropical forests but is also its biggest producer of palm oil, an edible oil used in everything from margarine to soap and fuel. Many big buyers of palm oil, besides purchasing certified sustainable oil, have invested in technologies to monitor their supply chains and help stop deforestation, but with limited success so far. The Rimba Collective will have an initial focus on projects in Indonesia and aims to be the largest businessled conservation initiative in the region. Its founding partners are consumer goods companies Nestle, PepsiCo, Procter & Gamble and Singapore-based agribusiness Wilmar International.

They will contribute funding managed by Lestari Capital for a portfolio of forest conservation projects in Southeast Asia. It is hoped more investors, such as commodity traders, palm oil processors and growers, consumer goods firms and manufacturers, will join the scheme before the first payments are made in December. Projects will be selected based on their potential to protect and restore large areas of natural

ecosystems and critical habitats such as rainforest, peatland and mangroves. Other priorities are to generate measurable ecosystem benefits – including carbon sequestration, water purification and soil health – and decent livelihoods for local communities. Benjamin Ware, global head of sustainable sourcing and climate delivery at Nestle, said the firm's involvement would "enable us to speed up our proactive eff orts to protect forests and peatlands as well as human rights", beyond its supply chain.

Last year, well-known brands launched a fresh push to stop commodity supply chains fuelling forest loss. It was met with scepticism by many green groups after the same set of companies failed to meet a 2020 target to purchase only sustainably produced commodities. Environmentalists urged firms in the Rimba Collective to ensure their entire supply chains are not linked to deforestation and to transparently report on progress. Grant Rosoman, senior adviser at Greenpeace International, said more finance for forest conservation, especially led by communities, was desperately needed. He welcomed the long-term nature of the new scheme and the fact that its results will be verified independently. But transparency around how it works, including its costs, payments and the organisation running it, are crucial, he added. "We are also concerned that with carbon sequestration as one of the stated benefits, carbon credits may be claimed and sold to climate polluters," he told the Thomson Reuters Foundation. Marcus Colchester, a senior policy advisor at the UK-based Forest Peoples Programme, called the Rimba project "innovative" and urged Indonesia to help by simplifying its onerous process for recognising customary land rights. Kevin Woods, a senior policy analyst at Washington-based nonprofit Forest Trends, said studies showed results are poor when forest conservation does not support those rights. "This can be best achieved by funds going through local organisations that work closely with forest-based communities on…conservation," he said.

US fossilfuel companies took billions in taxbreaks and then laid off thousands

Fossil-fuel companies have received billions of dollars in tax benefits from the US government as part of coronavirus relief measures, only to lay off tens of thousands of their workers during the pandemic, new figures reveal.

A group of 77 firms involved in the extraction of oil, gas and coal received $8.2bn under tax-code changes that formed part of a major pandemic stimulus bill passed by Congress last year. Five of these companies also got benefits from the paycheck protection program, totaling more than $30m.

Despite this, almost every one of the fossil-fuel companies laid off workers, with a more than 58,000 people losing their jobs since the onset of the pandemic, or around 16% of the combined workforces.

The largest beneficiary of government assistance has been

Marathon Petroleum, which has got $2.1bn in tax benefits.

However, in the year to December 2020, the Ohio-based refining company laid off 1,920 workers, or around 9% of its workforce. As a comparative ratio, Marathon has received around $1m for each worker it made redundant, according to BailoutWatch, a nonprofit advocacy group that analyzed Securities and Exchange Commission filings to compile all the data.

Phillips 66, Vistra Corp, National Oilwell Varco and Valero were the next largest beneficiaries of the tax-code changes, with all of them shedding jobs in the past year. In the case of National Oilwell Varco, a Houston-headquartered drilling supply company, 22% of the workforce was fired, despite federal government tax assistance amounting to $591m.

Other major oil and gas companies including Devon Energy and Occidental Petroleum also took in major pandemic tax benefits in the last year while also shedding thousands of workers.

“I’m not surprised that these companies took advantage of these tax benefits, but I’m horrified by the layoffs after they got this money,” said Chris Kuveke, a researcher at BailoutWatch.

“Last year’s stimulus was about keeping the economy going, but these companies didn’t use these resources to retain their workers. These are companies that are polluting the environment, increasing the deadliness of the pandemic and letting go of their workers.”

The tax benefits stems from a change in the Cares Act from March last year that allowed companies that had made a loss since 2013 to use this to offset their taxes, receiving this refund as a payment.

The extended carry-back benefit was embraced by the oil and gas industry, with many companies suffering losses even before Covid-19 hit. Pandemic shutdowns then severely curtailed

travel by people for business or pleasure, dealing a major blow to fossil-fuel companies through the plummeting use of oil, with the price of a barrel of oil even entering negative territory at one point last year.

A spokesman for Marathon, the one company to answer questions on the layoffs, said the business made “the very difficult decision” to reduce its workforce, providing severance and extended healthcare benefits to those affected.

“These difficult decisions were part of a broader, comprehensive effort, which also included implementing strict capital discipline and overall expense management to lower our cost structure, to improve the company’s resiliency, and re-position it for long-term success,” the spokesman said. “We look forward to better days ahead for everyone as the nation emerges from the pandemic.”

This expense management didn’t extend to the pay of Marathon’s chief executive, Michael Hennigan, who made $15.5m in 2020. According to BailoutWatch, Marathon’s chief executive is paid 99 times the average company worker’s salary.

“They had no problem paying their executives for good performance when they didn’t perform well,” said Kuveke. “There is no problem with working Americans retaining their jobs but I don’t believe we should subsidize an industry that has been supported by the government for the past 100 years. It’s time to stop subsidizing them and start facing the climate crisis.”

Faced by growing political and societal pressure in their role in the climate crisis and the deaths of millions of people each year through air pollution, the oil and gas industry has sought to paint itself as the protector of thousands of American workers who face joblessness due to Joe Biden’s climate policies.

“Targeting specific industries with new taxes would only

undermine the nation’s economic recovery and jeopardize good-paying jobs, including union jobs,” said Frank Macchiarola, senior vice-president for policy, economic and regulatory affairs at lobby group American Petroleum Institute, following Biden’s announcement of a new climate-focused infrastructure plan on Wednesday.

“It’s important to note that our industry receives no special tax treatment, and we will continue to advocate for a tax code that supports a level playing field for all economic sectors along with policies that sustain and grow the billions of dollars in government revenue that we help generate.”

Europe gasoline rockets despite demand blight from lockdowns

As Europeans drive less, the price they're paying for gasoline to power their cars is moving higher as the continent's oil refineries boost exports — but make less — of the fuel.

The so-called crack spread, the price at which gasoline trades over crude oil, hit its strongest for the time of year since 2017 at the start of April. That's helped push retail prices to their highest in years on a seasonal basis in several of the continent's big consumer nations including Germany, France and Italy.

At least a quarter of the gasoline-making units at northwest Europe's oil refineries have been offline recently for maintenance, or suffered unplanned disruption. That's further reduced output at a time when plants are processing less crude oil anyway because of the pandemic. Add in healthy exports, in particular to the U.S., and prices suggest the market has more than offset the lost demand.

"There's a huge pull on European gasoline to other key regions," said Mark Williams, an oil analyst at Wood Mackenzie Ltd., adding that resurgent demand in the U.S. is boosting the European market.

When Europe's spring lockdowns came into force last year, millions of barrels of gasoline demand disappeared and processing margins sank deep into negative territory. This time that hasn't happened, despite the continent's latest wave of mobility-restricting lockdowns limiting road use and perpetuating weakness in two other key transport fuels: diesel and jet fuel.

European exports of gasoline to the U.S. surged by more than 60% month-on-month in March and are set to stay strong in April, according to data from Kpler, an analytics firm. Shipments to West Africa are also healthy, averaging almost half a million barrels a day in the first quarter of this year. Nigeria has also recently said it won't phase out

gasoline subsidies.

At the same time, Europe’s own supply is being squeezed with multiple gasoline-making units called fluid catalytic crackers taken offline.

Germany’s Miro refinery, which normally supplies between a quarter and a third of the nation’s gasoline, has undergone a major overhaul this spring. The U.K.’s Pembroke plant is also among refineries that reduced supply in recent weeks.

“These outages are likely not economically motivated, but more a result of scheduling,” said Koen Wessels, an analyst at Energy Aspects, noting the loss of output has been supporting margins.

The refinery disruption and high exports have helped to strengthen Europe’s gasoline market even as the continent’s road use slumped to its lowest so far this year in the week through March 28, according to transport data compiled by Bloomberg. It was down about 30% on average, compared with pre-pandemic levels.

While those forces are helping gasoline, they’re not enough to push margins for other key transport fuels back to seasonal norms. With Europe’s air traffic still more than 60% below the pre-pandemic level, refiners are still shifting jet fuel production into diesel, adding to supplies and pulling down prices.

“We could well see another few weeks of strength before refiners bring on enough capacity to alleviate the shortage meaningfully,” said Eugene Lindell, an analyst at JBC Energy, when asked about current gasoline strength. “We would expect the ample spare capacity to take care of the issue once runs are ramped up.”

Inevitable fragments of a carbonneutral society: Natural gas coupled with CCUS, renewables, and hydrogen

As global society keeps pursuing a zero-carbon energy system, hydrogen’s role is becoming more notable. Updates and progress around the topic are now being broadcasted at an increasing pace, extending to areas that promise a significant role for hydrogen. Just a couple of years ago, everyone had agreed that hydrogen would gain a meaningful share by around 2050.

However, these days, due to sanctioned projects and the advancement of the related technologies with a set of adopted strategies, it is believed that the hydrogen era will materialise much earlier.

Hydrogen is not the only piece of the puzzle to achieve carbon neutrality, but it is the one that promises a feasible pathway towards net zero-emission through complementing other routes such as electrification and natural gas coupled with CCUS (carbon capture, utilisation and storage). The supremacy of hydrogen is based on the possibility that it can be employed to decarbonise the so-called hard-to-abate sectors or in sectors in which other decarbonisation pathways, such as electrification, are challenged. These sectors include but are not limited to steel, iron and cement, as well as heavy long-haul vehicles, aviation, and maritime and railways transportation. The GECF Hydrogen Scenario encompasses some of these recent developments in its latest update, which was published in February 2021. The Scenario has taken into consideration the latest updates and strategies adopted by countries and groups and assessed their impacts.

Currently, several countries have officially published their hydrogen strategies or hydrogen roadmaps. In some of the roadmaps and strategies such as the EU Hydrogen Strategy, the main priority has been attached to renewable hydrogen. While in some others, such as for Japan, Russia, and South Korea, blue hydrogen is envisaged to take a meaningful role. In certain strategies, definite and clear targets are set, like for the EU Hydrogen Strategy that considers a minimum of 40 GW installed renewable hydrogen electrolyser or 10mn tonnes (mt) of renewable hydrogen by 2030. Within the EU Hydrogen Strategy, another 40 GW is also defined as a target to install in the neighbouring countries and import to the EU. According to the latest results from the updated GECF Hydrogen Scenario which assumes a practical penetration of hydrogen into the future of the energy system, the demand for hydrogen by 2050

will increase by more than four times. However, the carbon saving through this hydrogen penetration is forecasted to be less than six (6) GtCO2 – far below the amount needed to achieve the Paris Agreement goals.

This result emphasises that, firstly, the hydrogen production supply chain needs to advance in all parts, and the cost should be reduced to gain more share in the future of the energy system. Secondly, the result highlights that hydrogen could not be the only solution in the carbon neutrality pathway, and other clean and decarbonised options, such as the application of natural gas coupled with CCUS has to be seriously taken into consideration by all stakeholders. Henceforth, let’s take a look at some results and forecasts from the Reference Case Scenario (RCS) of the latest GECF Global Gas Outlook 2050 (GGO 2050), as it will enable a clear view of the potential needs to fully decarbonise the hard-to-abate energy sectors when hydrogen is hypothetically assumed to take a sole role. According to the RCS results, the total EU transport demand in so-called hard-to-abate sectors will be reduced from 217mn tonnes of oil equivalent (mtoe); in 2019 and pre-Covid-19 pandemic situation, to around 150 mtoe by 2050. This reduction is primarily due to the energy efficiency enhancement of the fleets. In order to produce 150 mtoe of energy, around 52mt of hydrogen is needed, requiring more than 500 GW of electrolyser. This should be added to the demand from the iron, steel, and cement industry (other assumed hard-to-abate sectors.) The fossil fuel demand (coal, natural gas and oil products) from these sectors in the EU is forecasted to stand at 24 mtoe by 2050. To meet this level of demand only with green hydrogen, around 70 GW of the electrolyser must be installed. Based on the forecasted demand levels, the EU will need around 570 GW of electrolyser capacity to decarbonise the aforementioned hard-to-abate sectors in case that the green hydrogen is assumed to be the only solution. Based on technical circumstances and the policy, in the EU Hydrogen Strategy, the target was set to 2 x 40 GW renewable hydrogen

by 2030. Therefore, the needed electrolyser capacity for 2050 seems to be challenging but feasible in the EU. However, we still need to bear in mind some other salient points. The first point is that these results are based on assuming a successful effort in enhancing energy efficiency, and the level is subject to uncertainty. The second is that this is the volume needed only to decarbonise the referenced hard-to-abate sectors. Several other consuming sectors are supposed to be decarbonised through other pathways such as electrification.

They also create a massive volume of renewable electricity demand. A big question mark here is to gauge if there is a sufficient potential of renewable energies within the EU to accommodate all renewable electricity demand in the sectors and meet the electricity demand of electrolysers to produce green hydrogen. By looking into this subject from a global perspective, it can be observed that much more hydrogen is needed to decarbonise even these so-called hard-to-abate sectors. According to the latest modelling results published in GGO 2050, the global energy demand from hard-to-abate subsectors within transportation will stand at around 1800 mtoe per annum by 2050. In a hypothetical assumption, to provide this amount of energy only through green hydrogen production, more than 6,000 GW of electrolyser will be needed. This level is around five times more than the total current wind and solar installed capacity.

With similar calculations again on the imaginary only-green hydrogen assumption, 1,500 GW of electrolyser should be installed for the decarbonisation of iron, steel, and cement sectors. While numerous sectors are still not included in these calculations, other measures are assumed for the purpose of decarbonisation as well. In conclusion, the undeniable fact is that that there is no sole solution for carbon neutrality. Indeed, a combination of measures needs to be applied to achieve a net-zero emission. Apart from the energy

conservation and energy efficiency enhancement that results in a reduction in final energy demand, clean energy supply should be diversely sourced from all clean available potentials. Renewables, natural gas, and CCUS will take greater roles in their original form, and all of them should contribute to the hydrogen production. In closing, renewables, natural gas, CCUS, and hydrogen are inevitable parts of a fully decarbonised energy system.

OPEC+ to ease oil curbs from May after U.S. calls Saudi

OPEC+ agreed on Thursday to gradually ease its oil output cuts from May, after the new U.S. administration called on Saudi Arabia to keep energy affordable, mirroring Donald Trump’s practice of calling OPEC’s leader over oil policy.

The group, which has implemented deep cuts since a pandemic-induced oil price collapse in 2020, agreed to ease production curbs by 350,000 barrels per day (bpd) in May, another 350,000 bpd in June and further 400,000 bpd or so in July.

Iran’s oil minister, Bijan Zanganeh, confirmed the group would have boosted output by a total of 1.1 million bpd by July.

Under Thursday’s deal, cuts implemented by the Organization of the Petroleum Exporting Countries, Russia and their allies, a group known as OPEC+, would be just above 6.5 million bpd from May, compared with slightly below 7 million bpd in April.

“What we did today is, I think, a very conservative measure,” Saudi Energy Minister Prince Abdulaziz Bin Salman told a news conference after the OPEC+ meeting, adding that output levels could still be adjusted at the next meeting on April 28.

He said Thursday’s decision had not been influenced by any talks with U.S. officials or any other consuming nations.

The Saudi minister also said the kingdom would gradually phase out its additional voluntary cut that have been running at 1 million bpd, by adding 250,000 bpd to production in May, another 350,000 bpd in June and then 400,000 bpd in July.

CHANGING MOOD

Brent crude was trading around $64 a barrel, more than 20% up on the start of the year and not far from this year’s high of around $71.

“We reaffirmed the importance of international cooperation to ensure affordable and reliable sources of energy for consumers,” Jennifer Granholm, the new energy secretary appointed by U.S. President Joe Biden, said on Twitter after her call with the Saudi energy minister.

News of the call coincided with signs of a changing mood in informal discussions between OPEC+ members. A few days before

Thursday’s talks, delegates had said the group would likely keep most existing cuts in place, given uncertainty about the demand outlook amid a new wave of coronavirus lockdowns.

But in the 24 hours before the meeting started, sources said discussions had shifted to the possibility of output increases.

In the past, Trump had used his influence to force Saudi Arabia to adjust policy. When prices spiked, he insisted OPEC raise production. When oil prices collapsed last year, hurting U.S. shale producers, he called on the group to cut output.

Until this week, Biden’s administration had refrained from such an approach, keep a distance from Riyadh and imposing sanctions on some Saudi citizens over the 2018 murder of Jamal Khashoggi.

Even when OPEC+ decided on March 4 to keep steady output, triggering a price rise, the White House had made no direct comment.
Source: Reuters (Reporting by Alex Lawler and Ahmad Ghaddar in London, Rania El Gamal in Dubai, Olesya Astakhova and Vladimir Soldatkin in Moscow; Writing by Dmitry Zhdannikov; Editing by Edmund Blair)

China leads global green-bond sales boom, but faces headwinds

China overtook the US to lead a boom in global green-bond issuance in the first quarter, but analysts said it needs to do more to draw investors to help fund President Xi Jinping's estimated $21tn carbon neutrality pledge.

Pending tasks include raising investor awareness of the environment, harmonising fragmented rules and tackling 'greenwashing', or issuers' efforts to inflate their green credentials, they said.

At stake is Beijing's goal of net zero carbon emissions by 2060.

Chinese issuers including banks, property developers, power generators and railway operators sold $15.7bn of bonds during January-March period to fund 'green' projects such as clean and renewable energy, according to Refinitiv data.

The volume of such bonds, mostly yuan-denominated, almost quadrupled from a year earlier, the data showed.

That exceeds the roughly $15bn of such bonds sold by US issuers in the first quarter, and helped drive a tripling of green bond issuance globally.

Green bonds blossomed "largely thanks to China's recovery from the coronavirus," said Nathan Chow, strategist at DBS. "In

addition, the Chinese government is going all out to develop this market this year."

China, the world's biggest emitter of carbon dioxide, needs 140tn yuan ($21.33tn) of debt financing over the next 40 years to meet its net-zero emissions target, investment bank China International Capital Corp (CICC) estimates.

With roughly 800bn yuan of green bonds outstanding, China is already the world's second-biggest green bond market after the US.

However, green bonds account for less than 1% of China's $18tn bond market.

At this stage, "companies have no cost advantages issuing green bonds…and there's not enough market support for many green projects which take a long time to complete and are seen as risky," said CICC economist Zhou Zipeng.

Highlighting such headwinds, China's first batch of "carbon neutral" bonds, launched in February, met tepid demand.

Several fund managers said green bonds are not yet on their investment radar.

"The only thing Chinese investors currently look at is yield. So obviously if green bonds cannot offer the extra returns, they ask the government, 'what can you do to help me?'," said Ricco Zhang, Asia-Pacific director of the International Capital Market Association (ICMA).

A brokerage source said state-owned companies were motivated to issue green bonds to align with government priorities, but investors lacked incentives to buy them.

Authorities are aware of the problems.

Earlier this month, Chinese central bank governor Yi Gang called for incentives to boost private participation in meeting Beijing's carbon goals.

Moving closer to international standards by excluding coal from the green market would widen the potential foreign investor base, Chow of DBS said.

ICMA's Zhang said regulators also need to harmonise different domestic standards.

Currently, China's central bank, securities regulator and the

state planner have separate rules for green bonds issued under their supervision.
“Sometimes it’s hard for international investors to have a granular understanding of different (Chinese) green bonds. This brings challenges for green investors to identify the right target for investment,” he said.

QP in deal with Shell to become partner in two offshore exploration blocks in

Qatar Petroleum has entered into an agreement with Shell to become a partner in two exploration blocks offshore, the Republic of Namibia.
Under the terms of the agreement, which is subject to

customary approvals, QP will hold a 45% participating interest in the PEL 39 exploration licence pertaining to Block 2913A and Block 2914B, while Shell (the Operator) will hold a 45% interest, and the National Petroleum Corporation of Namibia (NAMCOR) will hold the remaining 10% interest.

Commenting on the agreement, HE the Minister of State for Energy Affairs Saad bin Sherida al-Kaabi, also the President and CEO of QP, said, "With this second exploration and production sharing agreement in Namibia, we are pleased to expand our exploration footprint in the country, and to further strengthen our presence in the southern Africa region.

"Working on these promising and prospective blocks with our valued long-term partner, Shell, is another step in our stride towards achieving our international growth strategy. We look forward to working together with the Namibian Government, NAMCOR and Shell on these blocks."

This is QP's second exploration licence in Namibia. In August 2019, QP entered into agreements for participating in blocks 2913B and 2912 offshore Namibia.

The PEL 39 blocks are located offshore Namibia in ultra-deep-water depths of about 2,500m, covering an area of approximately 12,300km2.

Sea-level rise: New study sheds light on responsible ice sheets

Though it is well known that climate-induced sea level rise is a major threat, new research has found that previous ice loss events could have caused sea-level rise at rates of around 3.6m per century. This offers vital clues as to what lies ahead should climate change continue unabated. A team of scientists, led by researchers from Durham University, used geological records of past sea levels to shed light on the ice sheets responsible for a rapid pulse of sea-level rise in Earth's recent past. At the end of the last ice age, around 14,600 years ago, sea levels rose at ten times the current rate due to Meltwater Pulse 1A (MWP-1A); a 500 year, ~18m sea-level rise event.

Until now, the scientific community has not been able to agree about which ice sheet was responsible for this rapid rise, with the massive Antarctic Ice Sheet being a likely suspect, but some evidence pointing towards ice sheets in the Northern Hemisphere. The new study uses detailed geological sea-level data and state-of-the-art modelling techniques to reveal the sources of MWP-1A. Interestingly, most of the meltwater appears to have originated from the former North American and Eurasian ice sheets, with minimal contribution from Antarctica, reconciling formerly disparate views.

In addition to flooding vast areas of low-lying land, this unparalleled discharge of freshwater into the ocean –

comparable to melting an ice sheet twice the size of Greenland in only 500 years – will have disrupted ocean circulation, with knock-on effects for global climate. Knowing the source of the meltwater will improve the accuracy of climate models that are used to replicate the past and predict changes in the future.

The results are important for our understanding of ice-ocean-climate interactions which play a significant role in shaping terrestrial weather patterns. The findings are particularly timely with the Greenland ice sheet rapidly melting, contributing to a rise in sea levels and changes to global ocean circulation. Of the findings, lead author Yucheng Lin, in the Department of Geography at Durham University, notes: "Despite being identified over 30 years ago, it has been surprisingly challenging to determine which ice sheet was the major contributor to this dramatic rise in sea levels.

"Previously, scientists tried to work out the source of the sea-level rise based on sea-level data from the tropics, but the majority of those studies disagreed with geological records of ice sheet change. Our study includes novel information from lakes around the coast of Scotland that were isolated from the ocean due to land uplift following the retreat of the British Ice Sheet, allowing us to confidently identify the meltwater sources."

Co-author Dr Pippa Whitehouse, in the Department of Geography at Durham University, said: "The technique we have used allows us to really dig into the error bars on the data and explore which ice-melt scenarios were most likely. "We found that most of the rapid sea-level rise was due to ice sheet melt across North America and Scandinavia, with a surprisingly small contribution from Antarctica.

"The next big question is to work out what triggered the ice melt, and what impact the massive influx of meltwater had on ocean currents in the North Atlantic. This is very much on our minds today – any disruption to the Gulf Stream, for example due to melting of the Greenland Ice Sheet, will have significant consequences for the UK climate."

Rising sea levels due to warming climate pose a great risk to society, improving our understanding of why and how fast change could happen; thus helping us plan for the impacts.