

EXECUTIVE SUMMARY

The Commodity summary

- Coal prices are still higher by 144% than a year ago prices.
- Natural gas prices are down by 20% WTD and is lower by 34% 6MTD
- Steel HRC (North America) prices are down by 58% than a year ago prices.
- Crude Oil Brent prices went up by 8% WTD and Crude Oil WTI prices went down by 3% WTD. The prices of Crude oil Brent and WTI are lower by 30 and 31% 6MTD respectively.

The Currency summary

- US Dollar to Euro is stronger by more than 6% YTD but Euro has gained over USD by 11% 3MTD
- The US Dollar to CNY is stronger by more than 9% YTD

The Rig count summary

• The Rig counts in North America have gone down by 11% MTD and in Africa, it has gone up by 17% 3MTD

Project summary

- Oman awards \$500 million LNG contract
- SABIC, OQ and KPI Signed Agreement for World Scale Petrochemical Complex in Duqm
- Technip Energies secures \$265 million contract for Chevron-QatarEnergy JV project
- Saudi Arabia announces re-tendering of Taiba (3.6GW) and Qassim (3.6GW) IPP Projects
- India plans \$2.2-bln green hydrogen initiative
- Petronas awards EPCC contracts to JGC and Samsung Heavy Industries
- Egypt announces \$2.1 billion investment in oil and gas exploration

COMMODITY UPDATES

COMMODITY	UOM	LATEST PRICE	WTD %	MTD %	3MTD %	6MTD %	YTD %
Chromium							
	USD/MT	10,278. 04	2.40	6.22	6.11	-6.36	-4.21
Coal	USD/MT	442.14	-0.96	14.90	-8.65	1.41	143.75
Cobalt							
	USD/MT	42,438. 99	-2.75	-12.64	-23.60	-46.18	-40.89

Copper	USD/MT	8,337.5 0	-0.89	3.58	8.71	-7.91	-12.48
Crude Oil	USD/BBL	80.95	3.48	-5.13	-7.72	-30.20	9.90
Crude Oil Brent	USD/BBL	82.61	8.43	-6.82	-9.21	-29.68	10.03
Crude Oil WTI	USD/BBL	79.29	-2.84	-3.31	-6.11	-30.72	10.44
Iron Ore	USD/MT	110.43	1.10	22.46	11.98	-19.13	-0.45
Molybdenum	USD/MT	58,608. 90	5.81	39.25	59.72	52.98	43.01
Natural Gas	USD/MC F	5.18	19.63	-25.58	-36.83	-34.37	29.42
Nickel	USD/MT	29,695. 00	5.13	16.66	27.12	14.96	49.52
Steel HRC (FOB China)	USD/MT	574.50	-0.61	9.71	0.03	-21.72	-25.06
Steel HRC (N. America)	USD/MT	750.07	2.39	4.42	-15.15	-40.48	-58.16
Steel Rebar	USD/MT	630.52	2.79	12.51	2.84	-14.95	-18.75
Steel Scrap	USD/MT	380.00	-0.78	8.25	5.37	-0.67	-16.29

 $Source: Investing.com\ /\ Trading\ Economics\ /\ London\ Metal\ Exchange\ /\ MarketIndex.com.au\ /\ Oil Price.com$

Cod e	Descriptio n	Count ry	Units	Latest Exchan ge Rates	WTD %	MTD %	3M TD %	6MTD %	YTD %
EUR USD	1 EUR to USD	Euro Area	USD	1.0647	0.25	2.45	11.0 0	0.65	-6.02
USD CNY	1 USD to CNY	China	CNY	6.9638	-0.07	3.22	2.99	-4.07	-9.26

Source-Trading Economics

CURRENCY EXCHANGE RATE

Region Unit		Latest Count	WT D %	MT D %	3MT D %	6MT D %	YTD %
US Stocks of Crude Oil & Petroleum Products	Thousand Barrels	15,98,236.00	- 0.94	0.14	- 2.39	- 4.78	- 10.63

Source: US Energy Information Authority

SELECTIVE COMMODITY TRADERS AND PIPE MANUFACTURERS STOCK PRICES

STOCK PRICES

Name	Latest Value	Units	WTD%	MTD%	3MTD%	6MTD%	YTD%
ArcelorMitta I SA	26.66	USD	3.57	0.26	31.91	9.71	-18.37
Glencore PLC	558.00	GBP	1.82	4.53	18.37	23.25	49.60
NYSE American Steel Index	1,752.98	Index	1.90	1.14	28.11	16.15	10.86
Rio Tinto PLC	5,808.00	GBP	2.56	7.98	21.47	14.99	19.35
Tenaris SA	35.50	USD	5.50	4.94	40.43	33.96	68.49
Tubacex SA	1.98	EUR	0.00	-3.88	-4.81	-16.81	25.00

Source- Trading Economics / Wall Street Journal / CNBC

INTERNATIONAL RIG COUNTS

ACTIVE RIG COUNTS BY REGION									
Region	Latest Count	WTD %	MTD %	3MTD %	6MTD %	YTD %			
United Arab Emirates	51	*	-1.92	2.00	6.25	18.60			
GCC	223	*	0.45	9.85	4.69	21.86			
Middle East	327	*	0.93	6.86	4.47	18.48			
Africa	83	*	7.79	16.90	18.57	6.41			
Asia-Pacific	188	*	-2.08	3.30	3.87	3.87			
Europe	95	*	-5.94	-2.06	33.80	-3.06			
Latin America	185	*	-1.07	8.19	20.92	20.13			
North America	873	-10.28	- 10.55	-10.55	-3.54	29.14			
Total	1,751	*	-5.71	-2.88	3.43	19.69			

Source- Baker Hughes

(*) No weekly data available for those particular regions

NEWS OF THE WEEK

GULF COOPERATION COUNCIL (GCC)

UAE

• ADNOC L&S signs deal for Indian LNG terminal

ADNOC Logistics & Services (L&S) and Atlantic Gulf & Pacific International Holdings (AG&P) have signed their third charter deal to utilise Ghasha, ADNOC's LNG carrier, as a floating storage unit offshore India. Under the

terms of the agreement, the carrier will be used at AG&P's LNG Import Terminal in India, which will be commissioned in the second half of 2024. The agreement, valid for 11 years with the option of a four-year extension, strengthens the existing relationship between the two companies, which have previously entered two similar agreements for FSUs in India and the Philippines. The integrated terminal offshore India will have an initial capacity of 5 million tonnes per annum. Captain Abdulkareem Al Masabi, CEO of ADNOC L&S, said: "ADNOC L&S is in the midst of a major renewal project of its LNG fleet and, as we do so, we are repurposing our older vessels to extend their life, generating incremental value and new revenue streams. 23rd December 2022

• Gezhouba group and SIDEM named as EPC for Umm Al Quwain IWP

The Developer of Umm Al Quwain IWP, ACWA Power selected the EPC contractor for 150 million imperial gallons a day (682,000 m³/day) of desalinated water plant. The EPC contract has been awarded to the consrotium of China Gezhouba Group Company Ltd. (CGGC) and French company SIDEM. The project is located in Umm Al Quwain, UAE, about 60 kilometers north of Dubai. Chen Xiaohua, Party Secretary and Chairman of CGGC, and Mohammed Abunayyan, Chairman of the Board of ACWA Power, attended the signing ceremony of the project. Once commissioned, Umm Al Quwain IWP is one of the world's top 5 seawater desalination projects. Also, one of the largest seawater desalination projects undertaken by Chinese enterprises in the world, represents an important achievement of CGGC in practising the idea of green development, strengthening international multilateral cooperation and promoting the implementation of "UAE Water Security Strategy 2036" and high-quality development of the "Belt and Road" Initiative. As per the contract, the project will be commissioned in 33 months. 21st December 2022

Oman awards \$500 million LNG contract

Asyad Shipping, part of Oman's state-owned Asyad Group, has signed an agreement with South Korean shipyard Hyundai Samho Heavy Industries for the construction of a pair of state-of-the-art LNG carriers. State-owned Asyad Group noted in a post that the agreement signing, covering the supply of two new fifth generation LNG carriers, represents "another landmark in the group's expansion plans to bolster its energy logistics capabilities and meet growing global demand". According to the Korean shipyard, the order for the two LNG carriers is worth the equivalent of \$505.5 million. It added that the vessels are slated for delivery by mid-2026. **26**th **December 2022**

• Oman, Japan Ink MoU in Energy Field, Extend MoU in Oil and Gas Field

The Sultanate of Oman, represented by the Ministry of Energy and Minerals, and Japan, represented by its Ministry of Economy, Trade and Industry, today signed a Memorandum of Understanding (MoU) in the field of hydrogen, fuel ammonia and carbon recycling that includes Methanation. The two sides also signed the third extension of the MoU signed between the Ministry of Energy and Minerals and Japan Organization for Metals and Energy Security in the field of crude energy, natural gas and clean energy. The MoUs were signed by Eng. Salim Nasser Al Aufi, Minister of Energy and Minerals and Yasutoshi Nishimura, Japanese Minister of Economy, Trade and Industry. The first MoU aims to accelerate the Oman-Japan energy and resources cooperation and acknowledge the continued role and contribution of the Sultanate of Oman to Japan's energy security. **28**th **December 2022**

SABIC, OQ and KPI Signed Agreement for World Scale Petrochemical Complex in Duqm

OQ, SABIC and Kuwait Petroleum International (KPI) have signed a Project Development Agreement of a jointly owned petrochemical complex in the Special Economic Zone at Duqm (SEZAD), the Sultanate of Oman. The three companies aim to establish a petrochemical complex consisting of a steam cracker and derivative units and a natural gas liquid (NGL) extraction facility. They will conduct the necessary studies and collaborate using their wealth of technical and commercial experience to develop the project with unique attributes that make it globally competitive and profitable for all three partners. The agreement was signed by Talal Hamid Al Awfi – OQ Group CEO, Abdulrahman SalehAl Fageeh CEO (A) of SABIC, and Shafi Taleb Al Ajmi – CEO of KPI. Commenting on this agreement, Talal Al Awfi, said, "OQ is proud of this historic agreement with our partners SABIC and KPI. The agreement is a significant milestone reached between the partners and comes at an

OMAN

important time in Oman with the near completion of the OQ8 refinery project in SEZAD being undertaken by OQ and KPI through the OQ8 joint venture. This agreement also comes in line with Oman Investment Authority (OIA) plans to attract foreign investments to support realize Oman's vision 2040 in its endeavour to diversify Oman's economy. **29**th **December 2022**

• QatarEnergy signs agreement with QPD to continue Al-Karkara and A-Structures offshore fields development and production

QatarEnergy and Japan's Qatar Petroleum Development Company (QPD) have signed a new agreement for the continued development and production of the Al-Karkara and A-Structures oil fields, located in the territorial waters of the State of Qatar. This new 5-year agreement, which commences on 23 December 2022, succeeds the development and production sharing agreement signed in December 1997. Under the new agreement, QPD, which is owned by Cosmo E&P and Sojitz, will continue to act as the operator of the oil fields. Commenting on this occasion, His Excellency Mr. Saad Sherida Al-Kaabi, the Minister of State for Energy Affairs, the President and CEO of QatarEnergy, said: "We are pleased to continue our partnership with Qatar Petroleum Development Company (Japan) and to work together to continue the development and production of the Al-Karkara and A-Structures fields. The fields were initially considered non-commercial until QPD managed to prove their commercial viability in the late 1990s. The fields started production in March 2006, and since then have produced a total of 33.5 million barrels of crude oil. Al-Karkara and A-Structures are the first fields in the State of Qatar to achieve zero gas flaring by re-injecting the excess sour gas underground. 22nd December 2022

QATAR

• Technip Energies secures \$265 million contract for Chevron-QatarEnergy JV project

Technip Energies has been awarded a major contract worth over \$265 million by Chevron Phillips Chemical (CPChem) and QatarEnergy for its joint venture project, the Golden Triangle Polymers, along the Gulf Coast in Texas, US. The scope of work includes supply of proprietary cracking furnaces linked to the 2,000 kilo tonnes per annum (kta) ethane cracker unit for the Golden Triangle Polymers project. Technip Energies said this latest award was in line with its early engagement strategy with CPChem and QatarEnergy, which resulted in the selection of proprietary ethylene technology and includes the successful completion of the ethylene license and Process Design Package (PDP). The modularized cracking furnaces will feature seven of the largest capacity furnaces that Technip Energies has ever designed, it stated. The cracker is designed using modern emissions reduction technology and processes that result in lower greenhouse gas emissions than similar facilities in the US and Europe, it added. **29**th **December 2022**

• <u>L&T wins EPC contract for world's largest hydrogen plant in Saudi Arabia</u>

SAUDI ARABIA L&T will execute power grid and power generation works for the plant on an EPC basis. NEOM Green Hydrogen Co (NGHC) has named Indian contractor Larsen & Toubro (L&T) as the sub-EPC contractor for its massive green hydrogen plant in Saudi Arabia. Under the terms of the contract, L&T will execute power grid and power generation works for the plant on an EPC basis. NGHC's primary EPC contractor and system integrator Air Products (a joint venture partner) signed the agreement with L&T, which was named one of the top contractors in the Top 25 EPC contractors list. Located in NEOM, Saudi Arabia's \$500 billion futuristic city being developed in Tabuk, NGHC's mega-plant will integrate up to 4 GW of solar and wind energy to produce up to 600 tons per day of carbon-free hydrogen in the form of green ammonia as a cost-effective solution for transportation globally. Green ammonia output is expected up to 1.2 million tonnes. The plant at NEOM is scheduled for commissioning by 2026. 23rd December 2022

National oil companies expected to announce more projects driven by expansion plans

The Middle East is home to some of the world's largest conventional onshore and offshore oil and gas fields. The most prominent fields in the region include Ghawar and the Safaniya oil fields in Saudi Arabia, the Burgan oil field in Kuwait, the Rumaila oil fields in Iraq. According to APIOCRP, MENA's five-year energy investment portfolio in the next five years comprises a total investment of \$879 billion, which is a 9% increase over the investment projection for 2021 – 2025. Of all the projects in the pipeline for implementation, about 30% are in the execution phase, while the remaining 70% are in the planning stage. The increase in project expenditure is spearheaded by the GCC, with committed projects making up more than 45% of the Gulf States' total energy investments, according to a recent report by Oilfield Technology. National oil companies in the region have committed investments in the upstream sector to increase the country's oil and natural gas production in the coming years: Saudi Aramco targets to increase its sustainable production capacity to 12.3 million bpd by 2025, thereby bringing additional output to meet global energy requirements. The plan is to further raise the production capacity to 12.7 million bpd by 2026 before reaching 13 million bpd by 2027. The kingdom plans phase-wise expansion of the nation's production capacity .The Dammam field is forecasted to yield an additional 75,000 bpd by 2024, and the offshore Marjan and Berri fields are set to provide another 300,000 bpd and 250,000 bpd, respectively by 2025. The Zuluf field expansion is projected to add 600,000 bpd by 2026 and the Safaniyah development is set to increase production by 700,000 bpd by late 2027. 22nd December 2022

Saudi Arabia announces re-tendering of Taiba (3.6GW) and Qassim (3.6GW) IPP Projects

Saudi Power Purchasing Company (SPPC) announces it will be re-tendering Taiba and Qassim IPP projects with provision for Carbon Capture and Sequestration (CCS) readiness. In alignment with KSA's Saudi Green Initiative, and its stated greenhouse gases (GHGs) net-zero ambition by 2060 through deployment of technologies for circular carbon economy approach in addition to the energy sector's objectives to ensuring security of supply, diversity of market participation, fair competition, and transparency, the Saudi Power Procurement Company will be re-tendering Taiba and Qassim projects into four (4) smaller combined cycle power projects of 1800MW capacity each with provision for Carbon Capture and Sequestration (CCS) readiness. All Taiba and Qassim qualified developers are automatically qualified for the new projects while other interested participants can submit their qualification documents starting today. 29th December 2022

Saudi Arabia Discovers Two New Unconventional Gas Fields

Prince Abdulaziz bin Salman bin Abdulaziz, Minister of Energy, Saudi Arabia announced in a statement that Saudi Aramco has discovered two new unconventional natural gas fields in the eastern region. Awtad unconventional gas field has been discovered southwest of Ghawar field, 142 km southwest of Al-Hofuf. Gas flowed from Awtad-108001 well at a rate of 10 million standard cubic feet daily, along with a daily 740 barrels of condensate, and from Awtad-100921 well at a rate of 16.9 million standard cubic feet daily, along with a daily 165 barrels of condensate. Prince Abdulaziz added that AlDahna unconventional gas field has also been discovered 230 km southwest of Dhahran. Gas flowed from AlDahna-4 well at a rate of 8.1 million standard cubic feet daily, and from AlDahna-370100 well at a rate of 17.5 million standard cubic feet daily, along with a daily 362 barrels of condensate. 27th December 2022

Saudi Arabia and China partner to develop refineries

Saudi Aramco, Saudi Basic Industries Corporation and Chinese energy company Sinopec have signed agreements to develop refining complexes in both Saudi Arabia and China, the Saudi NOC announced on Sunday. The first is a heads of agreement to develop the Gulei II integrated petrochemicals complex in Gulei, China. The project will consist of a 320,000-bpd refinery and a 1.5-million-tonnes-per-year petrochemicals cracker. It is expected to be commissioned by the end of 2025. The second is an MoU for economic and technical feasibility studies on a new petrochemicals complex in Yanbu, Saudi Arabia. Expected costs of both projects were not disclosed. Saudi Aramco aims to expand its liquids-to-chemicals capacity to 4 billion bpd by 2030. These projects represent an opportunity to contribute to a modern, efficient and integrated downstream sector in both China and Saudi Arabia," said Mohammed Y. Al Qahtani, senior vice-president of downstream of Saudi Aramco. "They also underpin our long-term commitment to remain a reliable supplier of energy and chemicals to Asia's largest economy. 21st December 2022

ASIA EXCLUDING GULF COOPERATION COUNCIL (GCC) **CLG** awarded contract for large slurry hydrocracking units Chevron Lummus Global LLC (CLG) has announced that Shandong Yulong Petrochemical Co. Ltd. has selected EST, which CLG licenses, for a slurry residue hydrocracking unit in Shandong Province, China. The unit will produce naptha, diesel and vacuum gas oil once it is complete, and with a capacity of 3 million tpy, it will be one of the largest in the world. By selecting the EST technology and technical solutions, Yulong will be able **CHINA** to achieve the highest conversion from residue to distillate products, and supply a maximum amount of feedstock to its petrochemical production units. Yulong will also be able to convert a large amount of high sulfur residue to useful transportation fuels and petrochemical feedstock while removing sulfur and other contaminants. The project scope includes the technology license, engineering, proprietary reactor internals and catalyst supply. 21st December 2022 TotalEnergies and Eni announce Cyprus gas discovery This follows a significant gas find in the Block 6 offshore project in August. France's TotalEnergies and Italian energy company Eni have announced a natural gas discovery at the Zeus-1 well off the Mediterranean island of Cyprus. The Zeus-1 well encountered 105m of recoverable resources in carbonate reservoirs, re-enforcing the "promising" outlook for the area and its development, TotalEnergies said on Wednesday. In August, TotalEnergies and Eni announced a "significant" gas discovery at the Cronos-1 well in Block 6, which is equally **CYPRUS** owned by the two companies. This success at Zeus-1 further enhances the potential of Block 6, only four months after the Cronos-1 discovery," said Kevin McLachlan, senior vice president, exploration at "New data gathered from the well will assist our ongoing assessment of fast-track TotalEnergies. development options for the discovered resources." TotalEnergies is working towards developing its new Lebanon Block 9 offshore gas project from next year. Last month, the company and Eni signed a "framework agreement" with Israel to enforce a maritime boundary accord that was agreed with Lebanon last month. 21st December 2022 IIFCL sanctions Rs 8,244 cr for 20 port projects - Construction Week India (constructionweekonline.in) IIFCL will also be providing financial assistance of Rs 1,000 crore to another greenfield non major port in Andhra Pradesh with proposed capacity of 30mtpa. State-owned IIFCL has sanctioned Rs 8,244 crore loans to about 20 projects to help add 836 million tonnes per annum (mtpa) of ports capacity, which is one-fourth of India's total cargo volumes. As per details, India's total port capacity is about 2,600mtpa. Of this, 12 major ports' cargo handling capacity stood at 1,598mtpa as of March 2022. India Infrastructure Finance Company **INDIA** (IIFCL) has been extending its financial support to many strategic port projects, including the Paradip Port, Essar Vizag port, Tuticorin, Krishnapatnam, Karaikal. The latest is the Ramayapatnam port, which reinforces our belief in this very important sector and the potential it holds to improve connectivity, bring down logistics costs, and provide a boost to the economy, according to IIFCL MD PR Jaishankar. The total capital expenditure by both the Centre and state governments in the port sector between FY20 and FY25 is estimated at Rs 121,194 crore under the National Infrastructure Pipeline. For projects executed by the Centre, about 58 identified projects are planned for implementation in the period 2020-25. So far, the state-owned

infrastructure financing firm has sanctioned around 650 projects with a total outlay of Rs 11.5 lakh crore and out of them, 500 are public private partnership (PPP) projects. 21st December 2022

• India plans \$2.2-bln green hydrogen initiative

India's government plans to launch a USD 2.2-billion green hydrogen incentive programme, Reuters reported on Tuesday. The proposed initiative aims to cut the price of producing green hydrogen by 20% over the next five years by increasing the scale of activity in the sector. According to sources, the current cost of producing green hydrogen is between USD 3.63 and USD 4.83 per kilogramme. It is expected the programme will be launched in February as part of the government's next fiscal year budget. Major Indian energy companies such as Reliance Industries, Indian Oil Corporation, NTPC, Adani Enterprises, JSW Energy and ACME Greentech Solutions have plans to build green hydrogen assets in the country. **27th December 2022**

• Front runner emerges for ONGC's \$670 million Daman development prize offshore India

Leading Indian engineering and fabrication contractor has emerged as the front runner for a sizeable offshore job from state-controlled Oil & Natural Gas Corporation (ONGC) for the Daman upside gas development project (DUDP) off the country's western coast. Two people close to the bid process told Upstream that commercial offers were recently opened by ONGC, with the contract likely to be awarded within days. "L&T is the [lowest] bidder and ONGC is expected to award the contract within days," the person noted. A pairing of India's Afcons with Indonesia's Gunanusa Utama Fabricators emerged a distant second in the bidding, offering close to \$810 million, project watchers suggested. Workscope The DUDP workscope includes four new wellhead platforms, infield pipelines, a new process gas compressor module and the addition of low-pressure compression at the existing process platform, a second person said. The preferred contractor will also be responsible for carrying out topsides modifications at existing wellhead platforms. 20th December 2022

• Future secured for BP's Indonesian LNG project

British supermajor BP and its partners have secured a 20-year extension for the Tangguh production sharing contract in Indonesia, securing the future of a key liquefied natural gas project where carbon capture, utilisation and storage (CCUS) is planned in the next development phase. "With the extension, we will be able to continue our important work to meet the country's energy demand by expediting exploration activities, contributing to the state's revenue and further supporting the local economy. With our recent addition of other blocks in Indonesia, this also reflects our confidence in the government of Indonesia as we continue to invest in country and deliver energy solutions," said Kathy Wu, BP regional president, Asia Pacific gas & low carbon energy. Current production is 1.4 billion cubic feet per day of gas, which will increase to 2.1 Bcfd once Train 3, which the government has designated a project of national strategic importance, comes into operation. 27th December 2022

INDONESI

Α

Indonesia awards 2 oil-gas exploration blocks to boost production

The Paus working area in offshore East Natuna, with an estimated 2.5 trillion cubic feet of gas, was awarded to Blue Sky Paus Ltd, the director general, Tutuka Ariadji, said. Indonesia has awarded another two oil and gas exploration blocks to domestic firms as it seeks to boost production to meet growing energy demand, the energy ministry's director general of oil and gas said on Wednesday. The Paus working area in offshore East Natuna, with an estimated 2.5 trillion cubic feet of gas, was awarded to Blue Sky Paus Ltd, the director general, Tutuka Ariadji, said. Authorities also awarded the Jabung Tengah working area, estimated to have 200 million barrels of oil equivalent, to a consortium of PT Cipta Niaga Gemilang and PT Rukun Raharja. The companies had committed to investing \$31.2 million in the two blocks over the next three years, Tutuka said. This brings the number of blocks awarded to six this year, of which two are production blocks. The energy ministry is preparing six oil and gas working areas to be offered in a new bidding round next year, he added. Once a member of OPEC, Indonesia become a net importer of oil in early 2000s as production dwindled. It is targeting reaching 1 million barrels per day of oil lifting by 2030. In the January-September period this year, Indonesia's oil lifting stood at 610,100 bpd, below a target of 703,000 bpd 28th December 2022

Iraqi PM pushes Basra Desalination Project

IRAQ

The Prime Minister, Mr. Muhammad Shia Al-Sudani, has chaired a meeting this week discussing the seawater desalination project in Basra Governorate. During the meeting, they discussed "the acceleration of contracting and financing mechanisms." The Prime Minister affirmed the government's intention to involve reliable international companies in the implementation of the project. The meeting was attended by the Minister of Construction, Housing and Municipalities, the Chairman of the Board of Advisors and a number of officials in the concerned sectors, as well as representatives of the Austrian consulting firm ILF. The project will also include the construction of a new power station, in addition to providing water to increase production at Basra's oil fields. **12**th **December 2022**

• 10 hydrocarbon discoveries made in Malaysia

Petronas and its Petroleum Arrangement Contractors (operators) in Malaysia this year have notched up a combined 10 discoveries on the back of buoyant exploration drilling, with the star of the show being Petronas Carigali's significant Nahara find. "The year 2022 has been a good year for exploration in Malaysia. I am very pleased with the increased exploration activities where 16 wells were completed, with two more in progress, doubling 2021's figure," said Petronas senior vice president of Malaysia Petroleum Management (MPM), Mohamed Firouz Asnan. Next year could deliver even greater success with as many as 30 exploration wells planned in 2023. In the emerging Western Luconia province, ConocoPhillips drilled three exploration wells on Block WL4-00, discovered gas with its Gagau-1 probe while the Salam-3 and Benum-2 appraisal wells confirmed the extension of oil and gas accumulations in adjacent fault blocks. In the mature Baram province, Thailand's national upstream company PTTEP made another gas discovery Paprika on Block SK 410B, where it discovered the giant Lang Lebah gas field in 2019. 23rd December 2022

• PTTEP makes sweet gas discovery offshore Malaysia

MALAYSIA

Thailand's national upstream company PTTEP has made another gas discovery in Malaysia with its Paprika-1 exploration well on Block SK 410B, offshore Sarawak, and is already considering development options. The Paprika wildcat, which was spudded in July, was drilled to a total depth of 3348 metres by Velesto Energy's jack-up Naga 5 (Dragon 5) and encountered gas pay in clastic reservoirs. PTTEP and its Block SK 410B partners Kufpec and Petronas Carigali earlier made the Lang Lebah giant gas discovery on the same block. "Paprika-1 is PTTEP's first exploration well in Malaysia this year and is successfully completed with a sweet gas discovery which enables the company to move toward further assessment for the development of the field," said the company's chief executive Montri Rawanchaikul. SK 410B is located in shallow waters, approximately 90 kilometres off the coast of Miri, Sarawak, and is adjacent to Block SK 417 where PTTEP last year made the Nangka sweet gas discovery. 23rd December 2022

• Petronas awards EPCC contracts to JGC and Samsung Heavy Industries

Japan's JGC and South Korea's Samsung Heavy Industries will build Petronas' third floating liquefied natural gas (FLNG) project after winning the engineering, procurement, construction and commissioning (EPCC) contract. Industry shipping publication TradeWinds reported the pair beat a rival consortium of Saipem and Wilson Offshore & Marine after a decision was made this week. Sources priced the nearshore ZFLNG project at around \$3 billion, according to TradeWinds. The project, with a minimum capacity of 2 million tonnes per annum (MTPA) is a first of its kind in Malaysia, Petronas said last December, when it announced the dual FEED design competition between the rival consortiums for its nearshore FLNG project in Sabah in Malaysia. The FLNG project, which Petronas refers to as a "nearshore liquefied natural gas (LNG) plant" is planned to be ready for start-up by end of 2026. Upon completion, the nearshore LNG plant, dubbed ZFLNG, will increase Petronas' LNG production from floating LNG facilities from 2.7 mtpa to 4.7 mtpa. 23rd December 2022

TURKEY

• Turkey's Black Sea Gas Find Now Amounts to 710 bcm

The total volume of natural gas Turkey has discovered in the Black Sea now amounts to 710 billion cubic meters (bcm) after a new field was located and a previous find was revised higher, President Tayyip Erdogan

said on Monday. Speaking after a cabinet meeting, Erdogan said Turkey had discovered a new reserve of 58 bcm in the Caycuma-1 field, in addition to revising up an estimated volume in the Sakarya field to 652 bcm from the previous 540 bcm. "As a result of the analysis of the data, we have revised the previously declared 540 billion cubic meters of reserve to 652 billion cubic meters," Erdogan said, adding that Turkey had drilled 13 wells in the Sakarya field. "With our new discovery at Caycuma-1, our gas reserve in the Black Sea has risen by 170 billion cubic meters to 710 billion cubic meters," he said. Erdogan said last month that Turkey is on track for the Sakarya gas field to go online in 2023. 27th December 2022 **AFRICA Biggest Gas Projects Coming Online in 2023 in Africa** Africa has identified natural gas amounting to 620 trillion cubic feet (tcf) of proven reserves as the energy resource of choice to address the continent's energy poverty, drive socioeconomic development and ensure **AFRICA** a just and inclusive energy transition. In light of this, and in recent years, a number of large-scale projects have kicked off that are set to usher in a new era of energy access and industrialization across the continent. As such, the African Energy Chamber, in its 'State of African Energy: 2023 Outlook,' explores the biggest natural gas developments that are set to come online in Africa in 2023. 26th December 2022 Eni awards contract for FLNG facility to Wison in Congo The proposed 2.4MTPA FLNG is planned to be deployed offshore Congo Brazzaville.Italian firm Eni has awarded major engineering, procurement, construction, installation, and commissioning (EPCIC) contract to Wison (Nantong) Heavy Industry for a floating liquefied natural gas (FLNG) facility. With a production capacity of 2.4 million tonnes per annum (MTPA) of liquefied natural gas, the proposed FLNG is **CONGO** planned to be deployed offshore Congo Brazzaville. The 380m-long and 60m-wide FLNG unit will also have capacity to over 180,000 cubic meters of LNG and 45,000 cubic meters of LPGs. To be anchored at a waterdepth of around 40m, the facility will be the second of its kind to be deployed in the country. The first one is the 0.6 MTPA Tango FLNG, which is due to start production in 2023. Eni said in a statement: "LNG production capacity on Marine XII will reach 3 million tonnes/year (over 4.5 billion cubic meters/year) in 2025. 23rd December 2022 Egypt announces \$2.1 billion investment in oil and gas exploration Egypt has announced a total investment of \$2.1 billion in oil and natural gas exploration plans until 2025, Minister of Petroleum and Mineral Resources Tarek El-Molla said in a meeting recently. The investments were announced for the Mediterranean Sea in partnership with major international companies, El-Molla **EGYPT** noted. Based on the preliminary findings, the new explorations are expected to result in promising discoveries that would support the national economy, El-Molla added. El-Molla also talked about recent development in the Soda Ash project in New Alamein's Industrial Zone with total investments of around \$500 million. 26th December 2022 **EUROPE** IPCEI grant awarded to Neste boosts Porvoo refinery's green hydrogen projects Neste became the first Finnish company to receive IPCEI status from the European Commission for its hydrogen projects. In December 2022, Business Finland awarded Neste with a public funding of EUR 27.7 million for green hydrogen project aiming to develop solutions for renewable hydrogen production. In July **FINLAND** 2022, Neste became the first Finnish company to receive IPCEI (Important Project of Common European Intere hydrogen projects, which enabled the company to apply for the public funding now granted. EU IPCEI projects promote interests of Europeans by supporting innovation projects in different EU Member States. In September 2022, Neste launched a strategic study on transitioning its Porvoo refinery in the long-term into a globall If implemented, the transformation path would result in replacing crude oil with renewable and

recycled raw materials in projects are an essential part of the planned transformation and the company's goal to achieve carbon neutral product by 2035. **24**th **December 2022**

• Lhyfe signs LOI to supply Schaeffler plant with green hydrogen

Lhyfe, one of the world's leading producers of green hydrogen, and the Schaeffler Group, a leading global supplier to the automotive and industrial sectors, have agreed on a Letter of Intent (LoI) for the production and purchase of green hydrogen. The aim is to build and operate an electrolysis plant on Schaeffler's factory premises in Herzogenaurach. With a capacity of up to 15 megawatts (MW), the plant will produce regional green hydrogen on an industrial scale. Schaeffler intends to not only make its own production climate-neutral, but also drive decarbonisation forward in the region. The goal is to supply the region with approx. 3.7 tons of green hydrogen every day, starting in 2025. Potential customers include municipalities and hydrogen filling stations. The waste heat generated by electrolysis will be fed into the industrial processes within the Schaeffler plant. The switch from fossil fuels to renewable energies plays a central role in our goal of climateneutral production until 2030," says Andreas Schick, member of the Board of Managing Directors for Production, Supply Chain Management and Purchasing at Schaeffler AG. "By partnering with Lhyfe, we have managed to team up with one of the most innovative companies to execute on the green hydrogen plant on our premises in Herzogenaurach. 22nd December 2022

• Norway's Vaar Energy makes new Barents Sea gas discovery

Norwegian independent Vaar Energy has made a gas discovery in the Barents Sea with the Lupa well, drilled near the Goliat field. A preliminary estimate suggested that the new find was on the scale of 57 million to 132 million barrels of oil equivalent recoverable, or between 9 billion and 21 billion cubic metres in recoverable gas resources. The Norwegian Petroleum Directorate (NPD) said the Lupa well was drilled about 27 kilometres northeast of Goliat, in the southern part of the Barents Sea, and 85 kilometres from Hammerfest. "Well 7122/9-1 encountered a 55-metre gas column in the Havert Formation, in sandstone layers totalling 46 metres with moderate to good reservoir quality. The gas/water contact was not encountered," the NPD said, adding that "in the Orret Formation, the well encountered an aquiferous sandstone reservoir with poor to moderate reservoir quality". Another offshore exploration well on the Goliat play, which Vaar has named Countach, will be drilled on Block PL 229, with potential for 41 million boe, according to Vaar. Vaar is partnered by Aker BP subsidiary ABP in the Luna project and by Equinor at Countach. Both wells are being drilled using the rig Transocean Enabler. 23rd December 2022

• Commitment at large greenfield developments in 2023

Petrobras to tender for eighth flotel for work offshore Brazil

Analytics company Wellingance announced Final investment decisions (FIDs) are being planned for a number of large untapped fields in the UK North Sea next year. Welligence announced alongside the announced FIDs planned for Cambo and Rosebank, decisions are expected on Perth, Bentley and Bressay in the North Sea. "Commitment at large greenfield developments, including Cambo and Rosebank, is expected. We may see some progression towards FID at the very last of the large, undeveloped fields including Perth, Bentley and Bressay." Bentley and Bressay. EnQuest acquired operatorship of both Bentley and Bressay in 2021; large oilfields close by to one-another; 85miles south-east of Shetland in the Northern North Sea. EnQuest announced in March that they added almost 250m of barrels of oil equivalent to its 2C reserves and that it was exploring a range of development options. They added that a field development plan would be advanced in 2022. Bentley lies less than 10miles from EnQuest's producing Kraken field. 27th December 2022

NORTH & SOUTH AMERICA

BRAZIL

Brazilian oil giant has six such units in operation and recently chartered a seventh vessel. Brazilian statecontrolled oil company Petrobras has launched an international tender to contract another flotel, as it takes
steps to increase its fleet of accommodation and maintenance units to eight. Petrobras invited contractors

GERMANY

NORWAY

UK

expected to include Prosafe, OOS International, PACC Offshore Service Holdings (POSH) and Floatel International to submit commercial bids on 11 January, sources told Upstream. Petrobras is offering a 450-day contract, renewable for the same period. The chartered flotel must be ready to begin operations 30 days after signing of the contract. **23**rd **December 2022**

• PGS awarded Petrobras 4D production contract offshore Brazil

Petrobras awarded PGS a significant 4D production contract over the Barracuda-Caratinga field in the Campos basin offshore Brazil. Mobilization is scheduled to start in Q2 2023 and acquisition is expected to be completed in early 2024. The Ramform Victory will most likely be rigged to acquire the Barracuda-Caratinga 4D survey, supported by PGS Apollo as a source vessel. "Our visibility for 2023 is improving with increasing rates. To optimize our vessel resources during the summer season next year we will most likely use the Ramform Victory to acquire the Barracuda-Caratinga 4D survey," says President & CEO of PGS, Rune Olav Pedersen. 22nd December 2022

• Texas Oil & Gas Pipeline and Facility Projects Dec 21, 2022

USA

Texas oil & gas pipeline and facility project permits last 7 days report dated Dec 21, 2022 is tracking 36 Oil & Gas and Mid Stream Operators that had 57 pipeline and facilities approved permits. Top Oil & Gas Operators approved for a facility permits include; Oxy (7), Ring Energy (7), Pioneer (4) Top Counties approved for a facility permits include; Andrews (5), Ector (3), Glasscock (3) Top Oil & Gas Operators approved for a pipeline permits include; Enterprise New well permits the last 10 days for Texas, Oklahoma, New Mexico and Louisiana includes 158 Operators and 598 permits. Top Oil & Gas Operators approved for a facility permits include; Pioneer Natural (27), Devon Energy (30), Diamondback Energy (21) Well permits by State; Texas (432), New Mexico (83), Oklahoma (48), Louisiana (35) Well Permits by top County; LEA (62), REEVES (38), Martin (53). 21st December 2022

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