

GERAB

BULLETIN

Weekly News



EXECUTIVE SUMMARY

The Commodity summary

- Crude Oil Brent prices are trading higher by 8% WTD and Crude Oil WTI prices are trading higher by 10% WTD but they are trading lower by 19% than a year ago prices.
- Coal prices are trading lower by 50% 6MTD
- Iron ore prices in downtrend and trading lower by 22% YTD.
- Steel HRC(North America) prices are in uptrend and is trading higher by 54% 6MTD
- Natural Gas prices were up by 6% WTD but trading lower by 67% YTD

The Currency summary

- Euro has gained strength against USD and is stronger by 13% 6MTD
- The US Dollar to CNY is stronger by more than 8% YTD

The Rig count summary

- The Rig counts in Africa have gone up by 20% 6MTD and the rig counts in North America have gone down by 14% 3MTD.

Project summary

- Kuwait Oil Company awards \$76 million oil flow lines contract
- 12,000km-long Water Project In Saudi Arabia Officially Launches
- Saudi Arabia's PPP Project Pipeline Launched with 200 Projects in 17 Sectors
- Air Products to build new nitrogen plants in Malaysia
- L&T unit lands over \$852mIn Middle East EPCI contracts
- Contract awarded for construction of wastewater treatment plant in Mbezi Beach, Tanzania
- A-Gas announces multi-million-dollar New Zealand expansion
- Tellurian in \$1bn deal for Driftwood LNG project land, shares surge
- Multi-billion-dollar clean ammonia facility planned for West Virginia
- Sinopec Joins Qatar's North Field East (NFE) expansion Project USD 30B

COMMODITY UPDATES

COMMODITY	UOM	LATEST PRICE	WTD %	MTD %	3MTD %	6MTD %	YTD %
Chromium	USD/MT	10,221.45	-0.49	-1.18	-3.99	8.42	-11.68
Coal	USD/MT	214.01	-1.94	8.25	-46.78	-50.29	-36.48
Cobalt	USD/MT	36,332.18	1.17	5.08	-7.97	-35.47	-58.06
Copper	USD/MT	8,881.00	-1.37	0.16	-1.22	17.51	-12.69
Crude Oil	USD/BBL	83.57	8.94	9.67	2.38	-7.19	-19.61

Crude Oil Brent	USD/BBL	85.63	8.23	8.18	1.37	-8.12	-19.32
Crude Oil WTI	USD/BBL	81.51	9.70	11.28	3.48	-6.20	-19.91
Iron Ore	USD/MT	121.05	-3.94	-5.06	0.43	26.96	-22.36
Molybdenum	USD/MT	45,621.45	-30.94	-36.09	-33.27	10.56	7.52
Natural Gas	USD/MCF	2.30	5.62	-8.06	-37.37	-63.71	-67.21
Nickel	USD/MT	23,555.00	1.64	0.30	-17.33	7.05	-28.97
Steel HRC (FOB China)	USD/MT	626.00	-4.13	-4.69	1.52	12.74	-26.38
Steel HRC (N. America)	USD/MT	1,295.21	3.27	6.31	62.81	53.55	-20.65
Steel Rebar	USD/MT	635.82	-1.58	-5.59	-3.60	11.62	-26.92
Steel Scrap	USD/MT	434.00	-0.23	-3.24	4.78	21.67	-27.68

Source: Investing.com / Trading Economics / London Metal Exchange / MarketIndex.com.au / OilPrice.com

CURRENCY EXCHANGE RATE

Code	Description	Country	Units	Latest Exchange Rates	WTD%	MTD%	3MTD%	6MTD%	YTD%
EURUSD	1 EUR to USD	Euro Area	USD	1.0995	0.69	2.48	1.55	12.53	0.93
USDCNY	1 USD to CNY	China	CNY	6.8779	0.06	-0.38	-2.55	4.14	-7.87

Source- Trading Economics

CRUDE OIL STOCK

Region	Unit	Latest Count	WTD %	MTD %	3MTD %	6MTD %	YTD %
US Stocks of Crude Oil & Petroleum Products	Thousand Barrels	16,04,231.00	0.43	0.43	-0.18	-1.21	-5.43

Source: US Energy Information Authority

SELECTIVE COMMODITY TRADERS AND PIPE MANUFACTURERS STOCK PRICES

STOCK PRICES

Name	Latest Value	Units	WTD%	MTD%	3MTD%	6MTD%	YTD%
ArcelorMittal SA	29.32	USD	4.27	2.55	-5.94	36.25	-10.39
Glencore PLC	483.60	GBP	5.74	5.43	-13.40	-0.96	-8.77
NYSE American Steel Index	1,907.80	Index	5.38	1.76	-2.87	27.05	-6.69
Rio Tinto PLC	5,520.00	GBP	4.25	-0.50	-11.24	13.16	-10.69
Tenaris SA	29.18	USD	3.66	-5.54	-16.94	1.92	-11.58
Tubacex SA	2.62	EUR	-2.60	9.62	18.55	42.39	39.36
Woodside Energy Group	34.37	AUD	1.40	0.63	-6.36	5.25	7.22

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	52	*	-1.89	0.00	4.00	26.83
GCC	214	*	-1.38	-1.83	2.88	5.94
Middle East	318	*	-1.24	-0.93	3.58	4.95
Africa	89	*	3.49	5.95	20.27	9.88
Asia-Pacific	195	*	3.72	6.56	1.56	11.43
Europe	109	*	5.83	1.87	9.00	57.97
Latin America	183	*	1.10	5.78	2.23	15.09
North America	875	-1.80	-1.80	-13.88	-10.53	10.62
Total	1,769	*	-0.11	-6.10	-3.33	12.10

Source- Baker Hughes

(*) No weekly data available for those particular regions

NEWS OF THE WEEK

GULF COOPERATION COUNCIL (GCC)

UAE

- Dubai's Empower adds new district cooling plant with a cooling capacity of 47,000 Refrigeration Tonnes (RT)**

The new plant will serve the residential community of the Dubai Land Residence Complex (DLRC), one of the prominent residential destinations in the city that features many modern facilities including green parks, libraries, mosques, hotels, educational institutes, medical facilities, and shopping centres. Emirates Central Cooling Systems Corporation PJSC (Empower), the district cooling services provider, announced the commencement of operations of its new district cooling plant in Dubailand, with a cooling capacity of 47,000 Refrigeration Tonnes (RT). The new plant will serve the residential community of the Dubai Land Residence Complex (DLRC), one of the prominent residential destinations in the city that features many modern facilities including green parks, libraries, mosques, hotels, educational institutes, medical facilities, and shopping centres. The number of buildings connected to the new plant in Dubailand is set to reach more than 250, including mixed-use buildings. Last year, Empower awarded a construction and outfitting contract worth AED193 million for the new plant in Dubailand, which is one of the next-generation modern and environmental-friendly plants that leverages international standards and technologies. **10th April 2023**
- Quartet set to battle for Adnoc expansion project on Abu Dhabi's largest offshore oilfield**

State giant aims to expand production capacity of its Upper Zakum oilfield to up to 1.2 million bpd. Four contracting giants are set to compete for a sizeable contract from Abu Dhabi National Oil Company (Adnoc) for the expansion of its giant Upper Zakum offshore oilfield. Adnoc is greatly expanding the capacity of some of its largest offshore oilfields, as it aims to achieve a 5 million barrels per day production capacity by 2027, up from the existing 4 million bpd. Upper Zakum is Abu Dhabi's largest producing offshore oilfield in the Persian Gulf and the most recent expansion project is aimed at expanding the field's production to. **9th April 2023**
- RFP for key Sharjah water project issued to pre-qualified bidders**

This project is in line with Sewa's principle objectives to augment its water production capacity to meet the present and future water requirements in the northern emirate. Sharjah Electricity, Water and Gas Authority (Sewa) has announced that the request for proposal (RFP) for the 90 MIGD Hamriyah IWP project has been issued to the eight pre-qualified bidders. This project is in line with Sewa's principle objectives to augment its water production capacity to meet the present and future water requirements in the northern emirate. According to Sewa, the project is expected to be commissioned by Q3 2026. The Sharjah utility would select the preferred bidder for the project post the evaluation of the proposals received from bidders. The deadline for submitting the bids has been set for August. **10th April 2023**

KUWAIT	<ul style="list-style-type: none"> <u>Kuwait Oil Company awards \$76 million oil flow lines contract</u> Combined Group Contracting has announced in a statement that it has secured a five-year contract worth \$76.5 million for oil flow lines project issued from Kuwait Oil Company. The company states that the works includes construction of flow lines and associated works in Umm Niqa And South Ratqa in Kuwait. Headquartered in Kuwait, Combined Group Contracting is currently working on several infrastructure, power and oil and gas projects. Last year, the company had secured a \$58 million contract from Kuwait Port Authority for its Shuaiba Port expansion project. The scope of work involves rehabilitation, upgrade and expansion of the existing utilities and infrastructure. 11th April 2023
OMAN	<ul style="list-style-type: none"> <u>Oman signs deal with Japanese firms to build low-carbon plant in Duqm</u> Oman's Public Authority for Special Economic Zones and Free Zones has signed an agreement with Japanese steel manufacturer Kobe Steel and Mitsui & Co., to develop low-carbon iron metallic project in the Special Economic Zone at Duqm (SEZAD). The project is expected to produce five million tonnes of Direct Reduced Iron (DRI) annually. By using technically and commercially proven production methods, Kobe Steel and Mitsui aim to provide a near-term decarbonisation solution to the steel making industry. In the long run, the project targets further decarbonisation through measures such as replacement of natural gas with hydrogen and carbon capture, as well as utilization and storage, with a goal to expand production capacity. Further, Kobe Steel and Mitsui will conduct the detailed business study, with an aim to commence low carbon iron metallics production by 2027. The product will be supplied to businesses in Asian and other global markets such as Europe. 11th April 2023
QATAR	<ul style="list-style-type: none"> <u>Sinopec Joins Qatar's North Field East (NFE) expansion Project –USD 30 B</u> QatarEnergy has announced the signing of a definitive partnership agreement with China Petrochemical Corporation (Sinopec) for the North Field East (NFE) expansion project, the largest project in the history of the LNG industry. The agreement was signed by His Excellency Mr. Saad Sherida Al-Kaabi, the Minister of State for Energy Affairs, the President and CEO of QatarEnergy, and Dr. MA Yong-sheng, the Chairman of Sinopec in a special signing ceremony held today at QatarEnergy's headquarters and attended by senior executives from both companies. The agreement marks the entry of Sinopec as a shareholder in one of the NFE joint venture companies that own the NFE project, one of the most critical projects in the global LNG industry. Pursuant to the terms of the agreement, QatarEnergy will transfer to Sinopec a 5% interest in the equivalent of one NFE train with a capacity of 8 million tons per annum (MTPA). This agreement will not affect the participating interests of any of the other shareholders. Noting the November 2022 agreement to supply Sinopec with 4 MTPA of LNG from the NFE project, His Excellency Minister Al-Kaabi said: "That agreement was not only the first NFE LNG supply agreement to be announced, but also the longest LNG supply agreement in the history of the industry. Today, Sinopec will join Qatar's LNG family becoming the first Asian shareholder in the NFE project. 12th April 2023
SAUDI ARABIA	<ul style="list-style-type: none"> <u>12,000km-long Water Project In Saudi Arabia Officially Launches</u> A 12 000km-long Water Project in Saudi Arabia has been launched. The project aims to be one of the world's largest desalinated water networks. It will produce up to 9.4 million cubic meters of water per day for the country. The project's plan includes the digging of a river that would span 11 meters in width 12,000 kilometers in length, and four meters in depth. The 12 000km-long Water Project in Saudi Arabia strives to surpass the length of the Great River Nile. As reported in the TV Series, Seen, the project's ambitious goals will require the use of anti-corrosion pipes. The popular Saudi journalist of the series, Ahmad al shugairi, further added that each pipe would need a diameter of 2.25 meters. Currently, Saudi holds the top position as a global producer of desalinated water. Annually, the country generates well over 1,006 billion cubic meters, of which accounts for 18% of worldwide production. Primarily, the network's facilitation is by a government-controlled entity. The Saline Water Conversion Corporation, on a global scale, is responsible for

the production of the largest volume of desalinated water. While still commenting on the project, Ahmad al shugairi said that the project is a reflection of the amount of effort and commitment towards the creation of underground rivers. **6th April 2023**

- **L&T secures major oil and gas contracts in Saudi Arabia**

The hydrocarbon unit of Indian EPC contractor Larsen & Toubro (L&T) has recently secured multiple offshore packages from Saudi Aramco. The contracts includes work on the further development of Aramco's giant Zuluf oilfield with a project scope that involves both new infrastructure and the upgrading of multiple production deck modules, sources said. The scope of work comprises engineering, procurement, construction & installation for various new offshore facilities and integration with existing installations. Commenting on the order wins, Subramanian Sarma, whole-time director and senior executive vice president of L&T Energy Hydrocarbon (LTHE) said, "LTHE has consistently demonstrated timely project delivery deploying end-to-end capabilities, including design, fabrication, and installation of large process platforms, living quarters, subsea systems, piping and other T&I works. The business is executing several domestic and international offshore projects and is committed to building its regional presence in geographies that it operates in, by nurturing local skills & talent, and enhancing engagement with local vendors and contractors. **5th April 2023**

- **Saudi Arabia's PPP Project Pipeline Launched with 200 Projects in 17 Sectors**

The National Center for Privatization & PPP (NCP), in cooperation with the targeted sectors for privatization in Saudi Arabia, announced the launch of the Privatization & PPP (P&PPP) pipeline consisting of 200 approved projects in 17 sectors. Announcing the pipeline will provide local and international investors with an opportunity for advanced preparation to ensure their readiness to participate in the projects tendered to the market. H.E. Mohammed Al-Jadaan, Mister of Finance, Chairman of the Board of NCP, stated that publishing these projects contributes to the aims of Vision 2030 to increase the attractiveness of the economy, create opportunities for local and international investor and increase private sector contribution to GDP. Publishing the project pipeline reinforces the strength of public-private-partnership and contributes to attracting new international investments. He also invited the local private sector to make as much use of the announced opportunities. **10th April 2023**

- **Saudi Arabia awards construction of Rabigh 4 Independent Water Plant project**

Saudi Water Partnership Company (SWPC) announced in a statement that, His Excellency the Minister of Environment, Water and Agriculture and Chairman of the Board of Directors of the Saudi Water Partnership Company, Eng. Abdulrahman bin Abdul Mohsen Al-Fadhli, signed the project agreements of Rabigh 4 Independent Water Plant, which will be established in Rabigh governorate in Makkah region, with potable water production capacity of 600,000 m3/d of desalinated water. Eng. Al-Fadhli explained that these agreements will help in achieving the goals and plans of the Ministry, to showcase water production projects in the various regions of the Kingdom. **13th April 2023**

ASIA EXCLUDING GULF COOPERATION COUNCIL (GCC)

CYPRUS

- **Eni puts major new East Med gas project on fast track**

Eni is set to sanction a major new project offshore Cyprus in 2024 and is studying onshore and offshore-liquefied natural gas solutions, according to the company's head of natural resources. The Italian major is also exploring the possibility of working with US giant ExxonMobil on a joint development of their Cypriot gas resources, although this appears the least likely option at present. **Eni** has found at least 5.5 trillion cubic feet of **gas** in Block 6 offshore southern Cyprus in recent years, resources held in the deep-water Calypso, Cronos and Zeus. **12th April 2023**

CHINA

- **Sinopec to build a long haul green hydrogen pipeline**
Novel route will span 400 kilometres from Inner Mongolia to Beijing. China's top hydrogen producer Sinopec has decided to build a long distance pipeline to transport green hydrogen it will produce in Inner Mongolia to users in Beijing, confirming an Upstream story published on 24 November 2022. Sinopec said the proposed pipeline has been listed as part of the national pipeline grid by the central government. The West-East hydrogen pipeline will span 400 kilometres from Ulanqab, Inner Mongolia to Sinopec Yanshan Petrochemical in Beijing via nine counties and cities in three provinces. The scheme involves building an onshore wind farm, an electrolysis system using wind energy to produce hydrogen and an export pipeline. The first phase will have pipeline throughput capacity of 100,000 tonnes per annum of hydrogen, expandable to 500,000 tpa at a later stage. The green hydrogen will replace the grey hydrogen Sinopec currently produces at Yanshan for transportation. China's second largest energy company has completed the site survey and is close to finishing the feasibility study for the new pipeline, it said. Blue hydrogen is produced from natural gas feedstocks, with the carbon dioxide byproduct from hydrogen production captured and stored. **13th April 2023**
- **Shaanxi LNG awards Technip liquefaction FEED contract**
Shaanxi LNG has awarded Technip Energies a contract to provide the process-design package, FEED, and key equipment for a single 0.8-million tpy liquefaction train as part of the Xi'An LNG Emergency Reserve & Peak Regulation project in China. Shaanxi LNG Reserves & Logistics Co. Ltd. has awarded Technip Energies NV a contract to provide the process-design package, front-end engineering and design, and key equipment for a single 0.8-million tonne/year (tpy) liquefaction train as part of the 3-million cu m/day Xi'An LNG Emergency Reserve & Peak Regulation project in China. The contract also covers technical services for construction, commissioning, startup, and performance testing. Xi'An LNG will use Air Products and Chemicals Inc.'s single mixed refrigerant (AP-SMR) liquefaction which will be all-electric motor-driven, according to Technip. The company added that it will be the largest liquefaction unit in the world using a single electric motor-driven mixed refrigerant compressor and that this will make it a reference point in terms of low-carbon LNG production. **5th April 2023**
- **SUEZ signs first contract for construction of industrial water desalination plant**
SUEZ will design and build a 100 MLD (million litre/day) seawater reverse osmosis (SWRO) desalination plant, in Penglai District, Yantai City, Shandong Province. As part of President Emmanuel Macron's official visit to China from 5 to 7 April 2023, SUEZ and its Chinese partners, Wanhua Chemical Group (Wanhua) and China Railway Shanghai Engineering Bureau Group (CRSH), officially signed a cooperation agreement for a seawater desalination project for industrial application. SUEZ will design and build a 100 MLD (million litre/day) seawater reverse osmosis (SWRO) desalination plant, in Penglai District, Yantai City, Shandong Province. The plant, complying with the highest industrial standards, is designed to use seawater as a complementary water source for the chemical industrial complex. The project builds on the partners' proven track record of success, and leverages the strong engineering construction capabilities of CRSH, a wholly owned subsidiary of China Railway Company Limited. While saving freshwater resources, the project will increase the resilience of the local water ecosystem and support Wanhua and its industrial partners in their ecological transformation. On its completion, the desalination plant will save over 36 million m3 of fresh water per year. **7th April 2023**

INDIA

- **Jakson Green to build methanol production unit at NTPC's Vindhyachal plant**
Jakson Green has won a first-of-its-kind project from National Thermal Power Corporation (NTPC) to establish a Metha Pradesh. Methanol is a cleaner alternative fuel that can be used for various purposes, including Power generation and transporta be a part of NTPC's Vindhyachal Thermal Power plant with a production capacity of 10 tonnes-per-day (TPD). The Methanol production unit is being designed to convert 20 TPD CO2 to 10 TPD Methanol through a catalytic hydrog plant flue gas through a carbon capture unit and green hydrogen produced by electrolysis. Jakson Green will oversee the entire design, engineering, procurement, and construction of this project on turnkey bas Japanese technology provider for the Methanol

synthesis process. The company will establish the plant on a fast-track success will pave the way for more such projects in the coming future. **7th April 2023**

- **L&T's oil and gas unit wins significant EPC contract**

The hydrocarbon business of Larsen & Toubro (L&T) announced today that it secured an order under its AdVENT (Advanced Value Engineering and Technology) business vertical. The EPC order is for nitrate plants at Gadepan, Kota, Rajasthan from Chambal Fertilisers and Chemicals Limited (CFCL), a leading fertilizer company in India. The plants, having capacities of approximately 240,000 mtpa will be built under a technology license from CASALE, a privately owned Swiss Company headquartered in Lugano, Switzerland. Organised under Offshore, Onshore, Construction Services, Modular Fabrication and AdVENT & Asset Management verticals, L&T's oil and gas unit offers integrated design-to-build solutions across the hydrocarbon sector to domestic and international customers. With over three decades of rich experience, the business has been setting global benchmarks in all aspects of project management, corporate governance, quality, HSE and operational excellence. **10th April 2023**

- **DBO Order Awarded for SWRO Desalination Plant in India**

The SWRO Desalination Plant in India has officially awarded its DBO order to VA Tech Wabag (WABAG). The Chennai Metropolitan Water Supply and Sewage Board awarded the design, build and operate, order. Currently, Wabag is one of the world's leading companies in the water treatment space. For the project, the company will be responsible for about 70% of the water production. At an estimate, the project's DBO order is worth about Rs 4,400 crore. The Japan International Cooperation Agency (JICA) will fund the project. Furthermore, its execution will be through a joint venture with Metito Overseas. Aside from the design, engineering, and procurement parts, the project's DBO order also includes its construction and installation. In addition to, testing as well as commissioning of the 400mld SWRO desalination plant. Alongside the associated seawater intake system over a term period of 42 months. **5th April 2023**

IRAQ

- **Tenders Announced for 3 Oil Refining Opportunities in Iraq**

Iraq's National Investment Commission (NIC) has announced the details of three investment opportunities in the oil refining sector. Please click on the links below for more information:
 Nasiriyah Refinery in Dhi Qar Governorate, with a capacity 150,000 bpd;
 Al-Kut Refinery in Wasit Governorate, with a capacity of 100,000 bpd;
 Samawah refinery in Al-Muthanna Governorate, with a capacity of 70,000 bpd. **6th April 2023**

INDONESIA

- **Indonesia tenders three exploration blocks**

Indonesia's Ministry of Energy and Mineral Resources is seeking bids for exploration and development of three oil and gas exploration blocks estimated to hold 2.5 billion bbl of oil and 9 tcf of gas. Indonesia's Ministry of Energy and Mineral Resources is requesting bids for exploration and development of three oil and gas exploration blocks. The blocks, the first phase of bid rounds for the year, hold estimated resources of 2.5 billion bbl of oil and 9 tcf of gas. Akia lies off the coast of North Kalimantan with an estimated resource of 2 billion bbl of oil and 9 of tcf gas. It is adjacent to Tarakan, Bunyu, and Nunukan, which have proven hydrocarbon potential, the regulator said in a release Apr. 10. Beluga lies off the coast of West Natuna with estimated resources of 360 million bbl of oil and 50 bcf of gas. It is close to South Natuna Sea Block B, Duyung, Natuna Sea Block A, Shrimp, and Snapper. Bengara I is sited in the North Kalimantan Plain with an estimated resource of 90 MMboe. It is close to Simenggaris. The Government of Indonesia awards oil and gas contract areas through bidding processes conducted twice a year in April and September. **10th April 2023**

- **Indonesia T&I gig up for grabs**

Saka Energi advances Suisen-1 project. Indonesia's Saka Energi has launched the tender process for the transportation and installation contract for its Suisen-1 development — the next structure to be exploited on its producing Muriah production sharing contract offshore Indonesia. Saka, a subsidiary of Indonesia's state-owned gas transmission company Perusahaan Gas Negara (PGN), is prequalifying contractors to

provide T&I services for the Suisen-1 project. This contract has a minimum local content (TKDN) requirement of 55%. The workscope involves the transportation and installation of a new substructure monotower WHT-D as part of the phase one development. The successful contractor will be tasked with the engineering, design and project management of the monotower's T&I; and its responsibilities will also include related procurement, maintenance, customs clearance and warehousing. The company too will need to provide all certification, port clearance and permits for the T&I scope including Migas' certification for the monotower, if required, according to Saka's prequalification documentation. The Muriah operator envisages the work – the contract is of six months' duration — starting by September or October this year. Saka currently produces from the shallow-water Kepodang field to the south of Suisen on the block, which lies about 180 kilometres northeast off the Central Java coast. Kepodang is in natural production decline with output down from its peak of some 90 million cubic feet per of gas and expected to come to the end of its life around 2025. **13th April 2023**

MALAYSIA

- Air Products to build new nitrogen plants in Malaysia**
 This strategic investment in additional capacity and infrastructure will strengthen Air Products' leading position in North needs. Air Products, a world leading industrial gases company serving Malaysia for nearly 50 years, today announced it will bu Penang's Bayan Lepas Free Industrial Zone and Batu Kawan Industrial Park. The company will also further extend its p investment in additional capacity and infrastructure will strengthen Air Products' leading position in Northern Malaysia a Air Products has established a strong presence in Northern Malaysia with two advanced air separation units in the Pra network that covers Prai Industrial Area, Bukit Minyak Industrial Area, Penang Science Park, Batu Kawan Industrial Pa growing customer demand, Air Products will build a nitrogen plant at its greenfield site in Batu Kawan Industrial Park, w manufacturing companies and integrate the plant into its existing pipeline network. **4th April 2023**
- OceanMight wins Shell Malaysia gas project prize**
 Contractor to fabricate modules for Rosmari-Marjoram fields development. Malaysian contractor OceanMight has scooped fabrication work for the development of Shell's Rosmari and Marjoram sour gas fields development offshore Sarawak, East Malaysia. KKB Engineering subsidiary OceanMight confirmed it has been awarded a purchase order contract worth approximately 111.6 million ringgit (\$25.3 million) from Samsung Engineering for the fabrication of modules and supply of steel structures for UK supermajor Shell's Rosmari-Marjoram onshore gas plant at Bintulu. This workscope is scheduled for completion during the third quarter of 2024. Upstream had reported on 22 July 2022 that OceanMight was expected to win modules work for the Rosmari-Marjoram project. A formal contract will be executed in due course, the contractor said on Monday.South Korea's Samsung Engineering last year was awarded the engineering, procurement, construction and commissioning contract for the onshore gas plant for the Rosmari and Marjoram fields that could come on stream by 2026. The EPCC contract will see Samsung's workscope executed in two phases – a limited scope before Shell takes the final investment decision on Rosmari-Marjoram with the majority of the work being performed after project sanction. The onshore gas plant will be able to process up to 800 million cubic feet per day of gas and its ready for start-up date is expected to be by the end of 2025. **11th April 2023**

MIDDLE EAST

- Technip Energies COO reveals major projects, trends in the Middle East**
 In an exclusive interview with Oil & Gas Middle East, Marco Villa, COO of Technip Energies, discusses the company's key projects, role of technology to address decarbonisation, and the need for collaboration to accelerate the energy transition. What are Technip Energies' ongoing projects and what's in the pipeline?We have a long-standing presence in the Middle East, having delivered more than 500 projects and providing services to the energy industry in the fields of gas and LNG, refining, petrochemicals and ethylene. We have major projects under execution in the region. The first one is the LNG North Field East project for QatarEnergy for which we are delivering 4 mega trains of LNG, associated with a large carbon capture and sequestration facility, leading to more than 25% reduction of greenhouse gas emissions when compared

to similar LNG facilities. This expansion project will produce approximately 33 million tons per annum of additional LNG, increasing Qatar’s total production from 77 to 110 million tons per annum. At Technip Energies, we have partnered with local best in class companies in the region. For example, we recently created NT Energies, a joint venture with NPCC, to support energy transition in the UAE and in the broader Middle East and North Africa region by providing added-value services in blue and green hydrogen and related decarbonisation projects, CO2 capture and industrial projects in waste-to-energy, biorefining, biochemistry and other energy transition themes. What do you foresee as key trends in the Middle East for the next decade? The main trend that we see is “more energy, less carbon. **8th April 2023**

- **L&T unit lands over \$852m in Middle East EPCI contracts**

The scope of work for LTEH includes engineering, procurement, construction & installation for various new offshore facilities and integration with existing installations. India's top engineering and construction firm Larsen & Toubro (L&T) said one of its key subsidiaries - L&T Energy Hydrocarbon - has secured multiple offshore packages worth over Rs70 billion (\$852 million) from a major energy group in the Middle East. The scope of work for LTEH includes engineering, procurement, construction & installation for various new offshore facilities and integration with existing installations. LTEH offers integrated design-to-build solutions across the hydrocarbon sector globally. Backed by over three decades of rich experience and extensive capabilities across the value chain, the business has been setting global benchmarks in all aspects of project management, corporate governance, quality, health safety environment (HSE) and operational excellence. On the mega order, Subramanian Sarma, the Whole-Time Director and Senior Executive Vice President, said: "LTEH Offshore has consistently demonstrated timely project delivery deploying end-to-end capabilities, including design, fabrication, and installation of large process platforms, living quarters, subsea systems, piping and other T&I works." "Securing these repeat orders indicate customer satisfaction and is a testimony to customer’s faith in the team's dedicated efforts towards developing and nurturing these capabilities," he added. **6th April 2023**

THAILAND

- **Kuraray, GC and Sumitomo Corp. to open plastic manufacturing plant in Thailand**

The isoprene business is expected to be one of the pillars of Kuraray GC's growth. Kuraray is partnering with PTT Global Chemical Public Company Limited (GC) and Sumitomo Corporation to open a m GC Advanced Materials, and Kuraray Advanced Chemicals (Thailand). This manufacturing plant is designed to upgrade and develop competitiveness in the Eastern Economic Corridor (EEC WHA Eastern Industrial Estate in Rayong province, presided over by the Deputy Governor of Rayong province. Acting Sub-Lieutenant Pirun Hemarak, the Deputy Governor of Rayong province, expressed his pleasure at having the Kuraray GC Advanced Materials and Kuraray GC Chemicals (Thailand) project, explaining that this manufacturing plan the Eastern Economic Corridor development to accommodate industrial progress, which is a key foundation for the country. Hitoshi Kawahara, Representative Director and President of Kuraray Co., Ltd., stated that the construction of the Kuraray has been successfully completed and commercial production has begun due to the excellent support and cooperation of well as our reliable partners: GC and Sumitomo. **10th April 2023**

TURKEY

- **Trillion Energy spuds fifth well at SASB gas field**

Trillion Energy International Inc. has spudded the Bayhanli-2 well at SASB gas field, Black Sea, Turkey. Trillion Energy International Inc. has spudded the Bayhanli-2 well at SASB gas field, Black Sea, Turkey. Bayhanli-2, the fifth gas well in a multi-well drilling program at the field, targets a previously discovered gas pool, which was not previously produced, through a long reach directional well bore to enable production, the company said in a release Apr. 11. The Bayhanli gas pool is a significant target and may likely require additional wells in the future to fully produce the economic reserves, the company said. Upon completion, the well is expected to reach a total measured depth of 3,400 m and true vertical depth of about 1,200 m, extending horizontally over 2 km from the East Ayazli offshore tripod. The well was spudded on Apr. 5th, 2023, and is currently drilled to a depth of 496 m. Drilling, casing, perforation, and testing is expected to take about 45 days. **11th April 2023**

UZBEKISTAN	<ul style="list-style-type: none"> <u>Saneg expands petroleum complex to improve fuel supply to Tashkent region</u> Sanoat Energetika Guruhi (Saneg), Uzbekistan’s largest private oil and gas company, has commission a new petroleum tank farm to provide gasoline and diesel fuel to Tashkent and the surrounding region. Saneg’s existing refuelling complex on the premises of Tashkent international Airport has been expanded to include 6 vertical steel tanks that can store an additional 12 thousand cubic meters of petroleum products. By offloading light oil products from railway tankers for storage in the tank farm, the complex will facilitate daily fuel sales of 1,500 tons through onward trans-shipment. Ulugbek Shernazarov, Saneg’s Deputy General Director for Commercial Affairs, said: “At the moment, the existing oil depot is loading and unloading AI-92 and AI-80 unleaded gasolines produced at the Ferghana Oil Refinery, as well as diesel fuel. Thanks to the launch of Saneg’s new logistics complex, we will be able to meet the growing demand for high-quality fuel and ensure delivery to the capital’s gas stations within an hour, supported by a fleet of 39 fuel trucks. The project was carried out by Enter Engineering at a cost of \$10 million, creating 35 new jobs in the process as part of Saneg’s commitment to Uzbekistan’s human capital development. The expansion of the tank complex follows Saneg’s recent creation of a new internal Well Maintenance and Overhaul Department that is significantly improving the efficiency of repair work at the company’s oilfields. 11th April 2023
AFRICA	
ALGERIA	<ul style="list-style-type: none"> <u>Algeria announces six new oil discoveries</u> Algeria’s state-owned energy company Sonatrach, one of the world’s largest oil firms, has announced six new oil discoveries in various parts of the North African Arab nation. In a statement published by local media, Sonatrach said the new discoveries were made in the first quarter of 2023. Two discoveries were made in Amguid in East-Central Algeria, with the first well yielding around 5,599 barrels per day (b/d) of crude oil and over 170,000 cubic metres (m3) of gas per day, it said. The second well produces 4,856 bpd of oil and more than 255,000 m3 of gas, the Company said. Two other wells were discovered in Berkine in South Algeria, with output of 129,048 m3 of gas and 239 b/d of condensates in the first well, according to the statement, which said the second well pumped 1,905 b/d of crude and 137,484 m3 of gas. Other discoveries were achieved in Ohanet in the Southwest, with gas production of more than 336,000 m3 of gas and 1,504 b/d of condensates. 11th April 2023
EGYPT	<ul style="list-style-type: none"> <u>China’s CTGI eyes investing in Egyptian water desalination, green hydrogen projects</u> Chinese Three Gorges International Corporation (CTGI) is looking forward to boosting cooperation with Egypt in the fields of electricity and renewable energy. The Chinese Three Gorges International Corporation (CTGI) is looking forward to boosting cooperation with Egypt in the fields of electricity and renewable energy, as well as in water desalination and green hydrogen projects, Ministry of Electricity and Renewable Energy stated on April 10th. Within the Electricity Ministry’s efforts, minister Mohamed Shaker met with CEO of CTGI and his accompanying delegation to discuss further cooperation between the two sides. Shaker stressed the importance of green hydrogen as a promising source of energy in the near future. CTGI’s CEO also expressed his aspiration to enhance cooperation with Egypt, which is deemed as the gateway to the African continent. 11th April 2023
LIBYA	<ul style="list-style-type: none"> <u>Libya lets contract for grassroots refinery</u> Zallaf Libya Oil and Gas Co. has let a contract to Honeywell UOP LLC to deliver front-end engineering and design for the operator’s proposed 30,000-b/d South Refinery to be built in Aubari City, about 25 km east of Al Sharara oil field in Libya. Zallaf Libya Oil and Gas Co., a subsidiary of Libya’s state-owned National Oil Corp. (NOC), has let a contract to Honeywell UOP LLC to deliver front-end engineering and design (FEED) for the

	<p>operator’s proposed 30,000-b/d South Refinery to be built in Aubari City, about 25 km east of Al Sharara oil field in southwestern Libya. As part of the late-March FEED contract, Honeywell UOP will provide initial engineering works for the refinery’s planned units, including delivery of technology licensing for approved units, Zallaf and the NOC said in separate releases. Following completion of this first phase of the proposed refinery’s development, Zallaf and the NOC said they will negotiate and award a second contract for engineering, procurement, construction, and commissioning (EPCC) works on the project to a potential contractor that must agree to allowing Honeywell UOP to supervise the installation process. 6th April 2023</p>
TANZANIA	<ul style="list-style-type: none"> <u>Contract awarded for construction of wastewater treatment plant in Mbezi Beach, Tanzania</u> A contract has been awarded for the construction of a wastewater treatment plant in Mbezi Beach, Tanzania. The contract was awarded by Dar es Salaam Water Supply and Sanitation Authority (DAWASA) to Metito. Contemporary engineering and technologies will be used at the 16,000 m3/day wastewater treatment plant in Dares Salaam’s Kinondoni District. This will in turn reduce carbon emissions, improve sludge quality, and reduce operational and maintenance costs. The plant will also be constructed in almost half of the allotted area. It will maximize savings and also optimize the use of the land. The wastewater treatment plant will be operated and maintained by Metito for three years. DAWASA staff will take part in all operational areas of the treatment plant. When the plant is fully operational, Metito will use conventional activated sludge technology, anaerobic digesters to produce biogas and a combined heat and power (CHP) generating system. This will cut electric power use by about 40%. Metito will also employ the sludge anaerobic digestion process in the first treatment phase. As a result, the sludge will be stabilized, and its quality will be maintained. Karim said that they look forward to establishing the project in partnership with the Dar Es Salaam Water Supply and Sanitation Authority. He claimed that the project would serve as an example for other projects of a similar nature in the region. 6th April 2023
ZIMBABWE	<ul style="list-style-type: none"> <u>Funds raised for exploration in Zimbabwe</u> Invictus Energy has raised USD 10 million to begin exploration for hydrocarbons at the Cabora Bassa basin in Zimbabwe, the Australian independent announced on Thursday. A second phase of 2D seismic surveying is expected to begin in May 2023. Additionally, drilling at the Mukuyu-2 well by the <i>Exalo Rig 202</i> is expected to commence in Q3 2023. The company is targeting gas condensate and light oil in the Upper Angwa, Pebbly Arkose and Post Dande formations. The rig will undergo maintenance and upgrades beginning in April 2023. “I am pleased with the backing Invictus has received from both existing and new shareholders as we prepare to follow up the successful Mukuyu-1 exploration campaign,” said Scott Macmillan, managing director of Invictus Energy. In January 2023, the company identified 13 potential hydrocarbons bearing zones at its nearby Mukuyu-1 exploration well. 7th April 2023
AUSTRALIA	
AUSTRALIA	<ul style="list-style-type: none"> <u>LanzaJet partners with Jet Zero to build SAF plant in Australia</u> U.S.-based LanzaJet is collaborating with Jet Zero Australia, a leading-edge Australian bioenergy company established to produce sustainable aviation fuel (SAF), to build a SAF manufacturing facility using LanzaJet’s alcohol-to-jet (ATJ) technology in Queensland, Australia. Construction on the Queensland plant is expected to begin in 2024. Once operational, the plant will produce up to 100 million litres of SAF annually from agricultural by-products such as sugarcane. The plant, which could be the first ATJ sustainable aviation fuel (SAF) production facility in Australia, is supported by the Queensland Government, Qantas, and Airbus as part of the Australian SAF Partnership. Sustainable aviation fuel has been identified by airlines, governments, and energy leaders as the most practical solution to decarbonising the aviation industry, which contributes to approximately 3% of global carbon dioxide emissions. 10th April 2023 <u>Papua New Guinea offshore gas project finally set for FEED lift-off</u>

Operator ready to fire the starting gun on Pasca A once regulatory approvals in place. Australian independent Twinza Oil is all set to proceed with front-end engineering and design (FEED) for the first phase one of its Pasca A gas condensate development offshore Papua New Guinea, just as soon as it receives the remaining regulatory approvals including for its Petroleum Development Licence (PDL) application. Pasca A will be developed in two phases, starting with the production of about 200,000 tonnes per annum of liquid petroleum gas (LPG) for the domestic market with exploitation of the gas to follow via a floating liquefied natural gas facility. Gas produced alongside the hydrocarbon liquids during phase one will be reinjected, Twinza has said. Updated estimates including contingent best estimate resources are 167 million barrels of oil equivalent including 464 billion cubic feet of LNG feed gas, 47 million barrels of condensate and 43 million barrels of LPG. These resources will likely be classified as 2P reserves after the PDL is awarded. **6th April 2023**

- **A-Gas announces multi-million-dollar New Zealand expansion**

Refrigerant management specialist A-Gas has expanded its operations into New Zealand having established the A-Gas New Zealand site located in South Auckland. The multi-million-dollar investment will allow the New Zealand market to access state-of-the-art gas separation technology, high speed refrigerant recovery, a unique reclaim cylinder exchange service and on-site laboratory and analytical services. “Building on our leading market position in Australia and globally, we are excited to be bringing our Lifecycle Refrigerant Management (LRM) capabilities to New Zealand,” said Brett Ferguson, Managing Director at A-Gas Australia. “Our unique capability in the recovery, reclamation and repurposing of refrigerants will play a vital role in helping the New Zealand HVAC-R sector to transition to a lower carbon future. The New Zealand site will be able to process and clean refrigerant recovered from the local market. After undergoing chemical analysis, the gas will then be reclaimed to meet the AHRI 700 standard. The project follows on from A-Gas’ recent announcement that it would rollout an enhanced version of its PyroPlas refrigerant destruction technology to Australia and New Zealand. Having acquired PyroPlas just over a year ago, A-Gas has developed the equipment to be able to deal effectively with halons, hydrofluorocarbons (HFCs) and mixtures of all previous generations of used refrigerant. **7th April 2023**

EUROPE

- **Thyssenkrupp Uhde and IDIP to partner on developing modules for green-ammonia plants**

The agreement will focus on the development of a joint project within the sector for the design, procurement, fabrication ammonia plants. thyssenkrupp Uhde and IDESA INDUSTRIAL PLANTS SLU (IDIP) have signed a memorandum of understanding (MoU) modules for green ammonia projects. The MoU was signed in Essen, Germany on March 23, 2023. The agreement will within the sector for the design, procurement, fabrication, and construction of modularized green ammonia plants. The proven uhde ammonia technology, which has already been applied in over 130 large-scale chemical plants across the Under the agreement, the companies will work together to further develop modularized green ammonia plants suitable units. These modularized plants will drive forward green ammonia projects, which are vital for the success of the energy transition. **9th April 2023**

GERMANY

- **Rhein Petroleum to spud Erfelden field well, southwest Germany**

Rhein Petroleum GmbH, a subsidiary of Beacon Energy PLC, has let a contract to RED Drilling & Services GmbH for a fully crewed drilling rig for the Schwarzbach-2 development well in Erfelden field, onshore southwest Germany. The rig is expected to mobilize in early-June 2023. The well, expected to be spudded mid-June, is targeting the Stockstadt Mitte segment which was proven by the Stockstadt Mitte-1 well (SK-M1) drilled by Exxon in 1986. This well encountered oil in the PBS sandstones and in the shallower Meletta-Schichten sands (ME). Drilling operations are expected to take 25 days to reach 2,255m TD (1,709m TVD), with an additional 12 days scheduled for testing. The drilling pad has been prepared and the 20-in. conductor pipe has been set at 85 m. Schwarzbach-2 is the first of potentially two development wells and one water well to be drilled in the Stockstadt Mitte segment over the next 18 months, the company said. The Stockstadt Mitte segment contains 2P reserves of 3.784 million bbl. The Schwarzbach South segment is undrilled, with 2C contingent resources of 2.4 million bbl. This segment will be the target of future development drilling. **11th April 2023**

NORWAY	<ul style="list-style-type: none"> <u>Norwegian operator Aker BP targets large discovery with imminent well</u> Rondeslottet has potential for 871 million barrels of oil equivalent. Norwegian operator Aker BP is poised to drill imminently what is likely to be the largest exploration prospect offshore Norway this year. The Rondeslottet prospect lies in water depths of 1108 metres in Block 6405/7 in the Norwegian Sea west of Trondheim. According to joint venture partner Vaar Energi, the prospect has pre-drill unrisks resource potential of 871 million barrels of oil equivalent. Vaar has indicated previously that success at Rondeslottet could lead to a major new field development. 12th April 2023
NETHERLAND	<ul style="list-style-type: none"> <u>Parkmead's new gas discovery in Netherlands comes on stream</u> Parkmead, the independent energy group backed by North Sea oil and gas entrepreneur Tom Cross, has commenced gas production from its new LDS-01 discovery in the Netherlands. Last week, Mr Cross, who is the Aberdeen-headquartered company's executive chairman, said that Parkmead's successful drilling campaign in the Netherlands had resulted in the LDS-01 well encountering new commercial gas volumes. Parkmead said that the well has been tied into the neighbouring commercial gas production infrastructure "in just a few weeks, demonstrating again the operational efficiency of Parkmead's low-cost assets onshore the Netherlands, where operating costs are less than \$9 per barrel equivalent. It confirmed that the new discovery is in its initial clean-up period, with early flow rates suggesting that Parkmead will "benefit from a material increase in daily net production". The Aim-listed group, which also 100% owns and operates the Kempstone Hill wind energy company in Aberdeenshire, producing electricity direct to the UK grid, last week declared it has "obvious concerns" around increasing tax on energy production around Europe as it fell into the red in the six months ended December 31, 2022. Parkmead, which has assets in the North Sea, west of Shetland, and onshore in Scotland and the Netherlands, reported a loss of £5.2 million, following a profit of £1.3m at the same stage last year. 7th April 2023 <u>Port Of Rotterdam - Onyx Power Plans To Build Plant For 'Blue' Hydrogen</u> Onyx Power wants to make a significant contribution to emission reduction in the Netherlands. In order to reach this goal Onyx Power plans to build a hydrogen production plant at its existing site in the port of Rotterdam to produce low carbon blue hydrogen. With a capacity of 1,200 MW the plant could produce some 300 kiloton per annum blue hydrogen, to decarbonize industry and meet national decarbonization targets. The CO2 produced while making the blue hydrogen would be captured and stored in depleted offshore gas fields. By doing so, 2.5 million tons of CO2 could be saved annually. In order to be able to develop this project, Onyx Power has announced to the responsible Environmental Protection Agency (DCMR) to carry out an environmental impact assessment in accordance with the Environmental Management Act. As part of this procedure, the company has published a Notitie Reikwijdte en Detailniveau (NRD), which describes the intended scope of the environmental impact assessment. 7th April 2023
UK	<ul style="list-style-type: none"> <u>Octopus Energy and RES to swap gas for green hydrogen</u> RES and Octopus Energy Generation's green hydrogen joint venture HYRO is working with Kimberly-Clark, the parent company of household brands like Andrex®, Kleenex® and Huggies®, to swap gas for green hydrogen at UK factories to reduce emissions and boost energy security. HYRO is working with industrial businesses to develop, own and operate green hydrogen plants, making the most of local renewables when it's sunny and windy. HYRO is developing electrolyzers to produce green hydrogen in this latest deal at two Kimberly-Clark UK manufacturing facilities. The on-site electrolyzers will use electricity from renewable sources like wind and solar to create green hydrogen, which will be stored and fed into hydrogen-ready boilers inside the factories, replacing industrial natural gas-fuelled boilers. It will create the heat needed in the manufacturing processes for tissues and toilet paper. The two projects in Wales and Kent have now also won places on the Government's shortlist for funding. The two electrolyser projects will have a combined

capacity of 22.5 MW and reduce thousands of tonnes of CO2 emissions annually for Kimberly-Clark. It will also help meet Government green hydrogen targets by 2030. **6th April 2023**

- **Worley gets pre-FEED and technical survey services for Cadent Gas**

The project led by East Coast Hydrogen (ECH2) will connect 10 gigawatts (GW) of hydrogen production from Humber and Teesside industrial hubs. Worley is providing preliminary front-end engineering design (pre-FEED) and technical survey services for Cadent Gas (ECHP) project in the UK. Worley is also delivering a study for Cadent to understand how to transition natural gas supply into hydrogen and provide route and sizing. This will be followed with a pre-FEED study for the project. The project led by East Coast Hydrogen (ECH2) will connect 10 gigawatts (GW) of hydrogen production from Humber network. With this project, Cadent aims to connect hydrogen supplies between Humberside and Northampton. Potentially the UK's future decarbonized energy demands. ECH2 comprises a collaborative partnership with Cadent, Northern Gas Networks and National Gas Transmission. The plans to meet its 2050 net-zero targets. When completed, the project will accelerate the industrial decarbonisation for the UK and is also estimated to create the economy.

8th April 2023

- **Harbour Energy, bp to Develop Viking CCS Project**

Harbour Energy and bp signed an agreement to develop the Viking CCS transportation and storage project. Harbour will be the project's operator of Viking CCS with a 60% working-interest, with bp acquiring a 40% non-operated share, the company said in a statement. The announcement came after the UK's recent decision to launch the Track 2 cluster sequencing process for carbon capture and storage (CCS), a technology that removes carbon dioxide emissions from the atmosphere and stores it underground. Over the past few years, efforts in Europe to capture carbon dioxide from the atmosphere and store it underground have accelerated as governments and industry work to cut emissions in order to achieve their climate targets. According to Harbour, the government recognises Viking CCS as one of the top competitors for this process' transport and storage system, and a final investment decision on the project is anticipated in 2024, pending the success of the Track 2 CCS.

11th April 2023

- **BP goes to work with huge drilling rig offshore UK**

UK supermajor BP has started a multi-well offshore drilling programme in the UK's remote West of Shetland area, with a harsh-environment drilling rig reactivated for the assignment. The semi-submersible Ocean GreatWhite began its five-well West of Shetland drilling campaign with BP last week, according to the rig's owner Diamond Offshore. West of Shetland is a significant production area for BP from three large assets Clair, Schiehallion and Foinaven where field expansions and production increases are planned, though UK political uncertainties and energy profits taxation are a challenge to all UK oil and gas producers.

12th April 2023

NORTH & SOUTH AMERICA

BRAZIL

- **Brazil's Prio looks to score at Frade field with Maracana exploration well**

Brazilian independent Prio has started a new exploration drive in the Frade field, as it searches for new pockets of oil within the Campos basin deep-water development. Prio is presently conducting a second revitalisation campaign at Frade, which reached output of 50,000 barrels per day of oil last week after the N5P2 well was placed on stream and achieved better-than-expected flow rates. The company is now undergoing a fresh infill programme with the drilling of the Maracana prospect in 978 metres of water, according to data from Brazilian market regulator ANP.

11th April 2023

USA

- **Tellurian in \$1bn deal for Driftwood LNG project land, shares surge**

US liquefied natural gas (LNG) developer Tellurian will sell 800 acres of land in Louisiana for \$1 billion to an undisclosed institutional investor, the company said. The company's shares surged about 28 per cent to \$1.52 in early trading. The land was earmarked for the proposed Driftwood liquefied natural gas terminal

facility, and the company will lease it back for 40 years at a capitalisation rate of 8.75 per cent and a letter of credit equal to 12 months of rent, among other requirements. "It is just tip of the iceberg with respect to capital needs," Stifel analyst Benjamin Nolan said in a note. He added that the lease would create a 40-year liability of \$87.5 million annually that would escalate by 3 per cent yearly. The Driftwood project has seen many setbacks including the cancellation of some LNG supply deals after two major potential customers last year raised concerns around the company's ability to finish the project. The project, which received regulatory approvals in January to begin construction, is expected to produce 27.6 million tonnes per annum of LNG when ready. **7th April 2023**

- **Linde signs CO2 off-take agreement with ExxonMobil**

Linde has signed a long-term agreement with oil and gas firm ExxonMobil for the off-take of carbon dioxide (CO2) from its new clean hydrogen production site in Beaumont, Texas. Back in February (2023), the industrial gas giant said it would invest \$1.8bn to build, own and operate an on-site complex to supply clean hydrogen and nitrogen to OCI Global's "world-scale" blue ammonia plant in Texas. The facility will be integrated into Linde's existing infrastructure along the US Gulf Coast and will also supply clean hydrogen to other new and existing off-takers across the network. ExxonMobil has now agreed to annually transport and permanently store up to 2.2 million metric tonnes of CO2 from the production site: the equivalent to the emissions from nearly half a million cars per year. Dan Ammann, President of ExxonMobil Low Carbon Solutions, said the project is another significant step towards achieving heavy industry's decarbonisation and Net Zero goals. **4th April 2023**

- **US EPA orders Valero refining to improve chemical safety at Benicia**

Under the terms of the settlement, Valero has agreed to make significant chemical safety improvements at the Benicia Refinery. The U.S. Environmental Protection Agency (EPA) announced a settlement with Valero Refining-California to resolve violations of the Clean Air Act's Chemical Accident Prevention regulations at their Benicia Refinery. The company will pay a \$1,224,550 penalty and make changes to improve process safety at the refinery. "This settlement sends a clear message that EPA will prosecute companies that fail to expend the resources needed to have a compliant, well-functioning Risk Management Plan to the fullest extent of the law," said Acting Assistant Administrator Larry Starfield for EPA's Office of Enforcement and Compliance Assurance. "Failure to properly manage hazardous materials can pose serious risks to our California communities," said Martha Guzman, Regional Administrator of EPA Region 9. **7th April 2023**

- **Honeywell introduces liquid organic hydrogen carrier solution**

Technology to play key role in unlocking the hydrogen economy by enabling the long-distance transportation of hydrogen at a lower cost. Honeywell today announced Honeywell Liquid Organic Hydrogen Carrier (LOHC), a solution that enables the long-distance transportation of clean hydrogen. This cost-effective solution can help meet the growing requirements for hydrogen use across various industries by leveraging existing refinery and transportation infrastructure. Honeywell recently committed to achieve carbon neutrality in its operations and facilities by 2035. This commitment builds on the company's track record of sharply reducing the greenhouse gas intensity of its operations and facilities as well as its decades-long history of innovation to help customers meet their environmental and social goals. About half of Honeywell's new product introduction research and development investment is directed toward products that improve environmental and social outcomes for customers. **10th April 2023**

- **Multi-billion-dollar clean ammonia facility planned for West Virginia**

Plans have today (3rd April) been unveiled for a major multi-billion-dollar clean ammonia facility in Mingo County, West Virginia, as an anchor project in the Appalachian Regional Clean Hydrogen Hub's (ARCH2) application to the US Department of Energy (DOE). US project partners, including Adams Fork Energy and CNX Resources, hope to start construction on the site in 2024, creating over 2,000 construction jobs. The Adams Fork Energy clean ammonia project, which will be jointly developed by Adams Fork Energy and the Flandreau Santee Sioux Tribe, is expected to have initial annual ammonia production capacity of 2.1 million metric tonnes. Located next to a reclaimed coal mining site, it is hoped the plant will displace more than 2.7

metric tonnes of carbon dioxide (CO2) each year. To do this, Adams Fork Energy has signed a strategic partnership with CNX to provide fuel and carbon sequestration services. **3rd April 2023**

- **Gran Tierra extends contract for Suroriente block offshore Colombia**

Gran Tierra Energy Inc. and Ecopetrol SA renegotiated the terms of a contract for the Suroriente block in the southern Putamayo region of Colombia, extending the contract by 20 years. The new terms allow for long-term investment in infrastructure and work programs to enhance oil recovery efficiency in existing fields, and appraisal drilling to potentially prolong the life of the fields, Gran Tierra said in a release Apr. 11. Gran Tierra will continue as Suroriente operator and will commit capital investment of \$123 million over a 3-year period from the agreement's effective date. Gran Tierra became operator of Suroriente in March 2019 with a 52% working interest. Ecopetrol holds the remaining 48%. Gran Tierra has increased production to an average 8,167 b/d of oil in first-quarter 2023 from an average 6,203 b/d of oil in February 2019. The company also has expanded the Cohembi EOR project. **12th April 2023**

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