EXECUTIVE SUMMARY

The Commodity summary

- Crude Oil Brent prices are trading higher by 9% WTD and Crude Oil WTI prices are trading higher by 10% WTD but they are trading lower by 20% than a year ago prices.
- Coal prices are trading higher by 9% WTD but is trading lower by 37% than a year ago prices.
- Iron ore prices in downtrend and trading lower by 23% YTD.
- Steel HRC(North America) prices are in uptrend and is trading higher by 54% 6MTD
- Natural Gas prices were up by 4% WTD but trading lower by 69% YTD

The Currency summary

- Euro has gained strength against USD and is stronger by 11% 6MTD
- The US Dollar to CNY is stronger by more than 8% YTD

The Rig count summary

The Rig counts in Europe have gone down by 6% MTD and the rig counts in North America have gone down by 10% MTD.

Project summary

- ADNOC L&S signs \$2.6 billion contract for new logistics platform project
- Saipem awarded EPCI Contract From Aramco
- Bahrain's Tatweer Petroleum eyes EPC contractors for \$200 million gas project
- Technip Energies strengthens Chinese foothold with \$272 million LNG prize
- TotalEnergies and Adani ready to start up \$730 million Indian LNG import terminal
- Iraq acquires stake in TotalEnergies' \$27 billion project
- FLNG sector poised for \$35 billion in contract awards
- Angolan oilfield development and Trinidad FEED among \$650 million worth of contracts for Saipem
- Petrofac, Hitachi Energy receive \$14 bln agreement from TenneT
- SBM seals \$1.6 billion funding for Buzios FPSO offshore Brazil
- Equinor shock confirmed: Contractor KBR secures hotly contested contract at \$9 billion project

COMMODITY UPDATES

COMMODITY	UOM	LATEST PRICE	WTD %	MTD %	3MTD %	6MTD %	YTD %
Chromium	USD/MT	10,198.16	-0.75	-1.40	-4.21	8.17	-11.88
Coal	USD/MT	212.36	9.15	7.41	-47.20	-50.67	-36.98
Cobalt	USD/MT	36,067.63	0.74	4.32	-8.64	-35.94	-58.37
Copper	USD/MT	8,767.00	-1.99	-1.12	-2.49	16.00	-13.81

Crude Oil	USD/BBL	83.29	9.38	9.30	2.04	-7.50	-19.88
Crude Oil Brent	USD/BBL	85.44	8.52	7.94	1.14	-8.32	-19.50
Crude Oil WTI	USD/BBL	81.14	10.29	10.77	3.01	-6.63	-20.27
Iron Ore	USD/MT	120.24	-4.58	-5.69	-0.24	26.11	-22.88
Molybdenum	USD/MT	51,817.50	-21.74	-27.41	-24.21	25.57	22.12
Natural Gas	USD/MCF	2.18	4.11	-12.87	-40.64	-65.61	-68.93
Nickel	USD/MT	23,115.00	-2.71	-1.58	-18.88	5.05	-30.30
Steel HRC (FOB China)	USD/MT	640.00	-1.61	-2.56	3.79	15.26	-24.73
Steel HRC (N. America)	USD/MT	1,295.21	3.27	6.31	62.81	53.55	-20.65
Steel Rebar	USD/MT	646.00	-2.07	-4.08	-2.06	13.41	-25.75
Steel Scrap	USD/MT	427.00	-1.84	-4.80	3.09	19.71	-28.85

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

CURRENCY EXCHANGE RATE

Code	Description	Country	Units	Latest Exchange Rates	WTD%	MTD%	3MTD%	6MTD%	YTD%
EURUSD	1 EUR to USD	Euro Area	USD	1.0887	-0.13	1.95	2.28	11.18	-0.09
USDCNY	1 USD to CNY	China	CNY	6.8824	-0.12	0.97	-0.76	2.84	-8.21

Source- Trading Economics

CRUDE OIL STOCK

Region	Unit	Latest Count	WTD %	MTD %	3MTD %	6MTD %	YTD %
US Stocks of Crude Oil &	Thousand	15,97,425.00	-0.71	-2.00	1.25	-2.44	-6.42
Petroleum Products	Barrels	13,37,423.00	-0.71	-2.00	1.23	-2.77	-0.42

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	28.13	USD	-6.23	-11.93	-2.12	36.62	-7.25
Glencore PLC	456.75	GBP	-2.11	-9.10	-13.15	-7.56	-11.93
NYSE American Steel Index	1,812.38	Index	-3.60	-11.65	-1.06	21.94	-7.65
Rio Tinto PLC	5,283.00	GBP	-2.87	-11.54	-12.79	4.41	-13.52
Tenaris SA	28.42	USD	0.00	-18.54	-14.16	-2.57	-5.52
Tubacex SA	2.60	EUR	6.12	6.12	20.93	31.31	42.08
Woodside Energy Group	34.02	AUD	0.55	-8.56	-1.69	-2.09	0.84

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	53	*	1.92	3.92	6.00	55.88
GCC	217	*	1.88	-2.69	6.90	16.04
Middle East	322	*	2.22	-1.53	5.23	12.20
Africa	86	*	1.18	3.61	21.13	14.67
Asia-Pacific	188	*	-1.05	-	3.30	5.03
Europe	103	*	-5.50	8.42	6.19	9.57
Latin America	181	*	6.47	-2.16	5.85	19.08
North America	891	-3.15	-10.45	3.48	-8.71	10.27
Total	1,771	*	-4.99	1.84	-1.77	11.03

Source- Baker Hughes

(*) No weekly data available for those particular regions

NEWS OF THE WEEK

GULF COOPERATION COUNCIL (GCC)

ADNOC L&S signs \$2.6 billion contract for new logistics platform project

ADNOC Logistics & Services (ADNOC L&S) has signed a \$2.6 billion contract with ADNOC Offshore to provide integrated logistics services for its new Integrated Logistics Services Platform (ILSP), one of the largest turnkey offshore logistics offerings in the world that is expected to coordinate end-to-end management of logistics and maritime operations at its base in Mussafah, Abu Dhabi. The agreement with ADNOC Offshore runs for five years, with the option of a five-year extension, and includes the provision of port services, warehouse operations, heavy lifting, material handling and shipping, rig and barge moves, marine terminal operations and waste management services. Captain Abdulkareem Al Masabi, CEO of ADNOC L&S, said: "We are very pleased to extend our decades' long collaboration with ADNOC Offshore as we unveil our ILSP and continue to revolutionize offshore oil and gas logistics. The ILSP is a unique offering that centralizes all logistics requirements for our customers through a single interface, optimizing efficiencies and reducing logistics costs. **30**th March **2023**

UAE

UAE plans oil and gas expansion

Adnoc, the UAE's national oil company, is set to expand oil and gas production to 7.5bn barrels of oil, the Guardian reports. Its planned expansion represents the fifth largest increase in production in the world, according to analysis produced for the Guardian by German NGO Urgewald, based on data from Rystad Energy. To meet net zero targets set out by the International Energy Agency (IEA), 90% of this would have to remain in the ground. The United Arab Emirates has the third biggest net zero-breaking plans for oil and gas expansion in the world, surpassed only by Saudi Arabia and Qatar. Adnoc is the world's 11th biggest oil and gas producer, delivering more than one billion barrels of oil equivalent in 2021. In November 2022, Adnoc announced a \$150bn investment over five years to enable an "accelerated growth strategy" for oil and gas production. Part of the plans include the extension of production in the Upper Zakum field, which Adnoc has previously described as a "mega-project" and the "second-largest offshore oilfield in the world. The IEA has said that to reach global net-zero emissions by 2050 and limit global warming to 1.5C, there must not be any new oil and gas projects approved after 2021. Just 10% of Adnoc's planned expansion is compatible with net-zero targets, with 90% of plans being advanced after this cut-off date. 5th April 2023

Baker Hughes Announces Major LNG Order from QatarEnergy

Baker Hughes announced in a statement that an order to be booked in the first quarter of 2023 with longtime partner QatarEnergy to supply two main refrigerant compressors (MRCs) for the North Field South (NFS) project, which will be executed by Qatargas. The MRCs are part of two LNG "mega trains" representing 16 million tons per annum (MTPA) of additional capacity that is estimated to further boost Qatar's LNG production capacity to 126 MTPA, helping to propel Qatar as a leader in global LNG production by 2027. The order reflects more than two decades of trust and successful collaboration between Baker Hughes, QatarEnergy and its various operating companies across the energy value chain. Most notably, Baker Hughes has supported Qatargas since the early 1990s with core LNG liquefaction technology. This most recent contract, which builds upon a previously announced award for North Field East (NFE) expansion in 2020, will bring the overall number of LNG "mega trains" driven by Baker Hughes' leading energy solutions to 12. When fully completed, it will increase Qatar's LNG production capacity from 110 MTPA, which will be achieved by the end of the first phase North Field East expansion in 2025, to 126 MTPA by 2027. 3rd April 2023

• Saipem awarded EPCI Contract From Aramco

Saipem announced in a statement that it has been awarded three new offshore contracts and two competitive FEED contracts totalling approximately 650 million USD. In Saudi Arabia, it has been awarded a Contract under the Aramco LTA program . Saipem will execute the offshore EPCI of one platform topside and the associated subsea flexible, umbilical and cable system. Another, contract has been assigned by Azule Energy for the Agogo Full Field Development project, a deepwater greenfield development, approximately 180 kilometres offshore Angola, about 20 kilometres west of the N'Goma FPSO (West Hub), which has been in operation since November 2014. The contract encompasses the Engineering, Procurement, Construction and Installation (EPCI) of rigid Pipe-In-Pipe flowlines with associated subsea structures. Saipem will mobilize its state-of-art offshore installation vessel FDS2.

EnQuest awarded the Contract for the decommissioning of existing infrastructures in the Heather oil field, located in the UK sector of the North Sea, around 460 kilometres northeast of Aberdeen. **3rd April 2023**

Aramco awards major offshore contracts in production expansion push

Saudi energy giant <u>Aramco</u> has awarded major offshore contracts amid aggressive investment push to scale up output. A pairing of Indian engineering giant Larsen & Toubro (L&T) and Oslo-listed Subsea 7 last month landed multiple EPC contracts from Saudi Aramco under the latter's long-term agreement (LTA) framework to which a select group of international contractors have access. The contract 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. Aramco also awarded a major contract to Saipem to execute the offshore EPCI of one platform topside and the associated subsea flexible, umbilical, and cable system. The company recently noted that its capital expenditure for 2023 between \$45 to \$55 billion in its largest spending exercise to date as it looks to increase its output capacity to 13 million b/d by 2027. Most of the incremental volumes in Saudi Arabia are expected to come from its key offshore oilfields during the next few years, requiring multiple phases of investments. **4**th **April 2023**

Saudi Aramco dishes out trio of offshore contracts in latest investment push

Saudi Aramco, the world's largest oil exporter, has awarded a trio of offshore engineering, procurement, construction and installation (EPCI) contracts to a leading international consortium continuing investments in its long term agreement (LTA) contracting framework. The Saudi state giant is pumping in billions of dollars to maintain the production profile of some of the largest offshore oilfields in the country, whilst also spending aggressively on big-ticket greenfield developments to swiftly scale up its oil production capacity. Aramco has highlighted its intent to swiftly scale up its sustainable oil production capacity to 13 million barrels per day by 2027, from the current 12 million bpd capacity. **4th April 2023**

QATAR

SAUDI ARABIA

Bahrain's Tatweer Petroleum eyes EPC contractors for \$200 million gas project Bahrain's Tatweer Petroleum is expected to award the EPC contract for its Bahrain Oil Field Associated Gas Compression Stations Project Phase 7 in the second quarter of 2023, according to Zawya Projects. The scope of work, according to Bahrain's tender board, includes the design, procurement, fabrication, installation, testing, pre-commissioning, commissioning, and start-up of three compression stations to increase the Bahrain Field's total compression capacity and for enhanced oil recovery purposes. The tender **BAHRAIN** for the EPC contract was issued in November 2022 with bid submission deadline of 5 February, according to the Bahrain Tender Board. The source said the technical bids were opened on 6 February 2023. Bid evaluation is ongoing. All six bidders' documents were accepted, and the award is expected in May 2023," the source said. The bidders include Enerflex Middle East, Jereh Oil & Gas Engineering Corp, Wasco Engineering International, Woodlands Energy Services Co, Petrofac International Bahrain, and TDE Overseas. The project, with an estimated value of \$200 million, is expected to be completed by the fourth quarter of 2025, the source said. 3rd April 2023 Technip Energies strengthens Chinese foothold with \$272 million LNG prize FEED work and technical services included in scope for Xi'An project. French contractor Technip Energies has won a contract worth up to €250 million (\$272 million) from China's Shaanxi LNG Reserves & Logistics Company for the Xi'An electric-driven liquefied natural gas emergency reserve and peak regulation project in China. Technip Energies' workscope involves the process design package, front-end engineering and **CHINA** design, and supply of key equipment of a single 800,000 tonnes per annum liquefaction train. It also covers technical services for construction, commissioning, start-up and performance testing of the 3 million cubic metres per day LNG project. The plant will utilise AP-SMR liquefaction technology which is well suited for mid-scale LNG and will be all-electric motor-driven with the aim of reducing emissions, noted the French contractor. It will be the largest liquefaction unit worldwide using a single electric motor-driven mixed refrigerant compressor, hence being a reference in terms of low-carbon LNG production. 4th April 2023 India's ONGC launches engineering contest for huge deep-water development Indian giant is spending billions of dollars to ramp up oil and gas production from its east coast assets. India's Oil & Natural Gas Corporation (ONGC) has fired the starting pistol on an integrated deep-water development project in the prolific Krishna Godavari basin off the country's east coast. Multiple people familiar with the development told Upstream that the state-owned company recently initiated a prequalification process aimed at shortlisting leading international engineering houses and consultancies to carry out pre-front end engineering and design and FEED studies on the Cluster 1 project in Block KG-DWN-98/2. ONGC is spending billions of dollars to ramp up oil and gas production from its east coast deep-water assets, which are expected to contribute more than 35 million cubic metres per day of gas and up to 77,000 barrels per day of crude at peak. 28th March 2023 **INDIA** TotalEnergies and Adani ready to start up \$730 million Indian LNG import terminal A joint venture between TotalEnergies and India's Adani group has been developing the 5 million tpa facility. A newly-built liquefied natural gas import facility at Dhamra port near India's eastern coast has received its first cargo, with joint-venture partners Adani group and French giant TotalEnergies expected to commission the facility within weeks. hamra's is the first such facility in eastern India and the partners have spent up to 60,000 million Indian rupees (\$730 million) in laying the ground and building it. Qatari LNG carrier Milaha Ras Laffan docked at the Dhamra port on 1 April, bringing in 2.6 trillion British thermal units of supercooled gas, which will be used to commission the terminal, the Press Trust of India reported. The joint venture dubbed Adani Total Private Limited comprises TotalEnergies and India's Adani group as key stakeholders, with each holding a 50% interest. Commissioning work on the LNG terminal has already started and is expected to be completed within 45 days, Upstream was told. 4th April 2023

Indian Oil advances proposed Paradip petrochemical complex

Indian Oil Corp. has granted approval for preliminary development work to proceed on a long-planned grassroots petrochemical complex that would be built nearby and integrated with IOC's existing 15-million tpy refinery in Paradip, Odisha, India.Indian Oil Corp. Ltd. (IOC) has granted approval for preliminary development work to proceed on a long-planned grassroots petrochemical complex that would be built nearby and integrated with IOC's existing 15-million tonnes/year (tpy) refinery in Paradip, Odisha, on India's northeastern coast.The late-March decision by IOC's board grants in-principle approval for the operator to carry out preliminary project activities including preparation of a detailed feasibility report for setting up the proposed petrochemical complex, IOC said in filings to National Stock Exchange of India Ltd. and BSE Ltd. The Stage 1 approval estimates the project at a cost of 610.77 billion rupees (\$7.39 billion), which would be IOC's largest single-site investment ever, the operator said. The planned Paradip petrochemical complex would be one of India's four proposed Petroleum, Chemicals, & Petrochemical Investment Regions (PCPIR). 5th April 2023

Larsen & Toubro bags EPC contract for Chambal Fertilisers and Chemicals' TAN Project

The size of the contract is Rs. 960.71 crore and is scheduled to be completed within 30 months from April 5, 2023. Chambal Fertilisers and Chemicals Limited has awarded an EPC contract to Larsen & Toubro Limited on April 5, 2023 Project.Chambal Fertilisers and Chemicals Limited is setting up a plant for manufacture of Technical Ammonium Nitrate at the District Kota, Rajasthan with a capacity of approximately 2,40,000 Metric Tons (MT) per annum including a plant to man annum of weak nitric acid.The contract includes designing, engineering, procurement, supply of equipment and materials, construction, project m commissioning of the Project and its associated facilities and grant/ transfer of requisite license for the Project. Payment is milestone based and includes 10% payment in advance against submission of a bank guarantee by the co The size of the contract is Rs. 960.71 crore plus applicable Goods and Services Tax and is scheduled to be completed Chambal Fertilisers and Chemicals Limited accounts for nearly 13% of the total urea produced in the country. 6th April 2023

• Iraq acquires stake in TotalEnergies' \$27 billion project

Iraq has agreed to a smaller 30% stake in TotalEnergies long-delayed \$27 billion project, reviving a deal that Baghdad hopes could revive foreign investment into the battered economy, *Reuters* reported. The deal was signed in 2021 for TotalEnergies to build four oil, gas and renewables projects with an initial investment of \$10 billion in southern Iraq over 25 years. But it has experienced several setbacks amid disputes between Iraqi politicians over terms. Iraq's state-owned Basrah Oil (BOC) will partner in the project, instead of the now-abolished Iraq's National Oil company (INOC), the cabinet statement noted. The potential for INOC's involvement had been another stumbling block for the deal. Iraq, OPEC's second largest producer, has been for years plagued by war, corruption and sectarian tensions that have held back its potential. QatarEnergy will also take part in the consortium and will have a share in the project, sources with direct knowledge of the matter said. Iraq's oil production capacity has remained at around 5 million barrels per day in recent years. Yet at one time there had been hopes of rivalling top producer Saudi Arabia with its output of 12 million bpd, more than a tenth of global demand. 5th April 2023

IRAQ

TotalEnergies, QatarEnergy to Participate in Iraq's Gas Growth Integrated Project (GGIP)

While confirming all the terms of the Development & Production Contract signed in 2021, TotalEnergies and the Iraqi Government have, through exchanges in the past months, jointly defined the necessary conditions and mutual insurances to move forward with the Gas Growth Integrated Project (GGIP). Signed in September 2021, the GGIP has for main purpose to enhance the development of Iraq's natural resources to improve the country's electricity supply. According to these agreements, TotalEnergies and its partners will invest approximately \$10 billion (100% share): to recover flared gas on three oil fields in order to supply gas to power generation plants, to build a seawater treatment plant in order to provide water injection for pressure maintenance to increase regional oil production, as an alternative to the use of fresh water from rivers and aquifers. Furthermore, TotalEnergies will develop a 1 GW solar power plant to supply electricity to the Basrah regional grid. In agreement with Iraqi authorities, TotalEnergies will invite the Saudi company ACWA Power to join this solar project. 5th April 2023

• IEC eyes maiden gas field development in Indonesia

Unexpected' discovery to be tested to confirm commerciality. New York-listed upstream independent Indonesia Energy Corporation (IEC) is negotiating an extension for its producing Kruh block onshore Sumatra, Indonesia, where it is hoping to exploit gas alongside the already flowing oil. IEC unexpectedly found evidence of a 30-feet net potential natural gas-bearing reservoir when drilling the Kruh-28 well initial evidence that was supported by both wireline logging and geologic logging data, and subsequent gas flaring. If a commercial amount of gas is tested in the Kruh-28 well, a development plan will be submitted for approval to the Indonesian authorities with the goal of commencing gas production in 2024. The indie is currently working over the existing Kruh-21 well, which was drilled eight years ago, to maximise production from the block. Oil is expected to flow again from this well and from Kruh-28 in the third quarter. IEC wants to secure a five-year extension for the Kruh block with the new contract set to expire in 2035. 3rd April 2023

INDONESIA

Inpex submits latest development plan for Indonesia LNG project

Carbon capture and storage scheme will neutralise all gas produced at Abadi field. Japan's Inpex has submitted a re-revised Plan of Development (POD) for its long-stalled multi-billion dollar Abadi liquefied natural gas project in Indonesia, which incorporates a carbon capture and storage scheme, to the host authorities. As part of Inpex's initiative towards a net zero society by 2050, the Abadi operator has been in dialogue with the authorities to ensure the LNG project's competitiveness and sustainability for the duration of the energy transition. As a result, Inpex amended the revised POD to include plans to neutralise all carbon dioxide emitted from gas production at the Abadi field through the introduction of CCS. Abadi's capital expenditure has been touted at more than \$12 billion for the now proposed onshore two-train liquefaction project while incorporating a CCS scheme could add \$1.2 billion or \$1.3 billion to the total, Dwi Soetjipto, head of Indonesia's upstream regulator SKK Migas, earlier said. Inpex now expects to sequentially restart activities for the Abadi LNG project, which is based on a 9.5 million tonnes per annum onshore liquefaction scheme in the remote east of the Indonesian archipelago. Work on the nearer-term horizon includes onsite activities and preparing for front-end engineering and design work subject to the Indonesian authorities approving the latest version of the POD. 5th April 2023

GTT wins FLNG work for Asian client

MALAYSIA

France's GTT has won a contract for the tank design of a new floating liquefied natural gas (FLNG) vessel, understood to be the facility destined for Malaysian energy giant Petronas' ZLNG nearshore project in Sabah, East Malaysia. GTT confirmed it has received an order from its partner, South Korea's Samsung Heavy Industries, for the tank design of a new FLNG unit on behalf of an Asian company. While neither contractor is naming the ultimate client, Petronas is the only Asian company with an FLNG facility on order at Samsung. With a total storage capacity of 200,000 cubic metres, this FLNG vessel will be the first to be fitted with the membrane containment system Mark III Flex developed by GTT. The facility's delivery is scheduled for the first quarter of 2027, which also tallies with the schedule of the ZLNG project. Samsung and JGC of Japan last December received a Letter of Intent from Petronas for the engineering, procurement, construction and commissioning contract for the \$2 billion-plus nearshore ZLNG project. **4**th **April 2023**

AFRICA

AFRICA

FLNG sector poised for \$35 billion in contract awards

Africa to dominate near-term investments but opportunities abound in the Americas: Westwood. The global floating liquefied natural gas sector's role in transitioning to a low-carbon future has been

highlighted by the \$35 billion-worth of engineering, procurement and construction contracts forecast to be awarded through to the end of 2027, according to consultancy Westwood Global Energy. In view of FLNG investments last year and planned investments expected between 2023 and 2027, Westwood anticipates 18.3 million tonnes per annum of additional FLNG capacity to come on stream by 2027, with an associated EPC award value of \$13 billion. A further 36.5 million tpa capacity is anticipated to hit the market after 2027 from FLNG units sanctioned through the end of 2027, with an EPC value of \$22 billion. Although FLNGs offer cost efficiencies compared to onshore LNG alternatives, operators have typically opted to wait for favourable conditions to progress these multi-billion-dollar projects. With gas prices hitting record highs in 2022 and Europe striving to reduce dependence on Russian pipeline gas imports, the time is nigh for the stuttering FLNG industry to fully bloom, noted Westwood. 5th April 2023 Angolan oilfield development and Trinidad FEED among \$650 million worth of contracts for Saipem Saipem announces \$650 million worth of new contracts covering a wide range of offshore activities. Italian giant Saipem has been awarded a major subsea deal for development of the Agogo field offshore Angola, and also contract wins in the UK North Sea and Saudi Arabia. The Agogo contract, covering the engineering, **ANGOLA** procurement, construction and installation scope for rigid pipe-in-pipe flowlines and associated subsea structures, was awarded by Azule Energy, a joint venture between Italy's Eni and the UK's BP. Agogo is a deep-water greenfield development about 180 kilometres offshore Angola and about 20 kilometres west of the N'Goma floating production, storage and offloading vessel (West Hub), which has been in operation since November 2014, Saipem noted. 3rd April 2023 Marathon Oil to further develop Equatorial Guinea Regional Gas Mega Hub Through its affiliate Marathon E.G., the company has signed a HOA with the government of Equatorial Guinea and Noble Energy E.G. to execute phase 2 and 3. Marathon Oil is set to move ahead with the further development of the Equatorial Guinea Regional Gas Mega Hub (GMH) by progressing the next two phases. In this connection, the US-based oil and gas firm has signed a heads of agreement (HOA) through its affiliate Marathon E.G. with the government of Equatorial Guinea (E.G.) and Noble Energy E.G., a Chevron company. **GUINEA** Phase 1 of the Equatorial Guinea Regional Gas Mega Hub was executed by establishing a tieback of the Alen field located in Block O, off the east coast of Bioko Island, to the onshore facilities in Punta Europa. The first gas from phase 1 was delivered in February 2021. Marathon Oil chairman, president, and CEO Lee Tillman said: "We are excited about this critical milestone in the ongoing development of Punta Europa as a world-class hub for the monetization of local and regional natural gas. 31st March 2023 **EUROPE** Petrofac, Hitachi Energy receive \$14 bln agreement from TenneT Petrofac Ltd said on Thursday it was awarded a 13 billion euro (\$14.09 billion) framework agreement with Hitachi Energy by Dutch-German electricity grid operator TenneT to supply offshore platforms and onshore converter stations. The multi-year framework agreement, which the oilfield services provider said represents the largest in its history, is part of TenneT's 2 gigawatt (2GW) high-voltage direct current (HVDC) offshore wind programme in the North Sea. TenneT has been engaged to connect about two-thirds of the 65 GW in offshore wind capacity targeted by Germany, the Netherlands, Denmark and Belgium by 2030. **GERMANY** The agreement covers six projects, each of which will be executed under a standalone contract valued at over 2 billion euros, split about equally between Petrofac and Hitachi Energy, Petrofac said. Petrofac also said it would undertake the engineering, procurement, construction and installation of the offshore platforms and elements of the onshore converter stations, while Hitachi Energy will supply converter stations. 30th March 2023 **NORWAY** Odfjell Drilling signs two LOIs for Deepsea Atlantic operations in North Sea

With a combined firm duration of 23 months, the LOI's are valued at around \$290m and exclude integrated services, upgrades or modifications or mobilisation fees. UK-based oil drilling and well services provider Odfjell Drilling has signed two Letters of Intent (LOI's) for the operations of its semi-submersible unit, Deepsea Atlantic, in the North Sea region. With a combined firm duration of 23 months, the LOI's are valued at around \$290m and exclude integrated services, upgrades or modifications or mobilisation fees. The LOI's also include provisions for performance bonuses and fuel incentives. In addition, the arrangement offers three additional optional periods of about one-year each, where prices for each period will be mutually agreed upon before exercising. Deepsea Atlantic is a sixth-generation deepwater and harsh environment semi-submersible unit. It is an advanced, dual derrick, dynamic-positioned unit that comes with an enhanced GVA 7500 design similar to its sister rigs Deepsea Stavanger and Deepsea Aberdeen. With a 7,500MT loading capacity, the unit is designed for operations in harsh environments and at water depths of up to 3,000m. **31**st **March 2023**

• Lime Petroleum is pre-qualified as operator in Norway

Lime Petroleum AS ("Lime") is proud to announce that the company has been pre-qualified as an operator on the Norwegian Continental Shelf (NCS) by the Norwegian Ministry of Petroleum and Energy on 28 March 2023, following the completion of a pre-qualification process which started in April 2022. Mr Lars Hübert, Chief Executive Officer of Lime, said, "The pre-qualification as operator marks an important milestone for Lime, as it is a confirmation that Lime has built a competent organisation for all major functional areas. We have grown from strength to strength over the years, from a pure oil and gas exploration company with partner status, to one with production assets, and now with operator pre-qualification. **31**st March 2023

Statera Energy to develop 3GW Hydrogen project in Kintore, Scotland

Kintore Hydrogen is a 3GW electrolyser project that will use surplus wind power in Scotland to create green hydrogen, which will be supplied to the UK's most carbon-intensive industrial clusters, through existing gas transmission pipelines. UK-based flexible energy generation and storage company Statera Energy has unveiled its plans to develop a major green hydrogen project in Kintore, Aberdeenshire. The company intends to develop Kintore Hydrogen as a 3GW electrolyser project that will use surplus wind power in Scotland to create green hydrogen. The green hydrogen produced will be supplied to Statera's power-generating facilities and the UK's most carbon-intensive industrial clusters, through existing gas transmission pipelines. The project will improve the UK's energy security, create important infrastructure, enable private investment in the green economy, and creates skilled local jobs, said the company. 31st March 2023

Anning and Somerville Gas Fields in PL P2607, offshore UK

Project Type : Offshore gas fields

Location: Southern Gas basin, UK Continental Shelf

Reserves: 301.5bcf of gas (2P reserves)

Final Investment Decision: 2023 Expected First Gas: 2024

Owner: Hartshead Resources

Anning and Somerville gas fields are located offshore UK in the Seaward production licence P2607. The licence is owned and operated by Australian oil and gas company Hartshead Resources. License P2607 comprises five blocks in Quads 48 and 49 on the UK Continental Shelf in the Southern Gas Basin. It hosts several gas fields and exploration prospects with a combined gas resource base of around 0.8tcf. The licence will be developed in three phases. Phase I will include the development of Anning and Somerville gas fields, which are estimated to hold 2P (proven and probable) reserves of 301.5 billion cubic feet of gas (bcf) (around 52 million barrels of oil equivalent). In May 2022, the Phase I development Concept Select Report (CSR) was submitted to the North Sea Transition Authority (NSTA). The company received 'Letter of No Objection' on the development concept in July 2022. PROJECT GALLERY The Phase I Front-End

SCOTLAND

UK

Engineering & Design (FEED) study and the gas export route are expected to be finalised during 2022/2023. 6th April 2023

NORTH & SOUTH AMERICA

• SBM seals \$1.6 billion funding for Buzios FPSO offshore Brazil

Netherlands-based floater specialist SBM Offshore has secured project financing for a large floating production, storage and offloading vessel set to be deployed at the giant Buzios pre-salt field offshore Brazil. Brazil's Petrobras in mid-2021 awarded SBM a lease-and-operate contract for the supply of the Almirante Tamandare FPSO to serve the Buzios-7 project in the Santos basin. SBM has now signed a \$1.63 billion funding for the Almirante Tamandare FPSO with a consortium of 13 international banks with insurance cover from four international export credit agencies (ECA). **31**st March **2023**

• Petrobras launches much-anticipated tender for two FPSOs in deep-water frontier

Bids to be submitted later this year for units to produce in the deep waters of the Sergipe-Alagoas basin. Brazil's Petrobras has returned to the market to charter two floating production, storage and offloading vessels to be deployed at the deep-water section of the Sergipe-Alagoas basin. The state-controlled company tried to contract the first of two FPSOs for the new frontier play last year but, the decision to opt for a 'build-operate-transfer' format was not well received by a market used to lease-and-operate or owner-led engineering, procurement and construction models. Only one bid was placed at that time, by Brazilian group Ocyan, and this was disqualified as the price offered surpassed the operator's internal budget. **4**th **April 2023**

• Petrobras lets contract for Route 3 lubricants plant

Petróleo Brasileiro SA (Petrobras) has let a contract to Chevron Lummus Global LLC (CLG)a partnership of Chevron USA Inc. and Lummus Technology LLC to deliver technology licensing for a new unit at the lubricants plant of the operator's Polo GasLub Itaboraí hub under construction in Itaborai, Rio de Janeiro, Brazil, as part of the operator's Route 3 integrated project to expand transportation and processing of associated gas from the country's offshore Santos basin presalt (OGJ, Nov. 7, 2022, p. 40). Under the contract, CLG will license its proprietary Isodewaxing and Isofinishing technologies for a new 12,580-b/d hydroisodewaxing (HIDW) unit that once completed will produce a wide-viscosity range of premium API Group II/II+ lubricating base oil grades for the first time in both Brazil and South America, the service provider said on Apr. 3rd April 2023

• Woodfibre LNG Project in British Columbia, Canada

Project Type : Natural gas liquefaction and export facility

Location : British Columbia, Canada

Export Capacity : 2.1 metric tonnes of LNG per annum

Estimated Investment : \$5.1bn

Start of Construction : September 2023

Expected Start of Operations: 2027

Owners: Pacific Energy (70%), Enbridge (30%)

Woodfibre LNG is a natural gas liquefaction and export facility being built around 7km south-west of Squamish, British Columbia, Canada. The project will have 250,000m³ of storage capacity and is licenced to export around 2.1 million tonnes of liquefied natural gas (LNG) per annum. Woodfibre LNG is owned and operated by a privately held Canadian company Woodfibre LNG Limited Partnership. In July 2022, Pacific Energy and energy infrastructure company Enbridge entered into an agreement to jointly invest in the development of the \$5.1bn project. PROJECT GALLERY Under the terms of the agreement, Enbridge will have 30% ownership stake in the project. Pacific Energy will retain the remaining 70% stake and will continue to be in charge of daily operations. 4th April 2023

BRAZIL

CANADA

KBR awarded front end engineering design contract for Equinor Bay du Nord FPSO project

The agreement also includes an option for continuation of detailed design and procurement management services through to final completion of the FPSO. KBR (NYSE: KBR) announced today that its Canadian entity, KBR Industrial Canada Co., has received a Letter of Intent (LOI) from Equinor Canada for the frontend engineering design (FEED) of the topside facilities of the new Bay Du Nord floating production, storage, and offloading facility (FPSO) to be located offshore Newfoundland, Canada. The agreement also includes an option for continuation of detailed design and procurement management services through to final completion of the FPSO. The FEED scope comes on the back of the pre-FEED engineering carried out by KBR in 2022 and will further mature the engineering and execution planning, working towards a final investment decision with first production expected to be in the late 2020s. During the FEED engineering, KBR will continue to help Equinor develop one of the lowest carbon emitting FPSO's in the world, using an onboard combined cycle power system and the latest technology to minimize the number of crew onboard and maximize digital solutions. All these elements will produce energy safely and securely while minimizing carbon emissions. **4**th **April 2023**

Equinor shock confirmed: Contractor KBR secures hotly contested contract at \$9 billion project

US player will work with Hatch to carry out engineering on the Bay du Nord FPSO. Houston-based KBR has confirmed the surprise award of an engineering contract on Equinor's US\$9 billion Bay du Nord project offshore eastern Canada. Last month, Upstream reported that the US player had secured a front-end engineering and design contract for the topsides of the deep water project's major floating production, storage and offloading vessel. his decision shocked the market and particularly Aker Solutions, KBR's rival for the prestigious job in Newfoundland & Labrador and which had been long-considered the frontrunner for the contract. KBR confirmed that its Canadian entity, KBR Industrial Canada, has secured a letter of intent the precursor to a formal contract for the FEED studies. The US company headed by chief executive Stuart Bradie added that it would execute the workscope jointly with Canadian subcontractor Hatch Ltd, out of St John's, the provincial capital, Canada and London. The contract also includes an option to carry out detailed design and procurement management services through to final completion of the FPSO. Some of Equinor's key requirements for the Bay du Nord FPSO are that it has low emissions, will use an onboard combined cycle power system and the latest technology to minimise the number of crew onboard, and maximise digital solutions. The FPSO is expected to handle about 200,000 barrels per day of oil from a cluster of fields in the Flemish Pass basin, beyond Canada's exclusive economic zone. 5th April 2023

• Linde inks agreement with ExxonMobil for carbon dioxide off-take

Linde's new facility is expected to start up in 2025 and will be integrated into Linde's extensive U.S. Gulf Coast industrial gas infrastructure. Linde has signed a long-term agreement with ExxonMobil for the off-take of carbon dioxide associated with Linde's new Texas. Linde previously announced that it will build, own and operate an on-site complex to supply clean hydrogen and nitroge scale blue ammonia plant. Linde's new facility is expected to start up in 2025 and will be integrated into Linde's extensive U.S. Gulf Coast industria hydrogen to other new and existing off-takers across the network. Under the terms of the agreement, ExxonMobil will transport and permanently store up to 2.2 million metric tons of carb production facility, equivalent to the emissions from nearly half a million cars per year. "Clean hydrogen is a key enabler of industry's transition to a low-carbon economy," said Dan Yankowski, Senior Vice P ExxonMobil as the carbon dioxide off-taker at our Beaumont project supports Linde's strategy to decarbonize customer low-carbon hydrogen at scale." "ExxonMobil's agreement with Linde underscores our growing momentum in providing industrial customers with large-s emissions," said Dan Ammann, President of ExxonMobil Low Carbon Solutions. "Linde's Beaumont clean hydrogen pro achieving heavy industry's decarbonization and net zero goals. 5th April 2023

Yara and Enbridge to develop low-carbon blue ammonia project in Texas

Yara Clean Ammonia and Enbridge have signed a letter of intent to jointly develop and construct a low-carbon blue ammonia production facility as equal partners. The proposed facility, which includes autothermal reforming with carbon capture, will be located at the Enbridge Ingleside Energy Center (EIEC)

USA

near Corpus Christi, Texas. Once operational, the production facility will be capable of supplying low-carbon ammonia to meet growing global demand, with an expected capacity of 1.2m to 1.4m tons per annum. Approximately 95% of the carbon dioxide generated from the production process is anticipated to be captured and transported to nearby permanent geologic storage. If confirmed through the front-end engineering design (FEED) phase and approved, total project investment is expected to be in the range of \$2.6bn to \$2.9bn, with production start-up in 2027/2028. Enbridge and Yara will utilise their complementary strengths to develop and execute the project. **5**th **April 2023**

• <u>Biden-Harris Administration announces new clean energy projects to revitalise energy communities,</u> support coal workers, and reduce reliance on competitors like China

The actions announced today will drive new investments in energy communities to support their economic revitalization, strengthen American supply chains, and help ensure coal, oil, and gas workers benefit from the new clean energy economy. As part of this release, Treasury and IRS have partnered with the Interagency Working Group on Energy Communities to provide a searchable mapping tool that helps identify areas that may be eligible for the energy community bonus. The Energy Communities IWG today is also releasing a Memorandum of Understanding between 11 federal agencies to work together to get new resources into energy communities. Agencies will support Rapid Response Teams, which provide more targeted, on-the-ground assistance, resources, and technical guidance to communities and regions facing acute and unique challenges. 5th April 2023

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