EXECUTIVE SUMMARY

The Commodity summary

- Crude Oil Brent prices are trading higher by 7% MTD 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 lower by 38% YTD
- Iron ore prices in downtrend and trading lower by 23% YTD.
- Nickel prices are in uptrend and is trading higher by 23% 6MTD
- Natural Gas prices were up by 6% WTD but trading lower by 65% YTD

The Currency summary

- Euro has gained strength against USD and is stronger by 12% 6MTD
- The US Dollar to CNY is stronger by more than 7% 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 16% 3MTD.

Project summary

- UAE player lands \$412 million contract at world's second largest offshore oilfield
- Inside Kuwait's \$10 billion Al-Zour petrochemicals complex project
- Gulf Energy awarded \$100m Multiple Contract Extensions in Oman
- Battle heats up for \$5 billion offshore packages from Qatar's NOC
- ACWA Power \$677mn rabigh project
- Saipem secures two-year extension for Eni's \$280 million drillship contract
- Maire Tecnimont bags US\$ 90 million contracts
- China chemical groups seek Beijing nod for \$10bln Indonesia refinery
- Methanex Egypt and Suez Methanol Derivatives sign a new methanol pipeline agreement
- Nigerian National Petroleum Corporation to invest \$12.5 Bln in Nigeria-Morocco Gas Pipeline
- Acelen to invest \$2.4bn in renewable fuels production in Brazil

COMMODITY UPDATES

COMMODITY	UOM	LATEST PRICE	WTD %	MTD %	3MTD %	6MTD %	YTD %
Chromium	USD/MT	10,142.36	0.13	-1.94	-4.73	7.58	-12.36
Coal	USD/MT	207.56	-3.01	4.99	-48.39	-51.79	-38.40
Cobalt	USD/MT	36,310.13	-0.06	5.02	-8.02	-35.51	-58.09
Copper	USD/MT	8,979.50	1.11	1.27	-0.13	18.81	-11.72

Crude Oil	USD/BBL	82.77	-0.96	8.62	1.40	-8.08	-20.38
Crude Oil Brent	USD/BBL	84.72	-1.06	7.03	0.29	-9.09	-20.18
Crude Oil WTI	USD/BBL	80.82	-0.85	10.34	2.60	-7.00	-20.58
Iron Ore	USD/MT	120.34	-0.59	-5.61	-0.16	26.22	-22.81
Molybdenum	USD/MT	41,520.15	-8.99	-41.84	-39.27	0.62	-2.15
Natural Gas	USD/MCF	2.45	6.35	-2.22	-33.39	-61.40	-65.13
Nickel	USD/MT	25,375.00	7.73	8.04	-10.95	15.32	-23.48
Steel HRC (FOB China)	USD/MT	627.50	0.24	-4.46	1.76	13.01	-26.20
Steel HRC (N. America)	USD/MT	1,295.21	0.00	6.31	62.81	53.55	-20.65
Steel Rebar	USD/MT	633.13	-0.45	-5.99	-4.01	11.15	-27.23
Steel Scrap	USD/MT	415.00	-4.38	-7.47	0.20	16.35	-30.85

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

CURRENCY EXCHANGE RATE

Code	Description	Country	Units	Latest Exchange Rates	WTD%	MTD%	3MTD%	6MTD%	YTD%
EURUSD	1 EUR to USD	Euro Area	USD	1.0958	-0.78	2.23	0.95	12.07	1.00
USDCNY	1 USD to CNY	China	CNY	6.8997	-0.42	-0.39	-1.74	4.91	-7.01

Source-Trading Economics

CRUDE OIL STOCK

Region	Unit	Latest Count	WTD %	MTD %	3MTD %	6MTD %	YTD %
US Stocks of Crude Oil & Petroleum Products	Thousand Barrels	16,02,195.00	-0.13	0.30	-0.31	-1.34	-5.55

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	29.47	USD	-1.31	9.19	-4.66	32.69	-9.35
Glencore PLC	494.35	GBP	1.37	10.01	-14.16	1.99	-4.73
NYSE American Steel Index	1,922.20	Index	0.75	7.19	-2.00	28.10	-5.25
Rio Tinto PLC	5,530.00	GBP	-0.13	3.17	-10.99	16.94	-5.47
Tenaris SA	29.06	USD	-2.84	2.14	-18.42	-0.58	-11.13
Tubacex SA	2.53	EUR	-3.44	1.20	12.44	25.25	39.78
Woodside Energy Group	33.41	AUD	-3.22	7.77	-9.80	-3.33	2.23

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	856	-2.17	-3.93	-15.75	-12.47	8.22		
Total	1,750	*	-1.19	-7.11	-4.37	10.90		

Source- Baker Hughes

(*) No weekly data available for those particular regions

NEWS OF THE WEEK

GULF COOPERATION COUNCIL (GCC)

UAE player lands \$412 million contract at world's second largest offshore oilfield

Five-year integrated drilling services contract is expected to commence during second quarter. Adnoc Drilling has landed a \$412 million contract to provide integrated drilling services (IDS) for Abu Dhabi National Oil Company's huge Upper Zakum oilfield. The emirati drilling giant said in a statement on Thursday that the five-year IDS contract has been awarded by Adnoc Offshore and work is expected to commence during the second quarter of 2023. "Adnoc Drilling will provide IDS for the development of the Upper Zakum field, the largest producing field in Adnoc's offshore portfolio," it stated. 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 in the Persian Gulf is Abu Dhabi's largest producing offshore oilfield and its recent expansion phase is aimed at expanding the field's production to 1.2 million bpd, While Adnoc does not disclose the individual production profiles of its offshore oilfields, Upper Zakum's production capacity is already thought to stand at more than 900,000 bpd. 14th April 2023

• <u>UAE and Japan Signed agreements for low-carbon hydrogen value chain</u>

ADNOC, UAE announced in a statement that it has signed two agreements with several Japanese partners to strengthen the low-carbon hydrogen value chain between the UAE and Japan. The agreements build on the deep-rooted energy relationship between the two countries and will advance practical solutions to help meet growing global demand for clean fuels. ADNOC is an early mover in developing global markets for hydrogen and its carrier fuels such as ammonia. These latest strategic agreements demonstrate our commitment to working with our customers to decarbonize the energy system. ADNOC mentioned that agreement with Kawasaki aims to explore production, liquefaction and transportation of hydrogen to key global markets. While a second – with the Japan Organization for Metals and Energy Security, Mitsui, INPEX and the Clean Fuel Ammonia Association – aims to confirm clean certification for ADNOC's low-carbon ammonia projects. As both energy sources emit no carbon dioxide, they will also play a key role in decarbonizing hard-to-abate sectors. **17**th **April 2023**

• European player lands offshore services contract for "major" Abu Dhabi field development

Starting this month, Fugro will perform a series of offshore surveys including geophysical, geotechnical and ROV inspections. Netherlands-based geotechnical player Fugro has won a contract from a leading Middle East client to perform extensive offshore surveys in Abu Dhabi. Fugro on Monday confirmed the development and said the surveys will be carried out to "support one of the largest long-term field development programmes in the UAE". While Fugro did not name the winning project or the operator, Upstream understands that it involves work on one of several field developments being executed by Abu

UAE

Dhabi National Oil Company (Adnoc). "Commencing April 2023, Fugro will perform a series of offshore surveys including geophysical, geotechnical and remotely operated vehicle (ROV) inspections supported by advanced engineering and geo consulting studies to help inform the front-end engineering [and] design," the company said. Fugro stated that the "project consists of approximately 600 kilometres pipeline route assessment with 800 crossings, 49 jacket surveys and island offshore surveys". The Dutch player will deliver "near real-time insights into the ground conditions" using Fugro's remote data management solutions. **18**th **April 2023**

Fugro wins field survey contract for major Abu Dhabi project

A contract has been granted to Fugro to provide site characterisation services in support of a long-term field development program that is one of the largest in the UAE. Starting from April 2023, Fugro will carry out a range of offshore surveys that will encompass geophysical, geotechnical, and remotely operated vehicle (ROV) inspections. These surveys will be backed by advanced engineering and geoconsulting studies and will provide valuable information to support the Front End Engineering Design (FEED). The project will cover around 600 km of pipeline route, with 800 crossings, as well as 49 jacket surveys and surveys of offshore islands. A contract has been granted to Fugro to provide site characterisation services in support of a long-term field development program that is one of the largest in the UAE. Starting from April 2023, Fugro will carry out a range of offshore surveys that will encompass geophysical, geotechnical, and remotely operated vehicle (ROV) inspections. **18**th **April 2023**

• Inside Kuwait's \$10 billion Al-Zour petrochemicals complex project

Kuwait Integrated Petrochemical Industries Co (KIPIC), a subsidiary of Kuwait Petroleum Corp, plans to develop a facility that will be integrated with the adjacent Al-Zour refinery and will add a gasoline block, an aromatics block, an olefins conversion technology unit, polypropylene units, and associated utility and offsite facilities to the existing site to produce nearly 2.7 mtpa of aromatics and polypropylene The Al-Zour refinery project is a greenfield, environmentally-driven project and part of Kuwait's National Development Plan that sets out the nation's long-term development priorities, including the aim to position the country as a global hub for the refining and petrochemicals industry. The refinery is located approximately 90 kms south of Kuwait City, and is one of the largest refineries built in one phase, with a capacity to process 615,000 barrels per day (bpd) of a wide slate of Kuwait domestic crude oils, including Kuwait export crude and Kuwait heavy crude. 14th April 2023

KUWAIT

• KPMG: Kuwait Infrastructure

Kuwait Vision 2035: Infrastructure projects valued in excess of \$27.6bn Projects depend on advanced adoption of PPP agreements. In a recent report by audit and advisory services group, KPMG, Kuwait's infrastructure, a main aspiration of its vision 2035, is seen as a chief agenda underpinned by the country's strong pipeline of infrastructure projects, and reinforced by demand for advancements. Entitled "Emerging Trends in Infrastructure: The Kuwait Perspective," the international group observed the optimism in Kuwait's \$27.6bn (AED101.4bn) worth of planned developments, currently in the bidding stage. Imran Shaik, Director for Deal Advisory and Head of Infrastructure Services at KPMG in Kuwait believes that despite the slowdown in the awarding and implementation of projects, the prevalent tone in the sector is positive. 17th April 2023

Gulf Energy awarded \$100m Multiple Contract Extensions in Oman National Energy Services Reunited Corp. (NESR), an international, industry-leading provider of integrated energy services in the Middle East and North Africa ("MENA") region, announced that its subsidiary, Gulf Energy, successfully completed negotiations with multiple clients in Oman to extend existing Well Intervention contracts for up to five (5) years. Based on the Company's excellent service delivery and new **OMAN** technology introductions across various fields that have resulted in exceptional well productivity increases, the new contracts range in duration for different clients and reflect the strong, mutual trust with the client base in an improving oilfield services landscape. NESR CEO & Chairman Sherif Foda commented, "The success of Gulf Energy in its in-country value ("ICV") and Omanization initiatives clearly reflects NESR's broader localization ambition as National Champion of the MENA region. 19th April 2023 Battle heats up for \$5 billion offshore packages from Qatar's NOC Ruya development aims to achieve plateau oil production of 300,000 bpd from Al Shaheen field. A clutch of leading international contracting giants is poised within days to submit technical bids for multiple offshore packages worth at least \$5 billion for work on the expansion of NOC's Al Shaheen oilfield, dubbed the Ruya development. Qatar has been aggressively scaling up its liquefied natural gas production capabilities, eying **QATAR** soaring demand in Europe and Asia, but is also expected to invest heavily in strategic offshore oil projects to sustain and ramp up production from some key assets. 20th April 2023 Chinese giant lands latest Aramco contract on world's biggest offshore oilfield A leading Chinese engineering, procurement, construction and installation contractor has landed a key offshore contract from Saudi Aramco for the further expansion of its giant Safaniyah oilfield. The Saudi stategiant is spending billions of dollars to boost the capacity of its offshore fields and has finalised multiple EPCI deals in recent weeks, as a part of its long-term agreement (LTA) arrangement with international contracting giants.13th April 2023 **ACWA Power \$677mn rabigh project** ACWA Power's new plant will aid the response to the growing holy seasons' demands.Leading Saudi developer, investor, and operator of power generation, water desalination and green hydrogen plants, ACWA Power has signed water purchase agreements for the Rabigh 4 Independent Water Plant (IWP), which will have a 600,000 cubic metre per day production capacity. Leading a consortium that includes Haji Abdullah Alireza & Partners Company, a leading player in the management, operation and maintenance of SAUDI ARABIA sea water desalination plants, and Bahrain-based Almoayyed Contracting Group, ACWA Power was awarded the project by The Saudi Water Partnership Company (SWPC), which will be the sole buyer of services for the Rabigh 4 project, located on the Red Sea coast of Saudi Arabia. ACWA Power plant will service Makkah, Madinah regions Approximately valued at \$677mn (AED2.49bn), the reverse osmosis plant will service the Makkah and Madinah regions, where demand spikes are regular during the Ramadan and the annual Hajj season. 17th April 2023 Saudi Aramco fires starting gun on huge offshore gas development project Contract involves multiple offshore facilities required at the Marjan oil and gas field. Saudi Aramco has fired the starting gun on a sizeable project involving further development of its giant Marjan oil and gas offshore field. The Saudi state giant aims to achieve a 50% growth in gas production by 2030 led by the massive \$100 billion-plus Jafurah unconventional gas programme and the expansion of some of its most prominent offshore fields. In addition, Aramco the world's largest oil exporter is carrying out the expansion of some of

its largest offshore oilfields including Safaniyah, Manifa, Marjan, Zuluf and Berri, in line with the country's

plan to boost its sustainable oil production capacity to 13 million barrels per day by 2027, up from the existing 12 million bpd capacity. **18**th **April 2023**

• Saipem secures two-year extension for Eni's \$280 million drillship contract

Saipem has been awarded a two-year contract extension by Eni for the use of the Santorini drillship. The contract extension, which will give continuity to the ongoing activity, will come into force starting from August 2023 and is worth approximately \$280 million. The deal also includes income linked to investments for improvements to the drillship worth around \$15 million. The Santorini drillship. The contract extension, which will give continuity to the ongoing activity, will come into force starting from August 2023 and is worth approximately \$280 million. The deal also includes income linked to investments for improvements to the drillship worth around \$15 million. The Santorini is a seventh-generation drillship that was acquired by Saipem in December 2022, and is capable of performing drilling activities at depths of up to 12,000 feet (over 3,500 metres). 19th April 2023

ASIA EXCLUDING GULF COOPERATION COUNCIL (GCC)

Maire Tecnimont bags US\$ 90 million contracts

CHINA

Largest ultra-low energy urea plant to be licensed in China by the Group through NextChem Holding and its subsidiaries Maire Tecnimont (MAIRE) announces that some of its Sustainable Technology Solutions subsidiaries, which are directly controlled by NextChem Holding, have been awarded several new contracts for technology licensing and engineering services for an overall value of approximately USD 90 million. These contracts have been granted by international clients mainly in Europe and the Far East. In particular, Stamicarbon, NextChem Holding innovation and licensing company engaged in nitrogen technologies, has been awarded licensing, process design package and equipment supply contracts for an Ultra-Low Energy grassroots urea plant in the Jiangxi province, China. This will be the largest Ultra-Low Energy plant with a design capacity of 3,850 metric tons per day and the seventh one globally based on Stamicarbon's proprietary innovative design, which allows steam consumption to be reduced by about 35% and cooling water consumption by about 16% compared to traditional processes. 20th April 2023

INDIA

ONGC re-tenders key contract on India's flagship deep-water development

Sapura's financial woes contributed to two years of delay for key offshore project. India's Oil & Natural Gas Corporation (ONGC) has issued a brand new tender for a key transport and installation (T&I) contract involving unfinished work on its \$5 billion Cluster 2 deep-water development, off the country's eastern coast. ONGC is spending billions of dollars to ramp up oil and gas production from its Krishna Godavari basin deepwater 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. **14**th **April 2023**

INDONESIA

Chandra Asri and INA inks MoU to set up chlor-alkali plant

Chandra Asri has signed a basic engineering and licensing agreement with Asahi Kasei Corporation (AKC) from Japan. Chandra Asri and the Indonesia Investment Authority (INA) have signed a Memorandum of Understanding to work toge in Indonesia, PT Chandra Asri Alkali (CAA) on Thursday, April 13, 2023. The CAA plant, a wholly owned subsidiary of C other potential international investors. As part of the accelerated development of this plant, Chandra Asri has signed a basic engineering and licensing agreem Japan, a leading world-class licensor with state-of-the-art intellectual property for the construction of CAA plan. The establishment of this world-class chlor-alkali company is expected to accelerate the growth of the national downstr become one of the world's largest nickel producers, as well as position itself in the global electric vehicle value chain 15th April 2023

• Petronas Carigali launches tender for latest Indonesia oilfield development

Hidayah targeting start-up in early 2027. Malaysia's national upstream company Petronas Carigali has launched a tender process for a key contract at its Hidayah oilfield development offshore Indonesia. The

workscope for the front-end engineering and design job being tendered encompasses the marine element of the greenfield project plus engineering design services for mechanical and electrical work. The FEED contract has a minimum local content (TKDN) requirement of 85% and is expected to tempt the likes of Indonesia's Synergy Engineering and Asiatek Energi Mitratama to bid for the work on the Hidayah oilfield, which lies in the North Madura II production sharing contract area. **18th April 2023**

China chemical groups seek Beijing nod for \$10bln Indonesia refinery

The move comes as China ramps up talks on mega investments in Southeast Asia as part of President Xi Jinping's Belt and Road Initiative. Two Chinese polyester fibre makers are seeking Beijing's approval to build a \$10 billion refinery and petrochemical complex in Indonesia, sources with direct knowledge of the matter told Reuters. The move comes as China ramps up talks on mega investments in Southeast Asia as part of President Xi Jinping's Belt and Road Initiative, and as Beijing limits approvals for new domestic refineries to cut carbon emissions and a fuel supply overhang. East China-based Tongkun Group and Xinfengming Group are planning a refinery-petrochemical complex in North Kalimantan province on Borneo Island, three sources said, to produce feedstocks for chemical fiber. Led by Tongkun, the proposed petrochemical complex would include a 200,000 barrels-per-day refinery and an 800,000 tonne per year ethylene unit, which could be expanded in the future, said two of the sources. The project would be part of a planned industrial park in North Kalimantan where companies broke ground on a \$2.6 billion hydropower project last month to attract aluminium, battery and electric vehicle manufacturers Tongkun has begun feasibility studies for the project, which would partly make paraxylene for its growing production of purified terephthalic acid (PTA) in China, a feedstock for polyester fibre, two sources said. **18th April 2023**

KAZAKHSTAN

• Over 50 oil and gas fields and prospective blocks on offer in Kazakhstan

More than 50 oil and gas fields up for grabs in areas that include disappearing Aral Sea. Kazakhstan has invited energy companies and investors to bid on more than 50 oil and gas fields and prospective blocks in the country, hoping to continue a largely successful run of finding new operators for state-held resources. According to a statement from the country's Energy Ministry, the list of offered assets include 11 existing fields and 45 prospective acreages where additional exploration efforts will be required to identify commercially viable hydrocarbon reserves. The fields are mostly small assets located chiefly in the country's two oil provinces, Atyrau and Mangistau, and are expected to raise interest from privately owned domestic independents already working in the area. Earlier online auctions attracted only Kazakhstan-based investors, but Chinese players already operating in the country have also shown interest. 17th April 2023

• Petronas aims to restart key LNG feed gas pipeline by Q1 2024:

Malaysian giant in September declared force majeure on supplies to MLNG Dua. Malaysia's national oil company Petroliam Nasional Berhad aims to restart a gas pipeline currently under force majeure by the first quarter of 2024, a senior company executive told Reuters. "Our plan is to complete the work by Q1 2024," said Shamsairi Ibrahim, Petronas vice president of LNG marketing and trading. Last September, Petronas declared force majeure on gas supply to MLNG Dua – one of four liquefaction projects that comprise the Petronas LNG Complex at Bintulu, Sarawak – following subsidence issues on a section of the Sabah-Sarawak Gas Pipeline (SSGP) denominated as KP201. In tandem with the repair work, Petronas is undertaking an investigation into the supply disruption to MLNG Dua that has nameplate liquefaction capacity of 9.6 million tonnes per annum, which it aims to complete by the middle of this year. MLNG Dua has term contracts with term customers including Japanese companies Mitsubishi, which is also a partner, and Tohoku Electric.17th April 2023

MALAYSIA

• Air Products to build new nitrogen plants in Malaysia

This strategic investment in additional capacity and infrastructure will strengthen Air P Northern Malaysia and its capability to meet market 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. The company will also build a new nitrogen plant in the Bayan Lepas Free Industrial Zone to serve the fast-growing de manufacturing industries. Air Products brought its first nitrogen plant in the zone onstream in 2021. **9**th **April 2023**

MYANMAR

• PTTEP asserts itself in Myanmar and plans to relaunch new offshore project

Thai operator facing criticism but still looking ahead to next Zawtika phase. Thailand's national upstream company PTTEP is preparing to relaunch a new development phase of its Zawtika project offshore Myanmar, where it is facing pressure over its continuing investment in the military-controlled state. Bangkokheadquartered PTTEP is one of only two heavyweight foreign operators in Myanmar following the military takeover in February 2021 that triggered an exodus by many companies with interests in the country, although government sanctions played a part in some of these company departures. South Korea's Posco International is also still doing business in Myanmar's oil and gas sector as operator of the giant Shwe field. **18**th **April 2023**

• Sulzer to build new research center for its separation technology solutions in Singapore

Sulzer will focus its research activities on chemical separation processes for circular operations such as polymer recycling and bio-based fuel and polymer production. Sulzer has signed an agreement with JTC Corporation, the master planner and developer of Singapore's industrial infras center for its separation technology solutions. The new facility will be located at the Jurong Innovation District's CleanTech Park, Singapore's first eco-business park s sustainable manufacturing and urban solutions. Sulzer will focus its research activities on chemical separation process recycling and bio-based fuel and polymer production. Innovative separation solutions for customer applications Sulzer and JTC Corporation signed a tenancy agreement last week at the site location in CleanTech Park to mark the s sustaining ecosystem, CleanTech Park supports the growth of clean technologies and advanced manufacturing by offe solutions in real-world conditions. The new Sulzer Chemtech facility will focus on driving development of innovative sep the Asia Pacific region. **14**th **April 2023**

SINGAPORE

Keppel and ExxonMobil to develop low-carbon ammonia solutions

ExxonMobil Asia Pacific has signed a memorandum of understanding (MoU) with Singapore's Keppel Infrastructure to develop access to low-carbon hydrogen and ammonia for scalable commercial and industrial applications in Singapore. Keppel Infrastructure is the infrastructure arm of Singapore-based Keppel Corporation, a global asset manager and operator with strong expertise in sustainability-related solutions spanning the areas of energy & environment, urban development and connectivity. In addition to being a hydrogen carrier and storage medium, ammonia can be used directly as a carbon-free fuel or broken down into carbon-free hydrogen for use in power generation, as well as feedstock for refinery and petrochemical operations. This MoU follows the Singapore government's launch of its National Hydrogen Strategy in October 2022, which expects hydrogen to meet up to half of Singapore's power needs by 2050. As part of this hydrogen strategy, the Energy Market Authority (EMA) and the Maritime and Port Authority of Singapore (MPA) issued an expression of interest in December 2022 for proposals to build, own and operate low- or zero-carbon power generation and bunkering facilities on Jurong Island. ExxonMobil is advancing its world-scale low-carbon hydrogen facility at its integrated complex in Baytown, Texas, from where ammonia will be produced. The low-carbon hydrogen, ammonia and carbon capture facility is expected to produce 1 billion cubic feet of low-carbon hydrogen per day, making it the largest low-carbon hydrogen project in the world with a planned startup date of 2027-2028. 20th April 2023

Egypt, India launch polyethylene factory in Suez governorate

Egypt and India unveiled Sunday the cornerstone for a polyethylene (PET) production factory to cost a \$110 million investment, in Ain Sokhna, Suez governorate. The project is planned to have a production capacity of 30,000 tons per month, Ahram Online reports. The construction will go through two phases, the first starting during the first half of 2024 while the second will be executed in mid-2025. The project will provide more than 700 direct and indirect job opportunities. "We appreciate the presence of Indian investments in the industrial zone in Sokhna, and the presence of the Flex factory within the industrial developer Orascom for Industrial Zones, as Flex is one of the largest Indian companies working in this field," Walid Gamal El-Din, Chairman of the General Authority for the Suez Canal Economic Zone (SCZONE) said. Flex-Egypt, an Indian company in the Arab country, is owner of the future facture. **10**th **April 2023**

• Egypt cooperates with foreign partners on extensive oil drilling program

During the meeting, the pair mulled the available investment opportunities to British companies wishing to invest in the field of oil and natural gas in Egypt. The Egyptian petroleum sector is currently implementing an extensive drilling program in cooperation foreign partners to make new oil discoveries and increase production, Minister of Petroleum and Mineral Resources Tarek El-Molla said in a meeting with the British Ambassador to Cairo Gareth Bayley. During the meeting, the pair mulled the available investment opportunities to British companies wishing to invest in the field of oil and natural gas in Egypt. They also discussed the key role played by the East Mediterranean Gas Forum (EMGF) in supporting regional and international integration. Additionally, Bayley pointed out that some British oil and gas companies seek to review and study the available investment opportunities in Egypt. 11th April 2023

Methanex Egypt and Suez Methanol Derivatives sign a new methanol pipeline agreement

Suez Methanol Derivatives is designed to produce 140 KTA of main products including resins, SNF and 42 KTA of special UF resins for various end-use applications. Methanex Egypt and Suez Methanol Derivatives (SMD) Company signed an infrastructure development agreement for plant to the neighboring SMD project in Damietta. The agreement was signed by Methanex Egypt Managing Director M Hesham Selim in the presence of ECHEM Chairman Ibrahim Mekky. Mohamed Shindy, Methanex Egypt Managing Director, said: "We are very pleased with our partnership with SMD on the growth of the Egyptian petrochemicals industry. As the sole producer of methanol in Egypt, we are proud of our role support of the Ministry of Petroleum and Mineral Resources' vision to maximize the value of the country's oil and gas re commitment to this vision even further, as we undertake the construction and maintenance of a dedicated pipeline that in Damietta Port." Hisham Selim, Suez Methanol Derivatives (SMD) Company CEO & Chairman, said: "SMD project is the first of its kind sector, aiming to produce highly value-added specialty chemicals. Through the utility of locally produced petrochemical between the Egyptian petrochemical companies. In addition to our agreement with Methanex Egypt, we have also sign and EPC for feedstock supply and products off-take. I am confident that this methanol pipeline will provide a safe, effici methanol supply throughout the lifetime of the SMD project. 17th April 2023

Egypt, India launch polyethylene factory in Suez governorate

Egypt and India unveiled Sunday the cornerstone for a polyethylene (PET) production factory to cost a \$110 million investment, in Ain Sokhna, Suez governorate. The project is planned to have a production capacity of 30,000 tons per month, Ahram Online reports. The construction will go through two phases, the first starting during the first half of 2024 while the second will be executed in mid-2025. The project will provide more than 700 direct and indirect job opportunities. "We appreciate the presence of Indian investments in the industrial zone in Sokhna, and the presence of the Flex factory within the industrial developer Orascom for Industrial Zones, as Flex is one of the largest Indian companies working in this field," Walid Gamal El-Din, Chairman of the General Authority for the Suez Canal Economic Zone (SCZONE) said. Flex-Egypt, an Indian company in the Arab country, is owner of the future facture. **10**th **April 2023**

EGYPT

Ghana oil project on verge of revival after Aker sells up

GHANA	African bank becomes 100% shareholder of Aker Energy, operator of the Pecan project offshore Ghana. Aker Energy, the beleaguered operator of the long-stalled Greater Pecan oil project offshore Ghana, has a new owner, one that is intent to revive this what was a challenging \$2 billion deep-water development. Greater Pecan has been on hold for about two years, while Aker Energy worked out how to finance a project hit by Covid and political issues, all while state-owned Ghana National Petroleum Corporation (GNPC) wanted to buy a stake in the asset for \$1.3 billion. Today, Aker Capital 100%-owned by Aker ASA — and Norway-based TRG agreed to sell their respective 50.79%. 14 th April 2023
LIBYA	 Eni hits market with two bid processes for huge Libya offshore project Italy's Eni has started the ball rolling on two key bid processes on its \$8 billion Structures A&E project offshore Libya. Due on stream in 2026, this is Libya's most significant project for 20 years and will see 750 million cubic feet per day of gas exported from the A and E fields. The project will centre on two big fixed steel platforms tied in to the existing onshore treatment facility at Mellitah where a carbon capture and storage plant will also be built. 18th April 2023 New Libyan gas project forges ahead with tenders for Atshan facility and export pipeline State-owned player starts bid processes for central production facility and 300-kilometre pipeline. Libya's state-owned National Oil Corporation (NOC) has issued two separate calls to contractors to build a major new gas production complex and export pipeline at its Atshan project in the Murzuq basin. In 2019, NOC gave the go-ahead for its 100%-owned subsidiary Zallaf Oil & Gas to pull together a plan to exploit large volumes of associated gas held in the onshore asset which straddles blocks NC 210 and NC 151, close to the border with Algeria. This project is now moving ahead, with Zallaf in the market for contractors to fabricate a large scale gas processing plant at the field and to build a gas export pipeline. 18th April 2023
	a large scale gas processing plant at the field and to baild a gas export pipeline. 10 April 2023
	• IFC and OCP Group partner to build solar plants, green fertilizer production in Morocco Under the agreement, IFC will provide OCP with a green loan of €100 million to build the solar plants in the mining town Morocco's largest phosphate reserves. IFC and OCP Group partner to build solar plants, green fertilizer production in Morocco IFC and OCP Group, the world's largest phosphate-based fertilizer producer, today announced a partnership through a to power OCP's Morocco operations to reduce the company's carbon footprint and help green its fertilizer production. A green loan is a form of financing where funds are made available to finance eligible green proje such as climate change mitigation or climate change adaptation. The project is part of OCP's \$13 billion Green Investm fertilizer production and transition its operations to green energy by 2030 and allow OCP to replace its electricity consu 285,000 tons of carbon dioxide equivalent (tCO2e) annually. 13 th April 2023
MOROCCO	• Two UK companies to build mega-algae production plant in Morocco Brilliant Planet, an emerging leader in nature-based carbon dioxide removal (CDR) and Mott MacDonald, the global engineering, development & management consultancy, will build in Morocco the largest algae production facility in the world. The announcement was made Friday by the two UK companies in a joint press release. The Moroccan plant will be commissioned in 2024. Brilliant Planet's method of using marine microalgae to capture and sequester CO2 offers nature-based solutions for reducing carbon emissions and driving climate change mitigation, he added. Mott MacDonald will provide Front End Engineering Design support, covering multiple disciplines for the demonstration facility in Akhfennir, a Moroccan Saharan coastal town. 17 th April 2023
	Moroccan companies bid to build Casablanca's desalination plant Morocco's water department plans to announce the company that would build Casablanca's desalination plant by year's end, water and equipment minister Nizar Baraka said, adding that the competing companies

include Moroccan ones. Consecutive droughts emptied many Moroccan dams pushing the government to invest in desalination to free dam water for inner regions. By 2030, Morocco will source 50% of its fresh water from desalination, up from 11% currently, Baraka said. In November, King Mohammed VI urged the

government to speed up the country's renewable energy efforts which would power desalination plants. Industry minister Ryad Mezzour – who was speaking together with Baraka at a meeting by the alliance of Istiqlal party economists- said that 70% of the equipment used in desalination plants in the country are made by Moroccan suppliers. Between 1960 and 2020, the availability of renewable water resources decreased from 2,560 m3 to about 620 m3 per person per year, placing Morocco in what is considered a situation of "structural water stress", The World Bank said in a recent report. **13**th **April 2023**

• Nigerian National Petroleum Corporation to invest \$12.5 Bln in Nigeria-Morocco Gas Pipeline

The Nigerian National Petroleum Corporation (NNPCL) will invest \$12.5 billion to secure a 50% stake in the \$25 billion Nigeria-Morocco gas pipeline project. This historic project is expected to set a record as the world's longest offshore gas pipeline, covering some 5,600 km across 11 African countries. NNPCL and Morocco's National Office of Hydrocarbons and Mines (ONHYM) are jointly financing the project in equal parts. NNPCL managing director Mallam Mele Kyari, who was speaking in Abuja on Thursday, said the Corporation's pipeline project, which will link Nigeria to Morocco, is already in Phase II of the preliminary design study, and is undergoing an environmental impact assessment and rights of way investigations. According to Kyari, NNPCL is taking advantage of Nigeria's huge natural gas reserves of more than 200 billion cubic feet, which could grow to 600 billion cubic feet as more investment is expected due to the recent resolution of production sharing contract disputes with partners. He said the large reserve will provide a low-carbon energy alternative that will support growth in the energy and industrial sectors, fight poverty, reduce the carbon footprint and create more job opportunities. 8th April 2023

• Chinese yard secures work for mystery Nigerian LNG plant

Scope involves four process modules, for which Wison has lined up Baker Hughes. Chinese contractor Wison Offshore and Marine has been awarded a gig to provide procurement services for an unnamed liquefied natural gas plant in West Africa. Shanghai-based Wison in recent years has enjoyed success in fabricating LNG modules, having concluded a number of deals including one with Eni to build a floating LNG vessel destined to exploit the Italian energy giant's gas asset offshore Congo-Brazzaville. "This contract is for the procurement of an undisclosed onshore LNG plant project," Wison said, even though Asia-based engineering sources told Upstream the contractor's scope also includes engineering and construction for the facility to be built in Nigeria's Akwa Ibom State. **18**th **April 2023**

• Shell's hydrocarbon hotspot: Supermajor seeks to drill 10 more wells in prolific Namibia

Supermajor's future offshore activities could be influenced by the creation of marine protected areas. Shell has filed plans to drill as many as 10 new exploration and appraisal wells on the prolific licence offshore Namibia that hosts its highly promising Jonker, Graff and La Rona discoveries. The supermajor may also carry out an extended well test on one or more of its discoveries to better understand reservoir connectivity, amid concerns that the creation of new marine protected areas may complicate offshore operations. **14**th **April 2023**

QatarEnergy signs MoU with Namibia to enhance energy co-operation

The MoU paves the way for continued co-operation and covers key areas such as knowledge sharing, workforce development and exploring further investment opportunities in Namibia. QatarEnergy has signed a memorandum of understanding (MoU) with the Ministry of Mines and Energy of Namibia to strengthen co-operation in the energy sector. The agreement was signed by HE the Minister of State for Energy Affairs Saad bin Sherida al-Kaabi, also the President and CEO of QatarEnergy, and Tom Alweendo, Minister of Mines and Energy, Namibia, at the signing ceremony held at QatarEnergy's headquarters in Doha. The MoU paves the way for continued co-operation and covers key areas such as knowledge sharing, workforce development and exploring further investment opportunities in Namibia. In his remarks at the signing ceremony, HE al-Kaabi said: "We are pleased to further enhance our co-operation with the government of Namibia and build on our recent successes. This agreement further strengthens our relationship as we work jointly towards a prosperous future. 17th April 2023

NIGERIA

NIMIBIA

AUSTRALIA

• Excavation of underground powerhouse cavern begins at Kidston Pumped Storage Hydro

The excavation of an underground powerhouse cavern at Kidston Pumped Storage Hydro Power Plant in North Queensland, Australia, has begun. This comes approximately 14 months since the implementation of the project began in January 2022. The project seeks to transform the former Kidston gold mine into a pumped storage hydroelectric power generation facility. It is being carried out by a Joint Venture between McConnell Dowell and John Holland. **10**th **April 2023**

• TotalEnergies-operated Papua LNG Project in Papua New Guinea (nsenergybusiness.com)

Project type: LNG project

Location : Papua New Guinea

Capacity: Four LNG trains with a total capacity of 4Mt/y

Final Investment Decision: 2023-end or early 2024

Operator: TotalEnergies

Ownership: TotalEnergies (40.1%), ExxonMobil (37.1%) and Santos (22.8%)

Papua LNG Project is a planned Liquefied Natural Gas (LNG) production project in Papua New Guinea. Set to be located adjacent to the existing PNG LNG processing facilities, the project will have four LNG trains with a combined capacity of 4 million tonnes per year (Mt/y). The fully integrated Front-End Engineering Design (FEED) for the Papua LNG project was launched in March 2023. The Final Investment Decision (FID) is planned by the end of 2023 or early 2024. Production is expected to commence four years after FID, in late 2027 or early 2028. The development of the project, which is estimated to entail an investment of \$10bn, will support LNG supplies to Asia as well as reduce the use of coal for power generation. Contractors involved In August 2022, a consortium of Technip Energies and Clough was selected to conduct the FEED studies for the Papua LNG project's upstream production facilities. **17**th **April 2023**

AUSTRALIA

Pilot Energy and Svante work to decarbonise Western Australia

Duo planning to capture about 8 million tonnes per annum of CO2 from Kwinana area. Carbon capture company Svante is teaming up with Pilot Energy, an Australian exploration and production company, to provide carbon capture and storage (CCS) solutions for industrial customers in Australia, including the Kwinana Industrial Area. The two companies intend to develop full-service CCS solutions for customers, starting with about 8 million tonnes per annum of carbon dioxide from Western Australia's Kwinana Industrial Area. Svante's innovative solid sorbent carbon capture technology is an ideal solution to efficiently capture the Kwinana Industrial Area's hard-to-avoid CO2 emissions, and we're enthusiastic about this new collaboration," said Brad Lingo, Pilot's chairman. The Kwinana Industrial Area is a hotspot for decarbonisation efforts in Australia, with BP planning a green hydrogen hub in the area through converting an oil refinery, and while Woodside Energy plans a hydrogen and ammonia production hub there. Svante's technology will be paired with Pilot's Cliff Head CO2 offshore storage project, which is converting the operating Cliff Head offshore oil field to enable permanent carbon dioxide storage and low-carbon hydrogen and ammonia production. Chevron was a lead investor in Svante's funding round last year, which raised \$318 million for the company. 19th April 2023

FLNG on the table to exploit Australian gas giant

Competing options under evaluation for Rafael discovery despite studies showing floating liquefaction is technically and commercially feasible. Australian independent Buru Energy is progressing towards exploitation of its potentially giant Rafael gas condensate discovery onshore Australia, with the operator looking to move into the front-end engineering and design (FEED) phase following delineation drilling in 2024. However, despite initial study work showing that a floating liquefied natural gas (FLNG) project would be viable, the operator is keeping its development options open via in-house and third party studies. A recently completed pre-feasibility study performed in collaboration by Technip Energies, Transborders Energy and Buru found that an approximate 1.6 million tonnes per annum FLNG facility is technically, commercially and economically feasible option to commercialise the 100% Buru-owned Rafael field. Rafael

has independently assessed potential recoverable volumes of more than 1 trillion cubic feet of gas and over 20 million barrels of condensate. Buru will continue to work with Transborders and its multi-project collaboration partners including Kyushu Electric Power, Mitsui OSK. Lines, Technip Energies, SBM Offshore and Add Energy to progress commercial discussions and to refine the cost and schedule parameters for the next phase of project definition. **19**th **April 2023**

Chemetics bags contract to install sulphuric acid technology for Arafura

Chemetics, Worley's technology and solutions provider for sulphuric acid and other specialty chemical facilities, has been awarded a contract to install its CORE-SO2 sulphuric acid technology at Arafura Rare Earths Ltd's Nolans Project in Australia. Located 135 km north of Alice Springs in Australia's Northern Territory, this greenfield mine will extract and process neodymium and praseodymium (NdPr). These rare earth elements are used to create ultra-strong permanent magnets for a range of applications, such as household electronics and high-performance motors for electric vehicles. Chemetics is delivering the detailed engineering and supply of Chemetics' CORE-SO2™ technology for the site's sulphuric acid plant, along with the associated oxygen plant. "Arafura Rare Earths is very pleased to be working with Chemetics Inc as a global leader that is able to provide the Nolans Project with highly efficient, robustly engineered and low-emission sulphuric acid technology. 20th April 2023

Australian indie discovers potential multi-Tcf gas resource down under

However, commercialising mixed coal seam gas and conventional gas volumes could prove challenging. Omega Oil and Gas has come up trumps with its Canyon-2 exploration well onshore Queensland, Australia, which the upbeat operator claimed could help unlock multi-trillion cubic feet of gas reserves. The Canyon-2 wildcat intersected 293 metres of gas and associated liquids hydrocarbon shows within the Kianga formation and upper Back Creek group. Omega said these intersections correlate with historic discoveries including Shell's Tasmania-1 gas find. Canyon-2 is also a continuation of the Cabawin-1 oil discovery that was cased, completed and put into production from the upper part of the Kianga formation back in the 1960s. The Kianga formation is the primary target of the ongoing exploration campaign but, after encouraging gas shows continued into the upper Back Creek group, the operator decided to deepen the well and this group now is a potential additional reservoir. "It's still quite early to say something definitively about the Canyon-2 well being a commercial discovery as they have yet to run the wireline logs and flow test the well. 20th April 2023

EUROPE

Evonik partners with Siemens to pilot new electrolysis technology for green hydrogen

Federal Ministry of Education and Research is providing funding for the project. Evonik is investing in a pilot electrolyzer at its site in Herne (Germany) to produce green hydrogen as a starting product f material for rotor blades for wind turbines. In an accompanying project, Siemens Energy is researching how this new e use. The project consortium started at the end of 2022 and runs until mid-2025. Both the investment and the research p Ministry of Education and Research. Judith Pirscher, State Secretary at the Federal Ministry of Education and Research (BMBF): "Green hydrogen is the mi funding the H2annibal project, we are supporting research into innovative hydrogen technologies in real conditions in the transfer from science to industry and supporting the ramp-up of the hydrogen economy in Germany. 17th April 2023

GERMANY

Neste scales up waste plastic processing at Porvoo refinery

FINLAND

Finland's Neste has successfully concluded its second series of industrial-scale processing runs with liquefied waste plastic at its refinery in Porvoo, Finland. While Neste is establishing large-scale capacities to process liquefied waste plastic at its Porvoo site, the current processing runs utilize existing refinery equipment built for crude oil refining. The goal of the processing runs is to further increase the company's understanding of how different types of waste plastics behave during chemical recycling in the refinery processes. The end product gained in the runs – Neste RETM, a drop-in feedstock for petrochemicals – is turned into new plastics by Neste's partners. Since Neste's first processing run in 2020, the company has concluded a total of six successful runs, processing close to 3,000 tons of liquefied waste plastic in total. After processing 800 tons

in the first series completed in 2022, the company has been able to more than triple that amount to date. The processing runs are a part of Neste's strategy to advance chemical recycling and contribute to a circular polymers economy. Neste processed so called "hard-to-recycle" waste plastic which would have ended up in incineration or landfill. 10th April 2023 Aker BP and ConocoPhillips make new oil discovery offshore Norway Ve prospect west of Stavanger hits oil in the Alvheim and Heimdal fields area. A joint venture comprising Aker BP and ConocoPhillips has made a shallow-water oil discovery near the producing Alvheim field in the Norwegian North Sea. Well 25/4-15, also known as the Ve prospect, hit a 31.5-metre oil column in the Heimdal formation, 29 metres of which was a sandstone reservoir with good reservoir quality, according to the Norwegian Petroleum Directorate (NPD). A 1.5-metre zone of residual oil was also found in a deeper Heimdal sand with good reservoir quality. 14th April 2023 European energy security boost: Norway puts Barents Sea gas pipeline back on agenda New analysis shows a pipeline is the most viable solution. A new subsea gas export pipeline in Norway's Barents Sea is the most viable of various alternatives for monetising gas discoveries in the region which could help boost energy security in Europe, according to a new study endorsed by the government. The study, by **NORWAY** the country's state-owned pipeline owner Gassco, considered various technical solutions including an increase in liquefied natural gas export capacity at the Hammerfest LNG facility, export of blue ammonia and a new gas plant and pipeline down to the Norwegian Sea for further transport through the existing gas pipeline network. 18th April 2023 OMV hits black gold offshore Norway near its producing Gudrun field Joint venture assessing size and commerciality of Eirik discovery. A joint venture led by Austrian operator OMV has made an oil discovery offshore Norway a short distance from the producing Gudrun field. The wildcat well 15/2-2 S (Eirik) was drilled in a high-pressure, high-temperature reservoir setting about five kilometres west of the Gudrun field in the North Sea, and about 230 kilometres west of Stavanger. A 500metre-thick oil column was discovered in the intra-Draupne reservoir formation, comprising multiple thin sandstone layers totalling 23 metres but with poor reservoir properties, according to the Norwegian Petroleum Directorate, with oil shows also seen in the Upper Jurassic reservoir. 20th April 2023 Cepsa JV to build largest 2G biofuels plant in southern Europe Cepsa, a leading international company headquartered in Madrid, Spain, and Bio-Oils, a member of the Apical group of companies, have created a joint venture to promote the production of second generation (2G) biofuels through the construction of the largest plant in southern Europe. Apical is a leading vegetable oil processor based in Singapore. The facility, which will be located at Cepsa's La Rábida Energy Park in Palos de la Frontera, Huelva, Spain, will entail an investment of up to EUR1 billion (USD1.1 billion), one of the largest private investments in the history of the southern Spanish region of Andalusia. The new plant will **SOUTHERN** secure the majority of the feedstock supply from organic waste such as agricultural residue or used cooking **EUROPE** oils through a global, long-term agreement with Apical, Bio-Oils' parent company, enabling it to address one of the key challenges facing the industry: access to feedstock. 2G biofuels promote the circular economy by using waste for their production that would otherwise end up in landfills. Cepsa will contribute its technical expertise and experience in the development of large industrial projects and fuel production as well as its knowledge of the European market and the decarbonisation goals of its customers in the transport sector. Apical and Bio-Oils will ensure the supply of raw materials and contribute their own expertise in biofuels production. 17th April 2023 Tecnicas Reunidas begins engineering works for e-methanol plant in Spain In Spain, CETAER has signed a collaboration agreement with Tecnicas Reunidas for the development of an e-**SPAIN** methanol plant to be built in Almeria, Spain. The facility will produce 37,000 tons per year of e-methanol

UK

from the combination of 7,200 tons per year of renewable hydrogen with 54,000 tons of CO2 captured in industrial processes. It is expected to start commercial operations in 2026. The project, called 'Nascar', includes in a first stage the configuration study of the plant, the preparation of the technical documentation for the permits and the development of a feasibility analysis. The second and third stages of the agreement will cover FEED (Front-end Engineering Design) and EPC (Engineering, Procurement and Construction) services, respectively. **7**th **April 2023**

• TotalEnergies eyes bid for E&P player Neptune Energy

Independent with strong North Sea presence could be worth \$5 billion. TotalEnergies is weighing up a bid for private equity-backed oil and gas company Neptune Energy, according to a report by Bloomberg news agency, citing people with knowledge of the matter. Neptune, which is backed by Carlyle Group and CVC Capital Partners, could be valued at more than \$5 billion in a sale, according to an earlier Bloomberg News report. **13**th **April 2023**

• Technip Energies wins FEED from LanzaTech for a SAF facility in UK

The development, which is expected to produce 79 KTA (thousand Tonnes per Annum) (ca.100million litres/year) of SAF technology. Technip Energies announces the award of a contract for the Front End Engineering Design (FEED) phase of LanzaTec Project based on LanzaJet Alcohol to Jet (ATJ) Technology, on track to be one of the first commercial SAF facilities in t Under a UK Government mandate, SAF must comprise the equivalent to at least 10% of jet fuel by 2030. DRAGON sta Aviation for the Goal Of Netzero. LanzaTech UK's DRAGON SAF Project has been awarded supplemental funding through The UK Department for Tran decarbonise aviation fuel in the UK. The flagship facility, to be located in Port Talbot, Wales, will uniquely use feedstock bringing circularity to the project's green credentials. 13th April 2023

• UK Oil & Gas announces Pinarova-1's 9 inch casing is set

Drilling is expected to resume on schedule in the next few days following final wellhead and BOP pressure test. UK Oil & Gas PLC (London AIM: UKOG) is pleased to announce that Pinarova-1's 9% inch casing is now set and cemented down to 287 metres below surface. In preparation for drilling ahead through the target Eocene Hoya limestone sequence, installation of the new wellhead and blow-out preventer ("BOP") assembly is now nearing completion. Drilling is expected to resume on schedule in the next few days following final wellhead and BOP pressure test. It is planned to drill cautiously through the Hoya target zone and to open-hole test any zones where good live oil shows are encountered prior to reaching a total depth at around 550 metres below surface. UKOG's geologist will remain on site to identify and, hopefully, sample any live oil to surface within the newly enlarged mud-pits and to help describe Hoya reservoir geology seen in drill cuttings. 19th April 2023

IGas Energy secures planning permission for Glentworth development

The Lincolnshire County Council has approved IGas Energy's plans to develop a new oil well, abolGas gets planning for new oil well near Gainsborough. (Credit: Mihai on Unsplash)IGas Energy has secured the planning approval for the development of a new oil well in the village of Glentworth, in the West Lindsey district of Lincolnshire, England.

The Lincolnshire County Council has granted the planning approval. The proposed new well site is located about 2.3km from Glentworth and less than 0.5km from the company's existing Glentworth-K well site which has been operating since 2011. The first phase of the development is estimated to add around 200 barrels per day and nearly 1.0mmstb 2P reserves and have a mid-case net present value (NPV) of £17.5m. Based on the success of Phase 1, further development drilling is planned in subsequent years. The UK-based oil and gas company intends to develop an initial appraisal well and up to six horizontal development wells, as part of the Phase 2 development. The Phase 2 development has the potential to add about 500 barrels per day of production, along with nearly 2mmstb 2P reserves from 2C, said the company. 18th April 2023

• Chevron Lummus gets contract for Petrobras' Group II base oil unit

Chevron Lummus Global LLC (CLG) announced a recent contract award from Petróleo Brasileiro S.A. (Petrobras) for a new 12,580 barrel-per-day (bpd) hydroisodewaxing (HIDW) unit at the GasLub Hub, a lubricant plant in Itaboraí, Rio de Janeiro state, Brazil. Petrobras is a state-owned Brazilian multinational corporation in the petroleum industry headquartered in Rio de Janeiro, Brazil. Chevron Lummus Global's scope includes the technology license, basic design engineering, and research unit testing services. Employing CLG's ISODEWAXING and ISOFINISHING technologies, the unit will produce a wide viscosity range of premium API Group II/ II+ lubricating base oil grades for the first time in Brazil and South America. 13th April 2023

• Acelen to invest \$2.4bn in renewable fuels production in Brazil

The Mubadala Capital-backed firm plans to build a new biorefinery in the Brazilian state of Bahia to produce one billion litres per year of renewable fuels, aimed initially at the foreign market, where green diesel and sustainable aviation fuel are approved already for sale as well as consumption. Acelen, a downstream company created by Mubadala Capital, announced plans to invest over BRL12bn (\$2.44bn) over the next 10 years in Brazil towards the production of renewable fuels. A memorandum of understanding (MoU) was signed in Abu Dhabi, UAE by the company in this regard with the government of Bahia. The MoU is aimed at producing renewable diesel and Querosene de Aviação or sustainable aviation kerosene (QAV) to help expedite the energy transition of Brazil. Acelen plans to build a new biorefinery in the Brazilian state of Bahia to produce one billion litres per year of renewable fuels, which is equivalent to the annual supply of 1.1 million vehicles. The biorefinery will have a production capacity of 20,000 barrels/day. Its production will be aimed initially at the foreign market, where green diesel and sustainable aviation fuel are approved already for sale as well as consumption. 17th April 2023

Brazil adds 2.5 billion-barrel pre-salt block to bid round initiative

Jaspe area could be offered to investors under permanent offer initiative. Brazil's National Petroleum Agency (ANP) has approved the inclusion of the Jaspe pre-salt area into the list of blocks to be offered to investors at the country's forthcoming oil and gas rounds. Jaspe is a large pre-salt structure located in the prolific Campos basin that is estimated to hold in place volumes of about 2.5 billion barrels of oil equivalent. However, the latest exploration wells drilled in pre-salt areas auctioned off by the ANP over the past few years failed to result in any major hydrocarbons discovery. **17**th **April 2023**

• Norway's Equinor eyes another east Canada exploration drive

Proposed Newfoundland & Labrador programme includes prospect that two previous wells failed to reach. Equinor is eyeing plans to drill more exploration wells offshore eastern Canada in 2024, including a third shot to drill a probe on a promising structure after technical problems stymied two earlier attempts. The Norwegian major operates the \$9.4 billion Bay du Nord project in Newfoundland & Labrador and has spent recent years drilling exploration wells in the Flemish Pass basin to boost the development's commerciality. Some wells discovered extra oil and gas in the Cambriol and Cappahayden prospects which will be tied back to the Bay du Nord floating production, storage and offloading vessel. 13th April 2023

• Cemvita opens biomanufacturing pilot plant in Houston

eCO2 platform promises to alleviate feedstock shortage and produce carbon-negative fuels and chemicals at competitive market rates. Cemvita, the standard for biosolutions in the energy industry, today announced the opening of a pilot plant in Houston, development of technology for using CO2 emissions as feedstock to produce valuable biocommodities including fertiliz the pilot plant also marks the launch of Cemvita's eCO2 business as a wholly owned company under Cemvita. Boasting a substantial volume of 55,000 liters, the plant is currently producing eCO2 Oil, a cutting-edge microbially-pro is already shipping samples of eCO2 products to customers including leading renewable fuels companies and plastics in pre-FEED engineering on full commercial scale designs 13th April 2023

BRAZIL

CANADA

USA

• Atlas Agro selects KBR green ammonia technology for US fertilizer plant

Under the terms of the MoU, KBR will provide technology licensing, basic engineering design, proprietary equipment an zero-carbon nitrogen fertilizerS. KBR announced today that it has signed a memorandum of understanding (MoU) with Atlas Agro AG to license KBR's planned investment in a series of green nitrate plants. Under the terms of the MoU, KBR will provide technology licensing, basic engineering design, proprietary equipment a zero-carbon nitrogen fertilizers. The engineering design for the first plant located in the United States commenced in M "We are excited to support Atlas Agro's vision of zero-carbon fertilizer production through our market leading green am KBR President, Technology. "We are also confident that we can drive schedule synergies across the series of plants to globally. 14th April 2023

• SBM Offshore signs Chinese shipyard deal with second contract set to close soon

MPF C, to be classed by ABS, is likely destined for operation at ExxonMobil's Stabroek block offshore Guyana. Dutch floater specialist SBM Offshore has finalised talks with Chinese yard China Merchants Heavy Industry (CMHI) to build the hull and living quarters for its latest floating production, storage and offloading vessel, potentially destined for operation offshore Guyana. Multiple Asian contracting sources told Upstream that the award will commit CMHI's facility in Qidong city in eastern China's Jiangsu province to fabricate the FPSO hull, internally named as multipurpose floater C (MPF C). **14**th **April 2023**

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