

GERAB**BULLETIN**

Weekly News

**EXECUTIVE SUMMARY****The Commodity summary**

- Natural gas prices are in downtrend and trading lower by 72% 6MTD and 46% YTD.
- Coal prices are in downtrend and trading lower by 31% WTD
- Iron ore prices are in uptrend but down by 14% than a year ago prices
- Crude Oil Brent prices and Crude Oil WTI prices went down by 8% WTD. Both are trading lower by more than 10% than a year ago prices

The Currency summary

- Euro has gained over USD by 12% 6MTD but US Dollar to Euro is still stronger by more than 5% YTD
- The US Dollar to CNY is stronger by more than 6% YTD. CNY gained against USD by 8% 3MTD

The Rig count summary

- The Rig counts in North America have gone up by 18% MTD and it has gone up by 13% MTD in Europe.

Project summary

- TAQA Invests \$65mn in Taweelah B Independent Power and Water Plant
- Worley and JESA announces the Award of Phosphate Project in Saudi Arabia
- Indonesia approves US\$3.35bil revised development plan for Eni's Merakes gas fields
- Australia and Germany to invest \$90 mln for joint hydrogen supply chain projects
- Bord Gáis Energy To Spend €250m Building Two New Power Plants
- TechnipFMC scoops Norwegian EPCI prize valued at up to \$1 billion
- Argentina Inks \$540 Million Deal with Development Bank for Gas Projects
- Transocean in \$400 million-plus ultra-deepwater drillship deal
- Imperial Oil to invest \$539 mln in renewable diesel plant in Canada
- Eni joint venture advances \$8 billion Libya giant gas project

COMMODITY UPDATES

COMMODITY	UOM	LATEST PRICE	WTD %	MTD %	3MTD %	6MTD %	YTD %
Chromium	USD/MT	10,747.49	-0.12	0.95	11.07	4.11	4.95
Coal	USD/MT	270.07	-31.10	-32.85	-29.82	-39.91	3.81
Cobalt	USD/MT	37,081.75	-2.49	-6.07	-23.67	-30.19	-51.28
Copper	USD/MT	9,070.00	-3.28	0.88	12.68	13.72	-8.27
Crude Oil	USD/BBL	78.83	-7.90	-3.42	-7.62	-16.64	-15.56
Crude Oil Brent	USD/BBL	81.97	-7.76	-2.97	-7.55	-16.06	-13.27
Crude Oil WTI	USD/BBL	75.69	-8.04	-3.91	-7.70	-17.26	-17.90

Iron Ore	USD/MT	123.95	1.65	2.84	37.45	15.45	-14.11
Molybdenum	USD/MT	81,452.70	16.68	19.14	93.53	149.98	94.36
Natural Gas	USD/MCF	2.54	-15.83	-30.79	-63.47	-71.91	-46.10
Nickel	USD/MT	29,505.00	-0.39	3.55	15.91	33.15	25.50
Steel HRC (FOB China)	USD/MT	642.50	3.63	4.20	22.69	4.62	-19.42
Steel HRC (N. America)	USD/MT	865.31	6.73	8.77	20.46	-3.04	-31.93
Steel Rebar	USD/MT	647.04	-3.60	-1.90	15.45	-1.27	-22.65
Steel Scrap	USD/MT	435.00	2.96	5.02	23.92	13.30	-14.00

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

CURRENCY EXCHANGE RATE

Code	Description	Country	Units	Latest Exchange Rates	WTD%	MTD%	3MTD%	6MTD%	YTD%
EURUSD	1 EUR to USD	Euro Area	USD	1.0892	0.23	3.28	11.72	7.21	-4.76
USDCNY	1 USD to CNY	China	CNY	6.7484	0.11	2.53	7.93	0.18	-6.19

Source- Trading Economics

CRUDE OIL STOCK

Region	Unit	Latest Count	WTD %	MTD %	3MTD %	6MTD %	YTD %
US Stocks of Crude Oil & Petroleum Products	Thousand Barrels	16,07,193.00	0.10	1.87	-1.03	-4.26	-9.09

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	31.09	USD	-2.60	16.75	45.83	29.54	-1.27
Glencore PLC	544.70	GBP	-0.64	0.06	4.95	22.12	36.07
NYSE American Steel Index	2,035.71	Index	0.14	17.60	34.00	34.30	24.87
Rio Tinto PLC	6,064.00	GBP	-3.61	3.85	29.71	26.37	12.84
Tenaris SA	33.08	USD	-6.55	-1.37	3.96	24.31	29.17
Tubacex SA	2.42	EUR	1.68	19.80	13.62	22.84	49.38

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	*	1.96	4.00	8.33	23.81
GCC	218	*	-2.24	4.81	10.66	15.34
Middle East	321	*	-1.83	4.56	6.64	13.83

Africa	84	*	1.20	13.51	16.67	3.70
Asia-Pacific	183	*	-2.66	-4.69	0.00	1.67
Europe	107	*	12.63	7.00	35.44	1.90
Latin America	173	*	-6.49	-3.35	9.49	10.19
North America	1,016	0.59	18.00	3.89	5.18	22.85
Total	1,884	*	8.34	2.95	7.11	15.44

Source- Baker Hughes

(*) No weekly data available for those particular regions

NEWS OF THE WEEK

GULF COOPERATION COUNCIL (GCC)

UAE

- Masdar to take the Dutch route in supplying green hydrogen to European markets**
 The Abu Dhabi-based clean energy giant has signed an MoU with four Dutch companies to explore exporting green hydrogen to Europe. Abu Dhabi-based Masdar is going Dutch in its plan to develop a green hydrogen supply chain to Amsterdam and support the markets in the Netherlands and Europe. The parties will jointly develop a green hydrogen supply chain, focusing on production in Abu Dhabi and export to the Netherlands through the port of Amsterdam. The exported green hydrogen will be delivered to key European sectors sustainable aviation fuel (SAF), steelmaking, and bunkering for shipping. The global green hydrogen market is projected to reach \$72 billion by 2030, while PricewaterhouseCoopers (PwC), has estimated that by 2050, hydrogen demand could be between 150 and 500 million metric tonnes per year. **16th January 2023**
- Dubai Petroleum awards global logistics contract to Petrasco**
 A leading provider of international logistics solutions to the energy industry, Petrasco, has been awarded a key contract by Dubai Petroleum Establishment (DPE). The multi-year agreement, worth a seven-figure sum, will see Petrasco provide global logistics support for five offshore fields, an onshore gas field, pipelines, and support services. Work carried out in the emirate will be complemented with support from Petrasco's other international offices in the energy hubs of Aberdeen, UK and Houston, TX. The company's strategic partner, Middle East Tubular Services (METS), will also provide dedicated support throughout the duration of this contract. The company's Dubai site, located in the Jebel Ali Free Zone, is in excess of 180,000 sq. ft and offers office, warehouse, yard, and Dutch barn covered storage facilities with all required handling equipment on-site. It also has an additional 100,000 sq. ft of yard storage offsite. **25th January 2023**
- TAQA Invests \$65mn in Taweelah B Independent Power and Water Plant**
 Abu Dhabi National Energy Co. (TAQA) has expanded its stake in Taweelah B Independent Power and Water Plant with an investment of 239 million dirhams (\$65 million). In a regulatory disclosure on last Friday, the Abu Dhabi Securities Exchange (ADX)-listed integrated utility said it has entered into the operations and maintenance (O&M) of the Taweelah B and acquired an additional stake in the plant. TAQA completed its acquisition from BTU Power Company and its liquidators of BTU's entire interest in the Taweelah B IWPP in Abu Dhabi. In particular, TAQA acquired an additional 10% ownership stake in the owner of the Taweelah B IWPP – Taweelah Asia Power Company, thereby increasing TAQA's overall ownership stake in TAPCO to 70%. In addition, TAQA acquired a 25% ownership stake in Asia Gulf Power Service Company Limited (the O&M contractor to TAPCO). The Taweelah B IWPP, owned and operated by TAPCO, has 2.2 gigawatts (GW) of gross installed power generation capacity and 162 million imperial gallons per day of gross installed water desalination capacity. **27th January 2023**

OMAN

- **Maha signs pact with Mafrag for Block 70 in Oman**
Maha Energy (Maha), through its wholly-owned subsidiary Maha Energy (Oman) and Mafrag Energy (Mafrag Energy) have entered into a Joint Operating Agreement (JOA) for Block 70 in Oman, on 28 January 2023. The signature of the JOA, alongside the Governmental approval ratified by Royal Decree 74/2022 and other relevant procedures, marks the satisfaction of all conditions precedent required for the conclusion of the assignment of Maha's 35 per cent work interest to Mafrag Energy, as provided in the relevant Farmout Agreement signed by the parties in August 2022. Maha and Mafrag Energy will address the post-transfer obligations moving forward. Maha is the Operator of Block 70, with a 65 per cent shareholding interest. **30th January 2023**
- **Oman's Abraj Energy, EDO Collaborate to Advance Onshore Oil and Gas Services**
Abraj Energy Services, Oman has signed a Memorandum of Understanding (MoU) with Energy Development Oman (EDO) to develop services related to oil and gas extraction operations. The partnership will see Abraj provide an expanded range of services to EDO's affiliates, including Petroleum Development Oman (PDO), further strengthening the long-standing relationship between the two entities. The MoU was signed by Eng. Saif Said Al Hamhami, CEO of Abraj Energy Services and on behalf of EDO, Eng. Mazin Rashid Al Lamki, CEO of the company inked the deal. With the aim to ensure the long-term, sustainable security and supply of energy-related services in Oman, the collaboration serves to boost the contribution of national drilling champion Abraj to the country's oilfield services sector, as well as encouraging the implementation of alternative energy solutions. **31st January 2023**

SAUDI ARABIA

- **Saudi Arabia receives expression of interest for Jubail 4 & 6 Independent Water Project**
Saudi Water Partnership Company S.M.L.L.C (SWPC) announced the receipt of expressions of interest (EOI) in respect of the potential development of an Independent Water Project to be designed using Reverse Osmosis seawater desalination technology, Jubail 4 & 6 Independent Water Project. The desalination plant will be located 18 kms south of Jubail Industrial City at the Arabian Gulf Coast, adjacent to the existing plant units (Jubail Phase 1, Jubail Phase 2, Jubail 3A & 3B), in the Eastern Province of the Kingdom of Saudi Arabia. A total of 35 companies including 16 Saudi companies expressed their interest in the Project as follows: Power supply to the Project will be provided from the Saudi Electricity Company's high voltage network. The Project will be constructed with a 600,000 m3/day potable water capacity and will include the desalination plant and all associated infrastructure and facilities. SWPC's obligations under the WPA will be supported by a credit support agreement from the government of the Kingdom of Saudi Arabia. Interested Bidders should express their interest to participate in the tender process by no later than 9 January 2023. **26th January 2023**
- **Alfanar Signs MOU with Daewoo to Collaborate Oil & Gas and Petrochemical Projects**
Alfanar, Saudi Arabia announced the signing of an MoU with Daewoo Engineering & Construction Co.,Ltd. to explore opportunities for joint collaboration in the construction of oil, gas, and petrochemical projects in Saudi Arabia. The statement mentioned, as a leading Saudi company, we contribute heavily towards developing local content and achieving sustainability in this sector. Through this agreement, we will work on transferring and localizing expertise in the engineering construction field and exchange the expertise of advanced technologies used in design, procurement, and project execution. **31st January 2023**
- **Worley and JESA announces the Award of Phosphate Project in Saudi Arabia**
Worley announced in a statement that, Saudi Arabian Mining Company (Ma'aden) has issued a Notice of Award to Worley and JESA International S.A. (JESA) to provide engineering, procurement, and construction management (EPCM) services for its Phosphate 3 Phase 1 Project. The parties expect to work towards a definitive agreement for the in-Kingdom and out-of-Kingdom EPCM contracts in the next few months. Under the EPCM contracts, Worley will provide in-Kingdom services and JESA will provide out-of-Kingdom services, for the design and construction of new process plants in the industrial cities of Wa'ad Al Shamal (WAS) and Ras Al-Khair (RAK) in Saudi Arabia. This is part of an integrated greenfield

complex that is expected to produce up to 1.5 million metric tonnes per year of phosphate fertilizers, once operational. “We are pleased that Worley has been selected for providing services to Ma’aden’s Phosphate 3 development program that is expected to make Saudi Arabia one of the leading phosphate fertilizer exporters worldwide,” said Chris Ashton, Chief Executive Officer of Worley. **1st February 2023**

ASIA EXCLUDING GULF COOPERATION COUNCIL (GCC)

INDIA

- SRF approves three Dahej projects; Capex investment of Rs. 645 Cr**
 The board has approved a project for setting up a range of Specialty Fluoropolymers, producing an agrochemical intermediate, and creating a new plant building. SRF Limited, a chemical based multi-business entity engaged in the manufacturing of industrial and specialty intermed projected cost of Rs. 645 crore. The board has approved a project for setting up a range of Specialty Fluoropolymers at Dahej at a projected cost of Rs commissioned in 24 months. The board has also approved a project for setting up a new and dedicated facility to produce an agrochemical intermed crore to meet the growing demand for the product in the future. This project is expected to be commissioned in ten mon In addition, to cater to the growing requirements of new and upcoming plants at Dahej, the board has approved a proje at a projected cost of Rs. 40 crore. Established in 1970, SRF Limited with an annual turnover of Rs. 12,313 crore is a chemical based multi- business entit and specialty intermediates.The company’s diversified business portfolio covers Fluorochemicals, Specialty Chemicals and Laminated Fabrics.**31st January 2023**
- Government of India Approves Rs 197.44bn National Green Hydrogen Mission**
 Government of India has approved the National Green Hydrogen Mission, which is aimed at making India the global hub for the production of green hydrogen. The total outlay for the mission is Rs. 197.44 billion, out of which the government has allocated Rs. 174.90 billion for the SIGHT programme, Rs. 14.66 billion for the upcoming pilot projects, Rs. 4 billion for R&D, and Rs. 3.88 billion towards other mission components.The Ministry of New and Renewable Energy (MNRE) will formulate the scheme guidelines for implementation. The mission seeks to promote the development of green hydrogen production capacity of at least 5 MMT (Million Metric Tonnes) per annum with an associated renewable energy capacity addition of about 125 GW in the country by 2030. **31st January 2023**
- JSPL to Invest Rs 1,500cr to Operationalize Monnet Power Plant**
 Jindal Steel and Power (JSPL) plans to infuse up to Rs 1,500 crore to operationalize the recently-acquired Monnet Power Plant located in Angul, Odisha. The 1,050 MW under-construction coal-based power project, once completed, will fulfill the power requirements of JSPL's steel plant in Angul, the site for expansion activities. The investment will be made over the next 12-18 months. The coal for Monnet Power will be sourced from the Uktal B1 and B2 mines which have approximately 347 million tonne of reserves. The acquisition of Monnet Power by the steel major was completed at a value of Rs 410 crore through the insolvency route in December, 2022. **31st January 2023**

INDONESIA

- Local contractors win FEED work on Indonesian offshore gas project**
 Singapore’s Conrad Asia Energy has awarded key front-end engineering and design contracts for its grassroots Mako gas field development offshore Indonesia, with local contractors picking up the spoils. Indonesia’s very own Synergy Engineering has won the FEED for the mobile offshore production unit (MOPU), while compatriot Asiatek Energi has been awarded the FEED for the subsea umbilicals, riser and flowlines for the shallow-water field development, according to Jakarta-based sources. Conrad added that it has also awarded the FEED contract to an unnamed party for Mako’s conductor support frame

	<p>(CSF) and it has awarded a mystery vendor the pipeline route geophysical survey contract. 31st January 2023</p> <ul style="list-style-type: none"> <p><u>Indonesia to offer 10 oil and gas blocks in 2023, including in South China Sea</u> Indonesia plans to offer 10 oil and gas working areas this year, including a block in the South China Sea, amid efforts to boost energy production and make new discoveries, a senior energy ministry official said on Monday. In 2022, Indonesia auctioned 13 oil and gas fields and has appointed contractors for six of them. The country is aiming to reach crude oil lifting of 1 million barrels per day (bpd) and gas lifting of 12,000 million standard cubic feet per day (mmscfd) by 2030. Last year, it missed its oil and gas lifting target amid delays in projects and unexpected shutdowns. Among the oil and gas fields Indonesia plans to offer this year are working areas in Natuna D Alpha, which are giant gas fields situated in the South China Sea, energy ministry official Tutuka Ariadji told reporters. Last year, Indonesia approved development plan for US\$3 billion Natuna gas field in South China Sea. 30th January 2023</p> <p><u>Indonesia approves US\$3.35bil revised development plan for Eni's Merakes gas fields</u> Indonesia has approved a revised plan of development for its Merakes and Merakes East gas fields with a total investment of US\$3.35 billion, its upstream oil and gas regulator said on Tuesday. The project operated by the local unit of Italian energy company Eni started gas production in April 2021 and supplies to the Bontang LNG facility in East Kalimantan province. Italy's Eni did not immediately respond to an email request for comment. SKK Migas said the fields were expected to be onstream until 2032. Indonesia has a target of reaching 1 million barrels of oil per day and 12 billion standard cubic feet per day gas lifting by 2030, to meet rising domestic energy demands. 17th January 2023</p>
KAZAKHSTAN	<ul style="list-style-type: none"> <p><u>Chevron reaches 'important milestone' at Kazakhstan's largest producing oilfield</u> US supermajor keeps up pace of huge expansion project in Kazakhstan despite challenges of recent years. US supermajor Chevron has started bringing online newly built facilities that form part of the multibillion-dollar production capacity expansion project at the Tengiz oilfield the largest producing oilfield in Kazakhstan. The expansion includes construction of facilities under the Wellhead Pressure Management Project (WPMP) and Future Growth Project (FGP). The WPMP will enable the existing facilities to continue production at their full capacity by lowering flowing wellhead pressures, while the FGP involves the deployment of powerful sour gas injection compressors and injection wells to pump excess produced associated gas into the Tengiz reservoir and support its pressure. Chevron expects Tengiz to remain highly profitable, even in this transitioning year, with anticipated dividends to the US supermajor of between \$5 billion and \$6 billion in 2023, higher than in 2022, on an assumed average Brent price of \$60 per barrel, according to Chevron chief financial officer Pierre Breber. 30th January 2023</p>
LEBANON	<ul style="list-style-type: none"> <p><u>QatarEnergy dives into Lebanon with TotalEnergies and Eni</u> Doha-based giant takes stakes in two exploration blocks where a major wildcat will be drilled this year. QatarEnergy has taken a major stake in two promising exploration blocks offshore Lebanon where its partners are TotalEnergies and Eni. One of the blocks is set to host an exploration probe this year, targeting the big Qana prospect that also extends into Israel's waters across the recently agreed maritime boundary between the two nations. QatarEnergy has taken a 30% interest in blocks 4 and 9, after a deal was signed in Beirut in a ceremony attended by Walid Fayad, Lebanon's Minister of Energy & Water; Saad Sherida Al-Kaabi, Qatar's Minister of State for Energy Affairs; plus Patrick Pouyanne and Claudio Descalzi, the respective chief executives of TotalEnergies and Eni. 29th January 2023</p>
MALAYSIA	<ul style="list-style-type: none"> <p><u>Petronas, ExxonMobil to jointly pursue Malaysia CCS projects</u> Industry heavyweights forge ahead on carbon capture and Malaysian energy giant Petronas and US supermajor ExxonMobil have signed two project development agreements to jointly pursue carbon capture and storage (CCS) activation projects in Malaysia. Under the agreements signed on Friday, both</p>

	<p>companies will define the next steps including maturation of technical scopes for the CCS value chain, evaluation of identified fields for CO₂ storage, development of an appropriate commercial framework and the establishment of an advocacy plan to support regulations and policy development in enabling CCS projects. “Petronas is proud to work with its long-standing partner, ExxonMobil to pursue CCS projects together, aligning our shared aspiration to deliver energy solutions in a responsible and sustainable manner. 30th January 2023</p> <ul style="list-style-type: none"> <p><u>International contract wins set Decom Engineering up for successful year and further growth</u> Decom Engineering (Decom) have kicked off 2023 with a number of project wins and worksopes valued in excess of seven figures sterling. Underlining the global appeal of Decom’s cutting technologies, the decommissioning specialist has secured new projects in Africa, Norway, Thailand and Singapore, while strengthening ties to an existing client in Malaysia. Scotland and Northern Ireland-based Decom will mobilise multiple chop saws and supporting personnel in Q1 to support on decommissioning campaigns in the Gulf of Thailand. And offshore the Democratic Republic of Congo, Decom will provide a C1-24 chop saw with hot stab functionality to assist the recovery of a production jumper in water depths of up to 1,000 metres. The workscope, on behalf of a major oil and gas operator, was a result of Decom proving its chop saw could succeed where other cutting technologies had failed and it is the first time Decom has been engaged directly by this operator. In Norway, Decom will provide support through a tier 1 contractor to a major operator during the summer campaign season to cut concrete coated pipelines with its new larger C1-46 chop saw. 1st February 2023</p>
MYANMAR	<ul style="list-style-type: none"> <p><u>The new Zawtika Development Project in Myanmar will produce more than 400 Mmcfd of natural gas daily</u> The new Zawtika Development Project, located in the Gulf of Moattama in Myanmar, has entered to its fourth phase of construction (referred as 1D) prior to final commissioning in 2025. At its peak, this development is expected to be capable of producing approximately 400 million cubic feet of natural gas per day, equivalent to 4,500 full Olympic-size swimming pools. This 1D phase, which began its installation late in 2022, consists of eight new remote extraction wells (from ZWP12 to ZWP19), plus their associated pipelines with two pipeline end manifolds. Sarens, world leader in heavy lifting, engineered transport and crane rental, was asked by the Vietsovpetro joint venture to assist in the loading of the ZWP12 and ZP15 jackets, of approximately 5,000 tons each, at the port of Vung Tau in Vietnam. For this job, Sarens engineering team deployed four 588-ton strandjacks to pull the jackets into its final position on the barge used for its transport. One of the main challenges of this project came at the time of the loading of the ZWP12 jacket, with a total weight of 4,844 tons and a length of 140.3 metres, due to the approach of Typhoon Noru, which delayed the operation 2 days. 27th January 2023</p>
NETHERLANDS	<ul style="list-style-type: none"> <p><u>Strohm scales up operations as it completes plant expansion and plans recruitment drive</u> Strohm, the world’s first and leading producer of Thermoplastic Composite Pipes (TCP), has completed its plant expansion in The Netherlands, as it sets out to accelerate growth and support the energy transition. The expansion is the biggest capital investment the company has undertaken since originally setting up the facility in the port town of IJmuiden, near Amsterdam. With this investment, Strohm triples its capacity for production to 140km of normalised pipe per annum, allowing it to better support existing and future contracts, with plans to increase the capacity even further after implementing current efficiency gains. Following the expansion, the company’s plant boasts a production environment equipped with a dedicated production line for research and development; extrusion line for liner, coating, and weight coating materials; and two large production lines using state of the art, composite tape winding and proprietary melt fusion technology. Following the recent completion of a EUR 29m (£25m) investment round at the end of 2022, we are looking forward to enabling future growth and supporting the sustainability goals of the market with our innovative solutions. 25th January 2023</p>

SOUTH KOREA	<ul style="list-style-type: none"> <u>Enapter wins order for South Korea green hydrogen project in South Korea</u> Supported by the South Korean Ministry of Industry and Trade (Motie) with 62 billion South Korean won (\$43.3m), the project aims to investigate and compare hydrogen production with different electrolysis technologies. Energy technology specialist Enapter AG (Enapter) and its Korea-based technology partner YEST has received an order from South Korea for the deliver of two AEM electrolyzers with a total capacity of two megawatts, to be used in a 12.5 MW hydrogen pilot project on Jeju Island. The systems supplied by Enapter the only European company selected for the project are expected to produce more than 1,000 tonnes of green hydrogen per year. South Korea has outlined its hydrogen roadmap to boost industry, stating that it wishes to create large-scale domestic demand, develop relevant infrastructure and establish a global supply chain. Motie expects these measures to have an economic effect of 47.1 trillion won (\$34bn) and to cut 28m tonnes of greenhouse gases by 2030. 30th January 2023
THAILAND	<ul style="list-style-type: none"> <u>Afyren to build bio-based acid plant in Thailand with Mitr Phol</u> French start-up <u>Afyren</u> announced that is has signed a letter of agreement with Thailand's <u>Mitr Phol</u>, the world's third largest sugar producer, to form a 70-30 joint venture biorefinery in Thailand. The plant will produce about 28,000 tons per year of bio-based and low-carbon products, representing an annualized turnover of approximately EUR60 million (USD65.3 million). Mitr Phol will provide the plant access to local biomass by-products, while the plant will allow the Thai company to optimise its industrial circular platform, "From Waste to Value" model with high value-added bio-based outlets for its sugarcane co-products. Production start-up is expected by 2025, with the timetable to be specified at the end of the engineering studies scheduled for the second semester of 2023. With this project in Thailand, Afyren is targeting the Asian market, which represents 25% of the world market for carboxylic acids. Its first plant that will produce bio-based acids is now in the production start-up phase in Eastern France, with a production capacity of 16,000 tons per year. 27th January 2023
TURKEY	<ul style="list-style-type: none"> <u>Turkish Petroleum spuds key appraisal well on 5 Tcf gas discovery</u> Results from Asmara-2 probe will underpin subsea scheme in 2000 metres of water. Turkish Petroleum has just started drilling an appraisal well on a 5 trillion cubic foot gas discovery in the Black Sea that will from part of its major Sakarya project. Phase one of the Sakarya development is due on stream this quarter, with gas piped 165 kilometres from subsea wells to a new shore-based gas processing plant. In a future development phase, Amasra, which is located about 40 kilometres northeast of Sakarya, will exploited via more subsea wells feeding gas by flowlines to Sakarya's infrastructure. 1st February 2023
AFRICA	
ALGERIA	<ul style="list-style-type: none"> <u>Eni and Sonatrach sign strategic agreements</u> Eni CEO, Claudio Descalzi, and the CEO of Sonatrach, Toufik Hakkar, signed in Algiers two agreements, which outline future joint projects on energy supply, energy transition and decarbonisation. The agreements were signed in the presence of the Prime Minister of Italy, Giorgia Meloni, and the President of the People's Democratic Republic of Algeria, Abdelmadjid Tebboune. Through these agreements, Eni and Sonatrach will identify opportunities for the reduction of greenhouse gas and methane gas emissions and will define energy efficiency initiatives, renewable energy developments, green hydrogen projects and carbon dioxide capture and storage projects, to support energy security and at the same time a sustainable energy transition. In addition, the companies will conduct studies to identify possible measures to improve Algeria's energy export capacity to Europe. Eni has been present in Algeria since 1981. With an equity production of 100,000 barrels of oil equivalent per day, Eni is the main international company in the country. 27th January 2023
EGYPT	<ul style="list-style-type: none"> <u>Egypt: TAG Oil Provides BED 1-7 Operations Update - Petroleum Africa</u>

	<p>TAG Oil announced that the company has commenced the re-completion and evaluation operations of the BED 1-7 vertical well. These initial operations are part of TAG Oil’s Phase 1 development program of the unconventional Abu Roash “F” (ARF) reservoir in the Badr Oil Field (BED-1) located in Egypt’s Western Desert. More specifically, the company says it identified a suitable candidate well (BED 1-7) for re-completion that historically produced approximately 20,000 barrels from the ARF reservoir at an initial production rate of 418 barrels of oil per day. 27th January 2023</p>
LIBYA	<ul style="list-style-type: none"> <p>• <u>Italian Prime Minister prepares for Libya trip to sign oil and gas deals</u> Italian Prime Minister Giorgia Meloni is preparing for a visit to Libya as part of efforts to secure more oil and gas supplies from North Africa. Ms Meloni may go to the capital Tripoli as early as Saturday, Bloomberg reported. The trip is not confirmed and might be delayed or cancelled because of security concerns, the news agency reported sources as saying. The visit comes as Libya’s National Oil Corporation is set to sign offshore gas exploration and production agreements worth \$8 billion with Italian energy company Eni, according to media reports. Libya, Opec’s seventh-largest crude oil producer, has been looking to boost production after years of being plagued by conflict and political instability. The NOC plans to bolster oil production to 2.1 million barrels per day by 2025. With an equity production of 100,000 barrels of oil equivalent per day, Eni is one of the largest oil and gas companies operating in Algeria. 27th January 2023</p> <p>• <u>Biggest Libyan project in decades lauded as link in ‘south-north’ gas corridor</u> Eni and partner NOC commit to \$8 billion Structures A&E to boost domestic supplies and future exports to Europe. Eni’s decision last week to push ahead with the Structures A&E development offshore Libya will be a shot in the arm for the country’s gas-fired power generation when the giant project comes on stream in 2026. Notably, the \$8 billion project, which the Italian major is developing in partnership with the National Oil Corporation of Libya (NOC), is also being billed as an additional source of natural gas for Europe as the region cuts its gas-supply ties with Russia. 1st February 2023</p> <p>• <u>Eni joint venture advances \$8 billion Libya giant gas project</u> Italian energy giant Eni and partner the National Oil Corporation of Libya (NOC) have agreed to develop the Structures A&E giant gas project with overall estimated investments of \$8 billion including a related carbon capture and storage facility, confirming an earlier Upstream exclusive that the final investment decision would be taken in 2023. Structures A&E will be is the first major project in Libya since the early 2000s. It involves development of two gas fields - the A and E structures - located in contractual area D, offshore Libya. First gas from the duo is targeted for 2026 and will reach a combined plateau production of 750 million cubic feet per day. The fields’ development will centre on two main platforms tied into the existing treatment facilities at the Mellitah Complex. The project also includes construction of a carbon capture and storage (CCS) facility at Mellitah, allowing a significant reduction of the overall carbon footprint, in line with Eni’s decarbonisation strategy. The overall estimated investment will amount to \$8 billion, “with significant impact on the industry and the associated supply chain, allowing a significant contribution to the Libyan economy”, noted Eni. Upstream exclusively revealed in June 2022 that the Structures A&E base-case development calls for an 85,000-tonne processing platform and a smaller wellhead platform that together will produce 760 million cubic feet per day of gas, 42,000 barrels per day of condensate and 5000 bpd of oil. 29th January 2023</p>
MOROCCO	<ul style="list-style-type: none"> <p>• <u>Belgium’s John Cockerill to produce green hydrogen in Morocco</u> Belgium’s energy firm, John Cockerill, plans to invest in green hydrogen as part of a joint venture in Morocco where they plan to manufacture key equipment to transform electricity into hydrogen at a lower cost, Afrik21 reported. “In Morocco, John Cockerill will manufacture alkaline electrolyzers. This is the most widespread technology for the production of electrolytic hydrogen, but also for the production of numerous chemical compounds, including chlorine. It is therefore very mature in the industry. John Cockerill’s planned investment follows suit global companies such as Total Eren which announced a mega</p>

	<p>project to set up plants capable of transforming 10HW of clean electricity into hydrogen and green ammonia. For that purpose, Total Eren has already obtained a 170,000 hectare site from the Moroccan government in the Guelmim-Oued Noun region. Morocco plans to increase the share of renewable energy to 52% of its electricity mix by 2030. As part of that effort, Morocco's phosphates and fertilizers giant OCP said it will spend 130 billion dirhams (\$12.5 billion) in its 2023-2027 development plan to switch to clean energy. 16th January 2023</p>
MAURITANIA	<ul style="list-style-type: none"> • <u>Chariot acquisition of Singapore player boosts huge Mauritania green hydrogen project</u> Technology company offers solutions for desalination and brackish water treatment, targeting hydrogen and potable water markets. Upstream and transition player Chariot has struck a deal to buy a water production company, the experience of which is expected to help underpin its huge proposed green hydrogen project in Mauritania. Chariot and TotalEnergies-controlled Eren aim to develop a 10 gigawatt green hydrogen complex in coastal Mauritania called Project Nour. The company being acquired is Singapore-headquartered Eneo Water, which delivers clean water solutions using renewable energy. The London-listed player said its aim is to provide affordable access to water for private offtakers and municipalities in Africa, as part of its commitment to socially responsible development. Consideration for the acquisition is in Chariot ordinary shares with an initial US\$500,000 payable on completion of the deal and a further payment of up to US\$500,000 payable when financial close has been hit on further projects. 31st January 2023
SENEGAL	<ul style="list-style-type: none"> • <u>U.S. Conveys Heightened Interest in Senegal as Large-Scale Projects Take Off</u> The Biden Administration has made clear its intention of scaling up investment in Senegal, just as the West African country is about to see first hydrocarbon production at its Greater Tortue Ahmeyim (GTA) and Sangomar projects. Last week, United States Secretary of the Treasury, Janet Yellen, conducted a state visit to the country, meeting with a suite of government representatives, including Senegalese President and Africa Union Chair, H.E. Macky Sall, with the aim of advancing trade and economic ties. This year, Senegal is set to lead the MSGBC region's hydrocarbon journey with two sizeable oil and gas projects expected to soon reach first production: the 100,000-barrel per day Sangomar oil project and the 2.5-million-ton-per-annum Greater Tortue Ahmeyim (GTA) development, straddling the maritime border of Senegal and Mauritania. 27th January 2023
UGANDA	<ul style="list-style-type: none"> • <u>Drilling works at Kingfisher Development Area in Uganda begins</u> The drilling works of oil for commercial production at the Kingfisher Development Area (KFDA) in the Western Region district of Kikuube have begun. This comes following the launch of the development by Ugandan President Yoweri Museveni. The works will be carried out using the rig that was hauled in the East African country last August and assembled in November. Reportedly, the process will culminate in commercial production in late 2025 but could stretch into 2026. Operated by CUL, the Kingfisher Development Area (KFDA) covers the Kingfisher field located in Kikuube District. There are plans for future tie-ins of the Mputa-Nzizi-Waraga fields in Kaiso-Tonya, Hoima District. The project includes the development of a Central Processing Facility (CPF) with a capacity of 40,000 barrels of oil per day and 31 wells, comprising 11 injectors and 20 producers that will be drilled on 4 well pads. 27th January 2023
ZIMBABWE	<ul style="list-style-type: none"> • <u>Invictus hits prolific finds in frontier Zimbabwe</u> Invictus Energy has identified 13 potential hydrocarbons bearing zones at its Mukuyu-1 exploration well in Zimbabwe, the Australian-based independent announced on Monday. Potential areas were found across the Pebbly Arkose and Upper Angwa formations, with 11 hydrocarbons bearing zones totalling 225 metres discovered in the latter formation. This is an outstanding result and virtually unprecedented for the first well in a frontier basin, establishing a new petroleum province and substantially de-risking the company's wider acreage in the Cabora Bassa basin," said Scott Macmillan, managing director of Invictus

Energy. In February 2022, the E&P company signed a contract with Baker Hughes for the drilling campaign. In July 2022, the company tripled the estimated resources at the play to 566 bcm (20 tcf) of gas and 4.3 billion boe of gas condensate through an evaluation of 2D seismic data. **24th January 2023**

AUSTRALIA

AUSTRALIA

- **Australia and Germany to invest \$90 mln for joint hydrogen supply chain projects**
Australia and Germany have earmarked A\$50 million (\$35.5 million) and 50 million euros (\$54.4 million), respectively, towards a joint initiative to establish a green hydrogen supply chain, Australian Minister for Climate Change and Energy Chris Bowen said on Friday. The two countries, which signed a bilateral alliance on hydrogen production and trade in June 2021, announced funding for four projects under the German–Australian Hydrogen Innovation and Technology Incubator (HyGATE) initiative. Green hydrogen is made by using electrolyzers powered by renewable energy to split water. Of the earmarked funds, Australian cleantech firm Vast Solar and Solar Methanol Consortium won grants worth A\$19.48 million and 13.2 million euros, respectively, to develop a 10 MW electrolyser Producing green hydrogen for solar methanol production in Port Augusta, South Australia. Currently, data from the Office of the Chief Economist at the Federal Department of Industry, Science and Resources, showed hydrogen projects made up for A\$266 billion of potential investment from the total value of as much as A\$705 billion of resource and energy projects in the pipeline in Australia. "Working hand-in-hand with our international partners will help Germany to phase out coal-fired power generation by 2038 and aid Australia to reach net zero by 2050," said Bettina Stark-Watzinger, German Minister of Education and Research. **27th January 2023**
- **FEED contract awarded for Australian coalbed methane project**
Australian engineering services company Verbrec has won a front-end engineering study for compatriot Comet Ridge's planned Mahalo North gas development via a joint award from Denison, the infrastructure of which is being eyed to handle Mahalo North's coalbed methane. Early exploitation of Mahalo North would be a welcome addition to Australia's east coast gas supply. On Monday, Denison said the jointly funded FEED work is to prepare a design, project schedule and budget to upgrade its production infrastructure to accommodate 10 terajoules per day of gas from Mahalo North. **30th January 2023**
- **TotalEnergies moves up a gear on big Papua New Guinea gas prospect**
French energy major TotalEnergies is performing geological and geophysical studies on a large undrilled shallow-water gas prospect in Papua New Guinea. The French giant is a big investor in PNG, where it is currently developing a liquefied natural gas project called Papua LNG based on feedstock gas from the onshore Elk-Antelope fields. This new shallow-water opportunity is the Buna prospect in Block PPL 560 in the Cape Vogel basin. **30th January 2023**

EUROPE

BULGARIA

- **Bulgaria Begins Construction on 106-Mile Gas Pipeline to Serbia**
Bulgaria began construction on Wednesday of a long-delayed natural gas link with neighboring Serbia that will allow flows of non-Russian gas to Belgrade and boost the security of supplies in southeastern Europe. After Russia cut gas supplies to Europe in the wake of the war in Ukraine, European countries have been looking for alternative suppliers and have been pursuing energy cooperation more actively. The 170-km (106 mile) gas pipeline, which will run from the Bulgarian town of Novi Iskar to Nis in Serbia, is expected to be operational by the end of the year, Bulgarian Energy Minister Rossen Hristov said. Bulgaria, which has been considering the project since 2012, plans to have the 62-km stretch on its territory ready by the end of October. Serbia, which began construction last February, will also have its portion ready by autumn, officials said. Serbia is getting access to new sources of gas, coming from the Southern gas corridor and the terminals for liquefied natural gas in the Aegean Sea," he said. At present, the only gas link between the two countries transports Russian gas from the TurkStream gas pipeline to Serbia. The new pipeline, partially financed with European Union aid, will grant Serbia access to non-

	<p>Russian supplies from the Southern gas corridor and LNG terminals in Greece and Turkey. 1st February 2023</p>
GERMANY	<ul style="list-style-type: none"> <p><u>HH2E to build its second major green hydrogen plant in Germany</u> The plant nearby Borna will be built and operated by HH2E under a newly formed local company called HH2E Werk Th hydrogen customers and offtakers, including leading players in the mobility sector, large-scale energy and industrial co commercial air and road transport operators. The Thierbach project development consortium is comprised of HH2E AG, Foresight Group (“Foresight”) and Hydrogen PID has been already approved by the consortium, and the initial investment will be used for detailed engineering design The Final Investment Decision (FID) is expected in 2023, shortly before construction of the plant begins. Following the Lubmin project, this is the second large-scale project announced by the company this year. The technology those that will potentially follow, is similar and applies proven systems and components, thus reducing risk and implement. Simon Hogan, Chairman of HydrogenOne, commented: “We are pleased to start 2023 with our first investment in a cle private investment for our fund. Germany is leading the way in green hydrogen development and production in Europe with recently announced plans to develop 1800 km hydrogen energy pipeline by 2027, and so we are delighted to be actively involved in building out this industry in the country. We look forward to working with our consortium partners to bring the Thierbach project into production. We expect this to be the first of a number of hydrogen supply projects, where HydrogenOne has exclusivity on multiple opportunities in several countries. 26th January 2023</p> <p><u>RWE orders two 100-megawatt electrolysis plants for GET H2 in Lingen</u> RWE has ordered two 100-megawatt proton exchange membrane (PEM) electrolyzers from Linde Engineering, the world’s leading industrial gas plant engineering company. RWE plans to commission the first of the two plants in 2024 on the site of its gas-fired power plant in Lingen. The second plant is scheduled to start operating one year later. The two electrolyzers are part of RWE’s efforts to build 300 MW of electrolyser capacity in Lingen by 2026 as part of GET H2. Using electricity from renewable sources, the electrolyzers will produce green hydrogen for industrial customers. As production of electrolyser stack modules of this size takes several months, they must be ordered well in advance. GET H2 is one of RWE’s four hydrogen projects that have been shortlisted for funding for “Important Projects of Common European Interest” (IPCEI) since May 2021. Approval by the EU Commission under state aid law (notification) is pending for funding by the German government and the state of Lower Saxony. Nevertheless, RWE has now placed the order to ensure that the commissioning dates in 2024 and 2025 are still achievable in the event of approval under state aid law. These deadlines would be impossible to meet if there were further delay. 31st January 2023</p>
IRELAND	<ul style="list-style-type: none"> <p><u>Bord Gáis Energy To Spend €250m Building Two New Power Plants</u> <u>Bord Gais Energy</u> and its parent company <u>Centrica</u> have commenced investment of €250m to construct two new power plants with capacity to power 100,000 homes year-round. The two plants will provide 200MW of flexible gas-fired power generation, meaning they can be switched on and off as demand peaks, in terms of making Ireland's energy supply more stable and secure. When operating, they will react to the peaks and troughs of electricity generation from renewable generators, and Bord Gais Energy described the relative speed with which they can be switched on and off as a key benefit. Both plants are expected to be completed by the end of 2024. 18th January 2023</p>
NORWAY	<ul style="list-style-type: none"> <p><u>Linde awarded major FEED contract for Equinor’s low carbon hydrogen project</u> Energy company Equinor has awarded Front-End Engineering Design (FEED) contract for the H2H Saltend low carbon hydrogen project to Linde Engineering, in addition to an operation and maintenance service contract to BOC. Having submitted proposals for FEED as part of a design competition, the Linde-owned companies will play a major role in supplying technology to the plant and providing maintenance.</p>

	<p>According to Equinor, the H2H Saltend project is a 600-megawatt (MW) low carbon hydrogen production plant with carbon capture. The plant design will harness Linde Engineering’s hydrogen and air separation technologies, to be combined with UK-based Johnson Matthey’s Low Carbon Hydrogen (LCH) technology. With operations scheduled to begin by 2027, BOC will take lead of operating and maintaining the facility – to be located at the Saltend Chemicals Park where it will reduce emissions by up to one third. In addition, LCH will be blended into natural gas at the Equinor and SSE Thermal’s on-site Saltend Power Station, resulting in an estimated carbon dioxide (CO2) storage quantity of around 890,000 tonnes per year. By transporting hydrogen to industrial customers and capturing CO2 for safe sub-sea storage, the proposals aims to make the Humber Net Zero by 2040. 30th January 2023</p> <ul style="list-style-type: none"> <p><u>TechnipFMC scoops Norwegian EPCI prize valued at up to \$1 billion</u> Three-field offshore development scheduled for start-up from 2026. UK contractor TechnipFMC has won an integrated engineering, procurement, construction and installation (EPCI) contract valued at up to \$1 billion for Aker BP’s Utsira High development offshore Norway as a direct award from the project’s operator. Aker BP in December 2022 submitted its Utsira High project development plans to the Norwegian Ministry of Petroleum and Energy. The operator describes the project as “a bundle” of three separate subsea tie-in projects in the central part of the North Sea. The Symra field (formerly Lille Prinsen) will be a tie-in to the Ivar Aasen platform, while Solveig phase 2 and Troidhaugen (previously named Rolvsnes) will be connected to the Edvard Grieg platform. The Utsira High project will develop recoverable resources of 124 million barrels oil equivalent. Development drilling is scheduled to start in the third quarter of 2025, while production start-up is scheduled for the first quarter 2026 for Solveig and Troidhaugen, and 12 months later for Symra. TechnipFMC said this large EPCI contract, which it defines as being between \$500 million and \$1 billion, follows a two-year integrated front-end engineering and design study to optimise the field layout. 1st February 2023</p> <p><u>Semco Maritime signs 4-year contract with Equinor in Norway</u> Equinor has awarded Semco Maritime a new framework agreement for the provision of temporary staffing services for offshore nurses on the Norwegian Continental Shelf. Semco Maritime has provided highly qualified Nurses to Equinor since 2014 and this new framework agreement entails a continuation of the cooperation until 31 January 2027 with the option of extending by 2 + 2 years. This is an important contract for Semco Maritime, and we are proud and humbled by the trust displayed by Equinor now awarding us with a new frame agreement. We are also thankful to our onshore staff cooperating with our customers and maintaining a close dialogue with our employees to ensure quality deliveries on our contracts. We are looking forward to further developing the professional relationship with Equinor in the years ahead,” says Senior Vice President, Rig & Offshore Marine, Semco Maritime, Nikolaj Vejlggaard. 27th January 2023</p>
<p>SWEDEN</p>	<ul style="list-style-type: none"> <p><u>Wärtsilä biogas liquefaction project will significantly reduce greenhouse gas emissions in Sweden</u> The system has been ordered by Scandinavian Biogas Mönsterås, a joint venture company between Scandinavian Biogas Fuels (SBF), the majority owner, and local farmers supplying manure and agricultural waste to the project. The plant will produce bioLNG, a substitute for fossil LNG, and will be used as transport fuel for heavy vehicles, thereby contributing to a fossil-free transport system. The order was booked in Wärtsilä’s order intake in December 2022. The system will have the capacity to produce 30 tons per day of bioLNG. It will be the first project of this capacity using Wärtsilä’s amine scrubber-type Puregas CA technology to pre-treat the biogas, which is then liquefied using the company’s mixed refrigerant (MR) process. 27th January 2023</p>
<p>SPAIN</p>	<ul style="list-style-type: none"> <p><u>Cepsa partners with EDP on green hydrogen production</u> Both companies have signed an agreement to study the joint production of green hydrogen as part of the project of up to 1 GW in the Bay of Algeciras in the framework of the Andalusian Green Hydrogen Valley. Cepsa and EDP have signed an agreement to work together on large-scale green hydrogen production in</p>

	<p>the Bay of A in renewable energies through its subsidiary EDP Renewables and the fourth largest renewable energy producer in the develop up to 1 GW in Campo de Gibraltar, Cádiz, as part of the Andalusian Green Hydrogen Valley, the largest green Cepsa. Miguel Stilwell d'Andrade, CEO of EDP, said: "This agreement with Cepsa is an important step in EDP's plans to conve propel industrial decarbonization through the use of green hydrogen, and is another move to strengthen energy independence in Europe. This agreement will fa plant in Los Barrios, Cádiz, into a green hydrogen plant. This partnership contributes to several of the 2030 Agenda's Sustainable Development Goals: SDG 7 (Affordable and c economic growth), SDG 12 (Responsible consumption and production), and SDG 13 (Climate action). 30th January 2023.</p>
UK	<ul style="list-style-type: none"> <p><u>THREE60 Energy secures significant drilling contract with Crogga Limited to help Isle of Man achieve energy independence</u></p> <p>THREE60 Energy, a leading independent energy service company offering complete asset life cycle solutions, has secured an extensive contract with Crogga Limited to drill an appraisal well in the Crogga gas field offshore Isle of Man. If the well proves successful, it has the potential to provide energy independence to the Isle of Man by 2026. The appraisal well, called Independence, will be used to establish commercial flow rates of gas from the conventional Permian Collyhurst Sandstone reservoir. This is the first well to be drilled under the island's jurisdiction and, if successful, could lead to Crogga becoming one of the largest field developments in the East Irish Sea. The scope of work to be undertaken by THREE60 Energy is for the provision of detailed well engineering and well planning, including contracting of a drilling rig, procurement of drilling services and equipment, as well as offshore execution and project close out. The company will also provide well operator services, including engagement, liaison and accountability with regulators and stakeholders, emergency response capabilities and turnkey project management. Crogga Limited was awarded an Isle of Man license for the Crogga gas field in 2018, with operations expected to commence in late 2023. 17th January 2023</p>
NORTH & SOUTH AMERICA	
ARGENTINA	<ul style="list-style-type: none"> <p><u>Argentina Inks \$540 Million Deal with Development Bank for Gas Projects</u></p> <p>Argentina's government reached a \$540 million deal with development bank CAF for the extension of natural gas pipelines and related infrastructure linked to the country's Vaca Muerta basin, Economy Minister Sergio Massa announced on Wednesday. The infrastructure plan, expected to be approved in March, aims to boost a pair of gas pipeline projects — La Carlota-Tio Pujio and Reversal del Norte — as well as build compression plants, Massa wrote in a post on Twitter. "With these projects we will be able to supply the entire north with gas from Vaca Muerta and increase the possibilities of gas export volumes to Chile and Brazil," he added in another post. Vaca Muerta is a huge shale formation located in the Patagonian province of Neuquen and seen as key to Argentina's push to grow its economy while lessening reliance on expensive energy imports.26th January 2023</p>
BRAZIL	<ul style="list-style-type: none"> <p><u>Maersk wins new job for Petrobras offshore Brazil</u></p> <p>Marine services company Maersk Supply Service (MSS) has won its largest solutions contract to-date for Petrobras' Buzios 6 project offshore Brazil, although the value of its scope was not revealed. Denmark's MSS has signed what it calls an assignment agreement with UK contractor TechnipFMC for the towing and mooring campaign for the Buzios 6 project, said to actually be the seventh module of Buzios. MSS' workscope involves the pre-installation of the mooring system and hook-up of the P-78 floating production, storage and offloading vessel, which is being built by Singapore's Keppel Offshore & Marine under a US\$2.3 billion contract. The P-78 floater will be the seventh floater to be deployed on Petrobras' Buzios field in the Santos basin. This award follows the contractor's successful completion of the Mero 2 contract for the Sepetiba FPSO, for the pre-installation of the mooring system in a water depth of more than 2000 metres. This project, also offshore Brazil, involved the procurement and installation of 24 torpedo anchors, and the subsequent abandon of the polyester mooring lines. 27th January 2023</p>

	<ul style="list-style-type: none"> • <u>Transocean in \$400 million-plus ultra-deepwater drillship deal</u> Brazil-bound unit had been idle for more than a year. New York-listed rig owner Transocean has scored a contract worth upwards of \$400 million for its ultra-deepwater drillship Dhirubhai Deepwater KG2 for operations offshore Brazil. Transocean on Tuesday confirmed the Dhirubhai Deepwater KG2 has been awarded a 910-day contract by a mystery national oil company for work offshore Brazil. The estimated \$392 million order backlog, which equates to a dayrate of \$430,769, excludes a mobilisation fee of 90 times the contract dayrate. This new contract is expected to start in the third quarter of 2023. The 2010-built Dhirubhai Deepwater KG2 can operate in water depths of up to 12,000 feet and drill to a depth of 35,000 feet. The drillship has been idle since January 2022, according to Transocean's most recent fleet status report. The drilling contractor already has ultra-deepwater drillships Deepwater Corcovado, Deepwater Mykonos and Petrobras 10000 working offshore Brazil for the nation's very own Petrobras. 31st January 2023
CANADA	<ul style="list-style-type: none"> • <u>Imperial Oil to invest \$539 mln in renewable diesel plant in Canada</u> Imperial Oil (IMO.TO) on Thursday said it will invest C\$720 million (\$538.64 million) to construct Canada's largest renewable diesel facility at its Strathcona refinery near Edmonton, Alberta. The Calgary-based company said the facility will produce 20,000 barrels per day of renewable diesel and is expected to start production in 2025. The facility will use low-carbon hydrogen and biofeedstock combined with a proprietary catalyst to produce the renewable diesel, which Imperial says will reduce greenhouse gas emissions by roughly 3 million a year compared with conventional fuels. The low-carbon hydrogen will be produced with carbon capture and storage technology and supplied by Air Products. 26th January 2023
COLOMBIA	<ul style="list-style-type: none"> • <u>Jobo-Medellin Gas Pipeline Tabled as Colombia's Priority Project</u> The Canadian company Canacol Energy signed an agreement with the Shanghai Engineering and Technology Corp. (SETCO) consortium to build a gas pipeline. The 189-mile (289-km), 22-inch pipeline, from the Jobo gas processing facility to the city of Medellin, was declared part of the National Strategic Interest policy by the Colombian government. The project will connect the Canacol gas fields with the sales market in the interior of Colombia, which represents about 60% of the growing demand for natural gas. Beyond Medellín, the pipeline will make Canacol's gas available to consumers located in the cities of Bogotá, Cali and other regional markets. According to the work schedule prepared by Canacol, the pipeline will go into service in December 2024. The president of Canacol affirmed that the construction of this pipeline will allow Canacol to send new volumes of gas to the internal market of Colombia, and at the same time increase gas sales as a whole to more than 300 MMcf/d until 2025. Canacol has already executed two, 12-year, take-or-pay gas sale contracts for 75 MMcf/d in volume to Medellin through the pipeline and is negotiating additional long-term, take-or-pay gas sales contracts with customers in the interior to ensure that the new pipeline is filled to initial capacity of 100 MMcf/d. 27th January 2023
GUYANA	<ul style="list-style-type: none"> • <u>Keppel to Deliver Guyana-bound 'Mega' FPSO to SBM Offshore in 1Q</u> Singapore's Keppel Offshore & Marine said Wednesday it was on track to deliver a "mega" floating production, storage, and offloading vessel (FPSO) to SBM Offshore in the first quarter of 2023. This is the third FPSO that Keppel Shipyard is delivering to SBM Offshore and will be chartered to the consortium of ExxonMobil, CNOOC, and Hess, to operate in the Stabroek Block, offshore Guyana. The FPSO, which will be spread moored in water depth of about 1,900 meters, is designed to produce 220,000 barrels of oil per day, with associated gas treatment capacity of 400 million cubic feet per day and a water injection capacity of 250,000 barrels per day. The FPSO will be able to store approximately 2 million barrels of crude oil. Once it reaches Guyana, the FPSO will be used to produce oil from the Payara development. The first two FPSOs in Guyana, the Liza Destiny, and the Liza Unity, produce oil from the Liza field. SBM

Offshore will operate the FPSO at the Stabroek Block for up to two years, after which the FPSO ownership and operation will transfer to ExxonMobil. The first oil is expected in 2024. **1st February 2023**

USA

- **One Carbon Partnership launched to develop CCS project in Indiana**
Ethanol production firm Cardinal Ethanol has formed a joint venture with carbon capture specialist Vault 44.01 to develop and operate a new carbon dioxide (CO₂) capture and sequestration (CCS) project at Cardinal's ethanol facility near Union City, Indiana. As it stands, Cardinal's facility produces approximately 135 million gallons of ethanol per year, generating approximately 400,000 metric tonnes of CO₂ as a by-product of the corn fermentation process. The effort hopes to substantially reduce these emissions. The joint venture was formed through Cardinal Ethanol and Vault 44.01 affiliate companies, with each party controlling an equal interest. **30th January 2023**
- **FortisBC signs deal with Snuneymuxw First Nation for LNG facility**
Snuneymuxw First Nation will support natural gas company FortisBC in the development of British Columbia's first LNG facility, Tilbury Projects. A first nation residing in the centre of Coast Salish territory on the eastern coast of Vancouver Island, Snuneymuxw has committed to supporting Tilbury Projects and participating in regulatory processes. The agreement also ensures FortisBC is supporting Snuneymuxw's community members through educational opportunities, relevant training, and continued investments in the community. Mike Wyse, Chief of Snuneymuxw, said the deal respects the Snuneymuxw's aboriginal and treaty rights within its traditional territory and water. Originally, the facility's purpose was to store LNG to ensure our customers have the energy they need even during high winter demand. **30th January 2023**
- **Technip Energies wins key contract for ExxonMobil's Baytown blue hydrogen facility**
US supermajor ExxonMobil has awarded Technip Energies the front-end engineering and design contract for its Baytown blue hydrogen facility, which aims to be a potential launching point for a greater Houston carbon capture and storage innovation zone. The Baytown hydrogen project plans to produce 1 billion cubic feet per day of low-carbon hydrogen, capturing more than 98% of associated carbon dioxide emissions, around 7 million tonnes per annum, the company said. ExxonMobil initially announced the project would have capacity to transport and store up to 10 million tpa of CO₂, but now emphasises that the CCS network being developed will be made available for use by third-party emitters in the area. The project will be connected to ExxonMobil's existing Baytown refinery outside Houston. The company views the Baytown hydrogen and CCS project as a potential launching point for this hub, creating infrastructure that can later be shared by other companies in the area looking to decarbonise their operations. **30th January 2023**
- **U.S. Department of Energy to fund 17 sustainable biofuels projects**
The U.S. Department of Energy (DOE) announced USD118 million in funding for 17 projects to accelerate the production of sustainable biofuels for the country's transportation and manufacturing needs. The selected projects, located at universities and private companies, will drive the domestic production of biofuels and bioproducts by advancing biorefinery development, from pre-pilot to demonstration, to create sustainable fuels that reduce emissions associated with fossil fuels. The funding supports U.S. President Joseph Biden's goals to deliver an equitable, clean energy future, and put the United States on a path to achieve net-zero emissions, economy-wide, by no later than 2050. Projects selected as part of this funding opportunity will contribute to meeting DOE's goal to achieve cost-competitive biofuels and at least a 70% reduction in greenhouse gas (GHG) emissions by 2030. The projects also support the U.S. Sustainable Aviation Fuel Grand Challenge goal of enabling the production of three billion gallons of sustainable aviation fuel annually by 2030 and 35 billion gallons annually by 2050. Award amounts range from USD500,000 to USD80 million, with most projects receiving at least USD2 million. **1st February 2023**

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