

EXECUTIVE SUMMARY

The Commodity summary

- Crude Oil Brent prices trading lower by 6% WTD and Crude Oil WTI prices are trading lower by 8% WTD.
- Coal prices are trading lower by 65% YTD
- Steel HRC (N America) prices are trading higher by 3% WTD
- Iron ore prices are trading higher by 24% YTD
- Natural Gas prices are trading higher by 13% MTD

The Currency summary

- Euro is stronger by 5% YTD to USD
- The US Dollar to CNY is stronger by 2% YTD

The Rig count summary

- The Rig counts in Africa have gone up by 4% MTD and the rig counts in Europe have gone down by 4% MTD.

Project summary

- Saudi Arabia Announces Winning Bidders for Taiba-1, Taiba-2, Qassim-1, and Qassim-2 Conventional IPPs Projects
- Saudi Aramco Inks \$2.4 Billion Natural Gas Plant Deal With Hyundai
- UAE's Crescent Petroleum starts Iraq Gas Development Projects
- CNCEC shows interest in building gas turbine power plant at Atyrau oil refinery
- South Korean heavyweight to build platform for nation's largest CCS project
- Galp targets 10 billion barrel prospect in debut Namibian exploration campaign
- 4 Billion Tanzania-Uganda Oil Pipeline Project, World Longest Heated Pipeline, to Kick Off Operations in 2025
- Shell targets progress at Norway's largest undeveloped offshore gas discovery
- Essar Energy Transition to build the UK's Largest Hydrogen Plant
- US FERC approves TC Energy's GTN pipeline expansion project
- Construction of a gas-to-energy plant in West Bank Demerara in progress

COMMODITY UPDATES

COMMODITY	UOM	LATEST PRICE	WTD %	MTD %	3MTD %	6MTD %	YTD %
Chromium	USD/MT	9,258.25	-0.09	3.11	3.55	-8.45	-2.30
Coal	USD/MT	150.47	0.00	-14.30	1.67	-28.34	-65.25
Cobalt	USD/MT	34,039.37	1.45	10.27	-0.60	-4.87	-39.52
Copper	USD/MT	8,055.50	1.67	-3.46	-4.77	-8.95	6.44
Crude Oil	USD/BBL	85.64	-6.80	-4.34	10.82	5.75	-4.90
Crude Oil Brent	USD/BBL	87.81	-5.85	-3.74	10.62	5.78	-5.83
Crude Oil WTI	USD/BBL	83.47	-7.77	-4.96	11.04	5.72	-3.90

Iron Ore	USD/MT	118.19	-0.71	-1.34	5.95	-0.90	24.37
Molybdenum	USD/MT	44,717.40	-0.29	-16.63	-9.26	-4.59	8.93
Natural Gas	USD/MCF	3.10	1.77	12.54	11.93	37.60	-51.63
Nickel	USD/MT	18,270.00	0.22	-9.52	-14.42	-23.31	-17.27
Steel HRC (FOB China)	USD/MT	545.00	2.44	-0.36	-0.41	-13.05	-1.74
Steel HRC (N. America)	USD/MT	831.14	2.65	1.99	-14.29	-35.56	-0.91
Steel Rebar	USD/MT	552.93	1.09	-1.99	-3.15	-11.76	-4.79
Steel Scrap	USD/MT	366.00	1.39	-3.25	0.22	-11.98	2.80

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	1.0549	-0.29	-0.20	-4.82	-4.45	4.56
USDCNY	1 USD to CNY	China	CNY	7.3267	0.12	-0.20	-2.47	-5.57	-1.96

Source- Trading Economics

CRUDE OIL STOCK								
Region	Unit	Latest Count	WTD %	MTD %	3MTD %	6MTD %	YTD %	
US Stocks of Crude Oil & Petroleum Products	Thousand Barrels	16,16,887.00	-0.03	-0.37	0.25	1.11	-0.43	

Source: US Energy Information Authority

SELECTIVE COMMODITY TRADERS AND PIPE MANUFACTURERS STOCK PRICES

STOCK PRICES							
Name	Latest Value	Units	WTD%	MTD%	3MTD%	6MTD%	YTD%
ArcelorMittal SA	21.89	USD	-1.84	-9.62	-23.06	-21.34	-5.97
Chiyoda Corporation	350.00	JPY	-3.05	-8.14	-0.28	-11.39	-3.85
Glencore PLC	439.80	GBP	-2.30	-2.65	-6.32	-8.64	-14.75
HD Hyundai Heavy Industries Co. Ltd.	1,11,100.00	KRW	-0.98	-8.86	-20.24	-4.22	5.31
JGC Holdings Corporation	1,839.50	JPY	-0.27	-13.84	-5.62	11.55	2.94
McDermott International Ltd.	0.19	USD	0.00	-24.00	5.56	-40.63	-68.33
National Marine Dredging	20.60	AED	5.42	-14.74	-7.21	-6.19	-23.13
NYSE American Steel Index	1,796.23	Index	-0.17	-4.89	-13.79	1.54	14.48
Rio Tinto PLC	5,157.00	GBP	2.08	2.04	-1.38	2.38	6.48
Technip Energies NV	20.39	EUR	-9.82	-11.54	-3.14	38.99	60.17

TechnipFMC PLC	19.93	USD	-3.67	-3.81	6.29	55.58	82.51
Tenaris SA	32.37	USD	-1.91	4.89	-1.76	13.62	4.28
Tubacex SA	2.85	EUR	-2.40	-2.90	-1.22	9.85	31.11
Woodside Energy Group	34.86	AUD	-4.65	-3.30	-7.85	2.77	-0.11

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	59	*	3.51	5.36	13.46	18.00
GCC	221	*	-0.90	0.91	3.27	6.25
Middle East	323	*	-0.62	-0.31	1.57	5.21
Africa	96	*	-4.00	4.35	7.87	29.73
Asia-Pacific	205	*	0.00	0.00	5.13	6.77
Europe	108	*	-4.42	-3.57	-0.92	8.00
Latin America	175	*	1.16	-7.41	-4.37	-2.23
North America	818	0.99	1.11	-3.76	-3.20	-16.36
Total	1,725	*	0.00	-2.65	-0.81	-5.74

Source- Baker Hughes

(*) No weekly data available for those particular regions

NEWS OF THE WEEK

GULF COOPERATION COUNCIL (GCC)

KUWAIT

- CGC Kuwait Signs \$144.2m KOC Contract**
 Combined Group Contracting (CGC), Kuwait announces in a statement that it has signed the contract for a Services project issued by Kuwait Oil Company (KOC). The company states that the works includes providing maintenance support services for export facilities, for a period of 5 years. The value of the Contract is KWD 44.5 million. **23rd October 2023**
- Kuwait's HOT Engineering awarded Mina Abdullah refinery Maintenance Contract**
 Kuwait's HOT Engineering And Construction Co. a reputable contractor and a subsidiary of Tripple-E Holding, announced that it has received an award letter from Kuwait National Petroleum Company (KNPC) a prominent refining company in the region and a subsidiary of the state-owned holding company Kuwait Petroleum Corporate (KPC). The Contract is related to providing maintenance services for its Electrical, Firefighting, and Sirens systems at Mina Abdullah (MAB) refinery. Under the terms of this contract, HOTECC will provide its services to KNPC for a duration of about five (5) years. **24th October 2023**

SAUDI ARABIA

- **TROJENA Infrastructure Deal Contract Awarded for the 4.4-Kilometers**

TROJENA Infrastructure Deal Contract Awarded for the 4.4-Kilometers NEOM Time Travel Tunnel. TROJENA Infrastructure deal contract has been awarded for the 4.4-Kilometers NEOM Time Travel Tunnel . Saudi Arabia’s NEOM has awarded the TROJENA infrastructure development contract to a joint venture. The joint venture includes local company Al-Ayuni Investments & Contracting, and Turkish Limak Holding. The scope of the contract awarded covers the construction of a tunnel as well as a freight depot. The scope also covers excavation works at TROJENA, a mountain destination 50 kilometers from Saudi Arabia’s Gulf of Aqaba Coast. Bidding companies submitted their interest for the Mechanical, Electrical, Instrumentation, Controls, and Automation (MEICA) contract in May. The NEOM Time Travel Tunnel extends at 4.4 kilometers and includes twin-bored tunnels with an at-grade section, and ventilation shafts. The freight depot will be constructed next to the Mirage Visitor center and will be known as the Mirage freight depot. The depot will provide access to the underground Time Travel Tunnel. TROJENA Aims to Redefine Luxury as a Unique Mountain Destination in NEOM. There prospect is also that the project will be done in time to host the Asian Winter Games in 2029. **19th October 2023**

- **SEPCO awarded EPC Contract for Jafurah Desalination Project**

Shandong Electric Power Construction (SEPCO), China announced in a statement that, it has signed EPC Contract for Jafurah seawater desalination and water supply pipeline project located in Eastern province of Saudi Arabia. The agreement was signed with the Consortium of Lamar Holding and Mowah on the sidelines of the third “Belt and Road” International Cooperation Summit Forum. The main scope of work includes a seawater desalination plant with a daily water production capacity of 80,000 cubic meters and the EPC work of about 200 kilometers of water transmission pipelines. After completion, the project will be responsible for providing desalination water for Saudi Arabia’s Jafurah gas field development facilities. **21st October 2023**

- **Saudi Arabia Announces Winning Bidders for Taiba-1, Taiba-2, Qassim-1, and Qassim-2 Conventional IPPs Projects**

The Saudi Power Procurement Company (SPPC) announced the winning bidders for the Taiba-1, Taiba-2, Qassim-1, and Qassim-2 Conventional IPPs projects. These Conventional IPP projects are part of the energy mix plan, which is under the supervision of the Ministry of Energy, the energy mix plan aims to meet the future load demand of the electrical system, to ensure the reliability of the energy supply, to ensure security of supply, to localize gas turbines industry, and to allow for the utilization of carbon capture technologies. Furthermore, in alignment with the Saudi Green Initiative to reach net-zero greenhouse gases (GHGs) by the year 2060G by implementing advanced technologies in support of circular carbon economy strategies. On 20th January 2023, SPPC launched the Request for Proposals (RFP) for these Conventional IPP projects, on 30th July 2023, five (5) bids were received for each of Taiba-2 and Qassim-2 projects. Later, on 15th August 2023, five (5) bids were received for each of Taiba-1 and Qassim-1 projects. All bids were evaluated to ensure compliance with the RFP’s technical and commercial requirements.

- **Taiba 1 (1.8 GW)**

- Saudi Electricity Company + International Company for Water and Power Projects (ACWA Power)

- Saudi Electricity Company

- International Company for Water and Power Projects (ACWA Power)

- **Taiba 2 (1.8 GW)**

- Al Jomiah Energy and Water + EDF + Buhur for investment

- Al Jomiah Energy and Water

- EDF

- Buhur for investment

- **Qassim 1 (1.8 GW)**

- Saudi Electricity Company + International Company for Water and Power Projects (ACWA Power)

Saudi Electricity Company
International Company for Water and Power Projects (ACWA Power)
Qassim 2 (1.8 GW)
Al-Jomiah Energy and Water + EDF + Buhur for investment
Al-Jomiah Energy and Water
EDF Buhur for investment

projects will attract investments of around SR29.2 billion (7.8 billion USD). Each project will be developed on a build, own, and operate (BOO) basis by the winning consortiums, which will be 100% owned by the successful bidder. **25th October 2023**

- **NEOM's ENOWA and Aramco to develop first-of-its-kind e-fuel demonstration plant**

Aramco, a global integrated energy and chemicals company, and ENOWA, NEOM's energy and water company, have signed a joint development agreement to construct and establish a first-of-its-kind synthetic electro fuel (e-fuel) demonstration plant. It will be located in ENOWA's Hydrogen Innovation and Development Center (HIDC) and aims to demonstrate technical feasibility and commercial viability by producing 35 barrels per day of low-carbon, synthetic gasoline from renewable-based hydrogen and captured carbon dioxide (CO₂). Once complete, the integrated facility will generate 12 tons of synthetic methanol per day from green hydrogen and CO₂, using proprietary technologies developed by ThyssenKrupp Uhde. The synthetic methanol will then be converted into low-carbon gasoline using ExxonMobil's Fluidized-Bed Methanol-to-Gasoline (MtG) technology. The HIDC will also produce green hydrogen by leveraging an on-site 20-megawatt electrolyzer, powered by renewable energy sources. The innovation center being created by ENOWA will showcase the region's vast potential to generate and use wind and solar power commercially. Aramco's Transport Technologies R&D, with a presence in Paris, Detroit, Shanghai, and the headquarters in Dhahran, is advancing multiple technologies that aim to enable a more reliable, affordable, and sustainable transport future. **25th October 2023**

- **Firms Signed MOU to Foster Hydrogen Mobility Ecosystem in Saudi Arabia**

Hyundai Motor Company signed a memorandum of understanding (MOU) with Korea Automotive Technology Institute (KATECH), Air Products Qudra (APQ) and the Saudi Public Transport Company (SAPTCO) to establish and develop an ecosystem for hydrogen-based mobility in the Kingdom of Saudi Arabia. The parties have agreed to cooperate in establishing a hydrogen-based mobility ecosystem in Saudi Arabia and to provide support on technological services and human resources. Specific areas of collaboration include promoting demonstration projects for hydrogen fuel cell commercial vehicles and exploring opportunities for joint research in the field of hydrogen-based mobility. Hyundai Motor is expected to provide hydrogen fuel cell commercial vehicles to SAPTCO as part of the partnership, with the pioneering technologies in the hydrogen fuel cell industry with field-proven products and services deployed worldwide. As part of this strategy, the country announced the "Saudi Green Initiative" in 2021, demonstrating its commitment to exploring cutting-edge technologies and innovations to achieve the net zero carbon emission goal by 2060. **23rd October 2023**

- **Saudi Aramco Inks \$2.4 Billion Natural Gas Plant Deal With Hyundai**

Saudi Aramco has sealed a deal with South Korean Hyundai Engineering & Construction and Hyundai Engineering for the construction of a \$2.4-billion gas processing plant. The investment will be focused on the second phase of the facility. The two South Korean companies are already working on the first phase after they won the contract for that in 2021. The plant will be built at the Jafurah field, which, according to Reuters, is Saudi Arabia's largest non-oil associated gas field. Its reserves are estimated at some 200 trillion cubic feet. The company says it increased its daily gas processing capacity from 2 billion cu ft daily to 18 billion cu ft between 2000 and 2022 and has plans to boost this further. At the meeting where the \$2.4-billion deal for the Jafurah facility was signed, Riyadh also inked another deal with a South Korean company, this time for oil. Under the deal, Aramco could store 5.3 million barrels of crude at a storage facility operated by Korea's state-owned KNOC. Both deals were signed during a visit by South Korea's president to Riyadh to expand bilateral business dealings. Saudi Arabia is the biggest supplier of oil to South Korea. **24th October 2023**

- The 800,000 cm/d Al-Haer Sewage Treatment Plant Construction Project Selects its Preferred Bidders**
 The 800,000 cm/d Al-Haer Sewage Treatment Plant Construction Project Selects its Preferred Bidders. The 800,000 cubic meters per day (cm/d) Al-Haer sewage treatment plant construction project has been awarded to preferred bidders. The contract was awarded to local Miahona Company, and Belgium's Besix as its preferred bidders. The Saudi Water Partnership Company (SWPC) which was the company tasked with the contract awarding selected the two companies to develop and maintain the Al-Haer sewage treatment plant in Riyadh. The company has also announced Spain's Acciona and the local company, Tawzea as reserved bidders for the project. The Miahona/Besix team offered to develop the project for \$0.5173 a cubic meter. The Acciona/Tawzea team offered to construct the plant at \$0.6231 a cubic meter. The project involves the construction of a water treatment plant with a capacity of 200,000 cubic meters per day. The scope of the Al-Haer sewage treatment plant also includes the development of a treated sewage effluent (TSE) reuse system. **25th October 2023**
- Saudi Aramco floats tenders for trio of offshore projects involving giant oilfields**
 The work offered involves Marjan, Safaniyah and Abu Safah. Saudi Aramco has kicked off the chase for three offshore contracts falling within the scope of its long-term agreement (LTA) programme, involving some of Saudi Arabia's largest oilfields. Multiple people with direct knowledge of the process told Upstream that the state-owned giant recently issued tender documents to its select group of LTA players for the trio of maintenance and brownfield projects in the Persian Gulf. The projects are termed contract release purchase orders (CRPOs) and the three in question are CRPO 77 and CRPO 91 and CRPO 92, one informed person said. Aramco recently highlighted its intent to reach net zero scope-1 and scope-2 emissions by 2050, but is pressing ahead with key oil and gas investments that are aimed at maintaining the production profile of some of the kingdom's largest fields. Saudi Aramco has been spending between \$1.5 billion and \$2 billion each year on LTA projects, but cash flows nosedived last year as the pandemic dragged several regional economies into a sustained slowdown. However, LTA spending this year has recovered substantially on the back of higher crude prices and improved market fundamentals. Multiple offshore LTA engineering, procurement and construction contracts have been observed moving into the tendering stage, with Aramco expected to float many over the coming months. The company's lucrative LTA programme aims to rejuvenate oil and gas production from the country's maturing oilfields. **26th October 2023**

ASIA EXCLUDING GULF COOPERATION COUNCIL (GCC)

CHINA

- CNOOC Ltd strikes major CBM discovery in northern China**
 More than 110 billion cubic metres proven in-place reserves. Chinese offshore operator CNOOC Ltd has made a major coalbed methane discovery at the Shenfu deep field in northern China, with in-place reserves pegged at in excess of 110 billion cubic metres of gas. The Shenfu deep CBM field is located in the Ordos basin in northern China's Shaanxi province. The SM2-33-CH1 discovery well encountered 16.5 metres of coal seam gas at a depth of about 2011 metres. The well produce approximately 19,000 cubic metres per day of CBM after fracturing operations. The Chinese authorities have evaluated and approved proven gas in-place of more than 110 Bcm, making it China's first large deep CBM field of this scale. Shenfu is CNOOC Ltd's second major CBM discovery following the Linxing field in Shanxi province, which has similar proven gas in-place volumes. Discovered in 2021, Linxing holds 101 Bcm of CBM reserves in an area covering 728 square kilometres. **23rd October 2023**
- Stamicarbon bags contracts from Shandong Lianmeng Chemical for urea plant**
 This grassroots project will be the eighth urea plant worldwide to utilize Stamicarbon's proprietary Ultra-Low Energy design. Shandong Lianmeng Chemical Company awards licensing and equipment supply contracts for a grassroots urea melt and prilling plant in China to Stamicarbon, the nitrogen technology licensor of MAIRE Group. The plant located in Shouguang city of Shandong province in China will use Stamicarbon's Ultra-Low Energy design with a highly efficient pool reactor concept and have a capacity of 2334 MTPD. Stamicarbon will provide the license, proprietary equipment, including

	<p>high-pressure equipment made of super duplex stainless steel and associated services. This grassroots project will be the eighth urea plant worldwide to utilize Stamicarbon’s proprietary Ultra-Low Energy design. The Ultra-Low Energy Design allows heat supplied as high-pressure steam to be used three times instead of two, compared to the conventional CO2 stripping processes. This results in a 35% reduction in steam consumption and a 16% decrease in cooling water use. The efficiency of this design is proven with two operational plants, making its energy savings unparalleled in the market. 25th October 2023</p>
INDIA	<ul style="list-style-type: none"> <p><u>Shiva Engineering Services bags EPCm contract for specialty chemicals multipurpose plant</u> Shiva Engineering Services (SES) was awarded EPCm contract for specialty chemicals multipurpose plant the plant consists of Hydrogenation, Bromination, Chlorination, Nitration unit operations and more. The facility location is near Bharuch and the planned investment is around Rs. 230 crore. SES’s involvement in this project spans during entire project life cycle starting from Site Master Planning, Basic and Detailed Engineering Services, Procurement Support, Site Supervision, Construction & Safety Management, Commissioning and Start-up support. “Our track record of successful project delivery speaks volumes about our capabilities. Over the years, we have earned the confidence of many industry leaders by successfully delivering the projects beyond the expectations. As we embark on this project, we carry with us the invaluable lessons learned from our past successes. Our comprehensive engineering and project management approach, our adherence to global standards, and innovative value additions in engineering are the cornerstones of SES,” says Business Head, SES. 26th October 2023</p>
INDONESIA	<ul style="list-style-type: none"> <p><u>BP starts commercial operation of expanded Tangguh LNG facility in Indonesia</u> The start of Tangguh Train 3 operations will contribute an additional 3.8mtpa of LNG production capacity to the pre-existing two-train facility. BP and its partners have shipped the first cargo of liquefied natural gas (LNG) from the newly constructed third liquefaction train at the Tangguh LNG facility in Indonesia. Safely loaded and sailed, the cargo will be delivered to PLN (Persero), which is an Indonesian state-owned power generator. The milestone marks the start of full commercial operation of Train 3 of the Tangguh LNG project located in Papua Barat. The commencement of Tangguh Train 3 operations will contribute an additional 3.8 million tonnes per annum (mtpa) of LNG production capacity to the pre-existing two-train facility. It raises the total plant capacity of the LNG facility to 11.4mtpa. The maiden shipment of LNG from Train 3 departed from Tangguh on 18 October and is bound for delivery at PLN’s regasification facility in Arun, Nanggroe Aceh Darussalam province, Indonesia. BP’s subsidiary BP Berau is the operator of the Tangguh project with a stake of 40.22% alongside its affiliates in Indonesia. Other production sharing contract partners include MI Berau (16.3%), CNOOC Muturi Limited (13.9%), Nippon Oil Exploration (Berau) with 12.23% stake, KG Berau Petroleum and KG Wiriagar Petroleum (10%), and Indonesia Natural Gas Resources Muturi (7.35%). 20th October 2023</p> <p><u>Final investment decision on radar for Indonesian gas project</u> Independent Medco Energi is advancing towards the final investment decision on its Paus Biru gas field development on the Sampang production sharing contract offshore East Java, Indonesia. Co-venturer Cue Energy on Friday confirmed that Medco is continuing discussions with the Indonesian government on changes to the Sampang PSC and an extension to the existing 2027 contract expiry date. 21st October 2023</p>
IRAQ	<ul style="list-style-type: none"> <p><u>Siba Gas Field's Production to Be Raised to 100 Million Cubic Feet</u> The Iraqi Minister of Oil, Hayan Abdul-Ghani, stated on Friday that the ministry will increase the production of the Siba gas field in Basra governorate from 60 million to 100 million cubic feet per day. Abdul-Ghani explained that the field is one of the important gas fields in Iraq, adding that it currently</p>

produces between 50 and 60 million cubic feet per day, according to a statement cited by the Iraqi News Agency (INA). The Iraqi Oil Minister illustrated that the Siba gas field also produces 1,200 tons of liquid gas and 1,000 barrels of condensate. Abdul-Ghani clarified that the electricity required to power the facilities in the gas field is generated at the field where the fuel is available. The 21-kilometre-long and 6–13-kilometer-wide gas field was discovered in 1968 and has reserves of approximately 1.1 trillion cubic feet of gas. According to Abdul-Ghani, the gas field uses advanced technologies and horizontal drilling to increase the quantities of gas produced from the field. **23rd October 2023**

- **IDC Completes New Oil Well at Al-Zubair Oil Field**

The Iraqi Drilling Company (IDC) has successfully completed the drilling of the new oil well at Zubair oil field in Basra. Well Zubair/607 was drilled to a depth of 3,533 meters in 36 days. This achievement is part of a Contract with the Italian company ENI to drill 37 oil wells at the Al-Zubair oil field in Basra, in collaboration with Schlumberger. The Zubair/607 well is the 24th well completed by the company in this project. The drilling operations utilized the IDC-37 drilling rig, with a horsepower capacity of 1,500. Following this completion, the rig will be relocated within the same field to begin drilling the Zubair/600 oil well. The Iraqi Drilling Company allocated two modern drilling rigs, IDC-37 and IDC-38, for the execution of this project. **22nd October 2023**

- **UAE's Crescent Petroleum starts Iraq Gas Development Projects**

Iraq's Oil Minister has 'activated' three contracts with UAE-based **Crescent Petroleum**, as part of Iraq's fifth licensing round. The contracts are aimed at harnessing 400 million standard cubic feet of gas per day, within one and a half years, from the following development blocks:

Gilabat-Qumar [Kalabat], in Diyala

Khashim Ahmer-Injana [Khasham Al-Ahmar], in Diyala

Khudher Al-Mai [Khider al-Mai], in Basra and Muthana

Oil Minister Hayan Abdul Ghani emphasized the government's and ministry's dedication to increase investment in gas production, focusing on utilizing the gas to generate electricity. In a statement, the Ministry said the implementation of these contracts will prevent gas flaring, and the gas will be used to produce electricity through mobile power stations at the field sites, bolstering the national grid with substantial gas reserves. The original, twenty-year, contracts for these projects were signed in February 2023. Crescent Petroleum had previously stated that the two fields in Diyala, Gilabat-Qumar and Khashim Ahmer-Injana, will initially produce 250 million standard cubic feet per day (MMscfd) of natural gas. **17th October 2023**

KAZAKHSTAN

- **Kazakhstan signs more energy deals with partners in China**

Astana capitalises on strong interest as progress stalls on Russian gas export pipeline. Kazakhstan has forged new co-operation and financing agreements with partners in China for its oil and gas riches, capitalising on the lack of progress on a gas pipeline between Moscow and Beijing. Astana and China National Petroleum Corporation (CNPC) will extend an oilfield development contract to allow CNPC to continue producing in Kazakhstan's Aktobe region after 2025. A permanent deal has under been discussion since Kazakh authorities granted a temporary extension last year. The agreement on the extension of "contract No 76" was signed on Wednesday at an event in Beijing to mark the 10th anniversary of China's Belt & Road Initiative launched by President Xi Jinping. CNPC Aktobemunaygaz has operated the licence for the past 26 years producing about 3.3 billion barrels of oil and 150 billion cubic metres of gas. China Power has been reported as planning to invest \$150 million into the Jambyl region project. Russian disappointment The Kazakh announcements are in sharp contrast to the lack of updates from Russia or China on the progress of the Sila Sibiri 2 gas export pipeline project that Moscow hopes will transport 50 billion cubic metres of gas from West Siberia across Mongolia to China. **19th October 2023**

- **CNCEC shows interest in building gas turbine power plant at Atyrau oil refinery**

KazMunayGas (KMG) CEO Magzum Mirzagaliev discussed the idea of building a gas turbine power plant at the Atyrau Oil Refinery with Zhiyuan Lu, Director for ASEAN Region for the China National Chemical Engineering Co (CNCEC). We have reached an understanding with our partners from CNCEC on the gas plant project's implementation, covering design, construction, and financing stages. Importantly, there are plans to allocate surplus electricity to meet the needs of the Atyrau region's population," Mirzagaliev said. In turn, the regional director of CNCEC confirmed the company's interest in this project. "Our company confirms its commitment to the joint project with KMG. We are currently discussing with our Kazakh colleagues the optimal options for its implementation on mutually beneficial terms," he said. The Atyrau Oil Refinery is one of three large oil refineries in Kazakhstan. The main owner of the enterprise is state company KazMunayGas. Its processing capacity is 5.5 million tonnes per year, and the processing depth is up to 86.4%. **18th October 2023**

SOUTH KOREA

- **South Korean heavyweight to build platform for nation's largest CCS project**

KNOC aiming for start-up of Donghae project in 2028. HD Hyundai Heavy Industries has signed a preliminary basic design contract with sister company Hyundai Engineering & Construction for a carbon dioxide (CO₂) platform intended for the carbon capture and storage (CCS) project envisaged at Korea National Oil Corporation's (KNOC) depleted Donghae gas field offshore South Korea. KNOC has plans for a 1.2 million tonnes per annum CCS scheme at Donghae, which ceased production in late 2021. HD Hyundai some 20 years ago constructed the platform for the Donghae field, and the offshore and marine giant is now set to play a key role in repurposing the offshore asset. It is understood that the contractor will be responsible for the offshore platform while subsidiary HD Korea Shipbuilding & Offshore Engineering is tasked with developing the CO₂ subsea injection system. The Donghae field, located in the East Sea around 20 miles offshore the port city of Ulsan, came on stream in 2004 and produced for 17 years. The CCS project, currently hailed as South Korea's largest, has an initial ambition to capture and store 1.2 million tpa of CO₂ from the nation's industrial complexes.

The timeline for Donghae CCS project involves preparation until 2024, design and construction of the facilities from 2025 to 2027 and operations running from 2028 to 2057, according to KNOC. Under South Korea's updated and enhanced NDC (Nationally Determined Contributions), the government has committed to reduce total greenhouse gas emissions by 40% from the 2018 level by 2030. Based on this April's 1st National Carbon Neutral and Green Growth Basic Plan, 4.8 million tpa of CO₂ will be captured and stored in deep formations by 2030. "Among many other technologies for CO₂ reduction, CCS is the most pre-emptive one that will contribute to achieving our target for GHG reduction and carbon neutrality by 2050," commented KNOC. **24th October 2023**

AFRICA

ANGOLA

- **Sonangol and Chinese CNCEC Sign a Contract for the Construction of the Lobito Refinery in Angola**

Sonangol and China National Chemical Engineering Company (CNCEC) signed a contract for the construction of the Lobito Refinery in Angola. The final agreement, which provides for construction, technical support and supervision, follows the Memorandum of Understanding between the two parties, signed four months ago in Beijing. The refinery is to have the capability of refining up to 200,000 bopd (barrels of crude oil per day) to contribute to the effort that the Angolan State is carrying out for the gradual elimination of the current dependence on imports of refined products, mainly gasoline and diesel. The qualities and characteristics of Angola's crude oil grades are popular with refiners in the Asia-Pacific region, the EIA said. According to the World Bank Group, Angola exited a five-year recession in 2021, and its economy continued to grow in 2022, mainly because of increased crude oil production and high oil prices. Angola is a member of the Organization of the Petroleum Exporting Countries (OPEC) and a participant of the OPEC+ production cut agreement that began in 2016; the country also signed a new OPEC+ agreement in May 2020. As of early 2023, Angola has only one operating refinery, which is located in the Luanda province and has a nameplate capacity of 65,000 bopd, according to the EIA. Angola has three other refineries that are under development. **23rd October 2023**

LIBYA	<ul style="list-style-type: none"> <u>Libya's vision for southern oil refinery and gas pipeline - Oil & Gas Middle East (oilandgasmiddleeast.com)</u> In a significant development aimed at bolstering Libya's energy sector and fostering regional development, Deputy Chairman of the Presidential Council, Moussa Al-Koni, recently held a crucial meeting with the Minister of Oil and Gas of the Government of National Unity, Mohamed Aoun. The meeting, held in the capital city, addressed several pivotal issues including the possibility of establishing an oil refinery in the southern region of the country, enhancing fuel supply, and powering the Ubari power plant through a new gas pipeline. A statement released by the Presidential Council highlighted that both Al-Koni and Aoun acknowledged the vital importance of the proposed oil refinery in the southern region. The project is anticipated to not only contribute to the national fuel supply but also create employment opportunities and stimulate economic development in the area. 24th October 2023 <u>Rosetti Marino awarded \$316m contract by Saipem</u> Italy's Rosetti Marino has secured a contract worth over €300m from compatriot energy services player Saipem for an offshore project in the Mediterranean Sea. Under the contract, the Ravenna-based fabricator and shipyard will build a gas recovery module (GRM) of approximately 5,000 tonnes to be installed on the DP4 offshore structure off the coast of Libya. The scope of work includes engineering, material procurement, construction and load-out works, as well as activities to modify the DP4 platform to receive gas from the GRM and the refurbishment of the platform's accommodation module. Rosetti Marino said it expects to complete the work in early 2026. Milan-based Saipem won a contract in August worth around \$1bn for the development of the shallow-water Bouri natural gas field offshore Libya. The project's end user is Mellitah Oil & Gas, a consortium formed by National Oil Corporation of Libya and Eni. 26th October 2023
NAMIBIA	<ul style="list-style-type: none"> <u>TotalEnergies lines up mega-drilling contract to fast-track exploitation of giant Namibian oil discovery</u> TotalEnergies has launched a bid process for a contract set to be worth more than \$800 million to secure a rig to carry out development drilling on its huge Venus oil discovery offshore Namibia. The move underpins the French supermajor's plan to fast-track the exploitation of its multi-billion-barrel deep-water oil and gas find on the prolific Orange basin. Multiple sources told Upstream that TotalEnergies is in the market to award a five-year development drilling contract, with the operator due to make a decision by the end of this year. 24th October 2023 <u>Galp targets 10 billion barrel prospect in debut Namibian exploration campaign</u> Galp Energia is set, within weeks, to spud a high-profile exploration probe offshore Namibia, targeting an enormous prospect called Mopane that may house up to 10 billion barrels of oil in place. After TotalEnergies and Shell hit big oil with their Orange basin drilling campaigns, Galp will be just the third company to try its hand at making major discovery in this new global exploration hot spot. 24th October'23
TANZANIA	<ul style="list-style-type: none"> <u>\$4 Billion Tanzania-Uganda Oil Pipeline Project,World Longest Heated Pipeline, to Kick Off Operations in 2025</u> \$4 Billion Tanzania-Uganda Oil Pipeline Project,World Longest Heated Pipeline, to Kick Off Operations in 2025. Tanzania-Uganda Oil Pipeline that links Uganda and Tanzania has managed to overcome a major hurdle which delayed the final decision according to the Standard Bank Group Ltd. Tanzania managed to settle a major disagreement with some of the Chinese financiers according to Kenny Fihla who is the chief executive officer for the commercial and investment banking unit of lenders. Currently, Standard Bank is able to make a decision on whether to make an investment of as much as \$100 million just after the developer of the Tanzania-Uganda Oil Pipeline project, TotalEnergies SE,

China's CNOOC Ltd., Uganda and Tanzania both come to reach an agreement on funding of the structure. Moreover, the bank is waiting for the culmination of environmental and social impact assessment study. Tanzania-Uganda Oil Pipeline Length and Capacity The 1,443 kilometer-pipeline is expected to commence oil transportation in the year 2025 and ferry a total of 246,000 of crude oil in a single day when at peak. This Tanzania-Uganda Oil Pipeline will be the longest world heated pipeline when it shall be completed. A total of 62% stake will be owned by TotalEnergies in the planned conduit whereas 15% of interest will be each accorded to Tanzania Petroleum Development Corp. And Uganda National Oil Co. **18th October 2023**

- **Helium One Tanzania Drilling Project Resumes**

Tanzania Drilling Project informed all investors that drilling was resuming in the country after the repair of the rig was done thus resuming the Tai-3 well program to go on to attain a depth of 1,100 meters as planned. The drilling at the well resumed on Sunday 15 October according to the company. Bigger part of the Helium One Team, have been pushing very hard in order to troubleshoot and get a solution for the issue whereby they had to acquire a replacement part from the United States of America and repair the rig in order to get it to function. Tanzania contains a helium reserve of approximately 1.5 billion cubic meters .This discovery was made by Helium One and Oxford University where the two institutions got to announce the presence of the large deposit of the gas after they conducted a research in the country. Helium One Tanzania Drilling Project Next Well Currently, civil works are underway for the preparation of the next well of the company, Itumbula-C, which is anticipated to be finished. Before the wet season starts, it is expected that the Tai-3 reservoirs will be drilled and be evaluated before moving the rig. **21st October 2023**

- **Tanzania, Zambia sign natural gas deal as Samia wraps up trip**

The new gas pipeline is expected to transport liquefied natural gas from Tanzania to Zambia and is part of the expansion plans to the existing Tazama oil pipeline. President Samia Suluhu Hasan yesterday concluded her Zambia state visit as the two countries signed eight memoranda of understanding (MoUs), including an agreement for cooperation on the development of a natural gas export project. The new gas pipeline is expected to transport liquefied natural gas from Tanzania to Zambia and is part of the expansion plans for the existing Tazama oil pipeline. These agreements were signed yesterday by the respective ministers of the two countries during the final day of President Samia Suluhu Hassan's state visit to Zambia. We hope that more agreements will be signed soon, given the ongoing talks," she said. The Tanzania-Zambia Mafuta (Tazama) pipeline transported crude petroleum products from Dar es Salaam to the Indeni refinery in Ndola, Zambia. The 1,710 kilometres of pipeline are owned by Tazama Pipeline Limited, a joint company of the governments of Zambia (66.7 percent) and Tanzania (33.3 percent). **26th October 2023**

AUSTRALIA

AUSTRALIA

- **'A win' for new gas supply: Fresh Australian exploration acreage up for grabs**

WA government tempts players with eight areas across four prolific basins. The Western Australia government has launched the state's first exploration acreage offering of 2023, with eight onshore areas up for grabs. Industry association Australian Energy Producers (the former APPEA) called the round as "a win" for new gas supply and a positive step to delivering energy security to Western Australia following forecasts of growing demand in coming years. The eight areas respectively designated L23-1 to L23-8 are located two apiece in the Carnarvon, Canning, Perth and Amadeus basins. The largest of these assets, L23-5 in the Amadeus basin, comprises 90 blocks and spans more than 7000 square kilometres. In contrast, each of the two Perth basin areas — L23-7 and L23-8 — has six blocks and is less than 440 square kilometres in size. Prospective bidders have until 19 January 2024 to apply for acreage, according to WA's Department of Mines, Industry Regulation & Safety, which noted that the blocks are being made available under the terms of the Petroleum & Geothermal Energy Resources Act 1967 (PGERA). **21st October 2023**

- **Tamboran Hits Gas in Another Beetaloo Well in Australia**

Tamboran Resources Ltd. has said it encountered “significant gas” after achieving the fastest drilling in Australia’s Beetaloo Basin at the Amungee NW 3H (A3H) well. A3H, under exploration permit (EP) 98, reached a total depth of 12,589 feet including a 3,609-foot horizontal section in the Mid Velkerri B Shale, the Australian company said in a filing Monday with the local bourse. “The well intersected the target Mid Velkerri B shale at a total vertical depth of 2,272 meters (7,454 feet) and encountered significant gas shows within the shale, in line with pre-drill expectation”, said the announcement on the Australian Securities Exchange. It took Helmerich & Payne Inc.’s super-spec FlexRig about 18 days to spud A3H, 20 days faster than the A2H well, Tamboran said. The filing also announced the Shenandoah South 1H (SS1H), another Beetaloo well under EP 117, is on track for the start of stimulation next month with IP30 flows planned for 2024. In Beetaloo, a basin in the Northern Territory, Tamboran holds a 38.75 percent stake and operatorship in EPs 76, 98 and 117, while co-venturer Falcon Oil & Gas Ltd. owns 22.5 percent. Tamboran also operates EP 136 in the same basin with 100 percent ownership. In Beetaloo EP 161, Tamboran has 25 percent non-operated ownership.

18th October 202

EUROPE

AZERBAIJAN

- **SOCAR plans to increase STAR refinery capacity to 13 mln tonnes (interfax.com)**

The State Oil Company of Azerbaijan (SOCAR) plans to increase the capacity of the STAR refinery in Turkey to 13 million tonnes per year in 2024, the new head of the SOCAR Turkey Refining & Petrochemical Business Unit (SOCAR Turkiye business unit for oil refining and petrochemicals) - General Director of the Turkish Petkim Petrokimya Holding Kanan Mirzaev, said. "Since its inception to date, the STAR Refinery has achieved a significant increase in capacity with little investment by leveraging optimization capabilities in plant design. In particular, the refinery's capacity has been increased from 10 million tonnes to 12 million tonnes per year. We are focused on increasing this capacity in 2024 to 13 million tonnes per year," Mirzaev said in an interview with Turkish media. He said that the STAR refinery, which supplies 25% of Turkey's needs for petroleum products and occupies 19.5% of the country's domestic market, demonstrated successful operating results in 2022. The STAR refinery was put into operation on October 19, 2018 and was initially designed to process various types of oil such as Azeri Light, Kerkuk and Urals. Currently, the plant can process over 20 types of oil, but the most suitable for it are heavier grades. SOCAR invested almost \$7 billion in the construction of the STAR refinery. **23rd October 2023**

FRANCE

- **Lyon-Turin line progresses on 11 fronts**

The Herrenknecht machine will be operated by the Italian-French group CO 6-7, which comprises a French-Italian group of companies comprising Vinci Construction, Webuild, Dodin Campenon Bernard and Campenon Bernard Centre Est on the Lyon-Turin line. The TBM is 180m long and has a 10.4m diameter. It will excavate the 9km of the north tube, alongside the work already completed on the south tube, between Saint-Martin-La-Porte and La Praz. The first Herrenknecht TBM for CO 6-7 passed its FAT in July. It will dig one of the two tunnel tubes between La Praz and Modane. Each TBM has 8,100kW of power, weighs 2,300 tons and is equipped with 61 cutters. Tunnel Euralpin Lyon-Turin (TELT) says work on the rail line is progressing on 11 fronts. In September 12.5km of the 57.5km tunnel had been dug and the second of four 500m-deep ventilation shafts was completed in the Avrieux area. The €800m (£694m) contract covers industrial processing of the 23 million tonnes of materials excavated on the French side with a circular approach, including reuse of over 50% of the spoil on site. The complex will include three permanent storage sites, three materials processing stations, eight logistics platforms, 15km of conveyor belts and a full train loading facility. Once completed, the 57.5km Mont Cenis base tunnel 12.5km in Italy and 45km in France will be one of the longest rail tunnels in the world. **18th October 2023**

<p>NORWAY</p>	<ul style="list-style-type: none"> <p><u>Shell targets progress at Norway’s largest undeveloped offshore gas discovery</u> Energy minister underlines importance of Linnorm project delayed by squabbling joint venture. Shell is aiming to resume work on Norway’s largest undeveloped offshore gas discovery, which it suspended last year due to ongoing complications over the project concept and gas pipeline infrastructure. We initiated a Linnorm reframing and are still working to explore multiple options. We are actively engaging with partners and stakeholders to find viable ways forward for Linnorm,” a spokesperson for the UK major told Upstream at the beginning of this month. 23rd October 2023</p> <p><u>Equinor completes drilling at dry well 6307/1-2 in Norwegian Sea</u> The wildcat well 6307/1-2, drilled using the Deepsea Stavanger drilling rig to a vertical depth of 2283m below sea level, was terminated in sandstones in the presumed Red Layer in the Middle Triassic and will be permanently plugged and abandoned. Norwegian oil and gas company Equinor has completed the drilling of wildcat well 6307/1-2, located in the production licence 1058, 36km south of the Njord field in the Norwegian Sea. The well was drilled using the Deepsea Stavanger drilling rig, at a water depth of 312m, to prove petroleum in Triassic reservoir rocks (Red Layer), and to assess cap rock, reservoir, and fluid properties. The company confirmed that the well 6307/1-2 is dry and plans to permanently plug and abandon the well. The Norwegian company has been awarded wildcat well, which is the first to be drilled in the production licence 1058, as part of the Pre-defined Areas (APA) in 2019. In August this year, Equinor secured Norway’s Petroleum Safety Authority consent to start drilling at the wild cat well 6307/1-2, according to the Offshore Engineer. 25th October 2023</p>
<p>SPAIN</p>	<ul style="list-style-type: none"> <p><u>Spanish rail line goes underground</u> Spain’s Ministry of Transport, Mobility and the Urban Agenda has awarded a Comsa, FCC and Ferrovial consortium the contract to take one of Barcelona’s rail lines underground. The existing R2 Rodalies line, which runs 130km north to south, will go underground as it passes through the Montcada i Reixac municipality, on the northern side of Barcelona. The €540.4m (£468m) contract also includes the construction of a new station. The consortium will build a 4km tunnel, which will accommodate a third track to increase the system’s capacity. The new underground station will have platforms to serve two tracks, while the central track will be used by regional trains that will not stop at the station. The news underground section will be at depths of up to 35m. 16th October 2023</p>
<p>UK</p>	<ul style="list-style-type: none"> <p><u>Cruella de Drill prepares to tunnel in Glasgow</u> A Glasgow schoolgirl has won a competition to name a TBM to be used for Scottish Water’s Glasgow Resilience Project. Nieve O’Hara, a pupil at Our Lady of the Rosary Primary in Cardonald, took the prize with the name Cruella de Drill. The TBM will install a 252m stretch of trunk main 20m beneath the White Cart Water and the Paisley Canal railway line in the Nethercraigs area of the city. Concrete pipes 1500mm in diameter will be pipe-jacked into position at the rear of the TBM and a 900mm ductile iron water main will be installed inside. The work is expected to take about six weeks to complete. The Glasgow Resilience Project will benefit almost one million Scottish Water customers by connecting the Glasgow area’s network with the system in Ayrshire to improve security of supply. It will provide a two-way water supply between the Milngavie Water Treatment Works system, which provides water for more than 700,000 people across much of the Glasgow area, and the Bradan Water Treatment Works system, which supplies more than 200,000 customers across much of Ayrshire. The project is being delivered for Scottish Water by Caledonia Water Alliance, a Morrison Water Services and Aecom joint venture, and is expected to be completed in 2024. 16th October 2023</p> <p><u>Dana Confirms New Hydrocarbon Find in UK North Sea</u> Dana Petroleum has confirmed a new hydrocarbon discovery in the UK North Sea, in a statement sent to Rigzone.</p>

Dana Petroleum, as operator, is pleased to confirm the discovery of hydrocarbons within the UK Southern Gas Basin ‘Earn’ prospect that sits immediately to the west of the Tolmount field,” Andrew Jones, the company’s head of communications and stakeholder relations, told Rigzone. “All components of the petroleum system have been proven by well 42/27-4. The reservoir is gas saturated with thickness and properties within our pre-drill range of expectations,” Jones added. Dana Petroleum is a 50 percent partner, along with operator Harbour Energy, in the Tolmount Southern North Sea gas development, Dana notes on its website. Following start up in April 2022, the Tolmount gas field reached plateau rates of around 20,000 barrels of oil equivalent per day, net to Harbour, in June 2022, and cash payback in September, less than six months after first production, Harbour states on its site. The field has since come off plateau rates earlier than originally anticipated, resulting in a downward revision of field reserves, Harbour’s site adds. Drilling of the Tolmount East development well commenced in the fourth quarter of 2022 and was successfully completed, according to Harbour’s site, which notes that Tolmount East is expected to be tied into production in 2024. **17th October 2023**

- **Essar Energy Transition to build the UK’s Largest Hydrogen Plant**

Essar Energy Transition to build the UK’s Largest Hydrogen Plant. Essar Energy Transition Hydrogen, formerly known as Vertex Hydrogen, has embarked on the construction of its second hydrogen plant in the United Kingdom. This ambitious project is set to make a significant contribution to the country’s transition to a low-carbon economy. Plant Capacity: The new hydrogen facility will boast a remarkable peak power generation capacity of 1,000 megawatts and is projected to produce a staggering 230,000 tonnes of low-carbon hydrogen annually, firmly positioning itself as not only the largest hydrogen plant in the UK but also one of the largest globally. Its construction will be executed in phases, with the first phase anticipated to conclude within the next seven to eight months. The plant’s far-reaching impact extends beyond its sheer size; it is poised to catalyze investments across the UK’s North-West region. This will include the development of crucial infrastructure for transporting and storing hydrogen, as well as encouraging industrial and power generation customers to transition to this environmentally friendly fuel source. The total investment for both this second plant and the previously completed 350 MW first plant is estimated to be around £1 billion. The commencement of Front End Engineering & Design (FEED) for this second hydrogen plant represents a pivotal step in the UK’s endeavor to decarbonize the energy sector. By reducing greenhouse gas emissions, it aligns with the nation’s ambitious goal of achieving net-zero emissions by 2050. **23rd October 2023**

NORTH & SOUTH AMERICA

BRAZIL

- **Two go head-to head in Petrobras subsea tender to revitalise deep-water oil fields**

Brazilian giant seeking umbilicals for Jubarte and Marlim Leste developments. Brazilian oil giant Petrobras has received two bids in a tender to contract critical subsea gear to attend a pair of deep-water developments in the country’s Campos basin. Petrobras has been replacing old subsea equipment at ageing fields in an effort to keep these mature assets producing for longer. The latest bidding opportunity called for the contracting of 52.8 **24th October 2023**

CANADA

- **Vancouver subway marks another breakthrough**

The first of two TBMs has broken through at the future Oak-VGH Station on Vancouver’s Broadway Subway Project. TBM Phyllis has reached the fourth of six underground stations, excavating more than 2km of tunnel and installing approximately 1,330 concrete tunnel liner rings since being launched from Great Northern Way-Emily Carr Station in autumn 2022. The 150m-long machine passed under the Canada Line at a depth of 22m shortly after departing Broadway-City Hall Station. From there, the tunnel rises to 15m below the surface. After undergoing planned maintenance, TBM Phyllis will continue toward the future South Granville Station. The project’s other TBM – Elsie – will arrive at Oak-VGH Station this autumn. The Broadway Subway Project is a 5.7km extension of the Millennium Line from VCC-Clark Station to West Broadway and Arbutus Street, providing a fast SkyTrain service along the Broadway corridor. **16th October 2023**

- **Ksi Lisims LNG terminal Project in British Columbia, Canada**

Project type : Floating LNG Export Facility

Location : British Columbia, Canada

Capacity : 12 million tonnes of LNG per year

Expected Start of Construction : 2024

Expected Start of Operations : 2028

Investment : C\$8.3bn to C\$9bn

Project Proponents : Nisga'a Nation, Rockies LNG and Western LNG

The Ksi Lisims LNG Project is a proposed Floating Liquefied Natural Gas (FLNG) and marine terminal facility in British Columbia, Canada. The proponents of the project are Nisga'a Nation, Rockies LNG and Western LNG. The project proponents filed the initial project description for the Ksi Lisims LNG project with the Government of British Columbia and the Government of Canada in July 2021. The Detailed Project Description (DPD) was filed and posted by the British Columbia (BC) Environmental Assessment Office in April 2022. According to the report, the capital cost for the project is estimated to be between C\$8.3bn and C\$9bn. Contractors Involved The Front-End Engineering and Design (FEED) contract for the Ksi Lisims LNG floating terminal was awarded to Black & Veatch and Samsung Heavy Industries (SHI) in July 2023. Ksi Lisims picked Siemens Energy to assist with the design of liquefaction compression and associated electrical systems of the project. Other consulting services such as the connection of electromechanical systems to the external grid will also be provided by Siemens. **20th October 2023**

- **US FERC approves TC Energy's GTN pipeline expansion project**

The GTN XPress project will expand the pipeline system with an additional 150,000 dekatherms (dth) per day of firm transportation service to provide adequate gas required for 750,000 homes, with a project life of at least 50 years. The US Federal Energy Regulatory Commission (FERC) has approved the expansion of TC Energy's Gas Transmission Northwest (GTN) pipeline system into the Pacific Northwest. The GTN XPress project will expand the pipeline system with an additional 150,000 dekatherms (dth) per day of firm transportation service to its mainline system. It entails the installation, construction, modification and operation of natural gas compression facilities at the three existing compressor stations in Idaho, Washington, and Oregon. With a project life of at least 50 years, the GTN XPress project is expected to provide adequate gas required for 750,000 homes. According to Inslee, TC Energy intends to recover the costs for the pipeline expansion well beyond 2045, which may result in potential cost impacts to consumers. Washington's legal greenhouse gas limits require the state to reduce its greenhouse gas emissions by 95% by 2050, and the utilities to transition to 100% clean electricity by 2045, under the Clean Energy Transformation Act. Inslee added: "This decision also runs contrary to Washington state laws that require our utilities to transition to 100% clean energy by 2045 and will leave consumers on the hook for a costly stranded asset." Oregon Senator Jeff Merkley said: "The project will lead to damage of \$8.8m and will contribute 1.9 million metric tons of carbon per year in pollution to the Pacific Northwest. **20th October 2023**

- **Cenovus contracts Harland & Wolff to upgrade SeaRose FPSO vessel**

Harland & Wolff will deliver the SeaRose FPSO at Cenovus' Belfast Yard in early 2024 and has already started several preparatory works in Belfast, including inspections, procurement of steel, fabrication of customised blocks and other dry dock operations. UK-based shipbuilding company Harland & Wolff has secured a £61m base contract to provide the mid-life upgrade of the SeaRose Floating Production Storage and Offloading (FPSO) vessel. Canadian integrated oil and natural gas company Cenovus Energy has awarded the contract. Under the terms of the contract, Harland & Wolff will deliver the SeaRose FPSO at Cenovus' Belfast Yard in early 2024 and will be placed in the Building Dock for more than three months. It is the second time for the SeaRose vessel to visit Belfast, following its last visit in 2012. Harland & Wolff has already started several preparatory works in Belfast, including inspections, procurement of steel, fabrication of customised blocks and other dry dock operations. Additional fabrication has started to ensure the yard is fully prepared to begin refurbishment and

	<p>upgrade works as soon as the vessel arrives, in the next year. Currently known as Harland & Wolff (Methil) and Harland & Wolff (Arnish), the facilities focus on fabrication work within the renewables, energy and defence sectors. In addition to the four yards, Harland & Wolff also owns the Islandmagee gas storage project, which would provide 25% of the UK's natural gas storage capacity. 24th October 2023</p>
<p>GUYANA</p>	<ul style="list-style-type: none"> <p><u>Construction of a gas-to-energy plant in West Bank Demerara in progress</u> Construction of a gas-to-energy plant in West Bank Demerara in progress The early work on the gas-to-energy plant project in Wales, West Bank Demerara, has pleased ExxonMobil Guyana, and the company is confident that the project will be completed on schedule. The early work undertaken On-site and in the surrounding communities has met his personal satisfaction, according to ExxonMobil Guyana President Alistair Routledge. He called it really good progress recently. When asked about details, he claimed that Exxon's contractor had already cleared and prepped about 100 acres of land. The integrated plant, which will be built on this land, will collect gas from offshore. It will separate cooking gas from methane, which will then be delivered to a power plant to generate electricity. According to Routledge, the company contracted to design as well as build the integrated facility has also begun laying special drainage infrastructure. This is in preparation for civil works. In order to provide good access to the plant, the company also committed funds to early work to strengthen bridges and improve roads. The port facility, which Gaico Construction Inc. built to help the project, would soon be handed over to the government. Routledge referred to it as a material offloading facility. According to Routledge, they made great progress in their early works. The Liza Phase One and Liza Phase Two FPSO (floating, production, storage, and offloading) vessels will use a 12-inch pipeline. 19th October 2023</p>
<p>USA</p>	<ul style="list-style-type: none"> <p><u>Gateway Development Commission authorises framework for Hudson Tunnel contracts</u> The Gateway Development Commission (GDC) has authorised supporting or executing partner (SEP) agreements with Amtrak and the New Jersey Transit Corporation for construction on the Hudson Tunnel Project (HTP), securing the framework necessary to ensure the new tunnel contracts are executed. GCD's agreement with Amtrak is for Package 2, which includes work on the tunnel and systems fit-out, while the agreement with New Jersey Transit covers Package 3, which encompasses the tunnel's New Jersey surface alignment. The authorisation follows GDC's SEP Agreement with the Port Authority of New York and New Jersey for services in support of the tunnelling and heavy civil work, as well as with Amtrak for the Hudson Yards Concrete Casing Section 3. In a joint statement, New York commissioner and co-chair Alicia Glen, New Jersey commissioner and co-chair Balpreet Grewal-Virk, and Amtrak commissioner and vice- chair Tony Coscia, said: "There is incredible momentum behind building this tunnel because there is urgent need for it. Initial construction is beginning in both New York and New Jersey, but we cannot miss a beat. With these SEP Agreements, GDC and our partners are ensuring this tunnel is built as rapidly as possible. Early construction work for the tunnel is under way in New Jersey and New York. The project was selected for a US\$292m US Department of Transportation (USDOT) MEGA Grant for work on the Hudson Yards Concrete Casing Section 3. 17th October 2023</p> <p><u>Shell and Ecopetrol strike gas again at promising Colombian offshore play</u> Glaucus-1 discovery is the fifth in Caribbean waters. European supermajor Shell and state-controlled partner Ecopetrol have made a new natural gas discovery offshore Colombia. According to Ecopetrol, drilling of the Glaucus-1 exploration in Block COL-5 was a success, confirming the existence of a gas province in Caribbean waters. The Glaucus-1 programme took place in 2340 metres of water with the Noble drillship Noble Voyager. It was the fifth well drilled in the area. Earlier discoveries were made with the Kronos-1, Gorgon-1, Purple Angel-1 and Gorgon-2 prospects. "The development of this gas province in the southern Caribbean could contribute significantly to maintaining the country's energy security and supporting the energy transition that Ecopetrol has been developing," said Ecopetrol.</p>

Shell operates COL-5 with a 50% stake with Ecopetrol holding the other half. Next month, Ecopetrol is set to spud the Orca Norte-1 probe in the Tayrona block using the Noble semi-submersible rig Noble Discoverer. Ecopetrol has stakes at 11 offshore exploration tracts in Colombia in partnership with Shell, Brazil's Petrobras and US independent Occidental Petroleum. **23rd October 2023**

- **TechnipFMC wins contract for Mexico's deep-water field**

Woodside Energy is moving forward with Trion development. Global subsea specialist TechnipFMC has been awarded a contract by Australian operator Woodside Energy to manufacture and supply flexible risers for its \$7.2 billion Trion deep-water field offshore Mexico. Woodside has recently sanctioned development at Trion, which will feature a floating production unit with capacity to process 100,000 barrels per day of oil. TechnipFMC won a contract to supply infield flowlines and jumpers for Trion. Financial terms were not disclosed. "This contract is our largest flexible pipe award in the Gulf of Mexico to date," said TechnipFMC subsea president Jonathan Landes. The Trion development is expected to include 18 wells – nine oil producers, seven water injectors and two gas injectors – drilled in the initial phase, with a total of 24 wells drilled over the project life. Produced oil will be shipped to international markets, while gas that is not reinjected or used on the production unit will be delivered to the domestic natural gas pipeline network via a subsea pipeline. Trion lies in 2500 metres of water, about 180 kilometres off the Mexican coast and just 30 kilometres south of the maritime border with the US. **24th October 2023**

- **Air Liquide is a partner in six out of seven hydrogen hubs in the US**

All the Hubs to receive up to US\$7 billion in Bipartisan Infrastructure Law (BIL) funding. In the context of the U.S. government's announcement to support seven regional Clean Hydrogen Hubs to accelerate low-carbon hydrogen development, Air Liquide is a partner in a record 6 out of the 7 Hubs. This achievement is a recognition of Air Liquide's commitment to hydrogen development. Air Liquide's participation in these regional hubs support its ambition to create a reliable hydrogen network in the industry and bring it to scale. Air Liquide will bring its over 60 years of experience along the entire hydrogen value chain and apply its expertise in production, liquefaction, distribution, storage and end-use technologies to meet the specific needs of each region. In order to support the establishment of a nationwide hydrogen network in the U.S, companies have had the opportunity to participate within the Hydrogen Hubs program either as partners with supporting projects, or as supporters who provide their insight and expertise. As a core industry sponsor with a project in the HyVelocity Hub (Gulf Coast), Air Liquide will work with its partners to optimize the Gulf Coast's existing energy assets to develop hydrogen projects that benefit Texas, Southwest Louisiana, and the surrounding region. **25th October 2023**

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