

WORLD PIPELINES®

Volume 20 Number 10 - October 2020



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EPC AND PIPELINE CONSTRUCTION

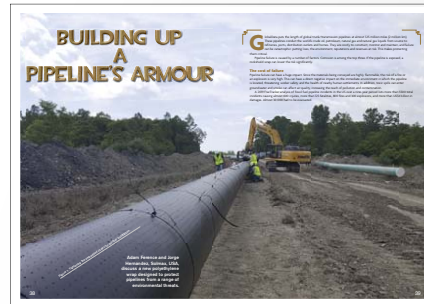
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COMMENT

FINAL HURDLES FOR NORD STREAM 2

German Chancellor Angela Merkel has been urged to drop her support for the Nord Stream 2 pipeline project following the poisoning of Russian opposition leader Alexei Navalny on German soil. German Foreign Minister Heiko Maas said to press after the incident: "I hope the Russians don't force us to change our position on Nord Stream 2," as the row with Moscow intensified over the poisoning of the Kremlin critic.

There have been repeated calls for former German Chancellor Gerhard Schröder to step down from his positions at Russian state-owned energy companies, including his role as chairman of the shareholders' committee of Nord Stream 2, in response to the Navalny poisoning.

It's not clear if the poisoning (for which Russia has denied responsibility) could thwart the future of the pipeline, but it comes as opposition to the project is building.

A resolution passed by the European Parliament in mid September called for the reinforcement of existing EU sanctions against Russia and to halt the Nord Stream 2 pipeline. The text of the resolution was passed by 83% of the EU Parliament but the body has no jurisdiction in this area.

The EU has so far signalled readiness to consider sanctions against the project if Russia failed to conduct a transparent investigation in full co-operation with the Organisation for the Prohibition of Chemical Weapons, the European Council told press. But any decision to impose sanctions has to be preceded by political agreement by the member states.

The last few months have also seen increased threats of sanctions from the US and some attempts by the US to organise a coalition of project opponents.

The pipeline, which runs 2400 km from Lubmin to Vyborg through the Baltic Sea, has just 150 km left to be laid. The project is all but finished.


In yet another twist, Reuters reported on 23 September that the world's largest group of shipping insurers will not insure vessels involved in the construction of Nord Stream 2, or TurkStream.¹ In a circular, members of the International Group of P&I Clubs were "strongly urged to assess and mitigate the risks of entering

into contracts on the Nord Stream 2 or TurkStream construction projects and exercise the fullest possible due diligence to avoid exposure to sanctions or enforcement actions".

In mid September, a Gazprom vessel departed for the project's pipeline supply base in Germany, so

it could supply pipes for the *Akademik Cherskiy* pipelaying ship. Allseas halted operations last year due to US sanctions and Gazprom has drafted in vessels of its own in order to continue with construction.

The seriousness of the Navalny allegations must be fully acknowledged and investigated, but Nord Stream 2 should not suffer as a result. The project fulfils a key part of Germany's, and Europe's, energy strategy and so far has attracted total investment of €9.5 billion (US\$11.2 billion).

Europe needs to boost its supply links to reliable sources of natural gas and needs pipeline and LNG infrastructure to facilitate this. 

1. <https://uk.reuters.com/article/us-russia-usa-energy-insurance/top-shipping-insurance-group-will-not-cover-ships-linked-to-nord-stream-2-idUSKCN26E1EM>

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Guest Comment

NJ Ayuk

Executive Chairman, African Energy Chamber, and CEO of Centurion Law Group, South Africa

When the US\$3.5 billion East African Crude Oil Pipeline (EACOP) is complete, it will make history: the 24 in., 1443 km system will be the largest oil pipeline in the region, transporting oil from Uganda's Hoima oilfields to the Port of Tanga in Tanzania, where it can be shipped around the globe.

More importantly, the EACOP has the potential to be a game-changer for East Africa. The pipeline project's construction alone will provide much needed work opportunities. Approximately 5000 - 10 000 jobs will be created to build it and its support infrastructure, including a marine storage terminal and load-out facility at the Tanga port; a loading pad and facility in Kabaale, Uganda; and 96.5 km of temporary and permanent access roads.

Not everyone sees the project as a positive — a number of environmental groups are protesting the EACOP — but I don't think we should be so quick to dismiss the economic growth, capacity building, and infrastructure development that this project can deliver.

The EACOP has been in the works for years as part of a massive investment project in Uganda's Lake Albert, the site of Africa's fourth largest oil reserves, with approximately 1.5 billion bbls of oil. The investment project, including the pipeline, was on hold from May 2019 to April of this year until Uganda's government and Lake Albert investment partners Total, Tullow Oil, and China National Offshore Oil Corporation could resolve a capital gains tax dispute. Since then, the investors have come to a new agreement, and Tullow has committed to selling its entire stake in the Lake Albert Development Project to Total. E&P activities now have a green light to move forward, along with the construction of the pipeline, which is tentatively scheduled to begin in April 2021.

Unfortunately, once it became clear that the


EACOP would be moving forward, environmental groups, including several based in Europe and the US, began petitioning banks not to finance the pipeline. They argue that the pipeline would pose unacceptable risks to natural habitats and wildlife and would displace communities in its path. This is not the first time that environmental activists who live in economies with fully developed oil and gas industries have tried to interfere with Africans interested in realising the same benefits.

While I agree that protecting the environment and communities is critical, these objectives should be met through careful planning and stringent pipeline integrity requirements, not by attempting to dismantle a project with so much potential to help East Africans.

The availability of a pipeline near oil-rich Lake Albert is going to spark a positive chain reaction in the region, beginning with new production and exploration activity. That will create opportunities for permanent jobs — from labour to professional and leadership roles — along with technology transfers and capacity building. The E&P activity also will contribute to the establishment and

growth of indigenous companies, from upstream operations to suppliers to oil field services businesses, along with entrepreneurial opportunities for businesses in other sectors. Foreign investment in the region could also lead to the creation of even more new infrastructure.

This is a development with the potential to contribute to widespread economic growth and stability, not only for a wealthy few, but for everyday Africans. When you consider the impact COVID-19 has had on African economies, the importance of this project — and the jobs that will be created during construction — becomes even more evident.

Not only am I eager to see construction on the EACOP get underway, I hope the project sets a precedent for further co-operation, and even more joint energy projects, in East Africa. 

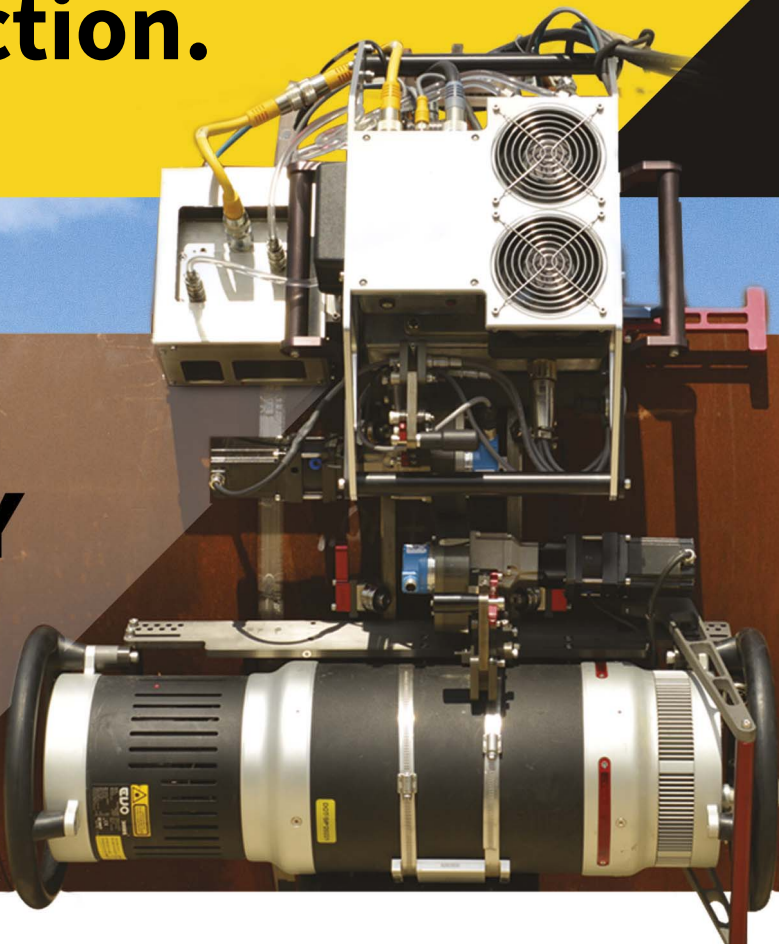
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WORLD NEWS

ICGB utilises first €30 million in EIB loan for realisation of the Greece-Bulgaria gas interconnector

The project company ICGB, which is responsible for the implementation of the Greece-Bulgaria gas interconnector, has successfully utilised the first tranche of the loan financing from the European Investment Bank (EIB). The total value of EIB financing for the purposes of the project amounts to €110 million, which is secured by a guarantee from the Bulgarian state.

“This is an unconditional achievement that costs a lot of complex preparation and joint efforts of the project company and the EIB and BEH, as the utilisation of such a resource requires the prior fulfilment of a number of serious conditions,” explained the Executive Officers of the project company Teodora Georgieva and Konstantinos Karayannakos.

According to them, this successful stage in the work on the project is also a sign for the financial institution’s trust in IGB. The EIB loan agreement was signed with BEH in 2019, so the financing of the IGB project is fully secured.

The total value of the interconnector that will connect the gas transmission networks of Bulgaria and Greece, is nearly €240 million, provided from shareholders’ capital, a loan from the EIB of €110 million with a state guarantee and grants of €39 million under the Operational Programme “Innovation and Competitiveness 2014 - 2020”. For the purposes of the project, €45 million have been provided from the European Energy Programme for Recovery.

A number of preconditions have been set for the receipt of the first tranche of the EIB loan, including the introduction of an

Environmental and Social Management Framework. These plans include more than 20 documents and aim to introduce the environmental and social standards of international financial institutions which are applicable to this type of infrastructure projects, including plans and measures for communication and support to local communities, compensation for the affected population, local livelihood restoration and other.

As part of the EIB’s preconditions, an environmental and social monitoring consultant has been selected to audit the implementation of the environmental and social measures set out in the developed environmental and social framework and to report to the European Investment Bank.

A number of documents have been prepared and presented for the IGB project – gas transportation agreements with the capacity users; agreement for utilisation of the loan and contract for establishment of a special pledge in favour of BEH EAD as a direct lender of the project company. The other collaterals have been established; the required insurance has been concluded with the necessary coverage for all risks during the construction.

“The realisation of the gas pipeline will increase the security of gas supplies and will lead to real diversification of sources. We are confident in the success of the project and the achieved utilisation of the first instalment of the loan is a serious and significant progress, which is possible thanks to the persistent efforts of all parties,” said Konstantinos Karayannakos.

Black Bear Transmission closes bolt-on acquisition of natural gas transmission assets from Third Coast Midstream

Black Bear Transmission LLC (Black Bear) has announced that it has completed the previously announced bolt-on acquisition of a portfolio of natural gas transmission assets (the NGT Assets) from a subsidiary of Third Coast Midstream LLC (Third Coast Midstream).

Black Bear is a portfolio company of the second Basalt fund (Basalt). This transaction marks Black Bear’s second bolt-on acquisition, having acquired the Ozark system from Enbridge in April 2020.

The NGT Assets include six intrastate natural gas pipelines spanning approximately 1400 miles in Alabama, Louisiana and Mississippi. The system has total capacity of more than 800 million ft³/d and benefits from significant interconnectivity to major long-haul pipelines, providing reliable, cost-advantaged gas supply to utilities and other key end-users.

“We are very pleased to finalise this purchase of additional pipelines from Third Coast Midstream,” said Rene Casadaban, Chief Executive Officer of Black Bear Transmission.

“These assets are a perfect fit with Black Bear because they strengthen our footprint of high-quality, demand-driven gas pipelines that are well-positioned to capture increasing natural

gas demand in the Southeast United States. A team of seasoned operations and business development personnel will be coming to Black Bear with the assets, allowing us to maintain our focus on providing safe and reliable service to our customers. We appreciate all the work on the part of Third Coast Midstream for making this a successful transaction, and we look forward to completing a smooth transition.”

“We are excited about the follow-on sale of the NGT Assets to Black Bear,” stated Matt Rowland, President & Chief Executive Officer of Third Coast Midstream.

“This transaction represents one of the final pieces of Third Coast’s strategic repositioning to focus on its core offshore and Gulf Coast asset base. In addition, Third Coast has executed a commercial services agreement with Black Bear, which will ensure a smooth transition and consistent commercial operations for Black Bear’s customers.”

Barclays served as exclusive financial advisor to Basalt, and Vinson & Elkins served as Basalt’s legal advisor. BMO Capital Markets served as exclusive financial advisor to Third Coast Midstream, while Orrick served as Third Coast Midstream’s legal advisor.



WORLD NEWS

IN BRIEF

BRAZIL

Subsea 7 S.A. has announced an agreement with Petrobras to extend by one year the current long-term day rate contracts for three pipelay support vessels (PLSVs) operating offshore Brazil. *Seven Waves*, *Seven Rio* and *Seven Cruzeiro* will operate at a new day-rate with effect from 1 August 2020 and their firm contract periods will now end in 2Q22, 3Q22 and 4Q22 respectively.

VIETNAM

McDermott International Ltd. announced that it has been awarded a contract by Delta Offshore Energy to provide front-end engineering design (FEED) services for a subsea gas pipeline. The pipeline will connect a regassification platform, located approximately 22 miles (35 km) offshore, to the planned 3200 MW power plant in Bac Lieu Province, Vietnam.

SWEDEN

The monitoring of Nord Stream 2 construction in the Swedish Exclusive Economic Zone show that the impacts of construction activities implemented in 2019 only had minor, local and short-term impacts to the Baltic Sea. New knowledge was obtained on higher frequency noise emanating from vessels moving in the Baltic Sea.

USA

Plains All American Pipeline, L.P. and Plains GP Holdings have announced that Robert V. Sinnott will be retiring from service as Kayne Anderson's designated representative on the Board of Directors of PAA GP Holdings LLC (GP Holdings), and that effective as of 1 October, 2020, he will be replaced by Kevin McCarthy, Vice Chairman of Kayne Anderson.


Enbridge to resume operation of east segment of Line 5 in the Straits of Mackinac

Enbridge will restart the east segment of Line 5 in the Straits of Mackinac after receiving authorisation from the Pipeline and Hazardous Materials Safety Administration (PHMSA) and approval from the Michigan Circuit Court.

Vern Yu, Executive Vice President and President of Liquids Pipelines said, "The decision to allow the restart of the east segment of Line 5 is very positive for the many residents and businesses in Michigan and the Great Lakes region who depend on the energy Line 5 delivers. Enbridge will continue to focus on the safe operation of the dual Line 5 pipelines at the Straits of Mackinac, ensuring the Great Lakes are protected while also reliably delivering the energy and feedstock that helps to fuel Michigan's and the region's economy."

Enbridge has throughout this period kept the State of Michigan fully advised of the status of the west and east segment investigations and will continue to do so.

Following a review of the data from an inline inspection of the east segment in the area around the damaged screw anchor, PHMSA indicated in a letter to Enbridge dated 4 September 2020, that, "The review by PHMSA and its independent third-party expert did not identify any integrity issues. As no integrity issues have been identified in the area around the displaced anchor, PHMSA has no objection to Enbridge restarting the east leg of Line 5."


The west segment returned to operation in July. 

Energy Transfer announces completion of Lone Star Express Pipeline expansion project

Energy Transfer has announced the completion of its Lone Star Express Pipeline expansion project, which was a major part of Energy Transfer's 2020 capital programme. The project was delivered on budget and ahead of schedule. The pipeline adds over 400 000 bpd of natural gas liquids capacity to Energy Transfer's existing Lone Star NGL pipeline system in Texas.

The new 352 mile, 24 in. pipeline originates in Winkler County, Texas and connects into the existing Lone Star Express 30 in. pipeline at the Morgan Junction in Bosque County, Texas, south of Fort Worth.

It will provide shippers additional connectivity out of the Permian and Delaware basins, further encouraging the recovery of production and jobs underway in the region.

The Lone Star pipeline system ultimately connects into Energy Transfer's Mont Belvieu facility, an integrated liquids storage and fractionation facility along the US Gulf Coast. Energy Transfer's seventh fractionator at Mont Belvieu was brought online earlier this year, bringing the partnership's total fractionation capacity to more than 900 000 bpd. 

YPPE Fest: daily webinar series a success

Young Pipeline Professionals Europe (YPPE) faced challenges raised by COVID-19 and the corresponding lockdown in the form of events being cancelled.

Undeterred, the group pivoted to make the most of an opportunity to keep the pipeline community connected and learn something new every day. Over a 12 week period from March to June, 50 webinars were presented from 34 different organisations during the online YPPE Fest.

With excellent audience engagement

from the 340 attendees from 120 companies, the daily webinar series was an ideal addition to a 'working from home' schedule.

Presentations covered a broad range of topics including pipeline inspection, new technologies and energy transition.

Recordings of the webinars now form part of the YPPE Library which is free to access for YPPE members via the website www.yppeurope.org. 



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5 - 9 December 2021

23rd World Petroleum Congress

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<https://www.wpc2020.com/>

Enterprise amends crude oil agreements with customers and cancels Midland to Echo 4 Pipeline

Enterprise Products Partners L.P. has announced that it and certain customers have amended agreements that provide Enterprise the ability to use the partnership's existing pipelines to support its crude oil transportation agreements and to cancel the 450 000 bpd Midland-to-ECHO 4 crude oil pipeline project (M2E4). Generally, the amendments provide for the reduction of near-term volume commitments in exchange for extending the term of the agreements.

The cancellation of M2E4 will reduce aggregate growth capital expenditures for 2020, 2021 and 2022 by approximately US\$800 million. Based on currently sanctioned projects, we expect growth capital expenditures, net of contributions from joint venture partners, for 2020, 2021 and 2022 to be approximately US\$2.8 billion, US\$1.6 billion and US\$900 million, respectively. These estimates do not include capital investments associated with the company's proposed deep water offshore crude oil terminal (SPOT), which remains subject to governmental


approvals. Enterprise does not expect to receive the approvals for SPOT in 2020. As a result of the cancellation, Enterprise expects to record an impairment charge of approximately US\$45 million to its earnings for the 3Q20.

"We are very proud of our commercial team for responding and working with our customers to amend these long-term agreements," said A. J. 'Jim' Teague, co-CEO of Enterprise's general partner. "This is another example of Enterprise working with customers for a 'win/win' solution that allows our customers and Enterprise to better allocate capital during the challenging times of the current economic cycle while retaining long-term, fee-based volumes and revenues for our assets. The capital savings from the cancellation of M2E4 will accelerate Enterprise toward being discretionary free cash flow positive, which would give us the flexibility to reduce debt and return additional capital to our partners, including through buybacks." 

Fugro wins three long-term ROV services contracts with Petrobras

In partnership with Solstad and Oceanpact, Fugro has been awarded three long-term contracts by Petrobras to provide remotely operated vehicle (ROV) services for a variety of subsea activities in Brazil. All three contracts are for three year firm periods with additional one year options.

Fugro will provide a total of five work class ROVs for these contracts, each outfitted with tooling and survey spreads that are operational in water depths of up to 3000 m. One ROV spread will be installed on the Solstad AHTS Far Statesman to conduct anchor handling and other subsea support activities. The remaining ROV spreads will be deployed in pairs on two vessels operated by Oceanpact to perform inspection, repair and maintenance (IRM) services. Led by a team of local, highly skilled personnel, all ROV services will be available to Petrobras around-the-clock to maximise work capacity and ensure operational efficiency.

"These new contracts will nearly double Fugro's IRM capacity in Brazil, helping us capture the increase in demand for these services by Petrobras," said Rogerio Carvalho, Country Manager for Fugro in Brazil. 

THE MIDSTREAM UPDATE

- HAWK is chosen as PST's global sales partner
- Energean report 1H20 results
- Plains All American announces director changes
- Trans Mountain announces community benefit agreement

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CONTRACT NEWS

Pin Oak Midstream acquires assets from Laurel Mountain Midstream

Pin Oak Midstream LLC, a wholly owned subsidiary of Pin Oak Energy Partners LLC, has announced the closing of a transaction with Laurel Mountain Midstream LLC (LMM), a joint venture between Williams Laurel Mountain, LLC and Chevron Northeast Upstream LLC, to acquire LMM's Jackson Center assets.

Jackson Center includes over 1050 miles of natural gas gathering pipelines and five gathering compressor stations with a gathering capacity of over 50 million ft³/d and multiple interstate pipeline interconnects (both National Fuel Gas and Tennessee Gas Pipeline) with total interconnect capacities of almost 100 million ft³/d. The transaction adds to Pin Oak Midstream's growing asset base within the Appalachian Basin.

Brent Breon, President of Pin Oak Midstream LLC and Chief Commercial Officer of Pin Oak Energy Partners LLC, stated, "These assets in Mercer, Lawrence, and Crawford counties of Pennsylvania are a great fit to our expanding footprint and further bolster the Company's midstream assets in the oil and wet gas windows of the Utica play in northwestern Pennsylvania. The Jackson Centre assets currently gather conventional and unconventional gas from third party operators in the area and will allow Pin Oak Energy to connect and produce Utica wells currently waiting on pipelines. Additionally, Pin Oak remains committed to our ongoing efforts of executing our growth strategy through acquisitions even during these difficult times." 


Corinth Pipeworks wins Shell Colibri contract

Corinth Pipeworks has signed an agreement with BG International (a subsidiary of Royal Dutch Shell plc), the operator of Block 22 and NCMA 4, in which Corinth Pipeworks will manufacture and supply steel pipes in connection with the development of Block 22 and NCMA-4 ('Colibri'), an offshore gas field development located in Trinidad and Tobago.

The agreement covers 93 km of 16 in. HFW and LSAW coated linepipe material for the export pipeline which will bring gas from the development of Block 22 and NCMA-4 to the Shell-operated Poinsettia platform, located in Trinidad's North Coast Marine Area (NCMA).

The two blocks are held in partnership with the Trinidad and Tobago national oil company, Heritage Petroleum Company Limited.

This award is another significant milestone in Corinth Pipeworks' growing presence in the upstream energy business segment, as it will be the first offshore project where pipes will be supplied in ultra-long 24 m/80 ft lengths. This will allow an almost 50% reduction in the number of offshore pipe to pipe welds resulting in a major CAPEX saving and an associated reduction in offshore vessel installation time.

Pipe manufacturing and coating will commence at Corinth Pipeworks facility, in Greece, later in 2020 and pipeline installation will commence according to schedule within 2021. 

Boskalis Subsea Services secures multi-million-pound Perenco contract in UKCS

Aberdeen based Boskalis Subsea Services, has announced the award and successful completion of a multi-million-pound contract awarded by Perenco UK. The contract is to support a pipeline project in the UK's Southern North Sea basin.

One of the firm's dive support vessels (DSV), the *Boka Da Vinci*, was mobilised to replace a 29 m section of pipeline, which delivers hydrocarbons from the NW Bell field to the Bessemer Platform. The hydrocarbons are then delivered to the Bacton Gas terminal in Norfolk via the Inde Field for processing and onward distribution to the National Grid.

The DSV and 100 crew on board were mobilised from Great Yarmouth Port to the pipeline's location, 78 km east of the Lincolnshire coast.

Tim Sheehan, Global Business Development and Strategy Director for Boskalis Subsea Services, said: "This marks our first saturation diving project with Perenco. Winning this contract on such a high priority pipeline project is testament to our growing reputation for being nimble and successfully delivering safe, integrated, cost-effective services.


"The Southern sector of the North Sea is a highly tidal region with relatively shallow water depths resulting in narrow windows of opportunity for carrying out subsea remedial work. Our state-of-the-art vessels are well equipped to support the many

challenges and tasks associated with inspection, repair and maintenance campaigns in both shallow and deep water. Coupled with our experienced project management teams, we are seeing increased interest from operators who recognise our value proposition and ability to ensure the smooth running of IRM operations, as well as SURF and decommissioning projects."

The *Boka Da Vinci* is equipped with two bells for saturation diving work up to a depth of 300 m and accommodation for up to 120 people. It also has a 140 t active heave compensated main crane, and 1120 m³ of available main deck space with a load capacity of 3300 t.

Following a detailed analysis and successful testing of Magma Global's flexible M-Pipe technology, Boskalis applied rigid spool methods to transport the replacement pipe solution.

The vessel also shipped a mechanical connector from Connector Subsea Solutions, as well as equipment to carry out testing, flushing and cutting services.

The campaign included dimensional surveys, dredging, and concrete mattress removal, storage and re-positioning activities. The work was supported by personnel from IKM Testing to carry out barrier testing and flushing services, and specialists from Claxton Engineering to prepare, cut and remove the existing steel pipe before Magma's M-pipe is installed. 



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Gordon Cope explores the far-reaching impacts of recent global developments on the oil and gas industries of the Middle East and North Africa.

The region encompassing the Middle East and North Africa (MENA) contains the world's largest share of oil and gas reserves, as well as production. The blessing comes with challenges; not only has MENA been disproportionately beset by the huge loss of demand due to COVID, it has also suffered significant self-induced wounds as well as geopolitical machinations involving a wide range of international players. How each country is coping with the myriad of problems varies widely.

UAE

In June 2020, Abu Dhabi National Oil Company (ADNOC) announced a deal that saw the acquisition of a minority stake in ADNOC Gas Pipeline Assets, a new subsidiary. The New York-based infrastructure investment fund Global Infrastructure Partners and five other investors acquired a 49% interest for US\$20.7 billion. The buyers get 20 year lease-rights to 38 pipelines, while ADNOC maintains ownership.

“The innovative transaction structure allows ADNOC to tap new pools of global institutional investment capital, whilst at the same time maintaining full operating control over the assets included as part of the investment,” the company noted. In 2019, ADNOC also agreed to a similar deal with KKR and BlackRock, investing US\$4 billion in Abu Dhabi’s oil pipelines.

In early 2020, ADNOC announced an immense new gas discovery on the border of Dubai and Abu Dhabi. The 80 trillion ft³ of gas is located in a 5000 km² block. Recent discoveries have boosted Abu Dhabi’s official reserves to 105 billion bbl of oil and 273 trillion ft³ of conventional gas, and 160 trillion ft³ of unconventional gas.

Saudi Arabia

In 2019, Saudi Aramco announced that it would expand its major East-West crude pipeline. The 5 million bpd Petrolina network runs from the Persian Gulf to the Red Sea port of Yanbu, but normally operates at 40% capacity since the majority of its exports go to Asia via the closer Persian Gulf. The increase in hostilities in the Strait of Hormuz have obliged Saudi Aramco to de-risk the threat of shipping interruptions by adding 2 million bpd of capacity to Petrolina, for a total of 7 million bpd. While the move will only partially reduce vulnerability (the line was damaged by drones in 2019, and the Red Sea’s southern passage has been the scene of several tanker attacks), it provides a viable alternative should Iran or its proxies close the Strait.

Bahrain

Bahrain, a tiny island kingdom in the Persian Gulf, has been jointly producing 200 000 bpd with Saudi Arabia for several decades. Conventional reserves are dwindling to 125 million bbl, however, leaving the country with just seven years of production. The country has a wealth of unconventional resources, however; approximately 80 billion bbl of tight oil in place and 20 trillion ft³ of gas. Billions of dollars will be needed to develop the resource, and the government is seeking international investment as well as making overtures regarding divestment of pipelines and plant infrastructure. The Bahrain LNG import facility, with a capacity of 800 million ft³/d, is one asset potentially on the auction block.

Kuwait

The joint operation of fields in the neutral zone, a disputed territory between Saudi Arabia and Kuwait, is once again in flux. The region had pumped approximately 500 000 bpd until 2015, when worsening bilateral relations resulted in suspension of production. Recent negotiations restored partial output, but the two countries have now suspended operations in the Al-Khafji field, which was pumping 300 000 bpd.

Oman

Oman, with daily production of 970 000 bpd and 5.4 billion bbl of reserves, has a production to reserves ratio of 15 years. While recent offshore exploration has uncovered new reserves, the non-OPEC nation is eyeing massive gas reserves

as a potential future solution to its pending revenue woes. The country has some 23.5 trillion ft³ of conventional gas, and has introduced contracts that favour the development of non-associated gas fields. Total and Shell have signed several gas-deposit deals; output could be directed either to the US\$6.5 billion Liwa Plastic Complex or to LNG exports.

The COVID crisis has dealt a blow to Oman’s plans for renewables, however. Petroleum Development Oman and partner Shell recently closed down GlassPoint Solar, a project designed to use solar power instead of natural gas to produce steam for EOR wells. The plan was to build a US\$600 million solar farm at the Amal field in southern Oman, enough to generate 1 GW of electricity.

Qatar

Over the last several years, exploration drilling in Qatar’s massive North Field has proven up additional reserves, and, in 2019, Qatar Petroleum (QP) announced it would spend US\$60 billion to add four new trains with a combined capacity of 32 million tpy at Ras Laffan, bringing total production to 126 million tpy by 2027.

Since then, demand destruction related to the COVID crisis has caused LNG prices to plunge. Qatar has vowed to maintain loadings at its 77 million tpy Ras Laffan terminal; QP noted that low production costs made it the ‘most efficient’ LNG producer, obliging higher-cost jurisdictions to make cuts. Although QP has put some expansion work on hold, it maintains that it will achieve its 126 million tpy target by 2027.

As part of its diversification goal away from the Middle East, Qatar recently farmed-into three offshore Mexico blocks. The deal gives them 30% of Total’s leases in the Campeche basin. “We are pleased to sign these agreements, which further expand Qatar Petroleum’s footprint in Mexico, and demonstrate our commitment to achieving our international growth strategy, with Latin America as a core area in our international portfolio,” said Saad Sherida Al-Kaabi, the Minister of State for Energy Affairs, and President and CEO of Qatar Petroleum.

Iran

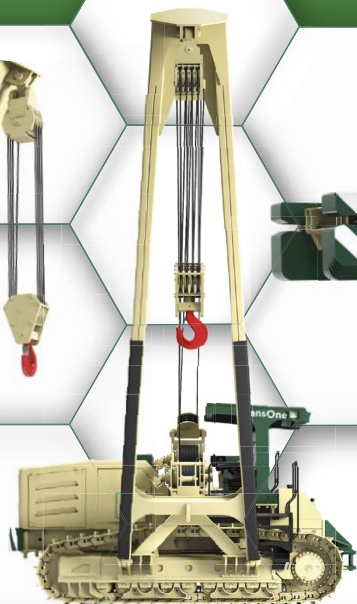
In order to mitigate US sanctions and increase transportation security, Iran has begun construction on the Guriyeh-Jask pipeline that would skirt the Persian Gulf and Strait of Hormuz entirely. The 42 in. pipeline will run 1100 km overland from major oil fields near Guriyeh to the port of Jask on the Gulf of Oman. The new pipeline would allow it to ship up to 1 million bpd to clients in Asia, while maintaining the potential to disrupt ship-borne supplies through the Strait of Hormuz. The line is expected to enter operation in 2021 and will include 10 million bbl of storage space in Jask, with the potential to expand storage to 30 million bbl.

The South Pars field, located in its marine boundary with Qatar, stretches for 3700 km² and holds an estimated 14 trillion m³ of non-associated gas reserves. Since 1990, Iran has been developing the field, and recently surpassed 750 million m³/d production. The Pars Oil and Gas Company (POGC), which oversees the development of the natural gas field, announced in May 2020 that it was ready to install a

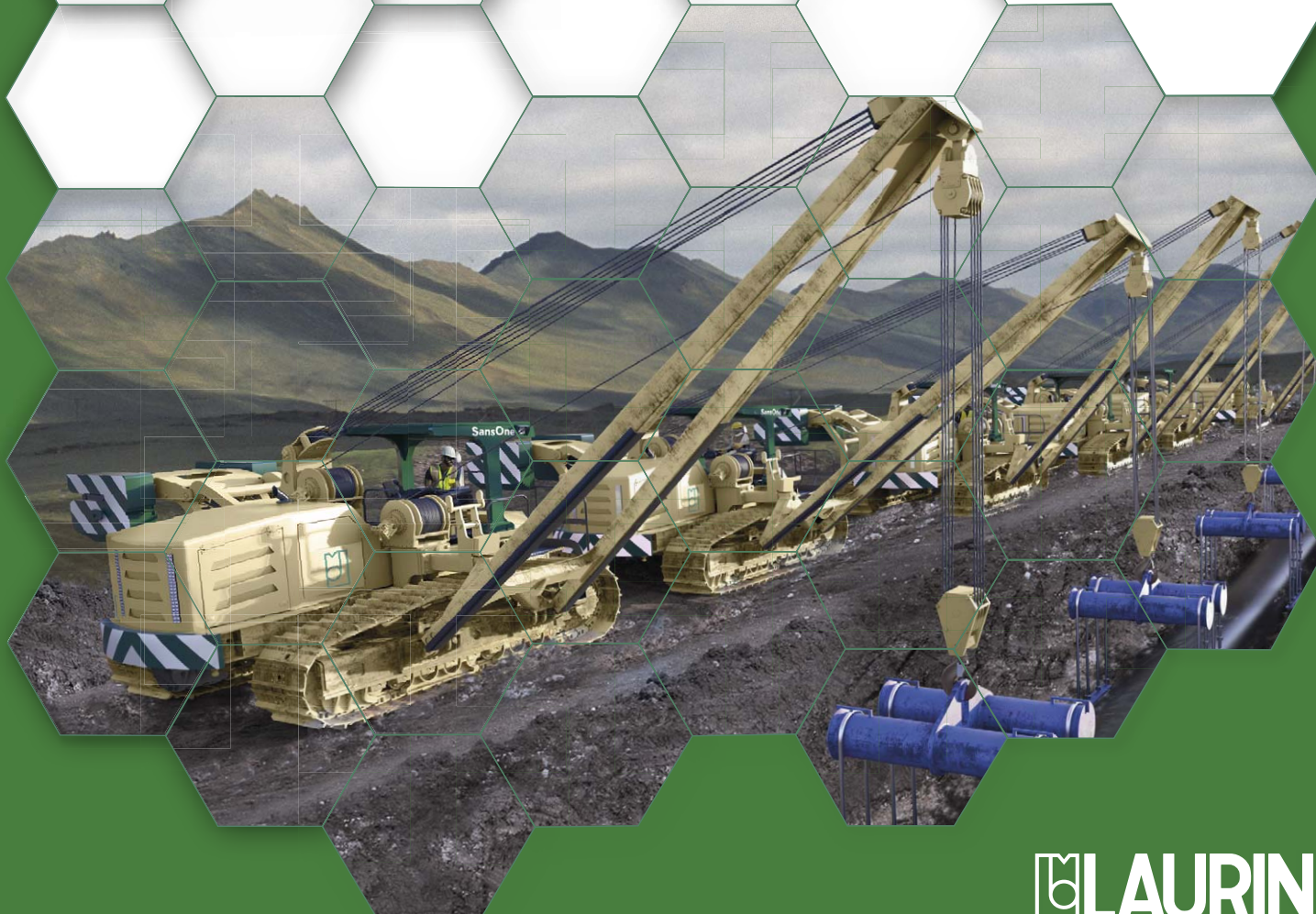
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single point mooring (SMP) loading system that could handle up to 7000 m³/hr of liquids, including condensate and crude. The offshore facility, connected to the mainland by a series of sub-sea pipelines, will allow the loading of VLCCs.

Iraq

As part of the latest OPEC+ agreement, Iraq needed to reduce its pre-COVID rate of 4.585 million bpd by 1 million bpd. It has had difficulty achieving its OPEC+ production level of 3.6 million bpd, running an estimated 600 000 bpd over the limit. In June 2020, the government approached BP, the operator of the giant Rumaila field, and asked it to cut 1.5 million bpd production by 10%. It also asked Lukoil, the operator of West Qurna-2, to cut a total of 120 000 bpd, and Exxon, the operator of West Qurna-1, to choke back 120 000 bpd.

Kurdistan, a semi-autonomous region of Iraq, is struggling to meet its financial obligations due to the crash in oil prices and demand. In May 2020, it re-stated its intention to hand over 250 000 bpd of oil production and revenues as part of an agreement finalised in late 2019. “The Kurdistan Region is going through difficult economic times due to falling oil prices and the impact of the coronavirus pandemic, and must make adjustments due to limited financial resources,” said Prime Minister Masrour Barzani.

Gulf Keystone Petroleum, which operates the Shaikan field under a production sharing contract with the KRG, was giving oil away in April, after the price of Brent fell below the US\$20 discount for Shaikan oil. It subsequently reined in operations and reduced its workforce of 400 by 40%, and repatriated 60% of its expatriate staff.

Algeria

Algeria faces domestic unrest as its young population struggles to find gainful employment. Due to mismanagement and lack-of-investment, crude output has been stagnant at 1 million bpd. Gas production has remained steady at 9 billion ft³/d, the majority of which is shipped to Europe. While conventional gas reserves are approximately 140 trillion ft³, Sonatrach is focusing future development on the estimated 710 trillion ft³ of unconventional gas, hoping to produce 2 billion ft³/d by 2030 and 7 billion ft³/d by 2040.

In early 2020, Sonatrach awarded a US\$3.7 billion EPC contract to Samsung to build the Hassi Messaoud refinery located 600 km southeast of Algiers. The Greenfield plant will have a capacity of 110 000 bpd when it comes online in 2024, and will supply both domestic and export needs.

Problems

COVID continues to dog the region. Total domestic demand destruction is estimated at 800 000 bpd for the Middle East alone. Outbreaks continue to flare up, especially in Iran, with little relief in sight.

Trump has badgered OPEC not to exceed a cap of US\$70/bbl, but many MENA economies are in such dire straits that they cannot possibly keep their economies afloat even under much higher prices. The IMF and other groups

use a ‘breakeven’ calculation, the price that a nation needs to balance its budget. In 2019, Qatar had the lowest breakeven point of US\$45/bbl Brent. The UAE has a budget breakeven oil price of US\$69. Saudi Arabia has a breakeven point of US\$82.60/bbl. Algeria has a breakeven price above US\$100. Clearly, most MENA nations face significant budget woes.

Strife is guaranteed to continue throughout the region. In Libya, the internationally-recognised government and various armed factors vie to control of the country’s oilfields and export terminals. General Haftar’s Libyan National Army are in possession of Sirte and key export terminals, effectively limiting exports to under 90 000 bpd in June 2020. Houthi rebels and their state sponsors were successful in temporarily halting over 5 million bpd of production in Saudi Arabia in 2019, with a drone attack on the immense Abqaiq processing facility. Iran continues to threaten the movement of crude through the Strait of Hormuz.


The future

The most critical factor in the Middle East for the near future is the price of oil. In April 2020, OPEC+ agreed to cut 9.7 million bpd, stabilising prices around US\$40/bbl. But any rise further in prices would encourage renewed production from shale plays in North America; Permian basin operators have shown that they can reduce and restore output with relatively little damage to wells and reservoirs.

In the longer term, MENA sovereign debt is expected to climb dramatically. S&P noted that the six countries of the Gulf Cooperation Council (GCC) – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE – are set to accumulate up to US\$490 billion in combined deficits between 2020 and 2023.

MENA nations are well aware that they need to curb spending, and many are taking previously-unimaginable steps. In May 2020, Algeria announced that it would slash its 2020 operational budget by 50%. It also instructed Sonatrach to cut operating and CAPEX by half, from US\$14 billion to US\$7 billion. In May 2020, Saudi Arabia announced that it was reducing its US\$272 billion 2020 budget by US\$13.3 billion, or 5% of overall expenditure, and is tripling its value added tax (VAT). Saudi Aramco is also taking budget steps; in June, it announced it would delay work at Marjan and Beerri fields for up to one year.

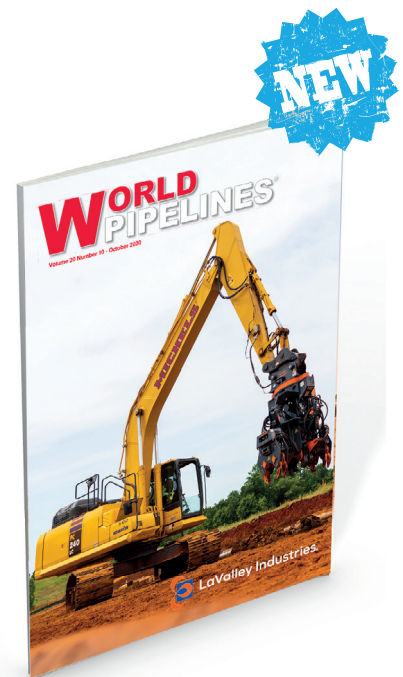
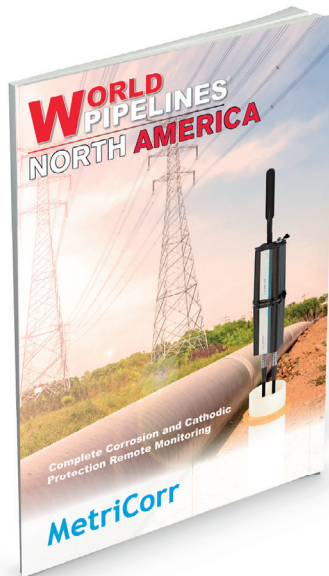
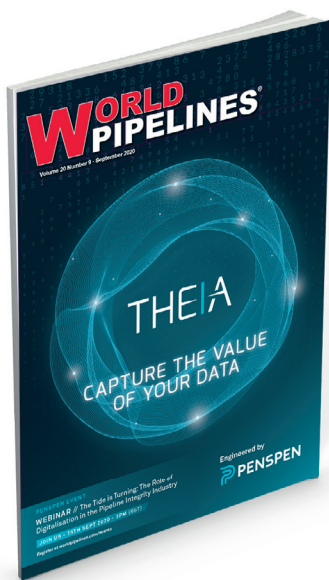
Cautious optimism is returning. In late July, a senior MENA banker asserted that the worst of shock was over. “We look forward to resetting the button as and when the world reaches normalcy,” said Raghavan Seetharaman, Chief Executive Officer at Doha Bank QPSC.

In conclusion, while COVID may eventually recede, the problems that face many MENA nations will remain. Those with vision and resolve are taking steps to address challenges; reducing budgets and subsidies, branching out downstream into refining and petrochemicals, and investing internationally in less contentious regions. Whether they succeed or not, MENA will remain a dominant player in the international oil and gas sector for many decades to come. 

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