

WORLD PIPELINES®

Volume 14 Number 11 - NOVEMBER 2014



LEADERS IN CORROSION
PREVENTION &
SEALING TECHNOLOGY

Denso Protal liquid
coating for the
rehabilitation of
pipes, valves, welds,
bends and tees





LOOKING AHEAD.

We plan for the future. More than one-third of ROSEN employees work in research and development, creating innovative products needed by the industry. An investment, we are proud of.

www.rosen-group.com

ROSEN
empowered by technology

20



42



80



Contents

WORLD PIPELINES | VOLUME 14 | NUMBER 11 | NOVEMBER 2014

03 Editor's comment

Money talks.

05 Pipeline news

TANAP; Southern Gas Corridor; Westward Ho pipeline; Trans Adriatic Pipeline; Blue Stream; and more.

REGIONAL REVIEW

12. The calm before the storm

Ng Weng Hoong discusses how, amid rising geopolitical tensions and record energy demand, Asia gains as crude oil prices plunge.



PAGE
12

20. Ongoing opportunities in Australia

Rex Hubbard, Atteris, Australia, discusses how a succession of brownfield subsea tie-back projects and an increased focus on integrity management activities should continue for many years to come, with continued opportunities for the Australian subsea and pipelines industry.

CORROSION CONTROL

25. Preservation of coated pipes

Dr. Shiwei William Guan, Bredero Shaw – a ShawCor Company, Canada.

PIGS

33. Measuring sludge and sediment

Stephen R Cox and David A Harman, SGS PfinDE, Inc., USA.

CLEANING PIGS

39. The cleaner solution

Roger Simonson, Black Powder Solutions, Canada.

KEYNOTE: UNCONVENTIONAL GAS TRANSPORT

42. Gas woes in India

Adrian John, Precergy Ltd, UK.

FLOW METERING

49. The cash registers of the industry

Craig Marshall, Project Engineer, NEL, UK.

53. A comprehensive check list

B. Chandragupthan, PL Engineering Ltd, and Girish Babu Nouchi, Wood Group Kenny, Abu Dhabi.

WELDING Q&A

59. World Pipelines' Welding Q&A

Featuring CRC-Evans, ESAB, The Lincoln Electric Company, Serimax (Vallourec Group), and Miller Electric Mfg. Co. and Hobart Brothers Company.

OFFSHORE OPERATIONS

76. A leading light for offshore safety

The University of St Andrews, UK.

UNDERWATER SOLUTIONS

80. Training for the future

The Underwater Centre, UK.

87. Complex materials

Rhys James, Lead Corrosion & Materials Engineer, Wood Group Kenny, Australia.

PIPELINE EQUIPMENT

93. Challenging the inaccessible

David Domig, LCS Cable Cranes, Austria.

99. A quick response to spills

Barry Cleveland and Linda Henning, Elastec/American Marine, USA.

ON THIS MONTH'S COVER

Reader enquiries [www.energyglobal.com]

Winn & Coales International, established in 1883 and known world-wide for its Denso range of anti-corrosion and sealing coatings. The company specialises in manufacturing products for the long-term protection of steel in buried, submerged, exposed and marine environments. Other well known brands produced are Protal liquid coatings for steel, Archco-Rigidon linings for steel and concrete and SeaShield systems for protecting jetty piles and marine structures.

Visit www.denso.net for more information.



Member of ABC Audit Bureau of Circulations



ISSN 1472-7390



**ONSHORE.
ON TARGET.**

**INNOVATION.
INSPIRATION.
DEDICATION.**
it's all in the
PIPELINE.

You can't afford mistakes. That's why CRC-Evans provides onshore pipeline services you can trust. From arctic terrain to jungle to desert, CRC-Evans lays the pipeline for success. We're consistent. We're reliable. We're there for you 24/7/365.

CRC-Evans offers a full range of onshore pipeline equipment and services, including automatic welding, bending machines, padding/crushing machines, weighting systems, field joint coating, heat treating, inspection, non-destructive testing. Our seasoned engineers, field service technicians and cutting-edge technology ensure that your pipeline is built with integrity and consistency.



WHAT'S IN THE PIPELINE FOR YOU?

See our full spectrum of onshore capabilities at
www.crc-evans.com/onshore



EDITOR

Elizabeth Corner

elizabeth.corner@worldpipelines.com

MANAGING EDITOR

James Little

james.little@worldpipelines.com

EDITORIAL ASSISTANT

Hannah Priestley-Eaton

hannah.p-eaton@worldpipelines.com

EDITORIAL ASSISTANT

Rosalie Starling

rosalie.starling@worldpipelines.com

ADVERTISEMENT DIRECTOR

Rod Hardy

rod.hardy@worldpipelines.com

ADVERTISEMENT MANAGER

Chris Lethbridge

chris.letbridge@worldpipelines.com

ADVERTISEMENT SALES EXECUTIVE

Will Pownall

will.pownall@worldpipelines.com

PRODUCTION

Stephen North

stephen.north@worldpipelines.com

SUBSCRIPTIONS

Laura Cowell

laura.cowell@worldpipelines.com

CIRCULATION MANAGER

Victoria McConnell

victoria.mcconnell@worldpipelines.com

OFFICE ADMINISTRATOR

Jo Repton

jo.repton@palladian-publications.com

WEBSITE MANAGER

Tom Fullerton

tom.fullerton@worldpipelines.com

WEBSITE EDITOR

Callum O'Reilly

callum.oreilly@worldpipelines.com

DIGITAL EDITORIAL ASSISTANT

Katie Woodward

katie.woodward@worldpipelines.com

PUBLISHER

Nigel Hardy

Palladian Publications Ltd,

15 South Street, Farnham, Surrey,
GU9 7QU, ENGLAND

Tel: +44 (0) 1252 718 999

Fax: +44 (0) 1252 718 992

Website: www.energyglobal.com

Email: enquiries@energyglobal.com

Annual subscription £60 UK including postage/E75/
€105 overseas (postage airmail)/US\$120 USA/Canada
(postage airmail). Special two year discounted rate:
£96 UK including postage/€120/€168 overseas
(postage airmail)/US\$192 USA/Canada (postage
airmail). Claims for non receipt of issues must be
made within three months of publication of the issue
or they will not be honoured without charge.

Applicable only to USA & Canada:

World Pipelines (ISSN No: 1472-7390,
USPS No: 020-988) is published monthly by
Palladian Publications Ltd, GBR and distributed in
the USA by Asendia USA, 17B S Middlesex Ave,
Monroe NJ 08831. Periodicals postage paid New
Brunswick, NJ and additional mailing offices.
POSTMASTER: send address changes to World
Pipelines, 701C Ashland Ave, Folcroft PA 19032

Comment

MONEY TALKS

Perhaps you do the same: when I mention to the stranger sitting next to me on the plane that I work in the oil industry, and they show a certain disdain for fossil fuels, I defend myself and my industry by saying “the more money the oil and gas industry makes, the more it will budget for developing new, cheaper, lower-carbon forms of energy.” It’s my standard defence and one I’m happy with.

However, the recent bout of cheap oil may also mean good things for the industry.

The shale boom in the USA has provided America with 100 years of gas, and double the amount of oil output when compared to the start of the decade. Each month, US oil production grows by 100 000 bpd. Oil production is projected to surpass Saudi output by 2020.

The ‘breakeven’ figure for shale oil producers is estimated to be about US\$ 80/bbl. The impact on consumers of this much cheaper oil (in barrel terms it has come down from US\$ 115/bbl to about US\$ 85/bbl; at the pump, prices have seen a smaller reduction) is considerable. Cheaper prices at the pump affect everyone, as Matt Ridley points out in *The Times* when he says: “the cost of energy is incorporated into the cost of every good and service we buy”.

Inexpensive, reasonably abundant oil means the energy industry is viewed in a new light, and perspectives change.

And what about pipelines, where do they feature in this bright new future in the US? According to Adam Peterson, writing for *Pitcairn*, pipeline companies in North America “have tremendous backlogs of projects to address the altered North American energy landscape...The growing volumes of US and Canadian-produced hydrocarbons are fueling increased demand for pipeline infrastructure build-out; we see more than US\$ 75 billion in such needs over the next three years alone. As the North American energy


picture continues to develop, more growth projects will come into focus.”²

Recently on www.energyglobal.com we have reported on some interesting Master Limited Partnerships (MLP) news in the pipeline industry. MLPs are publicly traded businesses that are taxed as partnerships rather than corporations. Notable among those companies restructuring into the MLP model are: Enterprise Products Partners; Plains All American Pipeline; Shell Midstream (who announced their IPO price last month); Kinder Morgan; Magnum Hunter

Resources Corp. and Morgan Stanley Infrastructure (expected to make an MLP offering next year); Williams and Access Midstream; Hess Corp.; CONSOL and Noble Energy; and upcoming movements from Antero Resources and Dominion E&P.

Favourable tax treatment means that MLPs are better suited to take on the

incredibly capital-intensive nature of building pipeline infrastructure. Pipeline construction is a long game, and investors can be hard to find. However, as we have seen, MLPs are benefitting from growth in the US market: pipeline systems need to be built, expanded or reworked in order to meet new geographical imperatives. To fully utilise the new shale oil and gas reserves, new pipelines are needed.

The US energy industry has witnessed a huge shift, and it bodes well for other countries too. Analysts think that every US\$ 10 off a barrel of oil means 0.5% of world GDP moves from exporting countries to importing countries, who in turn tend to spend spend spend: creating more cash for world economies and for investment. And so the pipeline industry forges ahead, tackling new energy realities, whether the energy-consuming public is spending money or saving it. 

RECENTLY ON
www.energyglobal.com
WE HAVE
REPORTED
ON SOME
INTERESTING
MASTER LIMITED
PARTNERSHIPS
NEWS

1. RIDLEY, M, ‘Cheap oil makes the world richer...and fairer’, *The Times*, Monday 20th October, 2014.
2. <http://www.pitcairn.com/outlook-on-energy-and-the-role-of-mlps-in-the-us/>

Lifting the Standard



Our smallest machine is a big deal

We have been building small pipe layers for over 20 years, and we always thought that there was nothing better in this class. But the new Maats RL24 pipe layer proves us wrong! It has wider tracks and the typical hinged boom as standard. Its cabin with ROPS structure, heater and air conditioning provides a safe and comfortable working environment, and with a 24.000 kg lift capacity, this machine again raises the bar.



Maats Pipeline Equipment • Breukersweg 4 • P.O. Box 165 • 7470 AD Goor (Holland)
Tel.: +31 (0)547 26 00 00 • Fax: +31 (0)547-26 10 00 • info@maats.com • www.maats.com



World News

SIGN UP TO RSS NEWS FEEDS AT WWW.ENERGYGLOBAL.COM

OPITO says effective leadership is needed in the oil and gas industry


At the fifth annual OPITO Safety and Competence Conference (OSCC 2014), David Doig, Chief Executive of safety standards body OPITO, will warn the industry that more effective leadership is required to drive a step-change in safety across the oil and gas industry.

Doig said: "The global oil and gas industry has to change in its approach to safety and competence. Staying the same is simply not good enough. Despite improvements, too many major and minor incidents and accidents are still happening from the Gulf of Mexico to the North Sea, from the Middle-east to South-east Asia."

OPITO's standards framework, now adopted by major oil and gas companies in 40 countries, ensures employers change the way in which people think about workforce development in relation to safety and then accurately measure the improvements.

Mr Doig added: "But OPITO can only lay the groundwork, it is the employers themselves who will ultimately drive long-term, high value change. And this needs strong, committed, courageous leadership. When organisations start talking about change, people inevitably become apprehensive, even fearful, and often disillusioned and disengaged. It takes bold and inspirational leaders to make change happen effectively, to bring people on board and make them part of that change; to ensure that they embrace it rather than fear it. New ways of doing things will only actually happen if people understand why they need to change and the benefit that change will have on them and those who work with them."

In a world exclusive, conference sponsor Shell will outline how the multinational exploration and production company is stepping up its approach to leadership in safety, through a new global programme.

Doig concluded: "The nature of our industry which operates some of the most complex technology in some of the most hazardous areas in the world, dictates that there will always be risk. It is how we effectively prepare and support our people to reduce the risks that ultimately dictates our success. Join us at OSCC to learn how our industry can implement the change required, so that every onshore and offshore worker anywhere in the world is fully aware of how to prevent accidents, incidents and near misses." 


Pipeline transportation market worth US\$ 13.97 billion by 2019

MarketsandMarkets expects that the pipeline transportation market is estimated to be US\$ 8.68 billion in 2014 and is expected to grow to US\$ 8.69 billion in 2019. This represents an estimated compound annual growth rate of 10% from 2014 to 2019.

Since the 18th Century, the pipeline system has been used for commercial activities. Pipelines are considered to be the safest and most efficient means of transporting large quantities of oil, gas, chemical, coal and water. Approximately 85% of all the oil and gas is supplied through pipelines.

The maintenance and management of the pipeline system is labour intensive and time consuming; hence companies developing control systems and monitoring systems to assist operators to control the whole site. Also, most of the pipelines are buried underground, making manual inspection difficult. Technologies such as sensors and pig trackers makes it easier for the controller to detect corrosion and cracks in the pipelines.

MarketsandMarkets has segmented the global pipeline transportation market by solutions: security solutions, automation and control, integrity solution, tracking and monitoring, and communication solution; by services: consulting, managed, and maintenance and support; by mode: oil and gas, coal, chemical, water and others; and by regions: North America, Asia-Pacific, Europe, Middle East and Africa, and Latin America. Some of the leading players that operate in this market include ABB, Alstom, Siemens, GE Transportation, Emerson, ESRI, FMC Technologies, Trimble and Schneider Electric.

The major forces driving this market are an increase demand for oil, and the safe and economical method of transportation that pipeline systems offer. The prime opportunity that is expected to boost this market is increase in demand for secured midstream solutions in the Asia-Pacific and Latin America region. 


DNV GL launches project to combat corrosion

DNV GL is calling for partners to collaborate in a JIP to develop an industry-wide recommended practice for the detection and mitigation of micro-biologically influenced corrosion.

External MIC is corrosion caused or promoted by micro-organisms on the outside of the pipeline system and is one of the leading causes of corrosion failures in onshore pipelines. It is difficult to prevent this type of rapid corrosion, since it is not possible to prove the presence of MIC directly without excavating the suspected site to run tests. Indications of MIC can be found through detecting either coating degradation using direct current voltage gradient or the pipeline's metal loss using inline inspection.

"Tiny micro-organisms can cause big headaches for onshore pipeline operators, since MIC leads to high corrosion rates at unpredictable locations along a pipeline. Even with well-functioning, long running cathodic protection systems in place, MIC can still occur," says Mirjam van Burgel, JIP Project Manager.

The JIP will focus on preventing or alleviating MIC by exploring the role of coating condition and cathodic protection in the occurrence and prevention of MIC, and identify practical means to support pipeline operators in detecting possible MIC sites by testing and selecting the best measurement techniques. The project will also develop a decision-support tool to rank the risk of MIC-sensitive areas along a pipeline.

"Onshore pipelines are critical in meeting the growing demand for energy worldwide. Currently, there are over 230 000 km of oil and gas pipelines under construction or planned, in addition to the existing pipeline infrastructure that must continue to operate safely and reliably [...] The outcome of this project will enable asset managers to effectively lessen MIC, enhance the safety and integrity of their pipeline system and reduce costs by avoiding costly excavation," says Asle Venås, Pipeline Segment Director – DNV GL Oil & Gas. 



World News

FOR MORE NEWS VISIT WWW.ENERGYGLOBAL.COM/NEWS/PIPELINES.ASPX

IN BRIEF

Russia/China

Russia and China may complete negotiations on building an additional natural gas pipeline to China, which will deliver energy via a western route by 2015.

The final details on constructing the second pipeline will hopefully be agreed within the next year, Russian Prime Minister Dmitry Medvedev said at a meeting with his Chinese Premier, Li Keqiang.

"We would like to come to an agreement in the next year," the Russian Prime Minister said, but made no comment on any of the business details.

Thailand

PTT Plc, the Thai national oil and gas conglomerate, plans to invest more than 100 billion baht on a new gas pipeline from Rayong's Map Ta Phut to Bangkok. The project will be its fifth pipeline to serve the constantly increasing demand for gas in the future.

Chief Executive and President Pailin Chuchottaworn said, "Our four gas pipelines are operating at nearly full capacity, so we have to prepare for the new one since construction will take years." Details of the new pipeline have yet to be finalised as the company is waiting for the results of the feasibility study.

The project would also need to meet the requirements of the state's power development plan. However, he said that it would probably be routed to link with pipelines carrying gas from Myanmar in order to secure gas supply in the future.

Australia

The Northern Territory has moved ahead with plans to build a 1000 km pipeline, expected to cost more than Aus\$ 1 billion, to supply natural gas to eastern Australia. Northern Territory Chief Minister Adam Giles said the pipeline, which did not yet have a private backer, needed to be operational by 2018 to avert a crisis in gas supply on the East coast of Australia.

Potential investors will be able to lodge formal expression of interest in building and operating the pipeline next month, so that construction can start as early as 2016.

Ukraine plans gas pipe from Poland

Ukraine plans to build a 110 km long, US\$ 245 million gas pipeline for transit of up to 10 billion m³/yr of gas from Poland.

Radoslaw Dudzinski, Deputy Chairman of the board of Polish Polenergia, told a Baltic business forum in Poland that the gas pipeline could become operational in 2019 - 2020.


Plans are to build the pipeline from underground gas storage facilities at Bilshe-Volitsa in Ukraine's Lvov region to the gas measuring station Drozdovichi on the Ukrainian-Polish border.

Ukraine, which transits Russian gas on to European consumers, currently does not receive Russian gas for its own needs due to an unsettled dispute with Moscow over prices. The country depends on Russia for more than half of its gas needs.

Reverse supplies from Poland to Ukraine decreased about 30% over the first ten days of October to 28.1 million m³, Poland's gas transport system operator Gaz-System said in a statement.

In September, Ukraine received 117 million m³ of gas in reverse mode, including 40.3 million m³ of gas over the first ten days of September.

Russia says it is ready to resume natural gas supplies to Ukraine if Kiev repays its gas debt and makes advance payments for new gas deliveries.

The Naftogaz oil and gas company stopped paying for the consumed Russian natural gas on 25th March. As of 1st August, the overall debt of Naftogaz to Gazprom for supplied gas totalled about US\$ 5.3 billion. 

Azerbaijani-British co-operation

Last month, a Forum on Azerbaijani-British co-operation, marking the 20th anniversary of the "Contract of the Century", was hosted in Baku.

The forum was opened with the welcome speech of SOCAR Vice President for ecology Rafiga Huseynzade. She stressed the importance of the forum in terms of deepening Azerbaijani-British co-operation in the energy field. Speaking about the history of the 20 year relationship with British BP Company, Huseynzade emphasised the importance of jointly created oil and gas export pipeline system, brought to attention the facts that

Russia proposes pipeline to Japan


Russia has proposed building a gas pipeline from Russia's Far Eastern island Sakhalin to the northernmost Japanese city of Wakkanai on Hokkaido Island and further to the main territory of the country, according to reports.

If the project is implemented, this will be the first gas pipeline linking Japan with another country. The idea of a gas pipeline from Russia to Japan has been debated for many years, but has never reached the level of practical talks.

Spending for the pipeline's construction is evaluated at 600 billion yens (slightly less than US\$ 6 billion). Some 20 billion m³/yr would be delivered through the pipeline.

The construction of a gas pipeline between the two countries would likely face many obstacles, including a dispute over islands taken by Russian forces at the end of World War II that has prevented Moscow and Tokyo from signing a formal peace treaty.

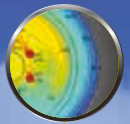
Moscow, which is heavily dependent on taxes from oil and gas sales to western Europe, has been trying to shift focus to Asian countries as potential customers for its vast reserves in eastern Siberia. It has been offering lower priced gas to Japan.

Moscow and Tokyo have been discussing a number of projects involving LNG supplies to Japan from Sakhalin and Vladivostok, but talks have slowed as the Japanese government fell in line with sanctions on Russia over the Ukraine crisis. 

CONFIDENCE

HOW DO YOU KNOW THE COATING INTERFACE
WON'T DELAY YOUR OFFSHORE PROJECT?

HERE'S A SIGN.



Engineering Services



Pipe and Joint
Coating Design



Coating System
Validation



Logistics Management



Pipe Coating
Application



Field Joint Coating

Today's model for offshore success

Only Bredero Shaw offers *Complete Coating Assurance*, a game-changing approach for meeting today's complex offshore challenges. It combines line pipe and field joint coating into a complete product and services model. Up front, our experts develop an integrated line pipe and field joint insulation system. We then draw upon the world's largest validation, production and logistics infrastructure to get the job done. Today the stakes are higher and the jobs are tougher. Make sure your project stays on schedule, with *Complete Coating Assurance*. Let's talk.



brederoshaw.com



World News

FOR FURTHER INFORMATION ON EVENTS VISIT WWW.ENERGYGLOBAL.COM/EVENTS

Events DIARY

11 - 13 November 2014

Fabtech

Atlanta, USA

<http://www.fabtechexpo.com/>

10 - 13 November 2014

ADIPEC

Abu Dhabi, UAE

<http://www.adipec.com/>

27 - 29 January 2015

European Gas Conference

Vienna, Austria

<http://www.europeangas-conference.com/>

9 - 12 February 2015

Pipeline Pigging & Integrity Management Conference

Houston, USA

<http://www.clarion.org/ppim/ppim15/index.php>

24 - 28 February 2015

PLCA

Carlsbad, California

<http://www.plca.org/>

25 - 26 February 2015

OPT

Amsterdam, The Netherlands

<http://www.ibcenergy.com/event/opt>

11 - 13 March 2015

AOG

Perth, Australia

<http://www.aogexpo.com.au/>

15 - 19 March 2015

NACE Corrosion 2015

Dallas, USA

<http://nacecorrosion.org/>

25 - 27 March 2015

OMC

Ravenna, Italy

<http://www.omc.it/>


Boosting Blue Stream's capacity

Moscow hosted a working meeting between Alexey Miller, Chairman of the Gazprom Management Committee and Taner Yildiz, Minister of Energy and Natural Resources of the Republic of Turkey.

It was agreed to load Blue Stream with Russian natural gas to full capacity as soon as possible in order to satisfy the growing demand of Turkish consumers.

The meeting agreed to boost Blue Stream's capacity from 16 - 19 billion m³/yr and to carry out the relevant work. The Beregovaya CS in Russia and the Durusu receiving terminal in Turkey will be upgraded for this purpose.


"Turkey is our most evolving market in terms of supplies. Gazprom has always reacted to the growing gas demand in Turkey by boosting supplies via Blue Stream. Today's decision will enable the Turkish economy to progress to a new stage," said Alexey Miller.

Turkey is Gazprom's second largest sales market behind Germany. In 2013, Gazprom supplied Turkey with 26.6 billion m³ of natural gas. Russian natural gas is supplied to Turkey via the Blue Stream and the Trans-Balkan gas pipelines. 

Shell stalls Westward Ho pipeline

Royal Dutch Shell Plc has decided to delay construction on its 300 000 bpd Westward Ho oil pipeline project. The pipeline is set to transport light sweet crude oil from the St. James crude terminal in Louisiana to markets and pipeline connections across the Texas state line in Port Arthur and Nederland.


According to reports, newer pipelines have already swamped the area with hundreds of thousands of barrels of crude per day, prompting Shell's decision to put the project on hold and focus on securing more commitments from shippers. Due to a lack of shipper commitments, the company was forced to cut the proposed capacity from an initial 900 000 bpd to 600 000 bpd in 2011, and again to 300 000 bpd in 2012.

While the pipeline had been due to start up in Q3 2014, in light of the delay the company expects construction work to be complete in 2017. 

Enagás joins TAP

Enagás has joined the Trans Adriatic Pipeline AG project as a new shareholder with a 16% stake in the company. In addition, existing shareholder Fluxys has increased its stake to 19%. The new arrangement follows the purchase by Enagás and Fluxys of the 19% of TAP shares previously owned by E.ON (9%) and Total (10%). TAP's shareholding is now comprised of BP (20%), SOCAR (20%), Statoil (20%), Fluxys (19%), Enagás (16%) and Xpco (5%).

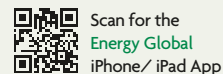
Kjetil Tunngland, Managing Director at TAP, said: "The TAP Joint Venture has always been open to new strategic partners and I am very pleased to welcome Enagás to TAP. This continues our successful joint-venture model that has brought producers, midstream players and gas buyers together to develop this important project. Enagás [...] will help to enhance TAP's strategic position as a truly European project that will transport a new source of gas to the continent's energy markets."

Andy Lane, Chairman of the Board of Directors for TAP AG, said: "I would like to thank both E.ON and Total for their strong commitment and contribution to TAP's development and welcome Enagás as a new shareholder in TAP." 

News HIGHLIGHTS


- WGK awarded subsea pipeline FEED contract
- Concern over steel industry
- ROVOP invests in new HQ and ROV facilities

➔ To read more about these articles go to:



Follow us on Twitter  @energy_global

Like us on Facebook  Energy Global

Join us on LinkedIn  World Pipelines

Connect with us on  World Pipelines



MORE
with **NACE**

Learn How to Assess, Implement & Manage the Integrity of a Pipeline System with the

Pipeline Corrosion Integrity Management (PCIM) Program

NACE's PCIM Program is a comprehensive training and certification program that is designed to train a wide range of pipeline professionals from field personnel to engineers in management. This program focuses on both the remediation technology and field techniques for carrying out integrity assessments as well as the implementation and management of an integrity management program. Courses may be taken as standalone training for continued professional development or as part of the path toward the PCIM Technician or PCIM Technologist certifications.*

Courses include:

- Pipeline Corrosion Assessment Field Techniques (P-CAFT)
- Direct Assessment
- In-Line Inspection (ILI)
- Pipeline Corrosion Integrity Management (PCIM)

To register or for more information,
visit www.nace.org/pcim

**All certifications are administered by the NACE International Institute, an independent affiliate of NACE International.*





Contract News

TO KEEP UP-TO-DATE ON CONTRACTS VISIT WWW.ENERGYGLOBAL.COM


Tata Steel signs MoU with Klesch Group

Tata Steel has signed a Memorandum of Understanding with Klesch Group to undertake detailed due diligence and negotiations for the potential sale of its Long Products Europe business and associated distribution activities.

The MoU covers several UK based assets including Tata Steel's Scunthorpe steelworks, mills in Teesside, Dalzell and Clydebridge in Scotland, an engineering workshop in Workington and a rail consultancy in York, as well as other operations in France and Germany. About 6500 people are employed at Long Products Europe and its distribution facilities. Tata Steel employs 30 500 people across Europe.

Explaining the context and rationale for this decision, Karl Koehler, Chief Executive of Tata Steel's European operations, said: "We are making huge strides on our strategic journey to become a premium, customer-centred steel company...We've improved the competitiveness of Tata Steel's European operations, including Long Products Europe which now supplies more of the innovative steel rail, rod, plate, sections and special profile products demanded by customers.

"Accelerating the pace of innovation on advanced steel solutions, helping our customers succeed in their markets and creating a sustainable asset base requires significant capital and expertise.

"We have therefore decided to concentrate our resources mainly on our strip products activities, where we have greater cross-European production and technological synergies...We want to build a sustainable business in the UK and further develop our mainland Europe business and we are committed to providing the necessary leadership and financial resources to achieve that." 

ATCO wins bid to build a pipeline in Mexico

ATCO Mexico has been awarded a contract by the Comisión Federal de Electricidad (CFE) to design, build, operate and maintain a 16 km natural gas pipeline that will fuel the existing Francisco Pérez Rios power plant near Tula, Mexico. Valued at approximately US\$ 50 million, this deal marks ATCO's first energy infrastructure project under the newly reformed energy sector in the country.

"We are honoured to have been selected by the CFE to build and operate this important piece of energy infrastructure in this great country," said Nancy Southern, Chair, President and Chief Executive Officer, ATCO Group. "ATCO has made a long-term commitment to Mexico and we consider it a great privilege to be a part of the community. We look forward to forming lasting partnerships and demonstrating that we are a trusted builder and operator of key infrastructure, just as we have done in Canada and Australia."

ATCO's growth in Mexico is modelled after its existing Canadian and Australian operations consisting of diverse yet complementary businesses of power generation, natural gas and electricity transmission and distribution, and workforce accommodation and site services.

With the opening of ATCO's office in Mexico City and the Tula pipeline project, ATCO has taken important first steps to establishing itself as a valued member of the community and will make a significant contribution to the region's economy. Expected to be in-service in 2015, ATCO will utilise a local engineering, procurement and construction firm to support the project. 


Steel pipe contract signed for Turkish-Azeri pipeline

Turkish and Azerbaijani companies and government officials have signed a contract to supply the steel pipe for a planned major natural gas pipeline project between the two countries.

The Trans-Anatolian (TANAP) gas pipeline project aims to carry the rich gas resources of Azerbaijan to energy hungry European countries. Turkish steel pipe producers Tosçelik, Borusan Mannesmann, Erciyas Boru, Emek, Umran and Noksel had previously won the tender to supply steel pipes for the planned TANAP.

Earlier this month, representatives from the supplier companies met senior Turkish government officials in Ankara. The agreed contract covers the supply of 1800 km steel pipes for the construction of the TANAP project over a four year period. The Turkish companies will supply approximately 1.2 million t of steel pipe for TANAP (80% of the total) and earn an estimated US\$ 3 billion.

China's Baosteel will provide the remainder of the pipes. The initial capacity of the pipeline is expected to reach 16 billion m³/yr. Approximately 6 billion m³ of the volume will be allocated to Turkey, while the rest will be transported to Europe. The first flow of gas to Turkey is scheduled for the second half of 2018, and Ankara plans to start pumping the Azeri gas to Europe in 2019.

The contract signings come a year after a decision to establish a consortium to build a gas pipeline to supply gas from the Shah Deniz field to Europe through Turkish territory. Azerbaijan and Turkey signed an intergovernmental agreement on TANAP in June 2012. 

Penspen awarded contract for TAPI pipeline feasibility

Penspen has been awarded a contract by the Asian Development Bank to carry out a technical feasibility study for a proposed 1820 km, 56 in. dia. pipeline from Turkmenistan's Galkynysh Gas Field, to serve energy markets in Afghanistan, Pakistan and India.

Penspen's scope of work includes a review of the proposed route, confirmation of hydraulics including compressor station size and location, provision of cost estimates and development of project execution strategy and schedule.

Penspen has awarded a sub-contract to the Netherlands based Royal HaskoningDHV an international engineering, consultancy and project management firm to undertake the important environmental and social safeguards components of the study.

The Technical Feasibility Study is expected to take six months to complete, following which, Penspen and Haskoning will provide ongoing support to ADB during the investor selection process.

Peter O'Sullivan, Penspen's Chief Executive, said: "We are proud to be involved in this major project, which will enable Turkmenistan to monetise a part of its vast natural gas reserves, by opening a southerly route to the energy-hungry markets of South Asia".

Penspen has been providing engineering, project management, asset management and integrity services to the oil and gas industry worldwide for over 60 years. 

Pipeline corrosion just met its match.

The PitBoss™ cleaning pig from TDW.



Brushes conform to
inside diameter of pipe to
clean pipe wall.

Effectively removes deposits
so corrosion inhibitors and
biocides can work.

Excellent all-purpose
cleaning pig for pipe
sizes 6" and larger.

Helps reduce the risk
of leaks caused by
internal corrosion.

To learn more about our entire line of pipeline
pigging solutions, contact your nearest TDW sales
representative or visit www.tdwilliamson.com.

NORTH & SOUTH AMERICA: +1 918 447 5500
EUROPE / AFRICA / MIDDLE EAST: +32 67 28 3611
ASIA PACIFIC: +65 6364 8520
OFFSHORE SERVICES: +1 832 448 7200



T.D. Williamson



The calm before the

STORM

Ng Weng Hoong discusses how, amid rising geopolitical tensions and record energy demand, Asia gains as crude oil prices plunge.



The statement at the end of a hurriedly concluded energy summit of the world's biggest economic bloc on 2nd September was conspicuous by what was not mentioned: the growing threats to global oil supplies from the expanding conflicts in Iraq, Syria, Libya, Sudan and Nigeria, the emergence of the Islamic State (IS), the revival of the Cold War between Russia and the West, and Ebola's impact on oil and gas production in West Africa just as global energy consumption is on course to hit another record high.

Instead, the "Beijing Declaration" issued by the energy ministers representing the 21 member Asia Pacific Economic Co-operation (APEC) group avoided all reference to reality by focusing on the evergreen feel-good topic of "Sustainable Energy Development in the Asia-Pacific Region".

The group's ability to breeze through an issue-free summit in one day amid the world's worst geo-political challenges since the Second World War was made possible by the strange timing of oil prices plunging to a 15 month low. Much to the relief of the APEC energy ministers and their governments, Brent crude crashed below US\$ 100 for the first time since mid 2013. To think it was just three months earlier when IS sensationally burst onto the Middle East that Societe Generale and other research firms were warning of the prospects of US\$ 150 Brent crude as oil flows from Iraq, Syria and Libya came under threat.

Had those fears played out, the APEC ministers – whose member countries represent 60% of the world's GDP including three of its largest oil consumers in the US, China and Japan – might have been dealing with economic collapse from the mother of all oil shocks.

But thanks to North America's surging shale production in recent years, the global oil markets have been tamed, throwing an unexpected lifeline to Asia's increasingly

energy-deficit economies. By more than offsetting the occasional supply losses from the Middle East and Africa, North American oil and gas producers have enabled Asia to focus on the business of growing their economies.

According to the International Energy Agency's (IEA) August forecast, global oil demand will grow by more than 1.1% to 92.7 million bpd this year and by a further 1.4% to 94 million bpd in 2015. Developing Asia, led by China and India, will drive the bulk of that growth, with its consumption expected to rise by nearly 3.5% from 22.53 million bpd in 2014 to 23.31 million bpd in 2015. That puts it just slightly less than North America's consumption of over 24 million bpd.

If the APEC energy summit had a make-believe calm, it was based on Asia's hope for oil and gas prices to remain stable in an oversupplied market. That faith will be sorely tested in the coming months as the world's geopolitical conflicts are likely to intensify.

"Peace has hardly broken out in the producing world. Between them, Iraq and Russia represent about 11 million bpd of exports," Canadian bank CIBC observed in a recent commentary.

At what point will the combined supply disruptions of oil and gas flows in the Middle East, Africa and Russia eventually overwhelm North America's new production capacity?

For Asia, the answer to that troublesome question could come sooner rather than later. A little over a week after the APEC summit, US President Barack Obama raised the world's geopolitical stakes with new sets of actions against both IS and Russia.

Bypassing the UN Security Council, he ordered the start of a new protracted war in the Middle East with air strikes in Syria and Iraq to stop IS's advance, and tougher economic and additional trade sanctions against Russia to undermine its crucial oil and gas sector. The sanctions will affect Russia's plans to develop its Arctic reserves as well as Siberian fields to supply China under their record US\$ 400 billion gas agreement signed last May.

Obama's strategy also calls for expanded military supplies to the Iraqi and Kurdish armies, and to "moderate" elements of the Syrian rebel militia fighting the regime of President Bashar Assad. Analysts have warned that Syrian rebel forces include IS members, while the loyalty of the Iraqi military is suspect as many had fled or joined the radical Islamic group that swooped to conquer oil-producing parts of the country in June.

Obama's "coalition" includes conservative Arab states like Saudi Arabia and Qatar, where the Sunni-supported IS has a strong following, but excludes Syria and Shia-based Iran which are highly motivated to fight the most radical Islamic terror group yet to emerge after Al Qaeda. The plot is becoming more convoluted, and will likely magnify the impact of the region's numerous conflicts.

As its oil addiction grows amid the collapse of crude prices, Asia is increasingly at risk of becoming the biggest collateral damage if the US fails to maintain its shale revolution.

"By 2030 China's energy consumption will be the centre of gravity for global energy demand. India and China will cement their positions as compelling destinations for exporters of coal, oil and gas," said Wood Mackenzie's analyst Paul McConnell.

But the experts at the APEC summit will have taken greater comfort from the UK consultant's prediction of an "energy independent" North America becoming a net oil and gas exporter by 2018.

That momentum will continue through 2030, according to McConnell, enabling North America's oil production to surge to 1040 million t from 650 million t in 2009 while its natural gas

output will double to 1000 million t since the start of the shale revolution in 2005.

"By 2018 North America will also have overtaken the gas output of Russia and the Caspian, and will grow to be the world's largest gas producing region by 2030," he said.

Asia: planning for oil supply disruptions

Regardless of North America's supply surge, two recent studies said Asia must prepare for potential oil supply disruptions as its energy demand growth is showing no signs of slowing down.

US ratings agency S&P said Asia's energy deficit will continue to rise after finding that the region's energy imports reached a record 40% of the world's in 2012, up from around 30% two decades ago while its share of global energy exports has stayed at around 17%.

Chatham House, UK, said Asia's economies are at growing risk of a supply shock as it relies on the Middle East for 75% of its oil with North America still some years away from becoming a net exporter.

Led by China, Japan, South Korea and India, the region's worsening energy trade deficit stands in sharp contrast against its robust merchandise trade over the two-decade period, said S&P.

Asia's share of the world's total merchandise exports has risen from around 25% to 33% while its import share has also risen.

"The Asia-Pacific is an energy-short region and is becoming increasingly so," said S&P in its report on the energy trade of the region's 13 largest economies. Their combined GDP has risen from 24% of the world's in 2003 to 30% last year.

"Reflecting its relatively poor energy endowment, the Asia Pacific is increasingly turning to countries outside the region to supply its rising energy needs. Central Asia, Africa and Latin America have recently gained market share in Asia-Pacific," it said.

Oil, the largest component of the region's energy trade, has accounted for the lion's share of the increase in merchandise trade over the past two decades, said S&P.

"The commodity constitutes about three-fourths of the total energy trade on both the import and export sides. Most of the expansion in energy trade in our 20 year sample occurred in the past decade, particularly in 2002 - 2007 when prices were rising quickly, although the trend continued through 2012," it said.

In US dollar terms, the region's oil trade deficit rose seven-fold over the 20 year period to US\$ 720 billion in 2012 while its gas deficit, starting from a lower base, has climbed to US\$ 120 billion, said S&P. The coal trade deficit has remained steady at US\$ 23 billion.

Nine of the economies were found to be net energy importers while four were net energy exporters. Their energy trade balances ranged from Singapore's deficit of 17% of GDP to Malaysia's 6% surplus of GDP. The unweighted average was 4.4% of GDP, almost entirely reflecting the trade in oil.

In its report, Chatham House warned that Asia has still not built up sufficient oil reserves or alternative supplies despite the threats of worsening geopolitical conflicts. In 2012, Iran threatened to close down the key Strait of Hormuz shipping route in response to any likely attacks from the US and Israel.

"Asia is more at risk from disruption of Middle East oil supplies than is either Europe or the US, yet as a whole it is less prepared to deal with such an upheaval," said author John Mitchell.

Papua New Guinea: Asia's new energy hotspot

Papua New Guinea (PNG) has announced its emergence as the energy industry's rising star with the export of its first liquefied

THAT WAS A SAMPLE OF

WORLD PIPELINES[®]

NOVEMBER ISSUE



DON'T WANT TO MISS OUT?

You will need to be a subscriber to read the full edition.
Please log in to www.energyglobal.com
or alternatively **click here** to subscribe.

For more information about the comprehensive
World Pipelines subscription package, please contact us:

www.energyglobal.com
E: subscriptions@worldpipelines.com
T: +44 (0)1252 718999