SENIOR energy sector leaders expressed optimism at WGC 2018 about the broad potential of North American pipeline projects amid an abundance of US natural gas, but expressed concern that opposition groups could derail the full potential of the abundant resource. Pages 4&5

Algerian bounty
Country looks to attract international investment to its shale sector. Page 6

Renewables knock
‘New animal’ poses tough competition for fossil fuel industry. Page 7

Industry opinions
Three Q&As with sector leaders over future direction for gas industry. Pages 8, 18&20

Mozambique quest
Gas sector opens door to huge levels of investment. Page 17

Mexico signs deals
Bid round awards sealed for batch of operators. Page 22

Tariff case verdict
Norwegian state wins lawsuit brought over cut to gas transportation rates. Page 24

ConocoPhillips keen on smaller scale LNG
Gas industry has work to do to secure future role

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Indonesia to wait for next FSRU

Indonesia’s next liquefied natural gas floating storage and regasification unit will now be “post 2020” as the republic has challenges to overcome before it can realise its touted small-scale LNG ambitions, writes Amanda Batterby.

State-owned oil company Pertamina and national electricity company Perusahaan Listrik Negara have ambitious plans for small-scale LNG to bring clean fuel to customers, particularly in the remote eastern part of the archipelago.

Various tenders have been touted and some already floated for FSRUs, mini-FSRUs and small LNG carriers as part of Indonesia’s grand small-scale LNG plan.

Ensuring affordability for customers is one key challenge, according to Pertamina engineering manager, Maya Kusmaya. “We have to consider the price, the affordability” to ensure that customers “can absorb the LNG at a certain price,” he told the World Gas Conference.

“The challenge that we face from this small-scale LNG distribution is that we have to find efficient, effective logistical infrastructure, because the volumes can be very small… sometimes only 0.5 or 0.1 million cubic feet,” added Kusmaya.

Also capital expenditure is a very real concern — many of the frontier areas that Pertamina is eyeing do not have ports, jetty or supporting facilities.

Jetties and related storage tanks make up a significant slice of the up-front cost of small-scale LNG projects and securing financing for these is understood to be a headache.

“This will be a very complex project, involving complex distribution logistics and also some new technology in small-scale LNG carriers especially with lower draft because some of the locations may be on very shallow rivers,” said Kusmaya.

Another issue for this ambition for the distribution project will be to line up skilled labour for the operation and maintenance of the facilities, particularly in outlying islands.

FLN and Pertamina intend to initially distribute locally produced volumes from the Tangguh Train 3, Bontang and potentially Donggi Senoro liquefaction projects.

While Indonesia could well find itself an importer of LNG if new gas fields are not discovered.

Sourcing volumes from various sources could present another headache for Indonesia given the tight specification of gas that is required as feedstock in PLN’s power plants.

LNG

US giant ConocoPhillips keen on smaller scale LNG options

US giant argues market has a growing appetite for lower and medium end of the scale developments

KATHRINE SCHMIDT
Washington, DC

US oil company ConocoPhillips is keen on the potential of small and mid-scale liquefied natural gas projects, arguing that the market for this kind of production is continuing to gain momentum.

The US independent’s Optimised Cascade Process has been a staple technology for decades in some of the world’s largest LNG plants, but there are also opportunities seen for more diminutive projects.

“Our technology is unique and it’s very scalable,” Mike Culligan, ConocoPhillips manager, LNG technology and licensing, told a panel at WGC 2018.

“From 1 million tonnes per annum all the way up to 7 million tpa, we can design and build plants… we do have a very strong interest in helping the world build out small to mid-scale projects where it’s appropriate.”

ConocoPhillips is known for its Optimized Cascade Process, first implemented at Alaska’s Kenai LNG plant in 1969, which went on to be licensed by a wide range of high-profile projects, including Wheatstone LNG in Australia, Atlantic LNG in Trinidad, and Sabine Pass and Corpus Christi LNG in the US.

The company also holds equity in LNG projects in Australia and Qatar.

Citing IHS Markit data, Culligan indicated about 11% of today’s LNG capacity includes trains of 3 million tpa or smaller, with about 3% of current global production coming from facilities with trains of 1.5 million tpa or smaller.

For projects in construction, about 8% of that 90 million tpa of capacity have projects with trains of 1 million tpa or smaller. For projects that are in or have completed a front-end engineering and design phase, about 14% fall into that smaller and mid-scale range.

“Then there’s a pick-up in the number of trains being built at that smaller train size,” Culligan said. “There will be a growing trend of capacity coming from small to midsize trains.”

In the broader perspective, however, smaller scale LNG is an “important and growing piece of the puzzle, but by no means a revolution”, he said.

However, with affordability as a key aspect, project execution is ever more important regardless of the scale of the project, he said.

“The real focus among a lot of developers and engineering, procurement and construction contractors especially, is really a more back-to-basics approach of removing costs and scope that may have bloated and made projects more expensive, and just smarter execution through modularisation,” he said.

“That’s really what’s driving lower-cost plants now (more than) technological innovations.” He suggested standardisation in general — rather than any specific construction model — is also a key aspect to bring down costs.

ConocoPhillips is not presently involved in any small-scale US projects at or beyond the FEED stage, Culligan told Upstream on the sidelines. But he told the panel he does see scenarios particularly in the US market that could make sense for such projects.

“You like to be in a place with the cleanest, sweetest gas with the most infrastructure already there,” he suggested, although he did add that some greener field projects with a particular advantage or minimal infrastructure could work as well.

“So, a US Gulf Coast brownfield location that requires a relatively simple incremental expansion that could be done in smaller bites… that’s really where to be, on the brownfield side.”