Italian firm to build platforms for second Russian Arctic LNG plant

(Reuters; Dec. 18) - Italian energy contractor Saipem plans to sign a deal this week with Novatek to build offshore platforms for the Russian firm’s proposed liquefied natural gas project, Arctic LNG-2, two sources close to the talks told Reuters. Novatek already has one plant in operation, Yamal LNG, and Arctic LNG-2 on the Gydan Peninsula in the Kara Sea will be its second, with a combined output capacity of more than 36 million tonnes per year — exceeded only by capacity in Qatar, Australia, and the United States.

The $27 billion Yamal LNG project, which started up a year ago, began running at full capacity of 16.5 million tonnes of LNG a year this month. Arctic LNG-2, estimated at $25.5 billion, would have a capacity of 19.8 million tonnes, with start-up planned by 2023, according to Novatek, majority owner and operator of both projects. This week, Novatek issued tenders to build an airport for Arctic LNG-2 and start recruiting workers.

Two sources said Saipem and Novatek planned to sign a firm deal in Italy this week for construction of gravity-based structures that will stand on the seabed to support the Arctic LNG-2 processing units. One of the sources said Italian export credit agency SACE planned to issue guarantees to support the project. The Saipem-Novatek deal has an estimated value of about 2.5 billion euros ($2.9 billion), the source said.

Novatek advertises for airport contractor for second LNG project

(Reuters; Dec. 17) - Russia’s top liquefied natural gas producer Novatek has launched tenders for construction of a new airport and recruitment of personnel for its second large-scale project, Arctic LNG-2, the company said Dec. 17. Novatek plans to start production at the Arctic Gydan Peninsula that juts into the Kara Sea in 2022-2023, with volumes reaching 19.8 million tonnes per year. The site is near the existing Yamal LNG plant, which launched a year ago and can produce 16.5 million tonnes annually.

According to tender documents published on Novatek’s website and on the trading platform of Gazprombank, the company is searching for a recruiting firm and a contractor to build an airport for Arctic LNG-2. Last month it declared a tender for construction of a housing complex for Arctic LNG-2, which would accommodate 1,500 people at the Utrennyye gas field, the main source of gas for the $25.5 billion project.
Russian media reports France backs debt for Arctic LNG projects

(OilPrice.com; Dec. 17) - France is extending its government guarantees for debt issued by Russia’s Yamal LNG project and loans that may be issued for the proposed Arctic LNG-2 project, France’s Economy Minister Bruno Le Maire said after a meeting with his Russian counterpart Maxim Oreshkin in Paris, according to Russian media reports. France also will provide longer terms for loan repayment for the two liquefied natural gas export projects, in which French oil and gas major Total holds sizable stakes.

“I confirm that we made a decision to give longer terms for repayment of loans, as for the state guarantees — this is a guarantee of the French state to the Yamal (LNG) project. All participants in this project requested it,” Russia’s TASS news agency quoted Le Maire on Dec. 17. “This is a success and an economic signal, but behind there is a political signal that we want to strengthen our cooperation in the energy sector based on the Yamal (LNG) project. The same goes to the Arctic LNG-2 project. It is very important for us that the largest number of French companies could take part in it.”

Total holds 20 percent in the $27 billion Yamal LNG project led by Russia’s Novatek. The plant started up a year ago. In May this year Total signed on to take a 10 percent stake in Novatek’s proposed Arctic LNG-2, not far from the Yamal site. The final investment decision for Arctic LNG-2 is expected next year, with start-up in 2023.

Russia wants to see billions invested in Arctic projects

(The Barents Observer; Norway; Dec. 14) – Meeting in the port city of Sabetta on the Yamal Peninsula, site of the country’s first Arctic LNG terminal, Russia’s Minister of Natural Resources Dmitry Kobylkin said he looks for 5.5 trillion rubles (about US$80 billion) in investment by 2024 in the region’s infrastructure and resource development including railways, sea ports, oil, gas, and coal fields. Kobylkin met with Prime Minister Dmitry Medvedev and other key government ministers and business leaders.

Just 900 billion rubles ($13 billion) would come from the federal budget, Kobylkin said. The rest will be private investment. There was no talk at the meeting about potentially devastating climate changes unfolding in the Arctic. The meeting was focused on exploitation, not protection. The Arctic is Russia’s top natural resource region, Medvedev said. “This is where we decide our two most important tasks — the providing of the national security of our country and, of course, its economic interests,” he said.

The meeting in Sabetta was held as the Yamal LNG project reached full production a year after starting up. And more is in the making. By 2035 Russia intends to increase its stake in global production of LNG from the current 4 percent to 20 percent. Several new projects are under development, among them the Arctic LNG-2 export terminal on the nearby Gydan Peninsula. The government officials said all the resource and
infrastructure development will be centered around using the Northern Sea Route, which is opening up to more ship traffic as sea ice shrinks under global warming.

**U.S. LNG developers face competition, commercial challenges**

(S&P Global Platts; Dec. 18) - Commercial issues will determine how many U.S. LNG export projects move forward in 2019, a year that will be critical for decision-making because of the expected global demand in the next decade. Risks to securing financing mean that developers will have to move quickly to secure enough interest to advance to a positive final investment decision. Ongoing trade tensions between the U.S. and China present a wildcard, as does competition from already established U.S. LNG players.

Brownfield projects such as ExxonMobil/Qatar-backed Golden Pass in Texas — adding liquefaction to an existing LNG import terminal — are seen as having an edge, while greenfield projects such as Tellurian's Driftwood LNG, NextDecade's Rio Grande LNG, and Venture Global LNG's Calcasieu Pass all on the Gulf Coast carry more uncertainty. Because liquefaction terminals take about four years to build, developers need to reach FID next year for 2023-2024 start-up when the market looks to need new supply.

Energy consultancy Wood Mackenzie is forecasting that 2019 could be a record year for LNG project sanctions with more than 220 million tonnes of annual capacity worldwide targeting FID. It expects some of the less prepared or less competitive projects to slip into 2020 and beyond. The uncertainty makes it extra important for developers to get their commercial contracts and financing together as quickly as possible to beat competitors to the punch. Tariffs imposed by China on imports of U.S. LNG in retaliation for U.S. tariffs on imports of Chinese goods have made those efforts more challenging.

**U.S. LNG exporters no longer need to report end use of gas**

(S&P Global Platts; Dec. 19) - The Department of Energy on Dec. 19 eased reporting mandates for U.S. liquefied natural gas exporters, scrapping a requirement that they track down the ultimate end user of the gas. The department said exporters will still be required to report the LNG cargo’s first point of delivery, but not where the gas is consumed. It has become apparent that it was "impracticable, if not impossible" for exporters to comply with the end-use reporting requirement, the department said.

"[A] cargo of LNG could be offloaded and regasified in one country and a portion of the U.S. natural gas could be re-exported by pipeline to another country or countries" without direct knowledge of the parties involved in the initial export deal, the policy statement said. In another example, it noted that U.S. gas could be comingled with non-U.S. gas and some portion sent to another country.
In addition to affecting future export approvals, the department struck the end-use requirement from existing authorizations. It said the impetus for the old requirement — preventing exporters from circumventing a longer federal review process by routing gas through free-trade countries such as Canada — is no longer a sufficient concern for a variety of reasons, particularly given compliance difficulties. Some exporters had worried their authorizations would be at risk if they failed to meet the requirement.

**LNG Canada project can offer lower-priced LNG than U.S. Gulf Coast**

(Reuters; Dec. 16) - The scramble for new liquefied natural gas export projects is shifting to the Pacific Northwest, where longstanding proposals are getting a renewed look as rising shipping rates make the region's close access to Asia more appealing — and with gas price shifts sweetening the deal. In October, Shell and its Asian partners approved a C$40 billion export terminal in British Columbia, surprising investors by saying they would deliver LNG to Asia at a lower price than U.S. Gulf Coast projects.

Since then, costs have shifted further in Canada's favor. LNG shipping rates hit record highs in November due to a tanker shortage, boosting costs for multi-week journeys from the U.S. Gulf Coast to Asia, while gas priced in Texas has surged as much as 51 percent as Canadian gas prices fell. Investors have traditionally favored Gulf Coast LNG projects, which led to the first wave of U.S. builds. However, Shell's cost estimates, shifting market conditions, and a months-long suspension of LNG deliveries to China due to the U.S.-China trade war have made the Pacific Northwest more attractive.

Pacific Coast projects were expected to cost more than rival U.S. Gulf construction. But Shell said it would be able to ship LNG to Asia for about $7 per million Btu, based on a $2 feed gas price, lower than analysts' assumptions. Shell Canada President Michael Crothers said access to cheap gas made LNG Canada attractive, while a construction slowdown in Canada's oil patch, hampered by low prices, has freed up contractors and workers. Canadian gas is selling at about $3 less than the U.S. Henry Hub spot price.

**Cheniere signs up Petronas as customer for Sabine Pass expansion**

(Houston Chronicle; Dec. 18) - Houston-based Cheniere Energy has signed a 20-year liquefied natural gas supply deal with a subsidiary of Petronas, Malaysia's state-owned oil and gas company. Under the deal Cheniere's Sabine Pass liquefied natural gas facility in Louisiana will supply 1.1 million tonnes of LNG per year to Petronas. Financial terms were not disclosed but Cheniere reported the purchase price of the LNG is indexed to the Henry Hub U.S. benchmark gas price plus a liquefaction fee.
Cheniere CEO Jack Fusco said Petronas will be a foundation customer for the sixth production unit at Sabine Pass. "This 20-year agreement ... continues our momentum on Train 6, where early engineering, procurement and site preparation activities have recently commenced ahead of a final investment decision." The company plans to make a final investment decision in 2019. At the full build-out of six liquefaction trains, Sabine Pass, the first LNG terminal on the U.S. Gulf Coast, would have an output capacity of 27 million tonnes per year — which would rank it as the fifth-largest exporting nation.

"We think Sabine Pass No. 6 is money-good," Wells Fargo Securities analyst Michael Webber said in a note to clients after the announcement. "With execution of the engineering, procurement, and construction contract with Bechtel (in November), the one milestone they now need to sort out over the next three to four months is financing." Cheniere has shipped nearly 500 LNG cargoes to 30 nations since starting up Sabine Pass in February 2016 and its Corpus Christi LNG terminal earlier this month.

**Poland’s gas distributor signs up for more U.S. LNG**

(S&P Global Platts; Dec. 19) - Poland's state-controlled gas producer and distributor PGNiG signed a binding 20-year contract on Dec. 19 for 2 million tonnes of liquefied natural gas per year from the proposed Port Arthur LNG project. The deal makes Poland a foundation customer for Port Arthur LNG, proposed for Jefferson County, Texas, and waiting on a final investment decision by its developer, Sempra Energy. At 2 million tonnes, the contract would cover about 15 percent of Poland's gas needs.

PGNiG said the contract's price formula is based on U.S. benchmark Henry Hub gas prices. Building its LNG import portfolio is one of PGNiG's gas supply diversification strategies. Currently, Russia’s Gazprom supplies about three-quarters of PGNiG's gas import needs under a partially oil-indexed contract that will expire in October 2022. PGNiG said Gazprom has taken advantage of Poland's limited supply options in the past and charges it one of the highest prices for gas in Europe.

PGNiG is in arbitration to reduce the price it pays Gazprom. Regardless of the outcome, Polish officials have said the company does not plan to extend the contract. PGNiG already imports LNG under a 20-year supply contract with Qatargas and expects to start taking deliveries next year from Cheniere Energy, which operates LNG export facilities in Sabine Pass, Louisiana, and Corpus Christi, Texas. PGNiG also has signed up to take gas from a proposed LNG plant in Louisiana, being developed by Venture Global.
Norway’s Equinor hopeful of talks on LNG project in Tanzania

(Petroleum Economist; Dec. 17) - Tanzania’s efforts to speed up talks with Equinor and ExxonMobil over of a host government agreement to develop an onshore liquefied natural gas project suggests a renewed sense of urgency, as Tanzania seeks to ensure it does not lose out altogether to neighboring Mozambique as a regional gas export hub. Equinor said it has received signals from Tanzanian President John Magufuli that he wants to start talks with the two companies. Contacts have been off and on for four years, but there seems to be optimism over the chances of progress this time around.

The companies hold the license for Block 2, off southern Tanzania, which has reserves estimated at more than 20 trillion cubic feet of gas. Equinor is operator with 65 percent, while ExxonMobil holds 35 percent. Earlier this year, it was reported that ExxonMobil wanted to sell its stake so that it could focus its East African activities on its planned LNG project in Mozambique.

Shell, which has made discoveries on adjacent acreage in Tanzanian waters, is eager to participate in any export facility. The company and its partner Ophir Energy are developing Blocks 1 and 4, which are estimated to hold about 16 tcf of recoverable gas. "It is our understanding that the objective of all partners involved in the Tanzania LNG project is to have a single, joint project," a Shell spokesperson said.

Benefits agreements with First Nations will ease the way for LNG

(The Northern Sentinel; Kitimat, BC; Dec. 14) - First Nations and bands that hold territory that will be impacted by the LNG Canada project are poised to earn millions of dollars under a series of agreements with the British Columbia government. Indigenous territories near the gas liquefaction plant and marine terminal that will be built in Kitimat, B.C., and along the route of the gas pipeline from northeastern B.C. to the coast will receive cash, lands, and also ongoing royalties when the project starts shipping gas.

Shell and its partners in October said they will proceed with the C$40 billion project. In each agreement, lump sums were paid once the agreements were signed with more to be paid annually. A royalty of 2 cents per tonne of LNG would generate payments of up to $280,000 a year for each affected First Nation. The cash and lands recognize the territorial and marine aboriginal interests of the First Nations. In return, they agreed to support the LNG industry and have promised not to interfere with development. The agreements with the province cover additional LNG terminals, should they proceed.

Area First Nations are not the only local governments to benefit from LNG Canada. The plant is subject to municipal property taxes of as much as $9.7 million a year once the project is in full production. To date, the Kitselas First Nation has negotiated one of the largest of the LNG benefits deals with the provincial government. When Shell and its
partners announced the final investment decision Oct. 2, the Kitselas received $1 million or more toward construction of a community hall.

Opponents threaten suit if they don’t like Canadian review of oil line

(The Canadian Press; Dec. 18) - A Vancouver-based environmental charity is readying to go back to court if — or it believes when — the federal government re-approves the Trans Mountain oil pipeline expansion next year. Peter McCartney, climate campaigner for the Wilderness Committee, said the National Energy Board review timeline is so short it underscores his belief that the government is looking just to fulfill the federal court’s concerns with the original review, rather than seriously reconsider the project.

The federal cabinet approved Trans Mountain in the fall of 2016. That approval was challenged by several environment groups and Indigenous communities, who argued the original review didn’t properly consider effects on marine life from oil tankers. Indigenous communities also felt their concerns had not been addressed as required by the constitutional duty to consult with them. The court agreed and in August tore up the cabinet’s approval, halting the Alberta-to-British Columbia oil pipeline expansion.

In response, the government asked the NEB to take a more thorough look at marine effects. There is no specific timeline for the Indigenous consultations, though the government gave the NEB until Feb. 22 to complete its work. Conservative Party natural resources critic Shannon Stubbs said the fact that environmental groups are already planning another lawsuit is proof of the energy industry’s contention that environmentalists don’t want proper consideration given to the project, but rather want to delay it enough to eventually kill it. “They will just do everything to stop it.”

Canada offers loans to help Alberta oil producers hit by low prices

(Bloomberg; Dec. 18) - The Canadian government announced C$1.5 billion in loans to help the oil and gas sector after a supply glut and limited pipeline capacity sank Western Canadian heavy crude to a low of $13.46 a barrel last month. The country’s energy and trade ministers announced the aid Dec. 18, including “commercial financial support” loans of C$1 billion from Export Development Canada (EDC) and C$500 million in financing from the Business Development Bank of Canada.

The EDC money will be aimed at exporters, including those that have “working capital needs,” while the C$500 million will be for “higher-risk but viable oil and gas small business enterprises,” and will be spread over three years, according to a government statement. “All in all, it has to do with liquidity,” Trade Minister Jim Carr said. The loan money can augment oil producers’ relationship with commercial banks and “will go a long way in helping them get through this tough spot,” Carr said.
The liquidity injection is aimed at producers pinched when crude prices plunged in what Prime Minister Justin Trudeau called a crisis in Alberta. The province has ordered a production cut and prices have almost doubled — though they're still trading at a steep discount to U.S. crude. The aid doesn't offer any help for the Alberta government's plan to buy rail cars to move more oil to market. Alberta Premier Rachel Notley criticized the move. "There's very little money in this, it's mostly loans," she said. "We didn't ask for the opportunity to go further into debt as a means of addressing this problem."

Trudeau has been criticized in the oil-producing province for inaction on building new pipelines, a shortage that has exacerbated the supply glut. His government also announced C$100 million in funding for oil and gas projects related to economic diversification, plus C$50 million in direct funding for “clean-growth” oil and gas projects.

**Protestors fight to shut down Northern Michigan oil pipeline**

(Washington Post; Dec. 14) - A modest camp in the woods of far northern Michigan is the symbolic base for protesters battling an aging oil pipeline that crosses one of the most environmentally critical locations in the country. Some 23 million gallons of Canadian oil flow daily through the Straits of Mackinac, an iconic waterway that connects Lake Michigan and Lake Huron and Michigan’s two peninsulas.

Line 5, operated by Enbridge, has been wrapped in controversy for months. To restore the route to its full capacity and improve its protections, Enbridge wants to replace the submerged pipes with a new single pipe that will run through a 4-mile-long tunnel 100 feet below the lake bed at a cost of $500 million. The “water protectors,” as those at the camp call themselves, vow to stay until the pipeline is totally shut down. “I'm doing it for my people,” said Patrick Deverney, 39, a member of the Grand Traverse Band of Ottawa and Chippewa tribes. “Without that water, we're going to die.”

Enbridge’s Straits of Mackinac operation represents only a tiny fraction of an extensive system that originates at the oil sands of northern Alberta. The network, built in 1953, transports a daily average of 540,000 barrels of crude and natural gas liquids across Michigan before arriving at a distribution center in the border city of Sarnia, Ontario. The route mostly serves as a shortcut across the Great Lakes to meet Canadian demand.

And while most Michigan residents feel a special attachment to the Great Lakes, the connection runs particularly deep for Native Americans. Several islands near the Straits hold ancestral burial grounds, and under an 1836 treaty the Anishinaabek people ceded some 14 million acres to the U.S. government but retained hunting and fishing rights. The pipeline, indigenous groups argue, threatens not just the environment but a culture.
Oil and gas spending falling short of future demand, Wood Mac warns

(Reuters; Dec. 16) - The number of new oil and gas projects will rise five-fold next year from a 2015 trough, but overall spending is still unlikely to be enough to meet future demand, consultancy Wood Mackenzie said in a report. Shaken by a sharp drop in oil prices in recent months, companies are generally expected to stick to spending discipline imposed following the 2014 price crash.

Global investment in oil and gas production, known as upstream, is expected to reach about $425 billion next year, according to Wood Mackenzie analyst Angus Rodger. That compares with a total spending of $770 billion in 2014, which dropped to $400 billion in 2016 and 2017. Although spending levels have slightly recovered since then, next year’s capital expenditures will still fall short of the $600 billion required to meet demand growth and to offset the natural decline of output from fields, Rodger said.

A handful of the world’s top oil companies said they would boost spending next year as they accelerate developments of highly productive shale fields. But overall, companies will seek to hold spending largely flat in order to return cash to investors after years of pain, Rodger said. Still, deep cost cuts introduced in recent years and lower lease rates for drilling rigs and oil field services mean that companies can get more for their money. Many of the new projects will be around gas with a record number of liquefied natural gas projects set to get the green light in 2019, Wood Mackenzie said.

CNOOC signs joint-development deals with nine foreign firms

(Bloomberg; Dec. 18) – China has signaled its openness for business with a raft of deals giving oil majors including Shell new opportunities to develop fields in partnership with the nation’s biggest offshore explorer. China National Offshore Oil Corp. said Dec. 18 it had inked oil and gas accords with nine firms. The agreements cover almost 25,000 square miles in the Pearl River basin to a depth of up to 10,000 feet.

In addition to Shell, France’s Total and Chevron were awarded parcels. All three majors hold existing production-sharing contracts with CNOOC. The other firms in the deals are ConocoPhillips, Norway’s Equinor, Husky Energy, Kuwait Foreign Petroleum Exploration, Australia’s Roc Oil, and South Korea’s SK Innovation.

CNOOC has signed more than 200 production-sharing contracts since its inception in the early 1980s, even as it has increasingly relied on its own resources to tap deep-water projects in Chinese waters. Chairman Yang Hua said the company aims to boost output to 2 million barrels of oil equivalent a day by 2025, from about 1.3 million last year. The smallest of China’s big three oil and gas firms, CNOOC is its favored vehicle for international cooperation and holds the vast majority of reserves in Chinese waters.
**Qatar signs up with Eni to produce oil offshore Mexico**

(The Peninsula; Qatar; Dec. 17) - Qatar Petroleum has signed an agreement with Eni, the Italian energy giant, to acquire a 35 percent participating interest in three offshore oil fields in Mexico. The agreement covers the Amoca, Mizton, and Tecoalli offshore oil fields in Area 1 in Mexico’s Campeche Bay. The agreement is subject to regulatory approvals by the Mexican government.

First oil production is expected by mid-2019, said Saad bin Sherida Al Kaabi, Qatar’s minister of state for energy affairs and CEO of QP. “This agreement marks another milestone for Qatar Petroleum as it strengthens its international footprint.” The partners expect the field to reach full production in 2021 through a floating production, storage, and offloading facility with a treatment capacity of 90,000 barrels of oil per day. The area is estimated to hold 2.1 billion barrels of oil equivalent, 90 percent of which is oil.

Qatar Petroleum already holds exploration rights in five offshore blocks in the Perdido and Campeche basins as part of a consortium comprising Shell and Eni, respectively. In line with its growth plans, the company said Mexico represents another step in its strategy to expand its international footprint.

**German company says LNG imports could start in 2022**

(Reuters; Dec. 17) – Dusseldorf-based energy company Uniper on Dec. 17 entered into agreements with Japanese shipper Mitsui OSK Lines and Hungarian oil and gas firm MOL to handle potential deliveries of liquefied natural gas into Germany. Discussions about importing LNG have grown recently as the German government wants to diversify away from pipeline gas from Russia, Norway, and the Netherlands. Suppliers, most notably Qatar and the United States, have expressed interest in supplying LNG.

Uniper is banking on Wilhelmshaven — close to its gas storage facilities — as the site for a German LNG import terminal. Uniper said Mitsui OSK Lines intends to own, operate and fund the floating LNG storage and regasification unit, with a send-out capacity of 350 billion cubic feet of gas per year. The unit could be in operation as early as the second half of 2022, Uniper said.

**Russia ready to land first LNG import cargo for isolated city**

(Reuters; Dec. 17) - Russia’s first liquefied natural gas floating import, storage, and regasification unit is expected to dock at the port of Kaliningrad on Dec. 18, a source told Reuters. The unit, named the Marshal Vasilevskiy, is being installed at Kaliningrad — a city separated from Russia and bordering Lithuania and Poland — by Russian
energy major Gazprom in a move to bypass pipeline gas deliveries via Lithuania in case there are any disruptions in gas transit.

The floating unit will be the first LNG import facility in Russia, the world's second-largest gas producer. The vessel is now anchored outside the port, according to Refinitiv Eikon shipping data. The Marshal Vasilevskiy came from Singapore with a cargo of LNG to commission the import facility. The gas will be fed into Kaliningrad's distribution system.

No more deliveries are currently expected at the import unit, the source said, as pipeline flows via Lithuania are stable and it's cheaper to get gas by pipeline rather than LNG.

**Industry looks to natural gas to grow as transportation fuel**

(Bloomberg; Dec. 15) - The natural gas industry is trying to up its green credentials as it bids to join electric cars and renewable power plants in a lower-emission future. European energy companies spent years touting the role gas can play as a transition fuel to replace dirtier sources of round-the-clock power. Now they are increasingly promoting gas as a cleaner alternative to oil products in transportation and investing in technology to produce less-polluting fuel.

“Natural gas will play a bigger role in a greener world,” Guy Smith, head of gas trading at Swedish utility Vattenfall, said Dec. 11. “The view that gas is just a transition fuel is changing,” said Eva Hennig, chairwoman of the distribution system operators committee at Brussels-based industry lobby group Eurogas. Austria’s OMV said it is assessing a liquefied natural gas fueling corridor for trucks from Germany to Bulgaria, one of the main traffic routes for international heavy-truck traffic in Europe.

The challenge for natural gas to expand into transportation is the lack of political will and a better regulatory framework, said Manfred Leitner, an OMV executive board member. Current European legislation focuses on vehicles emissions, which puts electric cars in a better position. “There are incentives only for electric cars. They are defined as low emitters, but when you look at the whole chain you ask where the electricity comes from. … The gas for the mobility market would fly if there was political will,” Leitner said.