Oil and Gas News Briefs
Compiled by Larry Persily
October 23, 2023

Chevron will buy Hess in $53 billion deal

(Reuters; Oct. 23) – Chevron said on Oct. 23 it agreed to buy 90-year-old Hess Corp. for $53 billion in stock, the second proposed mega-merger among the biggest U.S. oil players after ExxonMobil bid $60 billion for Pioneer Natural Resources earlier this month. The proposed deal raises the competition between Chevron, the No. 2 U.S. oil and gas producer behind Exxon, putting it in direct competition with its bigger rival to develop drilling in nascent producer Guyana.

The deal also signals Chevron's plans to continue boosting investments as oil demand remains strong and producers use acquisitions to replenish inventories after years of under-investment. Guyana has become a major attraction following huge discoveries in recent years, turning it into one of Latin America's biggest producers, only surpassed by Brazil and Mexico. Exxon and partners Hess and CNOOC are the only active producers in the country. Their projects are expected to reach 1.2 million barrels per day by 2027. "The prize here is Guyana," said Peter McNally, an analyst at Third Bridge Group.

The combined Chevron-Hess is expected to grow production and free cash flow faster and for longer than Chevron's current five-year guidance, the companies said. Hess is a big player in North Dakota's Bakken Shale. Worldwide, Hess produced an average of 387,000 barrels of oil equivalent per day in the second quarter of this year, with almost half of that coming from the Bakken. Chevron said that following the completion of the deal it intends to increase its share repurchases program by $2.5 billion to the top of its $20 billion annual range, in a sign of confidence in future oil prices and cash generation.

Canada's largest gas producers back West Coast LNG project

(Bloomberg; Oct. 18) - A group of Canada's largest natural gas producers including Tourmaline Oil and Ovintiv is pushing forward with a gas export project called Ksi Lisims LNG and has filed for environmental approval for the facility on British Columbia's West Coast. The plant, planned for 12 million tonnes annual output capacity, would be located near B.C.'s border with Alaska and would prepare gas for export by tanker to markets in Asia, according to the application filed with the provincial government.

The project is backed by the Indigenous Nisga'a Nation, Houston-based Western LNG and Rockies LNG Partners, which includes nine Canadian gas producers, including Tourmaline, Birchcliff Energy and Paramount Resources. The Rockies group, which accounts for a third of Canada’s gas output, began work on the project after other liquefied natural gas proposals in the region were scrapped.

Frustrated by delays in accessing overseas markets, some Canadian gas producers have even started shipping their gas from Western Canada all the way to LNG facilities on the U.S. Gulf Coast. “These are large projects, and it takes a lot of shoulders behind it to get it to the finish line,” Rockies LNG President Charlotte Raggett said of the effort for multiple producers to work together on the West Coast LNG project.

South Korean banks help finance LNG export project in Texas

(Business Korea; Oct. 19) - South Korea’s major government-run banks and commercial banks, including the Korea Development Bank (KDB), Export-Import Bank of Korea, Kookmin Bank and Woori Bank, are planning to provide multimillion-dollar loans for Hanwha Group’s investment in a U.S. liquefied natural gas project. According to financial sources on Oct. 18, the major domestic banks are set to participate as lead banks in NextDecade’s Texas Rio Grande LNG export terminal.

The lead bank representative is Japan’s investment bank, Mitsubishi UFJ Financial Group. In addition to South Korean banks, global financial institutions such as Mizuho Bank, JP Morgan, HSBC, RBC and others are also involved. The Industrial Bank of Korea (IBK) will execute loans of US$100 million, while Woori Bank will provide $45 million. Although KDB and Kookmin Bank have not disclosed the investment amounts, it is reported they will extend loans similar in scale to those of IBK and Woori.

Rio Grande LNG involves the construction and operation of an LNG export terminal with an annual capacity of up to 27 million tonnes in the Port of Brownsville, Texas. The first phase of the project, at 17.6 million tonnes per year, is estimated at US$18.4 billion, of which US$11.8 billion is sourced through syndicated loans. A syndicated loan is a group loan in which multiple institutions provide funds under the same terms and conditions. Next Decade took a final investment decision in July to proceed to construction.

Two more U.S. LNG projects will add 8% to global capacity

(Reuters; Oct. 19) - Two U.S. natural gas exporters are racing to complete construction of the country's first liquefied natural gas plants since 2022, hoping to cash in on booming demand for the gas before it fades later this decade, two analysts said this week. Golden Pass LNG, owned by QatarEnergy and oil major ExxonMobil, expects to start production at the first of three processing units at the Texas plant in the second half of 2024. The full project would be in operation by 2025, at 18 million tonnes per year.

Venture Global, which is building its $21 billion Plaquemines LNG plant in Louisiana, also aims to produce first LNG in the second half of 2024 and be fully running in 2025. It will be able to produce 20 million tonnes a year when completed. On Oct. 19, it received regulatory approval for its contractors to work a 24-hour, seven-day-a-week schedule. Golden Pass had previously received the same approval. The two Gulf Coast projects represent about an 8% boost in global LNG production capacity from 2022 numbers.

Both projects are competing to get underway before rivals do, and before renewable projects can siphon gas demand, which had risen at an average annual rate of 2.5%, according to consuming nations group International Energy Agency. The Qatar/Exxon and Venture Global LNG projects are competing to secure sales at current prices, said Alex Munton, director of gas and LNG research at consultants Rapidan Energy Group. "There is a financial windfall for companies as prices will soften by 2028 as more capacity comes online from other projects in the U.S. and globally", said Munton.

Qatar signs up another European buyer for 27-year LNG deal

(Reuters; Oct. 23) - State-owned QatarEnergy said on Oct. 23 it would supply Italy's Eni with gas for 27 years, following similar deals this month to supply the Netherlands via Shell and France through TotalEnergies. Affiliates of QatarEnergy and Eni signed a long-term sale and purchase agreement for up to 1 million tonnes per year of liquefied natural gas from Qatar's North Field expansion project.

LNG will be delivered to a floating storage and regasification unit in the Tuscany port of Piombino starting in 2026. Eni has a 3.125% stake in the North Field East expansion project. Together with the North Field South expansion, the two will lift Qatar's liquefaction capacity to 126 million tonnes per year by 2027 from 77 million. Qatar in the past two weeks has signed 27-year deals starting in 2026 to supply 3.5 million tonnes per year of LNG to Shell and TotalEnergies, its largest and longest European gas deals.

Germany signed on in November 2022 for a 15-year deal that starts in 2026 for 2 million tonnes per year of Qatari LNG, delivered by ConocoPhillips. Until the recent deals, Asia — with an appetite for long-term sale and purchase agreements — had outpaced Europe in locking in supply from QatarEnergy's two-phase LNG output expansion. Asian deals included 27-year supply to China's Sinopec sealed in November for 4 million tonnes and an identical one signed in June with China National Petroleum Corp.

FERC approves expansion of Pacific Northwest gas pipeline

(Associated Press; Oct. 19) – The Federal Energy Regulatory Commission on Oct. 19 approved the expansion of a natural gas pipeline in the Pacific Northwest over the protests of environmental groups and top officials in West Coast states, who said it goes against the region's plans to address climate change and could pose a wildfire risk. The $335 million project, known as GTN Xpress, aims to expand the capacity of the Gas Transmission Northwest pipeline, which runs through Idaho, Washington and Oregon, by about 150 million cubic feet of gas per day.

TC Energy plans to modify three compressor stations along the pipeline — in Kootenai County, Idaho; Walla Walla County, Washington; and Sherman County, Oregon. Compressor stations help maintain the pressure and flow of gas over long distances in a pipeline. The 1,377-mile pipeline runs from the Canadian border through a corner of Idaho and into Washington state and Oregon, connecting with a pipeline going into California. The company said the project is necessary to meet consumer demand.

Environmental groups criticized the decision of the commission, which "failed to listen to senators, governors, state attorneys general, tribes and the public in its rubber stamp of unnecessary fracked gas in the Northwest," said Audrey Leonard, staff attorney for Columbia Riverkeeper, an environmental nonprofit, in a statement. Leonard said Columbia Riverkeeper will appeal the federal regulators' decision and submit a petition for a rehearing. The pipeline belongs to TC Energy of Calgary, Canada — the same company behind the now-abandoned Keystone XL crude oil pipeline.

Customers urge U.S. approval of Louisiana LNG export project

(S&P Global Platts; Oct. 19) - Customers of Energy Transfer's proposed Lake Charles LNG terminal — including Shell, EQT and South Korea's SK Gas — are urging the U.S. Energy Department to issue a new export license for the Louisiana facility soon, so that the developer can make a final investment decision. Energy Transfer applied for the new authorization in August, seeking "expedited consideration" after the agency in April rejected the company's request for a three-year extension to its existing authorization.

The April denial amounted to a significant blow to the project, leaving in place an existing deadline to begin LNG exports at the Lake Charles plant by December 2025 — an impossibility, as construction has not started. The letters from the potential Lake Charles customers were among dozens in support of the approval that had been submitted to the agency and published online as of Oct. 18.

"We fear that the Lake Charles LNG project will not only be delayed, but ultimately cancelled if the DOE does not promptly approve this export authorization, leaving its planned buyers without their contracted LNG supply," wrote Jill Davies, president of Shell NA LNG, in an Oct. 9 letter. In seeking the new authorization, Energy Transfer reported the off-take agreements it has secured to support the project. Those include binding long-term deals covering 7.9 million tonnes per year, and preliminary deals for 3.6 million tonnes. The terminal is planned for 16.5 million tonnes a year of output.

[BP begins shipments from new LNG unit in Indonesia]

(Nikkei Asia; Oct. 20) - An expanded liquefied natural gas facility in Indonesia is online, bringing Japan a step closer to reliable procurement in a tight market where countries have pivoted away from Russian gas. BP said Oct. 19 that the first cargo has shipped from its new liquefaction unit at Tangguh, in which several Japanese companies hold interests. This marks the first start of commercial operation by an LNG facility with a long-term supply contract with Japan since Russia invaded Ukraine in 2022.

The addition of the new unit, or train, at Tangguh on New Guinea Island cost about 1 trillion yen ($6.67 billion at current rates). Its launch had been delayed from the initial timeline of 2020, in part by COVID-19. The third train raises the facility's output capacity by 3.8 million tonnes a year to an annual 11.4 million tonnes. Up to 2.8 million tonnes of the increased production will be sold to Indonesian state-run power utility PLN, with as much as 1 million tonnes going to Kansai Electric, based in Osaka.

The Tangguh facility is operated by BP, which holds a roughly 40% interest in the project. Other production-sharing contract partners include six Japanese investors — among them trading house Mitsubishi and energy company Inpex — holding a combined interest of about 46%. Japanese companies aim to secure reliable gas supplies by bolstering LNG projects in which they own interests.

[German company still trades in Russian LNG]

(Bloomberg; Oct. 19) - Germany is still trading Russian liquefied natural gas, as canceling the contract of a nationalized firm could cost billions of euros — creating a dilemma for Berlin and potentially benefiting Moscow. SEFE — a former unit of Gazprom — is shipping Russian LNG under the terms of a legacy contract that existed before Germany took over the company last year. The cargoes, which aren’t subject to international sanctions, are bound for India.

Still, the trade has become a headache for Germany, which has explicitly said it won’t use gas from Russia in the fallout of the war in Ukraine. Berlin is facing sharp criticism over concerns that a government-run company still has ties to Moscow, despite its political rhetoric. However, breaching the contract could cost German taxpayers at least €10 billion ($10.6 billion) — significantly more than the government’s bailout of SEFE and a price tag so high that it makes such a move unlikely, according to sources.

The figure is an estimate of damages and penalties if Russia were to successfully sue in an international arbitration court. Germany last year nationalized the firm to limit the spillover effects of the energy crisis that gripped the region after Russia cut its pipeline gas supplies. The bailout cost taxpayers between €6.3 billion and €7.7 billion. SEFE has a 20-year contract to deliver LNG from the Yamal facility in Siberia — a holdover from its Gazprom days. SEFE has a separate long-term obligation to supply India’s GAIL.

Russia wants to become largest LNG supplier to China

(Reuters; Oct. 19) - Russia wants to increase trade with China via the Northern Sea Route and become its top supplier of liquefied natural gas, Deputy Prime Minister Alexander Novak said on Oct. 19. President Vladimir Putin visited China this week and invited global investment in the NSR, which he said could deepen trade between east and west. The route runs from Murmansk near Russia's border with Norway eastward to the Bering Strait near Alaska.

Novak, who was part of Putin's delegation on the visit to China, met Chinese Vice Premier Ding Xuexiang and spoke at a Russia-China business forum, the Russian government said. Novak said Russia is the fourth-largest LNG supplier to China. Russia competes with Qatar, the United States and Australia on the global LNG market. He and Ding Xuexiang discussed ways to boost trade volumes via the two countries, particularly through the Arctic sea route to shorten cargo voyages.

French company may have violated sanctions on Russian gas project

(Reuters; Oct. 19) - Technip Energies shares plummeted on Oct. 19 after the French newspaper Le Monde said the company, which specializes in engineering and technology for the energy industry, may have failed to comply with European Union sanctions against Russia by continuing to supply equipment to a Russian liquefied natural gas project. Technip said in a statement after its shares fell as much as 22% that it had always respected international sanctions and also its contractual obligations regarding the Arctic LNG-2 project in Russia.

Le Monde said Technip supplied equipment to the project between August and October 2022 despite EU sanctions imposed in April 2022 that prohibited the sale, supply, transfer or export of goods and technology suited for use in oil refining and liquefaction of natural gas to any entity in Russia. The equipment delivered by Technip involved two modules for construction of a liquefaction train worth around 450 million euros ($US476 million), Le Monde said, citing Russian records, maritime data and satellite images.

In its article, Le Monde quoted the company as saying it was not in breach of sanctions as the components it delivered to the project were not strategic and were not covered by the EU ban. In July of this year, Technip said it had completed its exit from the Arctic LNG-2 project. The project is led by Russian firm Novatek which holds a 60% stake. Other shareholders include French energy major TotalEnergies, China's CNPC and Japan Arctic LNG — a consortium of Mitsui and JOGMEC — each holding 10% stake.

Cutoff of Israeli gas puts Egyptian LNG exports at risk

(Bloomberg; Oct. 19) - A liquefied natural gas vessel left an export terminal in Egypt either unloaded or only partially loaded, raising concerns that the Israel-Hamas war may disrupt supplies to global markets. The Seapeak Catalunya departed for Algeria — another LNG exporting nation — after spending two days at the Idku plant in Egypt, ship-tracking data compiled by Bloomberg show. That suggests the vessel either didn't load, or only picked up limited volumes.

LNG exports from Egypt are at risk as the war nearby rages. Israel's piped-gas flows to Egypt fell after the country's giant Tamar field was shut Oct. 9. The shortfall — and any further disruptions — may affect Egypt's ability to meet domestic demand and ramp up LNG exports after a halt in the summer. "Although Israel has surplus gas production, which currently supports Egypt and Jordan's growing demand, a continued or escalated conflict would have wide-ranging implications," Rystad Energy said in a note.

The war "poses a serious threat to the regional natural gas market and could have knock-on effects on Europe's liquefied natural gas supply as winter approaches," Rystad said. Egypt has exported just two LNG cargoes this month, one to Belgium and the other to Italy, ship-tracking data show. The nation met about 4% of Europe's LNG import demand in 2022, dropping to about 2% so far this year.

Venezuela on brink of boosting oil production

(Bloomberg; Oct. 19) - The U.S. just took the first steps in pulling back on a four-year-old sanction policy that had strangled oil exports out of Venezuela, home to world-class crude reserves. The major reversal signals that the Latin American country's industry is on the brink of being able to pump 200,000 more barrels of crude a day — a roughly 25% jump in production. That figure, a consensus outlook among several analysts, is based on the assumption that the sanctions will largely be done away with.

For now, the relief is temporary: It's a six-month license authorizing transactions involving the oil and gas sector in Venezuela. Still, that's a big step that will allow U.S. entities to buy oil from the nation for the first time in years and make its shipments more palatable to global trade more generally. Questions remain, though, about how quickly the nation's production can ramp up and what effect it will have on the global market, which is desperate for barrels as geopolitical tensions mount.

Some analysts predict output can increase rapidly in 2024 — with the most bullish forecasting a ramp-up within six months. Quick imports of diluents, the condensate the country needs to mix with its heavy crude, are key to boosting output. Venezuela's oil exports to the U.S. were halted in 2019 when the U.S. imposed sanctions. The reprieve is the latest step in a nascent, but significant, rebound for Venezuelan oil. Current output stands at 750,000 to 800,000 barrels a day. It's not the 3 million barrels a day that made Venezuela a global force in the 1990s, but neither is it the rock-bottom 374,000 in 2020.

Easing of U.S. oil sanctions could help Venezuela raise capital

(Reuters; Oct. 18) - A broad easing of U.S. oil sanctions on Venezuela will not quickly expand its output but could boost profits by returning some foreign companies to its oil fields and providing its crude to a wider set of cash-paying customers, experts said. The South American OPEC producer received broad waivers from the U.S. on Oct. 18, setting up a six-month period for reactivating oil and gas operations that have been severely constrained by the sanctions and decades of under-investment.

"This looks like a wide lifting of oil sanctions on Venezuela, which is surprising because the license is more expansive than expected," said Francisco Monaldi, a Latin American energy expert with Rice University's Baker Institute. Rolling back Trump-era sanctions, U.S. officials issued general licenses for Venezuela's oil, gas and mining sectors in response to a deal between Venezuelan President Nicolas Maduro and the county's opposition on the 2024 presidential election.

The oil license exempts energy firms around the world from obtaining individual licenses to work with state-run oil company PDVSA, Monaldi said. PDVSA could make a quick comeback to its traditional oil markets and offer its crude at higher prices after being forced to discount for years. The license could also reduce the company's struggles to raise capital, import drilling rigs, repair refineries, advance projects and secure relevant partnerships. The sanctions relief authorizes the production, sale and export of Venezuela's crude and gas, while keeping a ban on business with Russia.

Chevron could be a winner, Rosneft a loser in Venezuela

(Bloomberg; Oct. 21) - Venezuela has an opportunity to resuscitate the linchpin of its economy — oil — now that punishing U.S. sanctions have been relaxed. The move on Oct. 18 allows international companies to apply the full weight of their expertise and technology to fields and infrastructure that atrophied amid years or underinvestment, civil turmoil and international isolation. There will be winners and losers.

Chevron is best-positioned to benefit from the reopening. Chevron adopted a patient approach across the tenures of three CEOs by maintaining a presence in-country after the late President Hugo Chavez nationalized oil assets during the first decade of this century. The California-based company got a head start on the rest of the sector late last year when the U.S. government awarded it a special license to commence limited operations at four joint ventures and sell Venezuelan crude to American refiners.

Rosneft may have the most to lose because the U.S. still prohibits American companies from cooperating with or providing financing for Rosneft’s assets in Venezuela. The company’s trading arm, which accounted for half of Venezuelan oil exports as recently as 2020, has reduced operations in the country since it was hit with sanctions. Rosneft’s joint ventures are run mostly by crews from state-controlled Petroleos de Venezuela.

Repsol could be a winner: It has a stake in one of Venezuela’s biggest undeveloped fields, with a potential output of more than 300,000 barrels a day. Repsol also is keen to recover money owed by PDVSA on an offshore gas project. Repsol and partner Eni are in talks with the Venezuelan regime for a license to export LNG to Europe.

Canadian oil line project encounters new drilling challenge

(Bloomberg; Oct. 20) - Canada’s government-owned C$31 billion oil pipeline to the Pacific Coast is facing a new construction challenge just a few months before its scheduled opening. Trans Mountain is facing a “very challenging” task of drilling through hard rock in the Fraser Valley in British Columbia as it builds a pipeline to almost triple oil shipments from Alberta. The company has proposed a contingency plan to use a 30-inch pipeline instead of the planned 48-inch conduit should the drilling difficulties persist into next month, according to a letter filed with the Canada Energy Regulator.

The project that has faced years of delays and a quadrupling of costs is scheduled to start operation by the end of the first quarter of 2024. In September, the company won regulatory approval to alter a different section of the route because of similar drilling challenges. Regulators approved the route change over opposition from an Indigenous community which said the new route posed a threat to culturally significant land.

Trans Mountain has contingency plans to mitigate construction challenges in areas along the pipeline corridor, including the newest drilling issue, the company said in an emailed statement. The project is more than 95% complete. Filling the pipeline will require about 4.5 million barrels of oil and take six to seven weeks to complete. Prime Minister Justin Trudeau’s government bought the project from Kinder Morgan in 2018 after the company threatened to pull the plug amid fierce opposition in British Columbia. The government plans at some point to try selling the line after it is operational.

U.S. hopes to buy oil at $79 to refill strategic reserves

(Reuters; Oct. 19) - President Joe Biden's administration hopes to buy 6 million barrels of crude oil for delivery to the Strategic Petroleum Reserve in December and January, as it continues its plan to replenish the emergency stockpile, the U.S. Department of Energy said on Oct. 19. The department hopes to sign purchase contracts for the oil at $79 a barrel or less. That is an increase from its earlier preferred range of around $70 a barrel, but lower than the current benchmark futures price for U.S. oil of around $90.

Last year, the administration conducted the largest-ever sale from the SPR of 180 million barrels, part of a strategy to stabilize soaring oil markets and combat high pump prices in the aftermath of Russia's invasion of Ukraine. Since then, the U.S. has bought back 4.8 million barrels for an average of less than $73 a barrel. In January, DOE rejected some bids from oil companies to replenish up to 3 million barrels.

The DOE will issue monthly solicitations through at least May 2024, for volumes that have yet to be determined. The Biden administration has said it hopes its repurchase strategy will provide good taxpayer returns, because the oil was sold around $95 a barrel and could be bought back cheaper.

Wyoming shale play presents a ‘peanut butter’ challenge

(Cowboy State Daily; Oct. 18) - The next big oil strike in Wyoming could come from a familiar formation. Wyoming’s Mowry Shale underlies much of the state and has long been known as the source rock for many of the best oil and gas producing regions, particularly the Powder River Basin in the northeast part of the state. A study by the U.S. Geological Survey in the early 2010s shows untapped reserves of 200 million barrels of oil in the Mowry. Figuring out how to tap that would go a long way to extending Wyoming oil and gas plays for producers and would be a huge economic boon.

“As we’ve learned more about the Mowry, that number is probably going up,” University of Wyoming School of Energy Resources Director Scott Quillinan said. It’s one of a dozen feasibility studies the School of Energy Resources will begin drilling into with $2.5 million approved last year by the Wyoming Legislature. The money is on top of $500,000 in preliminary work last year, funded by Wyoming Energy Authority. “This isn’t just geologic or petroleum engineering. It’s economics, law, policy — it’s all the different disciplines needed to understand where the uncertainty lies with this play.”

Mowry Shale would lend itself well to hydraulic fracturing. But there’s a big problem — bentonite, a highly absorbent type of clay. Bentonite clay just mushrooms in the presence of water, expanding quickly and gumming everything up. Think extra-stiff peanut butter and you’ll have an idea how difficult this stuff can be out in the drilling field. “When you frack it, those fractures go out and they hit that peanut butter and they just don’t really propagate through,” Quillinan said. “And if they do propagate through the clay layers, or the peanut butter, you can’t keep them open, so it closes back behind it. We know the oil is there, but techniques to produce it are still being determined.”

Natural gas lobby group calls for more investment in supply

(Bloomberg; Oct. 19) - The world’s natural gas supply will slump in the coming decades without fresh investment, leading to more severe and frequent price shocks than those of the past two years, a lobby group said. Despite enduring demand for gas as a bridge fuel in the energy transition, supply is expected to crash after a 58% cut in investment

2014-2020, the International Gas Union said. While spending has since edged up, differing forecasts for demand and ambitious net-zero policies hamper future planning.

“Restoring a sustainable balance in the global gas market is imperative and requires addressing the existing supply shortfall,” the IGU said in a report prepared with consultants Rystad Energy and Italian gas-grid operator Snam. Investments are needed “to cope with natural supply decline, global demand dynamics, and likely growth in several regions.”

Countries in Europe have scrambled to secure new gas supplies after Russia’s invasion of Ukraine upended markets and prompted nations to prioritize energy security over green targets. Still, “uncertainty over the LNG market’s future trajectory and the role of gas in the energy transition continues to weigh heavily on — and in some cases delay — investment decisions,” the IGU said. “The level of future gas supply has been largely left to chance.” The surge in large-scale investments in renewables makes it challenging to obtain adequate capital for gas projects, the report added.

Japanese think tank says $7 billion investment needed in gas

(Bloomberg; Oct. 20) - The world will need $7 trillion to ensure there is sufficient gas supply through 2050 as nations shift to cleaner energies, according to a think tank in Japan. The investment will be required to build new liquefied natural gas export plants, refurbish existing facilities and develop gas fields, according to the Institute of Energy Economics, Japan. The scenario assumes a 56% reduction in emissions by 2050, as emerging nations will not be able to achieve carbon neutrality by 2050, the report said.

If emissions remain at current levels, nearly $10 trillion will be needed to maintain adequate gas supply through mid-century, IEEJ said. Differing forecasts for gas consumption and ambitious net-zero proposals have hampered future planning, the International Gas Union said in a report earlier this week. However, the International Energy Agency sees gas demand peaking this decade and has said no new long-lead projects will be required.