Oil and Gas News Briefs
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Analysts see oil back at $100 by end of the year and start of 2023

(Bloomberg; Oct. 6) - The OPEC+ alliance on Oct. 5 in Vienna agreed to its biggest production cut since the start of the pandemic, a move that drew a swift rebuke from the U.S. and prompted Goldman Sachs to increase its price forecast for global benchmark Brent crude this quarter. “All the developments we have seen on the supply side at this point very much sets the stage for what we believe will be higher prices into the end of this year,” Damien Courvalin, Goldman’s head of energy research, told Bloomberg TV. The bank increased its fourth-quarter estimate for Brent by $10 to $110 a barrel.

“Brent will find its way to $100 a barrel quicker than we estimated before” after OPEC+’s move, Morgan Stanley analysts including Martijn Rats said in a note. The reduction in output risks tightening markets significantly, although much depends on how Russian oil output fares after the European Union’s embargo comes into force in December, they said. The bank raised its Brent forecast $5 to $100 for the first three months of 2023.

The market is expected to tighten further and oil will advance past $100 in the coming quarters, UBS Group analyst Giovanni Staunovo said in a note. The OPEC+ cut will combine with the likely end of releases of strategic oil reserves by Western nations and higher demand from gas-to-oil switching this winter to squeeze the market, they said.

Another view comes from Citigroup. While the reduction is large on paper, the effective production cut will be much smaller because OPEC+ is already failing to reach its quotas, Citigroup analysts Francesco Martoccia and Ed Morse said. The move could backfire on OPEC+ if it slows economic activity and oil demand further, they added.

Chevron will face challenges ramping up oil production in Venezuela

(The Wall Street Journal; Oct. 6) - As the Biden administration looks at relaxing sanctions to allow Chevron to pump oil in Venezuela again, the company is preparing to navigate myriad challenges in the country that could limit its ability to increase production quickly. Chevron will have to manage everything from fuel shortages to accident-prone oil infrastructure to security and corruption risks that could hamper its efforts to revitalize the country’s gutted oil industry.

Some analysts said Venezuela’s oil production could increase by about 400,000 barrels a day in a matter of months to a year. That isn’t nearly enough to offset up to 2 million barrels of daily production the Organization of the Petroleum Exporting Countries and its

Russia-led allies said they would cut on Oct. 5. Venezuela is likely to hit a ceiling eventually of about 1 million barrels a day in the medium term, well below production levels before the U.S. sanctions, said Fernando Ferreira, an analyst at Rapidan Energy.

“To get above that level would be challenging,” Ferreira said. “They’ll have to do a lot of refurbishing of the oil infrastructure, and that would require a lot of investment.” U.S. officials hope Chevron, Venezuela’s state-run PDVSA and other producers can quickly extract more oil from long-neglected fields to help refill global supplies, but that might be difficult. For example, since the U.S. imposed sanctions, the country has struggled to get enough diluents — liquids that help the flow of Venezuela’s heavy oil, once primarily sourced from the U.S. Without that, Chevron will struggle to increase production.

OPEC+ production cut will help Saudis meet budget needs

(CNN Business; Oct. 7) - Saudi Arabia’s energy minister once famously said that the kingdom “derives pleasure from keeping everyone on their toes.” That is likely how White House officials and Democratic politicians were left feeling when the kingdom led OPEC+ to announce a mammoth oil production cut this week, causing fears of even higher inflation just five weeks ahead of the midterm elections.

OPEC+, the oil cartel led by Saudi Arabia and Russia, on Oct. 5 agreed to slash production by 2 million barrels per day. Saudi officials insist the kingdom must put its own economic interests ahead of domestic U.S. political considerations. Energy Minister Prince Abdulaziz bin Salman al-Saud said the cartel needed to be proactive as central banks in the West fight inflation with higher interest rates, which could raise prospects of a global recession, which could in turn reduce demand for oil and drive its price down.

Analysts also said Saudi Arabia cannot afford to let oil prices go below a certain level for budget reasons. This year, the kingdom is expected to register its first budget surplus after eight years of deficits caused by low oil prices and the COVID-19 pandemic. For its budget to break even, global oil prices must be at around $79 a barrel, according to the International Monetary Fund. Last month, prices dropped to $85 per barrel from a high of $139 just seven months ago. That was a warning sign for Saudi Arabia and other oil exporters that depend on oil for a majority of their revenue.

Saudi backing for oil production cut marks a change in U.S. relations

(Bloomberg; Oct. 8) - The U.S. has accused Saudi Arabia of siding with Russia after it led OPEC+ in a shock decision to slash crude output, keeping oil prices high at a time of global concern about inflation. The world’s largest oil exporter insists the decision was about economics, not politics. The move marks a significant moment in the more than 70-year alliance between Saudi Arabia and the U.S. The cutback came less than three months after President Joe Biden traveled to Saudi Arabia seeking more oil production to help lower prices. Here are some of the possible reasons Saudi Arabia did it:

Underpinning relations between the Mideast monarchy and the Western superpower has been an understanding that the U.S. provides the kingdom with military protection in exchange for a reliable supply of oil. But even before Biden traveled to Jeddah in July, Saudi officials were saying the nature of the partnership between Washington and Riyadh had fundamentally changed. The alliance, they said, had become unbalanced.

U.S. attempts to revive a nuclear deal with Riyadh's regional foe Iran, Saudi Arabia's participation in Yemen's war, and what Gulf states perceived as a lack of protection from Washington against attacks from Iranian-backed proxies, have all contributed to tensions. Privately, officials in the Gulf have long complained about U.S. attempts to bully them into policies. U.S. officials have been late to recognize that intimidation isn't working, and that Washington needs to live with a new order based on mutual interests, according to a person familiar with deliberations inside OPEC+.

Britain sets first oil and gas licensing round since 2019

(Reuters; Oct. 7) - Britain on Oct. 7 launched its first oil and gas exploration licensing round since 2019 to try and boost domestic hydrocarbon output as Europe weans itself off Russian fuel. The British North Sea, home to the global Brent benchmark grade, is an aging basin where oil and gas production has fallen from a 1999 peak of about 4.4 million barrels of oil equivalent to about 1.5 million.

Britain is hoping to increase domestic supplies as it grapples with record high energy prices which have forced it to plough billions of pounds into schemes to help limit the impact on residences and businesses and to curb spiraling inflation. In the new round, the North Sea Transition Authority offers 898 blocks, encouraging applications especially for the Southern North Sea where hydrocarbons are close to existing infrastructure, allowing for swift development.

Depending on the number and quality of applications, about 100 licenses might be awarded, the agency said. It estimates the time from oil or gas discovery to production has fallen significantly in recent decades to about five years. While hosting the COP26 climate summit last year, Britain decided not to join an alliance of countries vowing to stop new oil and gas projects on their territory.

High prices push some emerging buyers in Asia to question LNG

(The Wall Street Journal; Oct. 5) - Some emerging Asian countries are slashing imports of liquefied natural gas as competition, especially from Europe, grows for the fuel. Asia is still expected to drive global demand for LNG, but Russia's halt of most pipeline gas to Europe has spurred the continent to increase LNG imports. Intense competition for cargoes has pushed up Asian prices 12 times higher than early 2021 to roughly $70 per million Btu this year, casting a cloud over broader adoption of LNG in the region.

Soaring prices have left countries such as Pakistan, India and Bangladesh struggling to procure enough LNG. They collectively curbed cargo purchases by 11% since the war in Ukraine began, according to data firm Vortexa. In Bangladesh, the government has been rationing power to save energy. Significant additional supplies of LNG aren't expected to come online until around 2026. The supply shortages are eroding trust in LNG's reliability and affordability in some emerging Asian countries.

Vietnam's prime minister has questioned the feasibility of becoming reliant on LNG given current prices. Bangladesh pulled the plug on one of its biggest proposed LNG power plants. And in the Philippines, the government said it would seek to shore up its energy security by, among other measures, exploring new sources of domestic gas.

The turn to LNG was facilitated by Asian spot prices dropping to around $5 per million Btu in 2019 because of a supply glut. Low prices allowed developing Asian economies to buy on the spot market instead of inking contracts with suppliers that would lock in budgets for years, said Alex Siow, an analyst at research firm ICIS. Some Asian buyers also might not have the creditworthiness to enter into long-term deals, analysts said. The lack of long-term, fixed-price contracts is painful now that spot prices are soaring.

LNG producers warn supply shortage will continue for several years

(Bloomberg; Oct. 5) - Liquefied natural gas will be in short supply in the coming years as production lags behind surging demand from Europe, according to the top producers of the fuel. Global LNG demand is unlikely to peak for 20 to 30 years, Qatar Energy Minister Saad Al-Kaabi said at the Energy Intelligence forum in London. Meanwhile, supply will remain "structurally short" until there's significant new production capacity, which will be 2026 at earliest, Meg O'Neill, CEO of Australia's Woodside, said.

Their comments add to a growing chorus warning that Europe's worst energy crisis in decades is unlikely to end soon. While the continent looks set to cope this winter, it's next winter when the supply shortage will really bite as Europe tries to replenish its stockpiles without Russian imports. "Next winter is going to be the problem," Al-Kaabi said. "It doesn't look like it's getting better."

Qatar, the world's biggest LNG producer, has already committed to supply some 15 million tonnes of LNG to Europe this year, or about 19% of its total capacity, and can ship 12 million to 15 million tonnes next year, according to the minister. Even so, negotiations with European governments, which are relatively inexperienced LNG dealmakers, is proving tricky. Producers such as Qatar typically want long-term agreements that guarantee revenues, but countries like Germany have shorter horizons as they aim to eventually reduce their reliance on fossil fuels as part of climate goals.

China's growing reliance on gas imports leaves it vulnerable

(Reuters columnist; Oct. 7) - China's reliance on imported gas is increasing despite government efforts to boost domestic output, creating an intensifying problem for both energy and national security. China's gas production increased by 6% in the first eight months of 2022 compared with the same period in 2021, according to the National Bureau of Statistics. Production has increased at a compound annual rate of 7% over the past 10 years, doubling between 2011 and 2021, as the government encouraged the development of major fields in Sichuan, Xinjiang and the Ordos Basin.

But consumption has grown even faster, at a compound rate of almost 11% over the same period, as more households have been connected to the distribution network. Replacing wood, coal and bottled gas for residential and commercial heating and cooking has played a key role in reducing urban air pollution and improving life. Gas accounted for more than 8% of China's primary energy consumption in 2020 up from 4% in 2010 and just 2% in 2000.

China had become the world's fourth-largest gas producer by 2021 (after the U.S., Russia and Iran) but it was also the third-largest consumer (after the U.S. and Russia). In contrast to the U.S. and Russia, both of which were net exporters, China has been forced to turn to imports to meet its needs. China's net import requirement climbed to 6 trillion cubic feet in 2021, up from just over 1 tcf in 2011. The country relied on imported gas to meet 45% of its domestic needs in 2021 up from 34% in 2016 and 21% in 2011. Growing reliance on imported gas has emerged as one of China's biggest strategic vulnerabilities as relations with the United States and its allies have deteriorated.

China increases reliance on Russian energy

(The New York Times; Oct. 7) - Just 12 months ago, China's economy was growing too fast for its energy sector to keep up. Blackouts darkened vast factory districts. Office high-rises were evacuated minutes before they lost electricity for elevators. Municipal water systems stopped pumping for lack of power. Today China faces the reverse. Growth has slowed so rapidly that tens of millions of young people are without jobs and businesses teeter at the brink of bankruptcy.

And as the economy skids, China is importing far less energy — almost two million barrels of oil a day less than expected in August, and one-sixth less natural gas than a year earlier. The sharp decline in demand by China, the world's second-largest economy, is helping slow price rises sparked by Russian's invasion of Ukraine.

But even as China consumes less energy, it has increased its purchases of fossil fuels directly from Russia. Chinese oil refineries and gas distributors have been snapping up fuel at deeply discounted prices while Moscow has less clout to negotiate. China's role as a friend of Russia and the world's largest importer of crude oil — and second-largest importer of natural gas after Europe — makes it harder for the West to isolate Russia. "The friendship between China and Russia means that in the case of oil and gas, there is a geopolitical challenge for the West," said Philip Andrews-Speed, a China energy specialist at the National University of Singapore.

Europe headed to new record for LNG imports

(Reuters; Oct. 6) - Europe's liquefied natural gas imports are on track to hit a record in 2022, with inbound volumes through the end of September already 16.5% above 2021's full-year total and 8% over 2019's pre-COVID tally, according to Refinitiv. The continent's scramble to cut use of Russian natural gas following Russia's invasion of Ukraine all but guaranteed more European LNG demand, and made it just a matter of time before 2022's purchase volumes entered the record books.

What is less clear is just how much this splurge on the fuel will cost — depending on long-term contract rates and exceedingly high spot prices, and how that may affect the region's spending power and ambitions to transition its energy system away from fossil fuels. With budgets already shredded by the enormous costs associated with fighting COVID-19, European governments face paying out billions more in subsidies and stimulus packages to help businesses and people adapt to severing ties with Russia.

Governments have been under pressure to rein in power prices, which have surged as utilities lurched from primarily using cheap pipelined natural gas — mainly from Russia — to a more costly and inefficient mishmash of imported LNG, coal and other power-generating fuels. And with winter still ahead, ensuring adequate power for heating and industry will become an even greater challenge as competition for power fuels picks up.

Total says it will take Russian LNG as long as no sanctions block it

(Reuters; Oct. 5) - French energy giant TotalEnergies will continue to ship liquefied natural gas from Russia as long as there are no European sanctions on the fuel, CEO Patrick Pouyanne said Oct. 5, reiterating a previously stated position. "We will continue to ship LNG from Russia as long as there are no sanctions, or push, from Europe on the gas, because we contribute to the security of supply for Europe. If there are sanctions, we will stop immediately." Pouyanne told the Energy Intelligence Forum in London.

Following Russia's invasion of Ukraine, Europe in particular has become a prime market for the seaborne fuel, where massive amounts are being bought to help replace

Russian pipeline gas that used to supply almost 40% of the continent's imports. TotalEnergies has a contract with Russia's Yamal LNG for 4 million tonnes per year that runs until 2032. The company also is a partner in the venture. Pouyanne stressed that the energy giant is not investing in new projects in Russia.

France imported about 175 billion cubic feet of Russian LNG in the first eight months of 2022, surpassing Japan to become the largest importer of Russian LNG in February and March, a report by Columbia University's Center for Global Energy Policy said.

Qatar plans to pass Shell as world’s largest LNG trader

(Reuters; Oct. 5) - QatarEnergy CEO and state Minister for Energy Saad al-Kaabi said on Oct. 5 that his company will become the world's largest trader of liquefied natural gas over the next 5 to 10 years, a position currently held by Shell. "We are trading about 5 to 10 million (tonnes of LNG per year) now. We will be, in the next 5 to 10 years, the largest LNG trader in the world by far,” Kaabi told the Energy Intelligence Forum in London. That would include Qatar’s own production and LNG it takes from other projects for its sales portfolio. "We started about two years ago (with trading). ... I would say that the profitability of that venture is probably 20 times what I thought it could be."

The spike in spot LNG cargo prices to $175 million to $200 million, from around $15 million to $20 million two years ago, has consolidated trading in the hands of a few major traders. Shell and TotalEnergies are estimated to have a combined portfolio of 110 million tonnes of the current estimated worldwide market of 400 million tonnes per year. QatarEnergy's portfolio is estimated at 70 million tonnes, and BP's is estimated at around 30 million, leaving those four players accounting for over half of the market. Qatar’s North Field expansion project includes six production trains that will ramp up liquefaction capacity from 77 million tonnes per years to 126 million by 2027.

Qatar selecting partners for second phase of LNG expansion

(Reuters; Oct. 5) - Qatar will bring on board Shell and ExxonMobil as partners in the second phase of the Gulf country's giant liquefied natural gas expansion, three sources familiar with the matter told Reuters. The North Field South expansion is part of Qatar's ambitious drive to recapture and consolidate its position as the world's top LNG exporter, with demand for the fuel growing as Europe scrambles to substitute for the Russian pipeline gas that made up almost 40% of the continent's imports.

The two-phase North Field expansion plan includes six LNG trains that will ramp up its liquefaction capacity from 77 million tonnes per year to 126 million by 2027. The first phase, North Field East, is expected to add 33 million tonnes, while the North Field South phase will add 16 million. State-owned QatarEnergy earlier this year signed deals for stakes in the first phase with TotalEnergies, Shell, Exxon, ConocoPhillips and Italy's Eni, and last month named TotalEnergies as the first partner in the second phase. Shell and Exxon are also expected to be named as second-phase partners, sources said.

Japan will provide loan to help with LNG purchases

(Bloomberg; Oct. 6) - Japan will provide a public-private loan worth as much as 130 billion yen ($900 million) to the nation's top power producer to buy liquefied natural gas, the latest effort by the government to avoid a crippling fuel shortage this winter. The Japan Bank for International Cooperation and private sector banks formed a lending agreement to help JERA Co. procure LNG, according to a statement on Oct. 6.

"As Japan's public financial institution, JBIC will support efforts by companies to secure a stable supply of important resources and contribute to Japan's energy security," the organization said in a statement. Japan, which imports most of its energy needs, narrowly avoided blackouts in Tokyo earlier this year and is preparing for a renewed squeeze on supply in the coming months. The government is expected to call on residents and businesses to again conserve power this winter.

South Korea utility will burn more coal, less gas to save money

(The Korea Herald; Oct. 5) - South Korea's state power utility said Oct. 5 it plans to increase coal-fired electricity generation temporarily this year in an effort to cut costs and boost its financial health. Korea Electric Power said it will produce 12.8 terawatt hours with coal this year instead of burning liquefied natural gas. The amount accounts for nearly 8 percent of the country's LNG-fired electricity generation.

The state electricity firm estimated the move would help save roughly 1.6 trillion won ($1.13 billion) in fuel costs this year. The cost for producing 1 kilowatt hour using LNG amounts to some 170 won, compared with about 96 won for coal, it said. KEPCO said it has submitted to the government its financial improvement plan, which calls for more coal-fired power generation. KEPCO's move comes as it has been hemorrhaging cash in recent years due to surging fuel costs amid a freeze in electricity rates it can charge.

Japan ship owner signs charter contract with Russian LNG project

(Reuters; Oct. 5) - Japan's Mitsui OSK Lines said on Oct. 5 it had signed a long-term charter contract with the new Russian operator of the Sakahlin-2 liquefied natural gas project for the LNG carrier Grand Mereya to continue its shipping service. Russian

President Vladimir Putin signed a decree in June taking charge of the LNG project in the Far East, creating a new legal entity to deal with buyers and shareholders.

MOL's move comes after Japanese utilities, such as JERA and Tokyo Gas, signed deals with the new Russian operator to maintain long-term deliveries of LNG, and Japanese trading houses Mitsui and Mitsubishi were approved by Russia to take a stake in the new operator. MOL signed the contract with new operator Sakhalin Energy LLC through a subsidiary which is 60% owned by MOL, it said in a statement.

The Grand Mereya has been transporting LNG from the project under a long-term charter contract with Sakhalin Energy Investment Co., the former operator, and will continue the same services with the new operator, the shipping line said. MOL said it complied with sanctions imposed by the international community.

Russia sets up new operator to take over Exxon-led oil project

(Nikkei Asia; Oct. 8) - Russian President Vladimir Putin has signed a decree, published on Oct. 7, to set up a new operator for the Sakhalin-1 oil and gas project, following similar steps to seize other oil and gas projects with foreign participation. ExxonMobil, with a 30% stake, was the operator of Sakhalin-1, a development in Russia's Far East. The largest U.S. producer has been trying to exit Russia operations since March, days after Moscow's invasion of Ukraine. Exxon declined to comment on the new decree.

In April, Exxon took a $4.6 billion impairment charge for exiting its Russian activities, leaving the Sakhalin-1 operation open for a takeover from a partner. It also proceeded to reduce oil and gas production volumes and remove personnel from the country. In August, Putin issued Presidential Decree 520, which Exxon said impedes the company to conclude the exit safely. The producer then escalated the dispute and issued a note of difference that could ultimately end up in an arbitration process.

Exxon's head of upstream operations said on Oct. 4 it was still working with its partners on its exit. A transfer of operation to a partner would be a positive outcome for Exxon. Russia’s Rosneft is a partner, along with India’s ONGC Videsh and Japan's SODECO. The decree said the Russian government was setting up a new Russian limited liability company, which would own the investors' rights, including the operator's rights of Exxon Neftegaz. Oil production at Sakhalin-1 fell to just 10,000 barrels per day from 220,000 after sanctions were imposed on Moscow by Western powers over its war on Ukraine.

Landslide causes gas line leak in Malaysia, cutting into LNG exports

(Bloomberg; Oct. 5) - Malaysia will curb liquefied natural gas shipments to Japan this winter after a pipeline leak disrupted exports, another hit to already strained global supplies of the power-station fuel. Petronas has made a request to reduce contracted deliveries to several Japanese customers through the year-end, according to traders. Petronas said on Oct. 5 that it declared force majeure on supply to its LNG export facility due to a leak on Sabah-Sarawak Gas Pipeline on Sept. 21.

A landslide last month likely caused damage to the line, although it may be repaired before the end of the year, according to traders. Roughly 10 LNG shipments will be lost over the next three months, they estimated. Malaysia delivered 51 cargoes to Japan from October through December last year, according to ship-tracking data. Japan is the biggest buyer of Malaysian LNG.

The reduction in scheduled shipments threatens to intensify a scramble in Asia to find cargoes, boosting competition with Europe for scarce supply. Japan, which imports most of its energy needs, is grappling with a worsening shortfall and narrowly avoided blackouts earlier this year. The government is expected to call on residents and businesses to conserve power this winter.

South Korean gas supplier drops CO2-free claim

(Bloomberg; Oct. 5) - South Korea’s largest private gas supplier SK E&S removed from its marketing materials claims that it would produce carbon-free liquefied natural gas after the government expanded a crackdown on misleading labels of fossil fuel projects. SK E&S edited previous press releases and promotional videos to remove its claim that LNG from its planned Barossa project off the northern coast of Australia would be “CO2 free,” toning it down to “low-carbon” gas, a company representative said Oct. 4.

The changes came after the environment ministry urged the company in March to accurately advertise its product. Seoul is getting tougher on green marketing as activist groups and lawmakers ramp up calls to counter the rise of dubious claims by firms over their climate actions. The ministry’s guidance came after a climate group last December alleged that SK E&S falsely advertised the green credentials of the Barossa project.

South Korea in 2020 unveiled a target to be carbon neutral by mid-century, spurring public and private companies to accelerate de-carbonization plans. The claims by SK E&S highlight the difficulties governments worldwide are facing as companies seek to burnish their green credentials to appeal to investors and satisfy regulators. “Even after the administrative guidance, SK E&S only just removed those claims after keeping the ads unchanged for six months,” Jin Sung-joon, a lawmaker in the opposition Democratic Party, said in parliament on Oct. 4, criticizing the ministry for not following up sooner.

Australian state agency gets tough on Gorgon LNG emissions

(Sydney Morning Herald; Oct. 6) - Western Australia's environment watchdog has cracked down on excess carbon pollution from underperforming carbon storage at Chevron's Gorgon LNG and added a requirement for total emissions to taper to net-zero by 2050. This week, the Environmental Protection Authority recommended that Chevron must spare no expense to meet its pledge to store underground at least 80% of the carbon dioxide from its gas fields and in 2025 start reducing Gorgon's total emissions.

The move comes as the federal government reviews its safeguard mechanism, a scheme that sets pollution caps on the country's 215 largest industrial and resources emitters, of which Gorgon has been the largest over the past five years. Chevron was allowed to build its $US54 billion Gorgon gas export project on Barrow Island, a nature reserve off Western Australia's northwest coast, only because it was suitable for burying the high levels of carbon dioxide in its offshore gas fields.

But the CO2 injection system started late, has been shut down several times due to technical problems and now operates at well below design capacity. In February, Environment Minister Reece Whitby asked the EPA to review the greenhouse gas conditions imposed on Australia's most expensive resource project. Chevron proposed that any new requirements should not be "disproportionate to their effectiveness" and only require "best endeavors." Instead, the EPA recommended Chevron "implement all measures" to inject 80% of the carbon dioxide. The absence of a "practicable means" limitation means Chevron cannot use excessive cost as a reason for inaction.

Japan and Australia working together on liquefied hydrogen transport

(Australian Financial Review; Oct. 7) - From a distance, it is hard to tell you are looking at an engineering marvel. To the untrained eye, the Suiso Frontier could be any other 380-foot long seagoing cargo vessel. However, this is no ordinary ship. Custom-built with double-shell vacuum insulation, the vessel is a giant thermos flask and the only ship in the world that has successfully transported liquid hydrogen across oceans.

Utilizing cryogenic technology more at home in spacecraft, the Suiso Frontier (Suiso means hydrogen in Japanese) completed its world-first mission in January this year. Its cargo was hydrogen extracted from brown coal fields in Latrobe Valley in Australia, which was liquified by cooling it to minus 423 Fahrenheit — even colder than liquefied natural gas at minus 260. A second voyage between Australia and Japan was in June.

These voyages were significant because no one has transported liquid hydrogen across oceans before. Safely maintaining temperatures for the 16-day, 5,600-mile voyage was hugely complex. The backers of this expensive and ambitious pilot project say they are creating the world's first zero-emission energy supply chain that will revolutionize the use of hydrogen in resource-starved countries like Japan. "This is similar to LNG, which was a game changer in the energy world half a century ago," says Motohiko Nishimura, the executive at Japan's Kawasaki Heavy Industries, overseeing the project.

[Opponents of LNG import terminal in Italy could get 50% off gas]

(Reuters; Oct. 7) - Companies and Italian households in a Tuscan town chosen to host a new regasification terminal should be offered a 50% discount on their gas price to help overcome local opposition, the commissioner for the project said on Oct. 7. Under the government's energy plan, the new floating storage and regasification unit (FSRU) should be operational by the end of next March to increase the country's imports of liquefied natural gas and help make up for a shortfall of Russian imports.

The infrastructure, bought in June by Italy's gas grid operator Snam, is considered essential by Rome but has encountered fierce opposition from the mayor of Piombino, the city on the west coast of Italy where it would be moored. "The discount (I proposed) is 50% for citizens and businesses for as long as the ship will be in the port of Piombino," said commissioner Eugenio Giani, at the end of the second meeting to discuss plans for the terminal. A final decision over the discount and the number of people who would benefit will be up to the new government, Giani said.

After attending the same meeting, the far-right mayor of Piombino, Francesco Ferrari, repeated that the local administration is against the terminal. Ferrari added that Italy’s new government, which will likely be headed by far-right leader Giorgia Meloni, should have the power to decide over the terminal. Snam has agreed that the vessel will be moored at Piombino for three years and then will be moved offshore.