Qatargas supplies commissioning LNG Cargo to Indias Dhamra Terminal



Qatargas recently supplied a commissioning liquefied natural gas (LNG) cargo to Indias newest LNG receiving terminal 'Dhamra' on the vessel Milaha Ras Laffan in April 2023.

Qatargas sold the LNG on a Delivered Ex-Ship (DES) basis to the French multi- energy Company TotalEnergies, who delivered it to its 50-50 joint venture with Adani Group "Adani Total Private Limited".

Commenting on this achievement, Qatargas CEO Sheikh Khalid bin Khalifa Al-Thani said: "Delivery of this commissioning LNG cargo to India's Dhamra terminal is an important milestone for our company and for Qatar's LNG industry. We are committed to meeting the growing demand for cleaner energy in India and around the world. Our reliable and safe supply of LNG will help India meet its energy needs and contribute to its economic growth. Qatargas remains committed to operating sustainably and to delivering value to our customers, partners, and stakeholders."

"I would like to thank our valued partner, TotalEnergies, for their contribution to this successful delivery. Our partnership has been instrumental in helping us achieve this feat, and we look forward to continuing to work together to deliver cleaner and reliable energy to the world," he added Thomas Maurisse, Senior Vice President LNG at TotalEnergies, said: "We are pleased to have completed the first delivery of LNG to the new Dhamra LNG terminal with a cargo from Qatargas, our long-standing strategic partner. This new LNG terminal will contribute to India's security of energy supply and is in line with TotalEnergies' ambition to support Indias energy transition and its goal of increasing the share of natural gas to 15% of its energy mix by 2030."

Internal Dhamra is home to Indias seventh operational LNG terminal, the second of its kind on the east coast of the country. It is Adani Total Private Limiteds first LNG import terminal with a capacity of five million tonnes per annum (MTPA) and it is expected to boost gas utilization in the east coast of India. Once fully commissioned, Adani and TotalEnergies will provide regasification services to their downstream Indian customers.

The terminal features two tanks of 170,000 cubic meters (CBM) capacity each. The facilitys jetty is capable of handling LNG carriers from 70,000 to 265,000 CBM capacity. It also offers breakbulk services, enabling reloading of LNG to smaller vessels for further distribution and an LNG truck loading facility.

Qatar's North Field drives

global LNG assets deal value in 2022: GECF



Deal value of liquefied natural gas assets in 2022 climbed 15% y-o-y to reach \$23bn, driven by Qatar's LNG development, says Doha-based Gas Exporting Countries Forum.

The deal value of liquefied natural gas assets in 2022 climbed 15% year-on-year (y-o-y) to reach \$23bn, driven by Qatar's LNG development, Doha-based Gas Exporting Countries Forum has said in a report.

Qatar's North Field expansion project accounted for 43% of the growth in LNG deal value, GECF said in its 'Annual Gas Market Report 2023'.

According to GECF, merger and acquisition (M&A) activity in the upstream sector declined to \$154bn in 2022, 21% lower y-o-y, and below pre-pandemic levels.

This decline was essentially driven by the continued impact of Covid-related lockdowns particularly in China, high oil and gas price volatility and escalating geopolitical tensions in

Europe. Most regions experienced a sharp decline except for the Middle East and Africa.

In the Middle East, M&A activity increased by 46% y-o-y, while in Africa the deal value more than tripled compared to the previous year to reach a record \$24bn.

North America accounted for almost 50% of asset and corporate acquisitions in 2022 amounting to \$72bn, with private companies responsible for a large share of divestment as they opted to maximise their assets amidst the high price environment.

Europe and Africa accounted for 17% and 16% of M&A activity respectively, where high commodity prices increased the value of traded producing resources and spurred buying and selling activity.

In addition, a significant increase in demand for gas and LNG assets was observed in the midst of heightened concerns about energy security.

In 2023, upstream M&A activity is likely to be remain around 2022 levels or increase.

Furthermore, global energy security concerns are likely to drive investment for gas and LNG assets, and more so, increase acquisitions by European majors in Africa and the

Middle East to secure production assets.

Additionally, net-zero emission targets may also support demand for gas and LNG assets as the cleanest burning fossil fuel.

According to GECF, oil and gas investment has increased by 7% y-o-y to reach \$718bn, partly due to higher petroleum services and EPC costs.

In 2023, oil and gas investment is expected to rise further, on the back of greater investment in the upstream industry and LNG import terminals.

However, several looming uncertainties, including a slowdown in global economic growth, tight financial conditions, inflation, and high energy price volatility may deter investment, GECF noted.

Qatarenergy Selects Sinopec As NFE Expansion Partner



(MENAFN— Gulf Times) QatarEnergy has announced the signing of a"definitive" partnership agreement with China Petrochemical Corporation (Sinopec) for the North Field East (NFE) expansion project, the largest project in the history of the LNG industry.

The agreement was signed by HE the Minister of State for Energy Affairs, Saad Sherida al-Kaabi, also the President and CEO of QatarEnergy, and Dr. MA Yong-sheng, chairman, Sinopec at a ceremony held at QatarEnergy's headquarters and attended by senior executives from both companies Wednesday.

The agreement marks the entry of Sinopec as a shareholder in one of the NFE joint venture companies that own the NFE project, one of the most critical projects in the global LNG industry.

Pursuant to the terms of the agreement, QatarEnergy will transfer to Sinopec a 5% interest in the equivalent of one NFE train with a capacity of 8 million tons per annum (MTPA). This agreement will not affect the participating interests of any of the other shareholders.

Speaking at the signing ceremony, al-Kaabi said, "The People's Republic of China is a major driver of the global energy

markets as well as being one of the most important gas markets in the world and is a key market for Qatari energy products.

"Today's event underscores QatarEnergy's commitment to deepening its relationships with key LNG consumers, while prioritising long-term strategic partnerships and alignment with world class partners from China, represented by Sinopec here today."

Noting the November 2022 agreement to supply Sinopec with 4 MTPA of LNG from the NFE project, al-Kaabi said: "That agreement was not only the first NFE LNG supply agreement to be announced, but also the longest LNG supply agreement in the history of the industry. Today, Sinopec will join Qatar's LNG family becoming the first Asian shareholder in the NFE project."

"We are pleased to enter into this milestone agreement with Sinopec, marking yet another landmark in the excellent bilateral relations between the People's Republic of China and the State of Qatar. I would like to thank the working teams in QatarEnergy and Sinopec for their dedicated work to reach this important agreement.

"We are always indebted to the wise leadership of His Highness the Amir Sheikh Tamim bin Hamad al-Thani, and to his continued guidance and support of the energy sector," al-Kaabi concluded.

On his part, Dr Yongsheng congratulated both parties on signing the NFE project partnership agreement and said, "The meeting between Chinese President Xi Jinping and Qatar's Amir His Highness Sheikh Tamim bin Hamad al-Thani during the first China-Arab Summit and China-GCC Summit in 2022, comprehensively outlined the development blueprint of the strategic partnership between the two countries and guided the China-Qatar energy cooperation.

"The signing of this agreement today is a concrete move to carry forward what has been agreed between the two heads of state and deepen the partnership between Sinopec and QatarEnergy. It is another milestone after the signing of the long-term LNG SPA from the NFE project in November 2022, marking the integrated cooperation achieved by both companies on the NFE project."

"China-Qatar energy cooperation features a natural complementarity. QatarEnergy is a leading LNG producer in the world and one of the most important partners of Sinopec. The cooperation with QatarEnergy will help Sinopec further optimise China's energy consumption structure and enhance the security, stability, and reliability of clean energy supply.

"I hope that the two companies will continue to explore new LNG cooperation opportunities based on the solid foundation we have laid together and will further expand cooperation areas to achieve mutual benefit and win-win results," he added.

This agreement is the first of its kind after last year's series of partnership announcements in the \$28.75bn NFE project, which will raise Qatar's LNG export capacity from the current 77mn tonnes per year to 110mn tons per year.

Qatar LNG fleet expansion underpins domestic expansion of its North Field project, investments in US Gulf Coast: GECF



Qatar's LNG fleet expansion will underpin its domestic expansion of the North Field project, as well as investments in the Golden Pass LNG terminal in the US Gulf Coast region, Gas Exporting Countries Forum (GECF) has said in a report.

To accomplish this, it has been reported that Qatar has secured booking slots at all of the major South Korean shipbuilding yards over the next five years, for orders of around 100 new carriers, GECF said in the fourth edition of its Annual Gas Market Report.

At the end of 2022, the global LNG carrier fleet stood at 677 vessels.

Although the total has gradually increased, only 28 new vessels were commissioned in 2022. This represented growth of 4%, which was the lowest increase since 2013, it said.

As observed in the recent historical trend since 2010, the years in which there is a sharp increase in the fleet growth rate are typically followed by a drop in the subsequent year.

Accordingly, this was repeated in 2022, with just over 4,600,000 cubic metres of LNG carrier capacity entering into service, merely half of the capacity commissioned in 2021.

Nevertheless, most of these new builds were of the capacity

range between 170,000 and 200,000 cubic metres; in recent years, this new conventional class of carriers has been phasing out the previous standard range of 125,000 to 170,000 cubic metres.

Additionally, around 240,000 cubic metres of "mid-sized" LNG carriers were brought online in 2022.

This, GECF noted, is an "important" growing niche market for LNG transportation, demonstrated by a further 320,000 cubic metres of capacity already confirmed on the global LNG carrier orderbook.

Of the vessels for which the technical specifications are known, around 170 of the new conventional-sized carriers are on order for delivery between 2023 and 2026.

In respect of LNG shipments, GECF noted that in 2022, the number of LNG cargoes traded globally reached 6,210, increasing 2% over the total number of shipments in 2021.

This continued the trend of more cargoes being traded annually in each of the past five years, except during the initial breakout of the pandemic in 2020.

Compared with 2021, the number of LNG shipments per month was greater for most of 2022; over the year, the monthly average number of cargoes was 518 compared with 506 in 2021.

For the fourth consecutive year, Australia delivered the highest number of LNG cargoes.

In 2022, just as in 2021, the US, Qatar, Russia, and Malaysia completed the top five exporters by number of shipments.

The US also had the highest increase in number of cargoes, recording an additional 81 more shipments in 2022 than in 2021.

The second highest increase was attributed to Norway, which loaded 49 cargoes from the restarted Hammerfest LNG terminal since June 2022.

The increasing trend in global LNG shipments is expected to continue in 2023 as per the overall growth in LNG demand. Furthermore, LNG shipping would be boosted by the restart of the Freeport LNG plant in the US, and increased cargo imports in Europe and Asia Pacific.

However, the LNG shipping market may experience tightness due to new IMO regulations in 2023 and further ahead, GECF noted.

Oil and gas investment rise 7% y-o-y to \$718bn in 2022; may rise further in 2023: GECF



Oil and gas investment increased by 7% y-o-y to reach \$718bn in 2022 and is expected to rise further in 2023, but looming uncertainties may deter investment, the Gas Exporting Countries Forum said in its fourth edition of its Annual Gas Market Report Wednesday.

In 2023, oil and gas investment is expected to rise further, on the back of greater investment in the upstream industry and

LNG import terminals.

However, several looming uncertainties, including a slowdown in global economic growth, tight financial conditions, inflation, and high energy price volatility, may deter investment, GECF noted.

Spot gas and LNG prices in Europe and Asia reached record highs in 2022, with significant volatility throughout the year. This, the report noted, was mainly due to a tight LNG market as Europe's LNG demand surged to replace lower pipeline gas imports.

In 2022, the Title Transfer Facility (TTF) spot gas prices in Europe averaged \$38/MMBtu, 136% higher y-o-y, while Northeast Asia (NEA) LNG spot prices averaged \$33/MMBtu, a 79% increase y-o-y.

This shift in prices made Europe the premier LNG market for suppliers, as TTF spot prices maintained a high premium over Asian LNG spot prices. In 2023, spot prices are expected to remain volatile.

Factors such as a relatively mild winter, high gas storage levels in Europe, and weakened gas demand growth in the midst of a slowdown in global economic growth may exert downward pressure on spot prices.

However, there may be some upward pressure on spot prices this year due to the anticipated recovery in China's gas demand, higher imports in price-sensitive countries in Asia Pacific, and a rebound in gas demand in the industrial sector.

Additionally, any further supply disruptions or extreme weather conditions during the year may also boost prices, GECF said.

Energy security concerns took precedence over climate change mitigation goals in 2022, with policymakers focusing on meeting the energy needs of their people, the report said.

Following a record rebound in 2021, global gas consumption declined in 2022, but is expected to resume growth in 2023 and reach an all-time high level, with the power generation sector remaining the largest consumer of gas.

US, China, and some emerging countries in Asia Pacific are

forecasted to drive the growth of global gas consumption in 2023, it said.

GECF secretary-general Mohamed Hamel said, "The Annual Gas Market Report is comprehensive and I hope it will become an essential tool for anyone interested in natural gas."

The publication comes at a time when natural gas markets are undergoing fundamental transformations in terms of physical flows, investment, trade, and market functioning.

"The developments in the gas industry are an indication of the bright prospects for the expansion of the global gas industry, as natural gas is set to play a pivotal role in socio-economic development and towards just and inclusive energy transitions," Hamel added.

QATARENERGY TO PARTICIPATE IN IRAQ'S GAS GROWTH INTEGRATED PROJECT (GGIP) —



DOHA, Qatar • 5 April 2023 — QatarEnergy has agreed to hold a 25% share in the Gas Growth Integrated Project (GGIP) — a multi-billion-dollar project aimed at monetizing and developing the natural gas resources of the Republic of Iraq. The GGIP consortium will be composed of Basra Oil Company (30%), TotalEnergies (Operator — 45%), and QatarEnergy (25%), subject to the finalization of necessary contractual arrangements and obtaining customary regulatory approvals. His Excellency Mr. Saad Sherida Al-Kaabi, the Minister of State for Energy Affairs, the President & CEO of QatarEnergy, said: "We thank TotalEnergies for inviting us to partner with them and we thank the esteemed Iraqi Government for welcoming us to be part of this partnership. We are pleased to be part of this significant development, which is important for Iraq's

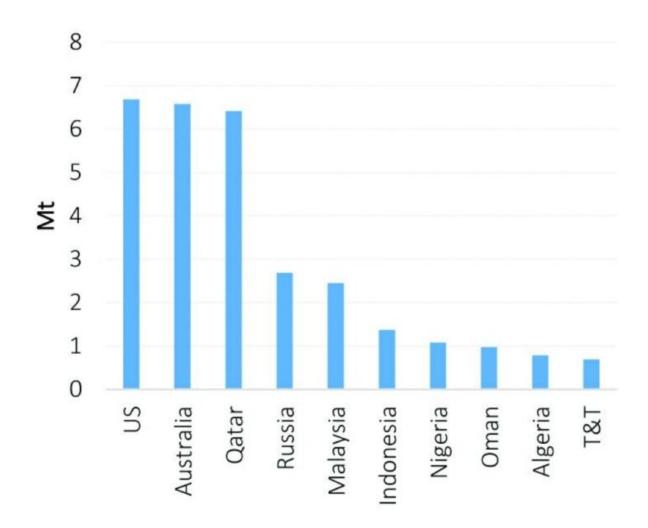
energy sector, and we look forward to working with TotalEnergies and Basra Oil Company to progress it to fruition. I would like to express our appreciation to the Government of Iraq for their valuable support to reach this point, and for the trust they have placed in QatarEnergy as a reliable partner."

Signed in September 2021, the GGIP is a key strategic project that involves investing approximately \$10 billion to design and construct facilities for recovering significant volumes of otherwise flared gas throughout the Basra region and supplying such recovered gas to power stations, as well as a seawater treatment and distribution system to supply water for injection into oil reservoirs for pressure maintenance purposes.

With extensive experience in large-scale energy projects, including seawater treatment projects, and a strong international partnership with TotalEnergies, QatarEnergy welcomes this opportunity to participate in such a key project for Iraq and its people.□

Qatar drives GECF LNG exports to 16.45mn tonnes in February

Top 10 LNG exporters in Feb 2023



GECF LNG exports have jumped 12% (1.74mn tonnes) year-on-year (y-o-y) to 16.45mn tonnes in February, driven by Qatar, which is the forum's top liquefied natural gas exporter, Dohaheadquartered Gas Exporting Countries Forum said in its latest monthly report.

The surge in GECF's LNG exports was driven by Qatar (+0.84mn tonnes), Norway (+0.36mn tonnes), Malaysia (+0.33mn tonnes), Egypt (+0.15mn tonnes), Mozambique (+0.15mn tonnes), Angola (+0.14mn tonnes), Algeria (+0.10mn tonnes), Trinidad and Tobago (+0.08mn tonnes), Russia (+0.05mn tonnes) and Peru (+0.02mn tonnes).

In contrast, LNG exports declined in the United Arab Emirates (-0.26mn tonnes) and Nigeria (-0.21mn tonnes), GECF noted.

Looking at Qatar and Angola, lower maintenance activity at LNG facilities in both countries compared to a year earlier

boosted the countries' exports.

In Norway, the continued ramp-up in production from the Hammerfest LNG facility, following its restart in June 2022, drove the increase in exports.

Furthermore, higher feedgas availability for LNG exports in Malaysia, Egypt, Algeria and Trinidad and Tobago supported the increase in exports from these countries.

With regard to Mozambique, the ramp-up in production from the Coral South FLNG facility supported the rise in LNG exports.

On the other hand, the decline in LNG exports from the UAE was attributed to maintenance activity at the Das Island LNG facility.

In Nigeria, lower feedgas availability for LNG exports contributed to the lower LNG exports.

NLNG declared force majeure on feedgas supply to the liquefaction facility in January 2023, which remained in effect in February, GECF noted.

In February 2023, global LNG exports rose sharply y-o-y by 11% (3.48mn tonnes) to 34.00mn tonnes.

Stronger LNG exports from GECF member countries, non-GECF countries and higher LNG reloads drove the growth in global LNG exports.

Non-GECF countries were the largest LNG exporters during the month with a share of 49.5% in global LNG exports, followed by GECF (48.4%) and LNG reloads (2.1%).

In comparison to February 2022, the shares of GECF member countries and LNG reloads increased from 48.2% and 0.8% respectively while the share of non-GECF countries declined from 51.0%, the monthly report showed.

At a country level, the US was the largest exporter in February 2023, followed by Australia and Qatar.

For January and February of this year, combined, global LNG exports rose by 6.7% (4.33mn tonnes) y-o-y to 69.44mn tonnes, GECF noted.

LNG fleet expansion helps Nakilat eye robust global growth



Nakilat, whose liquefied natural gas (LNG) carriers account for about 10% of the global LNG carrying capacity, has said its greater fleet capacity and increased operational efficiency provide it with a "competitive" edge as its expands its international shipping portfolio through the recent strategic expansion of Nakilat's fleet with an additional four LNG carriers, and the improved performance of its joint ventures and support services operating in the shipyard, Nakilat has achieved sustainable and long-term growth over the past year, demonstrating its commitment to innovative sustainability and operational excellence, its chairman Abdulaziz al-Muftah told shareholders yesterday at the annual general assembly meeting, which approved the 2022 results and 13% dividend.

"This commitment has provided Nakilat with a greater fleet capacity and increased operational efficiency, providing us with a competitive edge in the LNG shipping sector, as the company expands its international shipping portfolio," he said.

With a fleet strength of 74 vessels — one of the largest LNG shipping fleets in the world, Nakilat's portfolio comprises 69 LNG carriers, four liquefied petroleum gas carriers and one floating storage regasification unit — the company is backbone of the transportation link in Qatar's LNG supply chain, according to him.

"Our LNG fleet has a combined carrying capacity of over 9mn cubic metres, which is about 10% of the global LNG fleet carrying capacity," he said, adding the majority of Nakilat's vessels are fixed with long-term charters to reputable counterparties, creating a "steady and healthy" cash flow for the company.

Nakilat followed through its expansion plans with the delivery of "Global Sealine", a technologically advanced LNG carrier new-build during 2022, demonstrating commitment to innovation, sustainability, and operational excellence.

"This allowed Nakilat to provide greater fleet capacity and flexibility to its customers and gave the company a significant competitive advantage in the energy transportation sector," al-Muftah said, adding this also contributed towards the company's efforts at reducing its carbon footprint and operating sustainably apace growing its international shipping portfolio.

He said the company's resilience and the convergent efforts have enabled its sustained growth momentum and business continuity, creating immense value for both its customers and shareholders.

With a solid sense of direction from the company's long-term expansion strategy and opportunities that re-emphasised its importance in achieving its targets, Nakilat has been smoothly sailing towards making significant contributions and notable accomplishments during 2022, al-Muftah said in the latest

board report.

Supported by its Erhama Bin Jaber Al Jalahma Shipyard, Nakilat's joint venture companies continue adding strategic value to its operations through dedicated services, including ship repair, offshore fabrication, as well as a range of maritime services, all of which contribute towards establishing Qatar as a shipping and maritime hub, in support of the Qatar National Vision 2030, according to him.

Qatar is among 'Top 10 LNG exporters' in January; global LNG exports hit 35.5mn tonnes: GECF



Qatar is among the list of 'Top 10 LNG exporters' in January, data provided by the Gas Exporting Countries Forum (GECF) show. The other LNG exporting countries in the list are US, Australia, Russia, Malaysia, Indonesia, Algeria, Oman, Nigeria and Trinidad and Tobago.

Qatar is among the list of 'Top 10 LNG exporters' in January, data provided by the Gas Exporting Countries Forum (GECF) show.

The other LNG exporting countries in the list are US, Australia, Russia, Malaysia, Indonesia, Algeria, Oman, Nigeria and

Trinidad and Tobago.

In its inaugural edition of the Monthly Gas Market Report (MGMR) GECF said that in January, global LNG exports grew by 2.8% (0.98mn tonnes) y-o-y to 35.56mn tonnes.

The higher LNG exports were driven mainly by non-GECF countries and to a lesser extent from GECF member countries and LNG reloads.

However, GECF member countries were the largest LNG exporter globally with a share of 49.7%, down from 50.9% during the same period a year earlier.

Similarly, the share of LNG reloads in global LNG exports decreased from 1.5% to 1.2% during the same period.

In contrast, the share of non-GECF countries LNG exports globally increased from 47.9% to 48.8%.

GECF cited Rystad Energy's preliminary forecast and said global natural gas production was estimated to have decreased by 0.4% to 4,032 bcm in 2022 due to the decline in production in the CIS and Africa regions.

Several factors, including a decrease in gas demand due to high prices and geopolitical tensions, exerted downward pressure on gas production.

Conversely, natural gas output of North America, the Middle East, Europe, and Latin America increased by 64 bcm, 19 bcm, 7 bcm, and 3bcm, respectively.

The 2022 figures have been slightly revised upward from the

previous month's estimates due to upward revisions in natural gas output in Asia Pacific, the Middle East, and North America. Non-GECF natural gas output is estimated to increase by 3.8% to reach 2,388 bcm in 2022, mainly due to a production increase of 47bcm in the US.

In 2023, the forecasts reveal a growth in global gas production, driven by growth in North America, the Middle East, Africa, Latin America, and Asia Pacific.

GECF said it is pleased to unveil the inaugural edition of the Monthly Gas Market Report (MGMR). This new publication offers a comprehensive analysis of the global gas market on a monthly basis.

The report provides essential insights for industry players, policymakers, and stakeholders, including a detailed analysis of gas demand and supply, international trade flows, gas storage trends, pricing trends, and the impact of the global economy on the gas market.

"The GECF is committed to delivering high-quality information and analysis, and is confident that the Monthly Gas Market Report will be a valuable resource for all those interested in the gas industry," said Mohamed Hamel, secretary-general, GECF.

Column: Europe faces more high gas prices next winter



LONDON, Jan 20 (Reuters) — Europe is on course to end the winter of 2022/23 with a record amount of gas in storage, putting downward pressure on futures prices for deliveries this spring and summer.

But even with a record inventory carry over, the region will likely experience higher prices and renewed pressure to conserve gas in the winter of 2023/24.

Europe's storage is designed to smooth out seasonal variations in consumption not to provide a strategic stockpile to protect against an embargo disrupting supplies.

Combined gas consumption in the European Union and United Kingdom was around 5,203 terawatt-hours (TWh) in 2019, the last full year before the pandemic, according to Eurostat.

They have enough capacity to store 1,129 TWh, equivalent to about 21% of annual consumption, according to Gas Infrastructure Europe.

In practice, storage depletion supplies a much smaller share of actual consumption each year, typically around 10%.

SEASONAL STORAGE

Seasonal storage is designed to absorb excess production during summer, discharging during winter to meet peaking consumption.

Using inventories to shift supply from summer to winter in this way is more cost-effective than maintaining lots of extra

production capacity that would only be used a few months each year.

Inventories are large enough to cope with the unpredictability of winter heating demand and ensure supply does not run out in the event winter is much colder than average.

But given the relatively small volume of gas that can be stored, the inventory system cannot provide both seasonal and strategic storage at the same time.

STOCK CLEARANCE

Storage follows a two-season cycle of summer (with inventories accumulating from roughly April to September) and winter (inventories depleting from roughly October to March).

Deviations from this are usually reversed within the subsequent season via large changes in prices forcing inventories back to the long-term average within 6-12 months.

If inventories end the summer unusually high, prices fall to boost consumption, ensure inventories deplete faster and end winter close to average.

Conversely, if inventories end winter low, prices rise to curb consumption, accelerate inventory accumulation and end summer close to normal.

Price changes ensure that inventories normalise within a single storage year rather than over multiple storage years.

RECORD CARRYOVER

Gas conservation policies, high prices and an extended period of unusually warm temperatures between mid-December and mid-January have combined to avert possible gas shortages this winter.

EU and UK storage is on course to end the winter of 2022/23 more than 54% full, well above the average of 35% over the previous 12 years ("Aggregated gas storage inventory", GIE, January 20).

But that means there will be much less unused space to absorb over-production during the summer season of 2023.

Lack of storage will ensure prices fall to stimulate consumption and discourage production to limit inventory accumulation.

But the futures market is forward-looking; traders are already anticipating, accelerating and amplifying the price decline.

Prices have tumbled to limit excess inventories and create more space for gas to be put into storage during summer 2023.

Futures prices for gas delivered in March 2023 have fallen to less than 65 per megawatt-hour from 177 at the start of 0ctober and a peak of 338 in August.

Pressure on storage space is likely to keep prices low this summer even if they then rise again next winter.

Given the limitations of the storage system, a record carryover from winter 2022/23 will lessen but cannot eliminate the need for high prices and conservation in winter 2023/24.

Higher inventories provide more energy security than lower ones, but policymakers should avoid implying inventories alone are enough to prevent shortages or price spikes next winter.