

# 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 October 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.

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# Gasoline's Slow Fade Heralds US Supply Pain Now, Gain Later for Climate



(Bloomberg) – Gasoline demand in the US has peaked, with a surprise slowdown last year signaling that consumption is unlikely to ever again return to pre-Covid levels.

This long-awaited milestone shows that climate-friendly initiatives put into place more than a decade ago are finally taking the US across the threshold. American drivers are traveling more miles on less fuel than ever thanks to a generation of cars with more efficient engines as well as new electric vehicles. The government forecasts further declines for gasoline demand this year and next.

What comes next is a two-track future: short-term pain, followed by decades of economic and environmental benefits.

In the next several years, the fuel industry is poised to cut supply faster than the drop in demand, with more plants due to shut or convert to smaller biofuels facilities. The result could be production crunches for gasoline, price spikes or even limited outages because of the mismatch. Paradoxically for drivers, it's gasoline's slow death that will make it painful.

In the longer term, falling gasoline demand will eventually mean tamer prices and lower emissions, which is obviously good news for the environment since transportation is the biggest contributor to greenhouse gas emissions in the US.

Peak gasoline will “have significant implications for consumers, inflation, politics,” said Mark Finley, an energy fellow at Rice University's Baker Institute for Public Policy.

“All in all, a big deal – over time.”

One of the strange things about being at peak gasoline is that there's still quite a lot of demand. Consumption started plateauing in the years before the pandemic. Even as it drops now, it's not falling off a cliff and is still at what historically would be considered high levels.

At the same time, oil refiners, who turn crude into useable fuels, are already cutting back to stay profitable. The supply losses were exacerbated because of pandemic-induced shutdowns. Since gasoline plants are destined to become uneconomical stranded assets as demand fades, there's little incentive to increase output from them now.

In simple terms, the refining industry risks moving on from gasoline more quickly than consumers.

It's the latest example of the global energy transition's bumpy path. While most prices have calmed in the past few months, the jolts in natural gas, electricity and fuel markets are likely to be with us for the next several years as investments flow out of fossil fuels and into technologies for clean power. And it also underscores why energy-driven inflation has become harder to control – even periods of relative stability will likely be punctuated with volatile price jumps that will make the Federal Reserve's job that much more difficult.

What's Happening With Supply?

Oil refiners have already reduced their production capacity by more than 1 million barrels a day, equal to about 5% of the US total.

That squeeze helped to send retail gasoline prices to all-time highs in 2022 and left drivers in parts of the country facing lines to fuel up during the worst crunches of 2021. The disruptions are set to continue because of just how long the

lingering dependency on gasoline will last.

“It will take decades for gas-powered vehicles to drive off into the sunset,” said Rob Jackson, a professor of Earth system science at Stanford University.

Supply concerns in recent days helped to send the the gasoline crack spread – a measure of profitability of turning crude oil into the fuel – in New York up to levels not seen since last summer.

How Much Will US Demand Fall?

The Energy Information Administration sees a modest decrease for 2023, predicting a drop of less than 1% to 8.74 million barrels a day.

Matthew Parry, head of long-term forecasting at consultancy Energy Aspects, says the declines will become more pronounced over time. He predicts consumption will slump by about 15% between 2022 and 2027, for a total decline of around 1.4 million barrels a day over the period.

“It’s the ongoing replacement of old cars with more fuel efficient ones that contributes to the steady erosion in the amount of gasoline used per mile,” said Linda Giesecke, an analyst at consultancy ESAI.

US fuel economy in 2021 reached a record 25.42 miles per gallon, and preliminary data for 2022 shows an even greater jump to 26.36, according to the Environmental Protection Agency. These are the results of tough fuel mileage standards Barack Obama called a “harbinger for change” back in 2009. President Joe Biden has put forward even more aggressive goals, and his administration’s Inflation Reduction Act dedicates \$374 billion to climate-related spending, including for EVs.

How Long Will the Bumps Last?

It's hard to predict exactly when the supply and demand sides will even out, partly because that will depend on how quickly consumers buy new fuel-efficient cars and EVs.

In 2022, vehicles that run on full or partial electricity were poised to account for more than 17% of US auto sales, up from 3.3% six years ago, according to researcher LMC Automotive. But so far, EVs account for less than 1% of all vehicles on the road.

Cutting fuel demand is a long game. To put in perspective how much time it takes for the fleet to turn over: Even if all cars sold in the US today are EVs, it will take an estimated nine years for EVs to replace just half the cars on US roads, according to John Eichberger, executive director of the Fuels Institute.

#### What Does This Mean for Inflation?

Gasoline accounts for about 4% of the consumer price index. But fuel costs loom much larger in the minds of consumers, many of whom have to fill up their tanks weekly. To understand the outsized role gasoline plays in the economy, just consider the extraordinary steps that the Biden administration took in the last few years to keep prices under control: The president ordered a huge release of reserves from the strategic oil stockpiles and was imploring American oil drillers to increase output, even though the move stood in contrast to his climate-focused agenda.

Short-term price spikes in the next few years will continue to be a headache for policymakers. But zooming out a bit more, the long-term decrease in fuel demand will eventually help to keep costs in check.

"The politics of gasoline will also change," said Rice University's Finley.

# بعد البحر... نفط في البر؟

كتب نادر حجاز في موقع mtv:

أعاد الأمين العام لحزب الله نصرالله الى الواجهة الحديث عن استخراج النفط في البر بعد اكتشافه في البحر، جازماً أن لبنان يملك ثروة نفطية في اليابسة وأن السياسة عطلت استخراجها طوال السنوات السابقة.

تصریح نصرالله يذكرُ بدراسات عدة أشارت الى هذا الأمر، بدءاً من العالم غسان قانصوه وصولاً الى المسوحات التي سبق وأجريت في مهل زمنية مختلفة ومتباعدة. فهل لبنان يملك فعلاً ثورة نفطية في البر؟ وما الطريق الذي يجب أن تسلكه الدولة لاستخراجه؟ والسؤال الأهم هو أي فائدة لهذا الاستخراج وهل العالم لا زال في عصر النفط؟ الخبيرة في شؤون النفط والغاز لوري هايتيان ذكرت بالمحطات التاريخية التي برز فيها الحديث عن النفط في البر، بدءاً من الفترة الممتدة بين 1947 و1967، حيث حصلت محاولات للبحث عن النفط في اليابسة في 7 مناطق لبنانية، وخلصت الى أنه يوجد نفط في لبنان لكن الاستخراج مكلف جداً. وأُقفل الملف حتى العام 1993 حين حصلت محاولة في البحر في شمال لبنان، ليعاد ويُطوى الملف وصولاً الى مرحلة ما بعد العام 2000 حتى اليوم، مشيرة الى مسوحات أجريت من قبل الدولة اللبنانية في هذه الفترة ولكن لم يُعلن عن نتائجها، وبالتالي لا يمكن الحديث بعد عن كميات كبيرة نملكها.

الى وجوب القيام بالدراسات mtv وأشارت هايتيان في حديث لموقع اللازمة ولاحقاً بدء الحفر للتأكد من وجود النفط في البر من عدمه، موضحة أنه "لا يوجد اليوم أية خطة لاستخراج النفط في البر وكل ما نملكه هو مسوحات موقعية حصلت أخيراً، وكان هناك قانون للتنقيب عن النفط في البر قيد الدرس في البرلمان لكنه لم يُقر".

واعتبرت هايتيان أنه "بناءً على هذه المعطيات لا يمكن الجزم بوجود نفط في البر"، وما يمكننا القيام به هو التخطيط واتخاذ القرار". بالبحث حول كيفية استخراج النفط والغاز إذا وُجد.

وتعليقاً على طرح نصرالله، قالت هايتيان: "نصرالله يتحدث عن زمن



ولسّ، فالاعتماد على النفط والغاز والسعي للتحوّل الى دولة نفطية أصبح "دقّة قديمة" في الاقتصاد، ونمط اقتصادي قديم لا يصلح ولا يتماشى مع التطور العالمي في زمن البحث عن الطاقات المتجددة. وإذا كانوا يعتبرون أن هذا النهج سينقذ لبنان، فلن يكون له مكان في العالم".

وفيما وصفت هذا التفكير بالبالي والقديم الذي لا مكان له في العالم، شددت هايتيان على أنه "يجب التطلّع الى الأمام وكيفية الاتجاه نحو الطاقة المتجددة"، مقترحة أن تقوم وزارة الصناعة بمسح حول ما يملكه لبنان من معادن يمكن استخراجها واستثمارها في صناعة الطاقة المتجددة"، مضيفة "إذا كنا نريد فعلاً أن يكون لنا دور في الاقتصاد العالمي فالأجدى التفكير بهذا الاتجاه وهذا ما يمكن أن يساهم في تطوير المجتمع وحجز مكان للبنان في الاقتصاد العالمي".

النفط ليس الحل السحري للبنان... جملة قالها بيار دوكان في السابق، فعودة النهوض الاقتصادي يحتاج الى نمو والى استعادة الدورة الاقتصادية لحيويتها ودعم القطاعات المنتجة. وكل هذا لن ينفع إذا لم يقيم لبنان بالاصلاحات وتحسين مؤسساته في وجه الفساد، وإلا لن تحمل الأيام المقبلة ما هو أفضل من واقع حالنا حتى ولو كانت نفطية.

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## Prospects for the Cyprus EEZ in 2023



With no end in sight for the Russia-Ukraine war, global energy markets will continue to be unstable, making 2023 another difficult year for global energy.

On top of this, with uncertainties in global energy policy continuing, as Europe and the US pursue a faster energy transition, and elections in Cyprus, Greece and Turkey, oil companies operating in the Cyprus EEZ are unlikely to announce

any major new initiatives in 2023.

Chevron's appraisal drilling at Aphrodite is expected later in the year, but it may produce more questions than answers. The reservoir is compartmentalized, and the well will be drilled in the middle and largest section.

Even though the Minister of Energy makes frequent references to gas exports from Aphrodite starting in 2027, there are no clear plans by Chevron and its partners to support this. For such a date to be feasible, gas sales contracts should have already been signed with prospective buyers in Egypt. But 11 years after the discovery of Aphrodite, the Minister is still talking about the development plan being "in the final stages and we expect to have news soon," an often-repeated statement without any indication by when.

The announcement of 2-3 trillion cubic feet (tcf) gas discovery at Zeus-1 in block 6 by Eni/TotalEnergies in December, is good news. Small, but it adds to the two other small discoveries in the same block, Cronos-1 with 2,5tcf and Calypso likely with 1-2tcf. It strengthens the case for the potential linking of these gas fields to the subsea production facilities at Eni's Zohr gas field in Egypt, to be transported to the Damietta LNG plant for liquefaction and export.

Earlier in the week, the Minister of Energy suggested that the Eni-TotalEnergies consortium wishes to implement faster steps in the exploitation of block 6. But this was not borne out at the meeting of the two companies with the President on 10 January. Apart from generalities, and reconfirming commitment to Cyprus' EEZ, there was no mention of any such plans at this stage. Instead, TotalEnergies expressed interest to participate in future in solar energy projects, but there was no indication of when, where or generation capacity.

Evidently, the companies operating in Cyprus' EEZ are not rushing with any new commitments or investments at this stage.

This was confirmed by the Minister. Asked if there will be any activity in Cyprus' EEZ this year, she said "These are certainly issues that we discuss within the development plan of each block...we do not have anything concrete to announce, but there will definitely be some activity in the coming year."

The prospects for the development of the discovered gas fields in Cyprus EEZ in 2023 are low.

Apart from the need for oil company commitment, this requires a change of policy by the EU regarding the future use of natural gas in Europe. Even though it is looking for new supplies in the short-term to 2030 to replace Russian gas, the longer-term future remains uncertain.

EU's position, embodied in its REPowerEU strategy, is to reduce gas consumption in Europe by 30 per cent by 2030, and carry on reducing this further on the way to achieving net-zero emissions by 2050. It has already achieved a 20 per cent reduction in gas consumption year-on-year. This discourages European utilities from entering into long-term gas purchase contracts, which are needed to encourage the development of new gas fields that require 20+ years of exports.

I believe that challenges to the reliability and performance of renewables due to the effects of climatic change on wind speeds and rainfall will eventually force the EU to change its gas policies later in the decade. Already EU countries are calling for changes to the Green Deal that recognize the need for gas longer-term.

This will open up opportunities for the development of East Med gas for export to Europe.

But Cyprus must also prepare the ground to make this possible. An obstacle to developing Cyprus gas fields is the geopolitical risk associated with the unresolved Cyprus problem and Turkey's continuous threats. With elections in

Cyprus, Greece, and Turkey ushering in new governments by the summer of 2023, the second half of 2023 will be the right time to redouble efforts to overcome these obstacles.

Turkey's priority will be to tackle its catastrophic economic problems, something that will require the goodwill, cooperation and support of Europe and the US.

Readiness by Cyprus to enter into meaningful discussions to resolve the Cyprus problem will be supported by Europe and the US. Turkey may also consider this as key to gaining the cooperation of Europe and the US and becoming more amenable to working with them towards a solution.

A cooperative approach by all is the one most likely to produce the best possible results.

Preparing the ground also includes concluding the discussions with Israel regarding the Aphrodite-Ishai unitization dispute. But with changes in government, both in Israel and in Cyprus, this may have to wait until the second half of 2023.

With prospects for developing Cyprus' EEZ being low in 2023, the new President must prioritize the development of renewables from the currently low levels and the development of an integrated, long-term, strategy for energy and the economy, currently lacking.

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## **Aramco      sees      oil      demand**

# picking up on China and aviation recovery



The world's biggest oil company is confident demand will pick up strongly this year as China reopens its economy and the aviation market recovers.

"We are very optimistic in terms of demand coming back to the market," Saudi Aramco's chief executive officer, Amin Nasser, said in an interview. "We are starting to see good signs coming out of China. Hopefully, in the next couple of months, we'll see more of a pickup in the economy there."

Demand for jet fuel is now around 1mn barrels a day below pre-pandemic levels, according to Nasser, roughly half the figure from a year ago. "It's picking up," he said at the World Economic Forum in Davos.

Oil prices whipsawed in 2022. Brent crude surged to almost \$130 a barrel in the wake of Russia's attack on Ukraine, but slumped in recent months as the Chinese, US and European economies slowed. It's trading at about \$86.80 a barrel, up 1% since the end of December.

Many Wall Street banks, including Goldman Sachs Group Inc, expect it to climb above \$100 a barrel in the second half of the year. They cite a global economic rebound by that time, low fuel stockpiles in nations such as the US and the potential for Russian exports to drop as the west tightens sanctions.

Nasser reiterated that companies need to invest more in oil production. Idle capacity stands at 2mn barrels a day, barely above total demand of 100mn barrels, and will probably drop as China ends its coronavirus lockdowns, he said.

The world needs 4-6mn barrels a day of new production just to make up for the natural decline in existing fields, according to the CEO.

"We're moving into the situation where we're eroding spare

capacity and any supply interruptions will have a huge impact," he said.

"We will be in a situation similar to natural gas," he said, referring to how prices for the fuel jumped to the equivalent of \$250 a barrel after Russia's invasion.

The Saudi Arabian state-controlled company sees oil demand continuing to grow for the rest of the decade, even as electric vehicles become more popular and investors pour money into renewable energy.

"It's offsetting some of the demand" for oil, said the CEO. Still, crude consumption will "definitely" be higher in 2030.

The increasing use of petrochemicals – feedstocks for everything from plastics to fertilisers and clothes – is positive for Aramco, he said.

The company wants to convert 4mn barrels a day of crude into petrochemicals by the end of the decade. It's looking at more investments in Chinese refineries and liquid-to-chemical plants as part of that push, said Nasser.

"We're in serious discussions with so many entities" in China, he said.

Last year, Aramco and its chemicals subsidiary, Sabic, said they were planning to build a 320,000 barrels-per-day refinery at Gulei, a coastal Chinese town.

Aramco is also investing billions of dollars in hydrogen, a fuel seen as crucial to the transition to cleaner forms of energy. The Saudi firm aims to export blue hydrogen, made by converting natural gas and capturing the carbon dioxide emitted in the process, on a large scale from about 2030.

Talks with potential importers in Japan and South Korea are progressing, though they'll probably need to get assurances of financial support from their governments before they sign any supply contracts, Nasser said.

"They think they'll be able to do it in 2023," he said. "We'll see."

Blue hydrogen may end up costing the equivalent of around \$250 a barrel of oil, Nasser said, though Aramco won't know until it's done more research.

“It’s not going to be \$80 or \$100” a barrel, he said. “This is cleaner – it costs more.”

Negotiations with European firms are proving tougher, primarily because they want to wait for technological advances to bring down the price of blue hydrogen.

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## **Natural gas rollercoaster throws Europe’s inflation outlook wide open**

Cratering natural-gas prices thanks to warm winter weather are raising the odds that the eurozone’s inflation scourge will ease sooner than anticipated.

After a year when consumer prices consistently overshot predictions following Russia’s invasion of Ukraine, the bloc kicks off 2023 with the prospect of that dynamic reversing and with its near-term economic outlook brightening.

There’s even a chance headline inflation will reach the European Central Bank’s 2% target in the fourth quarter, rather than in 2025 as the institution forecast just a month ago, according to Joerg Angele, a senior economist at Bantleon in Zurich.

If gas prices stay where they are, “there’d be massive downward pressure on inflation” he said. With the ECB’s December assumptions way above current market levels, its next set of projections may well be revised lower.

The ECB “is off the mark again,” Angele said. “But this time in the other direction.”

The catch is that uncertainty about the path for gas prices remains high, even as optimism builds that the worst of Europe’s energy crisis is behind it.

Mild temperatures, more diversified supplies and efforts to cut consumption have eased much of the pressure unleashed when Russia attacked its neighbour almost a year ago. Gas inventories are far higher than the last five years' average and prices have recently traded below pre-war levels.

German Economy Minister Robert Habeck said this month that the danger of "a complete economic meltdown" appears to have been averted. The rosier outlook marks an about-turn from just a few months ago, when it was feared the region would struggle to keep the lights on during the colder months.

Even so, much of the winter remains, and there are risks from any bouts of extreme weather or fresh supply disruptions. A cold snap is forecast for the region in the coming days.

There are also concerns that Europe could face an even tougher year ahead as it struggles to rebuild the gas inventories previously supplied by Russia, while China's sudden Covid reopening could create more demand for liquefied natural gas.

"The impact of lower gas prices depends on whether they remain at these levels or whether it's a temporary relaxation," said Aila Mihr, an economist at Danske Bank in Copenhagen.

"There's still a risk that the situation could deteriorate in case of a new shock, or an attack on European energy infrastructure," she said. "If the situation remains as it is, it means that the slowdown in energy inflation could come faster than previously expected."

The more favourable energy situation is making economists more bullish. Goldman Sachs and Bank of America last week dropped expectations that the eurozone will suffer a winter recession, saying lower gas prices will probably quicken the retreat in inflation.

Such views were bolstered by data on Friday showing that Germany's economy probably avoided a contraction in the final three months of 2022.

Others, however, warn there's a lot of pain still to come. While there's a fairly direct link between wholesale gas prices and what consumers pay in countries like Italy and the Netherlands, Bantleon's Angele says many households – renters



in Germany, for instance – will still face with eye-watering heating bills this year.

Finance ministers across the region, meanwhile, may breathe a sigh of relief as the myriad support measures they agreed on last year look like being cheaper than feared. Economists at Berenberg have already lowered their forecast for the euro region's 2023 fiscal deficit to 3.7% from 4.3%.

All of this is unlikely to make a big impression on ECB policymakers, who've lately emphasised their focus on underlying inflation that strips out volatile components like energy and food. That measure hit a record in December, with chief economist Philip Lane warning wage gains will keep it elevated.

"The latest inflation optimism in markets has maybe been a bit much and they focused too much on headline inflation," Danske's Mihr said. "Core inflation is still rising and it's the key determinant for the ECB in the near term. I don't think that the slowdown in energy inflation will make them more dovish in the near term."

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## **BYD Challenges Tesla for Global Electric Vehicle Sales Supremacy**



A (Jan 13): In the last edition of Bloomberg's Hyperdrive newsletter, BloombergNEF offered up three predictions for the electric vehicle market in 2023: that sales will keep growing, albeit at a slower pace; that this will be a big year for plug-in trucks and vans; and that the global public charging station network will continue to steadily expand. BYD SD Motors

Malaysia as part of Sime Darby Motors (SDM), with the distributorship agreement between both parties having been signed in September 2022.A (Jan 12): Chinese carmaker BYD Co is planning a bold push into India's electric car market, joining a rush of foreign carmakers jockeying for a bigger share of the world's fourth-biggest auto market.HANOI (Jan 13): Chinese electric vehicle (EV) maker BYD Auto Co plans to build a plant in Vietnam to produce car parts, three people with knowledge of the plan told Reuters , in a move that would reduce the company's reliance on China and deepen its supply chain in Southeast Asia as part of a global expansion.

Today, let's look at four more prognoses for the year, having to do with Tesla's budding rivalry with BYD, the outlook for EV startups and battery prices, and the impact of the US Inflation Reduction Act.Might BYD overtake Tesla in battery-electric vehicle sales? Betting against Tesla historically has been a bad wager more often than not, but BNEF's team of analysts reckon 2023 could end with a new EV volume leader.Both feature Blade EV batteries which the manufacturer has developed in-house, and both power a front-mounted electric motor rated to produce 204 PS and 310 Nm of torque.BYD has been expanding its model lineup, geographic footprint and manufacturing capacity very rapidly in the last two years.India is a good bet because "people are realizing the need for EVs and the charging infrastructure is picking up.If you include the company's plug-in hybrid electric vehicles, it already overtook Tesla in 2022, and its sales of fully electric vehicles soared to around 911,000 last year from 321,000 in 2021.3 seconds.BNEF still expects Tesla's sales to grow by 30% to 40% in 2023 as its new plants near Berlin and in Austin, Texas, continue to ramp up.Backed by Warren Buffett's Berkshire Hathaway, BYD makes both plug-in hybrids and pure electric vehicles.

But the macroeconomic environment is shifting rapidly, with higher interest rates, falling home prices and battered stock

markets all starting to weigh heavily on consumers' purchase decisions. Standard kit for the Atto 3 Standard Range includes a panoramic sunroof, heated electric wing mirrors, 5.MG Motor India, a unit of China's SAIC Motor Corp on Wednesday said it plans to launch three electric models by the end of next year, while South Korea's Kia Corp said it plans to invest 20 billion rupees (US\$245 million) in India over the next four to five years to develop electric vehicles and launch its first domestically made EV in 2025. Elon Musk's Twitter antics also are turning off some potential buyers just as the competition heats up. Tesla's Model Y will still be the best-selling EV in the world in 2023 and likely will make it into the top-three models of any type after cracking the top five in 2022. BYD Atto 3 – click to enlarge Next up, the Extended Range adds an electronic tailgate, multi-colour gradient rhythmic ambient lighting on the door handles (single colour on the SR) and eight speakers with "Dirac HD" sound, PM2. Tesla's Supercharger network is also still a major differentiator, particularly in North America, where public charging is less developed. It's planning to sell 15,000 electric vehicles this year. This race will go down to the wire and depend heavily on pricing strategies. Rolling stock distinguishes the two; the SR rolls on 215/60 R17 tyres, while the ER wears 215/55R18 rubber. One said construction was planned to start by mid-year.

With major price cuts just made in the US and Europe, and already in play in China, Tesla is showing willingness to wage a price war to keep its volume growing. Tesla has room to manoeuvre here and probably can stay ahead for much of the year, but BYD may be able edge out its competitor in the final months. Meanwhile, the drive unit in the Atto 3 gets its own warranty as well, with eight-year, 150,000 km coverage for the motor, motor controller, DC assembly and electric control assembly. The company's expansion comes at a time when India is increasing scrutiny of Chinese firms. BYD's sales are still mostly concentrated in China, so its success will depend in large part on how the country unwinds its Covid Zero

policy. Both will remain miles ahead of legacy automakers, with Volkswagen finishing a distant third place. Driving heaven to him is exercising a playful chassis on twisty paths; prizes ergonomics and involvement over gadgetry. Battery prices stay elevated, averaging US\$152 per kilowatt-hour. In 2022, the volume-weighted average prices of lithium-ion battery packs across all sectors averaged US\$151 per kWh, a 7% increase and the first time BNEF recorded a rise. BYD will position itself as a “global” technology powerhouse to overcome the barriers of operating as a Chinese company in India and bring “confidence to customers,” Gopalakrishnan said. BYD is looking to lease 80 hectares of industrial land, more than doubling its footprint in Vietnam, where its electronic unit rents 60 hectares, a second source said.

BNEF expects the average battery pack price to rise slightly this year to US\$152 per kWh. Lithium prices will remain elevated, but should stay below earlier highs and pave the way for battery prices to decline again in 2024. The US Inflation Reduction Act puts the US in the EV and battery-making game. One of the big surprises of 2022 was the Inflation Reduction Act and its provisions to help boost EV adoption and on-shore EV manufacturing and the battery supply chain. Gopalakrishnan said consumers are no longer so price-sensitive, with 41% of the 3. While some details are still forthcoming, automakers and battery manufacturers are already responding. BNEF tracked almost US\$28 billion in new investment announcements in North America related to e-mobility and batteries after the law passed in August. If finalised in May, that finding would mean those companies would be subject to duties on products made in Vietnam and some other Southeast Asian countries.

China's lead here is formidable, but it's still early days for this transition. It will explore adding manufacturing facilities when demand increases in the next two to three years, Gopalakrishnan said. Only 2% of cars on the road globally are electric today, and there's a lot to play for as

nations and regions looks to build the next clusters of technology and manufacturing. Importantly, with much of the investment in the US flowing into red states, EVs should be a less-partisan issue this year and beyond. We expect that more than US\$80 billion will be committed to the North American battery supply chain in 2023. Despite Prime Minister Narendra Modi's 'Make in India' push, BYD doesn't have immediate plans to localize battery production and will continue importing them. These decisions are complex and often evaluated over many years, so pinning causality purely on IRA isn't appropriate.

Still, incentives are tipping the scales, and we'll gradually get more clarity on how other regions will respond. Industrial policy is back in vogue, with EVs and batteries at center stage. A wave of bankruptcies and consolidation There are too many automakers, and 2023 will make this painfully clear. The number of auto producers has been rising steadily for the last decade as the combination of cheap money and a window of opportunity with respect to electrification enticed new entrants. Slowing EV sales growth will cause a reckoning, as many realize they either don't have the capital to reach scale, the segments they're targeting are already crowded (for example, the premium end of the market) or consumers are simply not interested in taking a leap on a relatively unknown brand during a time of economic uncertainty.

The window of opportunity for new entrants has closed, and the number of automakers will decline this year. Other areas of the e-mobility value chain should fare better but also could see a thinning of the ranks. Subscribe to Mid-day email alert We deliver news to your inbox daily.



*By William Wilkes*

Germany's industrial heavyweights like BASF SE battling an unprecedented energy crunch are seeing signs the worst of the crisis has passed.

Fears of gas rationing after Russia's invasion of Ukraine have dissipated for the country's chemicals, metals and glass makers amid mild temperatures and Germany completing its first liquefied natural gas import terminal. Companies switching to purchasing gas and electricity in the spot market instead of long-term agreements are already reaping the benefits.

Energy prices are significantly lower for us," said Christopher Profitlich, a spokesman for SKW Piesteritz GmbH, which was forced to halt production of key base chemical ammonia last year after gas prices surged. "Both our machines are working and all of our production staff are working again."

Germany's pivot to wean itself off Russian gas is paying off. The government has rushed to tap liquefied natural gas in the market, boosting imports to Europe to a record high and keeping reservoirs close to full through the early winter. The country has also fast-tracked building LNG terminals.

"It looks like the risk of forced gas rationing has gone away this winter," said Wolfgang Große Entrup, who heads Germany's VCI chemical sector association. "But prices will need to stay lower for much longer for most companies to see a real difference."

The surge in gas prices forced many industrial companies to curb output, stoking fears for the future of factories and jobs. Major manufacturers including automaker Volkswagen AG and chemical giant BASF drew up emergency plans in case of supply disruptions, as Russia effectively stopped direct gas flows since September.

## Price Shock

While prices have started to wane, they remain significantly above levels seen before Russia started under-delivering gas in the months before its February 2022 invasion. Companies dealing with the price shock said customers in many cases have turned elsewhere, such as sourcing aluminum parts from the US or Asia.

“The feeling of apocalypse has lifted,” said Marius Baader, managing director of Aluminium Deutschland which represents aluminum manufacturers, said by phone. “But there’s no reason to celebrate yet.”

The drag on Europe’s biggest economy has also eased. Economists had predicted a downturn in September after measures of consumer confidence dropped and surveys of purchasing managers signaled a decline in output. Now the broader economy appears to be flatlining rather than shrinking.

“The currently stable energy supply situation ensures that production is secured for the time being,” said Matthias Frederichs, head of the BV building materials manufacturers’ association. “Still, there can be no talk of relief.”

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## Ras Laffan ethane cracker key milestone in downstream expansion strategy



The \$6bn proposed ethane cracker at Ras Laffan, which is

QatarEnergy's largest investment ever in country's petrochemical sector, marks an important milestone in its downstream expansion strategy.

The petrochemical complex will not only facilitate further expansion in Qatar's downstream and petrochemical sectors, but will also reinforce the country's integrated position as a major global player in the upstream, LNG and downstream sectors.

The Ras Laffan Petrochemicals complex, expected to begin production in 2026, consists of an ethane cracker with a capacity of 2.1mn tonnes of ethylene per year.

The 435-acre project site also includes two polyethylene trains with a combined output of 1.7mn tonnes per year (mtpy) of high-density polyethylene (HDPE) polymer products.

This will raise Qatar's overall petrochemical production capacity to almost 14mn tonnes per year, HE the Minister of State for Energy Affairs, Saad bin Sherida al-Kaabi, told Gulf Times.

QatarEnergy has joined hands with Chevron Phillips Chemical Company (CPChem) on the projected and created a joint venture, in which QatarEnergy will own a 70% equity share, and CPChem 30% stake.

Together their large and diverse portfolio will not just help meet the world's growing needs for advanced plastics and petrochemicals, but will also enable balanced growth and facilitate human development in a responsible and sustainable manner.

QatarEnergy and Chevron Phillips Chemical Company (CPChem) have taken a Final Investment Decision (FID) on the Golden Triangle Polymers Plant, an \$8.5bn world-scale integrated polymers facility in the Texas Gulf Coast area in the US.

The Ras Laffan petrochemicals complex will help meet the rising global demand for high-density polyethylene from 2026, when the largest ethane cracker in the Middle East and one of the largest in the world begins production.

Polyethylene is used in the production of durable goods like pipe for natural gas and water delivery and recreational



products such as kayaks and coolers. It is also used in packaging applications to protect and preserve food and keep medical supplies sterile.

The facility will be constructed with modern, energy-saving technology and use ethane for feedstock, which along with other measures, is expected to result in lower greenhouse gas emissions than similar global facilities.

The integrated olefins and polyethylene facility will be utilising "state-of-the-art design and technology" during its construction and operation to promote energy efficiency.

It is important to stress the unique environmental attributes of this world-scale complex. It will have lower waste and greenhouse gas emissions, when compared with similar global facilities.

Already, QatarEnergy made significant strides in realising the North Field Expansion by choosing partners this year for both North Field South (NFS) and North Field East (NFE) expansion, which is the global industry's largest ever LNG project.

This unique project is characterised by the highest health, safety, and environmental standards, including carbon capture and sequestration, to reduce the project's overall carbon footprint to the lowest levels possible.

The North Field expansion plan includes six LNG trains that will ramp up Qatar's liquefaction capacity from 77 mtpy to 126 mtpy by 2027.

Four trains will be part of the North Field East and two trains will be part of North Field South project.



أعلنت شركة إيني الإيطالية، عن اكتشاف حقل غاز جديد وصفته بـ"المهم" في بئر الاستكشاف "نرجس-1" الواقعة في المياه الإقليمية بالقرب من مدينة رفح، شرقي مصر.

وذكرت الشركة في بيان، الأحد، أن البئر شهدت استخراج أحجار رملية حاملة للغاز من الميوسين والأليغوسين، ما يؤشر لوجود الغاز الطبيعي.. "جرى حفر البئر بعمق 309 أمتار تحت الماء". ولم تقدم الشركة أية أرقام بشأن تقديرات كميات الغاز الطبيعي في البئر.

وتبلغ مساحة امتياز منطقة نرجس البحرية المصرية 1800 كيلومتر مربع، بشراكة تشغيلية بين شيفرون الأميركية بنسبة 45 بالمئة وإيني الإيطالية بنفس النسبة، وشركة ثروة للبترول (مصرية) بنسبة 10 بالمئة.

وأصبحت مصر مكتفية ذاتيا في الغاز الطبيعي، بمتوسط إنتاج سنوي يتجاوز 64 مليار متر مكعب، معظمه يذهب للاستهلاك المحلي.

ماذا عن الاكتشافات الأخرى لإيني في مصر؟  
تنتج إيني حالياً حوالي 60% من الغاز في البلاد. علاوة على ذلك، تلتزم الشركة بمشاريع لزيادة الإنتاج المحلي بناءً على حملة تنقيب وتطوير، تقول الشركة إنها من شأنها أن تساهم أيضاً في زيادة صادرات الغاز إلى أوروبا، من خلال مصنع تسييل دمياط.

ويعتبر حقل نوروس لإنتاج الغاز البري والبحري في مصر من بين أهم اكتشافات إيني في عام 2015، وهو واحد من أكبر حقول الغاز المصرية. دخل حقل نوروس للغاز، الواقع في واحدة من أكثر المناطق غزارة في دلتا النيل، حيز الإنتاج في وقت قياسي في أغسطس/ آب 2015.

كذا يوجد حقل ظهر البحري العملاق في مصر، ويُعتقد أن حقل ظهر هو أكبر اكتشاف للغاز على الإطلاق في مصر والبحر الأبيض المتوسط. يقع ظهر ضمن امتياز الشروق على بعد حوالي 190 كم شمال مدينة بورسعيد. تمتلك إيني حصة 50 في المائة في الكتلة، وهي مسؤولة عن العمليات هناك.

وفي التفاصيل، بحسب موقع الشركة الإلكتروني، فإنه تبلغ مساحة الأراضي المطورة وغير المطورة 18712 كيلومتراً مربعاً (6776 كيلومتراً مربعاً صافية من إيني). تقع الأنشطة الرئيسية المنتجة لشركة إيني في منطقة الشروق (حصة إيني بنسبة 50%) في البحر الأبيض المتوسط مع حقل ظهر العملاق للغاز، وامتياز سيناء، وخاصة في حقلي بلايم مارين-لاند وأبو رديس (حصة إيني بنسبة 100%)، الصحراء الغربية في المليحية (76% لإيني)، جنوب غرب مليحة (حصة إيني 100%).

كذلك تستثمر الشركة في رأس قطارة (حصة إيني 75%) وغرب أبو غراديح (حصة إيني 45%) امتيازات و(4) بلطيم (حصة إيني 50%)، دلتا النيل (حصة إيني 75%)، شمال بورسعيد (حصة إيني 100%)، امتيازات شمال (حصة إيني 100%)، رزاق (حصة إيني 100%)،

علاوة على ذلك، تشارك الشركة في امتيازات رأس البر (حصة إيني 50%) (حصة إيني 25%) وجنوب الغارة (حصة إيني 25%)،

وفي يوليو/ تموز 2021، تم توقيع اتفاقية مع الدولة المصرية لتقييم الجدوى الفنية والتجارية لمشاريع إنتاج الهيدروجين الأزرق والأخضر أيضاً، من خلال تخزين ثاني أكسيد الكربون في حقول الغاز الطبيعي المستنفد.

وفي يناير/ كانون الثاني 2022، مُنحت إيني خمسة تراخيص استكشاف، وفي عام 2021، بلغ إنتاج إيني 360 ألف برميل نפט مكافئ/يوم، وشكل ما يقرب من 21% من إجمالي إنتاج إيني السنوي من الهيدروكربونات