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) —



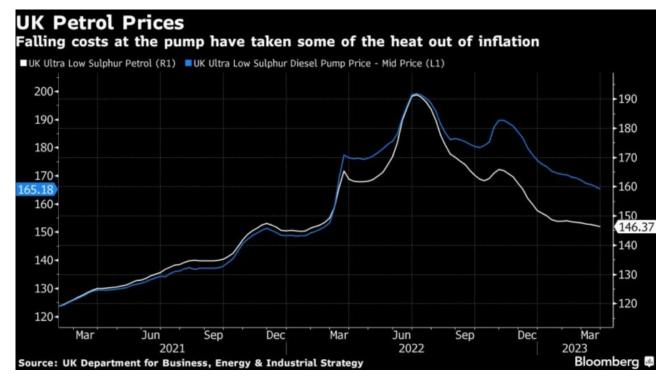
DOHA, Qatar • 5 April 2023 — QatarEnergy has agreed to hold a 25% share in the Gas Growth Integrated Project (GGIP) — a multi-billion-dollar project aimed at monetizing and developing the natural gas resources of the Republic of Iraq. The GGIP consortium will be composed of Basra Oil Company (30%), TotalEnergies (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.□

Oil Price Jolt Compounds Inflation Puzzle for Central Banks



Central bankers who spent past weeks puzzling over how financial turmoil will impact their outlook now have a jolt in the form of higher oil prices to contend with.

The surprise production cut announced by OPEC+ on Sunday spurred oil traders to speculate \$100 a barrel crude could be back on the horizon. In New York, oil was trading over \$80 Monday morning.

For officials in Frankfurt, London and Washington who have been focused on core inflation rates — stripped of energy and food — higher oil costs could put renewed pressure on headline prices. That would serve as a reminder of the risk that high overall inflation rates get embedded in households' expectations, forcing even more monetary policy tightening.

At the same time, production announcements such as Sunday's can sometimes have limited lasting effects. For his part, Federal Reserve Bank of St. Louis President James Bullard said Monday that he'd already expected higher oil prices, given China's reopening, Europe's skirting of a recession and continued strong US data.

"This was a surprise, the OPEC decision, but whether it will

have a lasting impact I think is an open question," Bullard said in an interview with Bloomberg Television. Some oil-price fluctuation "might feed into inflation, and make our job a little bit more difficult," he added.

European Central Bank Governing Council member Gediminas Simkus said Monday that "there are more factors there than the OPEC+ decisions."

"In the context of interest rates, general trends are most important. In the last reading, we saw core inflation grew," Simkus said.

OPEC's decision marks the third Monday in less than a month when global monetary officials have woken up to a new headache, with episodes of market turmoil following the collapse of Silicon Valley Bank and the forced takeover of Credit Suisse Group AG each having threatened to derail interest-rate hiking plans.

This time, the news adds to the case for institutions from the Federal Reserve to the Bank of England and ECB to stay the course on their monetary-tightening plans, with inflation rates still well above targets.

With fears of a full-blown financial crisis fading last week, money markets were already starting to reprice for more tightening. The oil-production news spurred such moves Monday.

Interest-rate futures suggest about a 65% chance of a quarter-point Fed hike in May, compared with roughly 58% late Friday.

In Europe, the latest readings had shown headline inflation coming down, thanks to energy, with more concerning signs of elevated price increases in the services sector.

Fed Chair Jerome Powell has emphasized the importance of core services inflation excluding housing, which US central bankers see as particularly influenced by the tight labor market. Data due on Friday on employment and wage costs in America were already set to be a key focus in setting expectations for the Fed's next policy decision, on May 3.

To the extent that the OPEC+ production cut proves to have a lasting impact — feeding through to gasoline prices ahead of the summer driving season — that could strengthen job-seekers' wage demands, adding to central bankers' concerns.

"At the margin, this is a small negative as it will bump up inflation," said Stephen Stanley, chief US economist at Santander US Capital Markets LLC. "But the Fed typically likes to look through oil price shocks, so the impact on policy is likely to be quite small."

Another consideration for policymakers: higher energy costs would pose a hit to household budgets for spending on other items, such as travel and dining out. Amid a likely tightening in the availability in credit thanks to the recent banking turmoil, that would be another restraint on the economic outlook.

"Higher oil prices in the near term give the Fed more anxiety about inflation expectations," said Derek Tang, an economist at LH Meyer/Monetary Policy Analytics in Washington. "But over the medium term, if oil prices stay high, it's a drag on growth and employment," he said. So for policy interest rates, "the impact might be a higher peak but quicker reversal."

In any case, given the moves already taken by central banks since last year, rate-hiking cycles are seen closer to the end than the start at this point.

"With the rapid rate rises since mid-2022, the ECB, Fed and BOE have now largely got on top of their inflation problems," said Michael Saunders, a former UK policymaker who is now at Oxford Economics. "At this stage, this rise in oil prices does not alter that view."

Opec+ cuts set to tighten Mideast crude supply to Asia and Europe



Middle East crude oil supplies are set to tighten further from May after Opec+ announced plans to cut output again, raising costs for refiners from Asia to Europe and pushing them to seek more supply from Russia, Africa and the Americas.

Oil prices jumped more than \$4 a barrel on Monday after the Organisation of the Petroleum Exporting Countries and their allies including Russia surprised markets by announcing production cuts of about 1.16mn barrels per day (bpd) from May through the rest of the year.

The pledges will bring the total volume of cuts by the group known as Opec+ since November to 3.66mn bpd according to

Reuters calculations, equal to 3.7% of global demand.

Opec+ had been expected to hold output steady through the end of this year, having cut output by 2mn bpd in November last year.

An official at a South Korean refiner said the cut was "bad news" for oil buyers and Opec was seeking to "protect their profit" against concerns of a global economic slowdown.

The supply cut would drive up crude prices just as weakening economies depress fuel demand and prices, squeezing refiners' profits, the South Korean refining official and a Chinese trader said.

Both declined to be identified as they were not authorised to speak to media.

Tighter Opec+ crude supply will be negative for Japan as it may further boost inflation and weaken its economy, Takayuki Honma, chief economist at Sumitomo Corp Global Research, said.

"Producing countries apparently want to see oil prices rise to \$90-\$100/bbl, but higher oil prices also mean higher risk of economic downturn and sluggish demand," he added.

The Opec+ production cuts come as purchases by China, the world's top crude importer, are expected to hit a record in 2023 as it recovers from the Covid-19 pandemic, while consumption from No 3 importer India remains robust, traders said.

At the same time, European refiners' demand for Middle East crude has risen — especially for Basrah Heavy and Oman crudes — to replace Russian oil banned by the European Union since December, traders and an Indian refining official said.

"Now they'll face the heat," he said, predicting the market will become "very tight".

Kuwait has already notified buyers it will cut exports to keep more crude for its Al Zour refinery, and Saudi Aramco is ramping up operations at its Jizan refinery.

Top exporter Saudi Aramco, which had been expected to cut official selling prices for term oil sales to Asia in May, may now decide to raise prices instead, traders said.

With higher prices and less supply of Middle East sour crude,

China and India may be pushed to buy more Russian oil, boosting revenue for Moscow, said the Indian refining official, who declined to be named as he was not authorised to speak to media.

The rise in Brent prices could push Urals and other Russian oil products to prices above the caps set by the Group of Seven Nations (G7) aimed at curbing Moscow's oil revenues, he said.

While traders and analysts had expected crude to be in surplus in the second quarter with Asian refineries down for maintenance and French refineries shut due to strikes, they now expect the Opec+ cuts to tighten markets ahead of summer, the high-demand season.

The Opec cuts would help soak up the excess volumes in the west, said a Chinese refining source. Refiners in Japan and South Korea said they are not considering taking Russian barrels due to geopolitical concerns and may look for alternative supply from Africa and Latin America.

"Japan could seek more supply from the United States, but bringing the US oil through the Panama Canal is expensive," Sumitomo's Honma said.

Traders are also watching for responses from the United States, which called Opec+'s move inadvisable.

"In essence, the purpose of this massive surprise production cut is mainly to regain market pricing power," the Chinese trader said.

New Opec cuts to tighten markets, widen oil market

deficit in H2: Emirates NBD



New Opec cuts may tighten markets considerably and widen the oil market deficit in the second half of this year, Emirates NBD said Monday.

The regional banking group forecasts Brent to average \$92.50/barrel in H2, 2023.

Some members of Opec+ have announced a "surprise" production cut to take effect from May and be held until the end of the year. Saudi Arabia will cut output by 500,000 barrels per day (bpd) while several other members will also cut output substantially.

The UAE will cut by 144,000 bpd, Iraq by 211,000 bpd and Kuwait will cut output by 128,000 bpd.

The production changes will mirror "voluntary" cuts of 500,000 bpd that Russia is making in response to sanctions that have been placed on its oil exports.

"Including Russia's cuts, the total reduction from Opec+ will be about 1.6mn bpd though as several members of Opec are already failing to hit their output targets, the scale of the cut is likely to be smaller," Emirates NBD said in a report.

"The move surprised markets and analyst consensus. Our own

expectation was that Opec+ would keep production unchanged from the levels it set in October last year when it also implemented a supply cut," Emirates NBD noted.

As recently as February this year, Prince Abdulaziz bin Salman, Saudi Arabia's energy minister, said that the "agreement that we struck in October is here to stay for the rest of the year," referring to planned cuts of 2mn bpd announced in October last year.

Since then, financial markets have endured considerable stress due to the collapse of several institutions in the US along with the descent of Credit Suisse.

That strain in financial markets did spill over into oil prices — West Texas Intermediate (WTI) futures recently hit a bottom of \$64/b on March 20 — though prices were already on their way higher with WTI ending last week at \$75.67/b.

The announced cuts from several Opec members will widen the oil market deficit in the second half of 2023, provided they are held for the full tenure of the agreement.

"Our prior oil market balance assumptions had a deficit emerging in H2 this year as demand was set to recover strongly from Q2 onward as China's oil demand normalised. With the new cuts from Opec+ taken into the baseline, the deficit will near on 3m b/d by Q4 this year and drain inventories down to 53 days of OECD demand. The pre-pandemic average for inventory days of demand had been about 62 days so the cuts will have a meaningful tightening effect on balances," noted Edward Bell, senior director, Market Economics at Emirates NBD.

The cuts from Opec+ ministers reinforce Emirates NBD's view that oil prices will recover from recent lows, particularly in H2.

"For now, we hold our recently revised oil forecasts unchanged — targeting Brent at an average of \$92.50/b in H2 — though the cuts do provide some upside risks to that view," he said.

The World's Most Important Oil Price Is About to Change for Good



After years of wrangling, the world's most important oil price is about to be transformed for good, allowing crude supplies from west Texas to help determine the price of millions of barrels a day of petroleum transactions.

The shift is because the existing benchmark, Dated Brent, is slowly running out of tradable oil for it to remain reliable. As such, its publisher S&P Global Commodity Insights — better known by traders as Platts — has been forced to make a dramatic overhaul.

Its switchover was fraught with controversy and caused a lot of stress among physical oil traders. But it was necessary. BP Plc at one stage said that Dated Brent was subject to "increasingly regular dislocations."

But the future of Dated is now set. From cargoes for June onward, West Texas Intermediate Midland, oil from the Permian will become one of a handful of grades that set the Dated benchmark.

Here's a look at what matters as the transition gets closer.

1. Why does it matter?

Dated, as it's commonly known by oil traders, helps to set the price of about two-thirds of the world's oil and even defines the price of some gas deals.

Oil producing states will often sell their barrels at small premiums or discounts to Dated, so the precise mechanics of how it is formed matter to them. In addition, the benchmark lies at the center of a complex web of derivatives, ultimately shaping Brent oil futures that get traded on exchanges.

Dated affects a host of oil prices, so even crude in Dubai could feel the effects, according to Adi Imsirovic, a veteran oil trader and senior research fellow at the Oxford Institute for Energy Studies.

2. Exactly what's happening?

Traders will be able to offer WTI Midland for sale from the US Gulf Coast. It will be delivered into Rotterdam and then price will be netted back using a freight adjustment factor as if it's shipped from the North Sea.

By following a careful process, Platts will evaluate if the oil is being offered at a higher or lower level than five existing grades that set Dated — Brent, Forties, Oseberg, Ekofisk or Troll.

If Platts judges that WTI Midland is the most competitive

price on offer — or actually sold — then it could set Dated.

So WTI Midland might then influence the price a seller of an Atlantic Basin barrel charges a refinery in China.

3. How will price discovery work?

Imagine the existing Dated grades, which go under the acronym BFOET, are at \$80 a barrel.

A trader might pick up a cargo of WTI Midland at \$79 from a terminal the US Gulf with \$2 added delivery cost to Rotterdam — more than 6,000 miles and around 17 days sailing away.

Platts would need to make that delivered cargo like-for-like against the existing BFOET grades, which are transacted on a so-called Free on Board, or FOB, basis in the North Sea.

To do that, it will use what it calls a freight adjustment factor, deducting the estimated cost of transportation across the North Sea to Rotterdam. If that were to be \$1 a barrel, then the implied FOB price of WTI Midland in the North Sea would be about \$80.

The process will place an emphasis on Platts's assessments of tanker costs.

4. What's the timeline?

Some changes are already getting underway. In February, Platts began assessing forward prices based on the new assessment. Real cargoes of crude from the US will be allowed for inclusion from early May.

The expiry of the May Brent futures contract at end-March will rely on some trades of a June Brent exchange of futures for physical contract, which will take the changes into account.

Those key derivatives tools, along with the futures market, will determine the basis price of physical Dated Brent for

June.

An important detail in the coming weeks is just how much trading of forward Dated Brent will pick up. So far, twelve entities have conducted transactions based on the new terms, according to Platts.

Ultimately these deals will define something called the Brent Index, a once-a-month price published by ICE Futures Europe that's used for the cash settlement of futures.

"Without a forward market, there's no way to financially settle the ICE Brent contract," said Kurt Chapman, a veteran oil trader and ex-head of crude at Mercuria Energy Group, who retired in 2018 after almost three decades on the front lines of global oil trading.

5. Will the Dated be better?

Assuming traders take to the adjustments, it will be transformative in terms of the underlying volume of oil that can be transacted.

In March alone, around 60 tankers hauling around 1.8 million barrels a day of oil were expected to arrive in Europe, the highest since 2016, according to data compiled by Bloomberg.

Something like 1 million barrels a day of WTI Midland will theoretically be eligible for inclusion in Dated, although the volumes may be marginal until the trading of new Dated picks up.

6. What are the main concerns?

No two crudes are identical and eventually Platts will have to evaluate precisely how WTI Midland compares with other grades within BFOET.

Some say it is superior because of its density and sulfur

levels.

However, some European traders have also expressed worries that the properties of WTI Midland cargoes may not match up to what was stipulated when it traded. That's because WTI is actually a blend of different crudes.

It would be a problem if a cargo of oil — bought or sold with a view to setting a global benchmark underpinning prices globally — were found to have a flaw.

US terminal operators say there's not much to be concerned about. They say that the 11 terminals approved by Platts that will send crude are all able to assure consistently high quality to suit Dated.

Another issue is the cargo sizes that will be allowed to be included. At 700,000 barrels, they do not match up to the reality of current oil trading of US oil.

There has been a flood of supertankers bringing 2-million-barrel cargoes across the Atlantic. Those wouldn't qualify for inclusion in setting the Dated.

Finally, the BFOET grades all come with their own loading programs with each consignment given its own unique identifier. That gives traders clear visibility on the supply of oil. That's not yet the case for WTI Midland and could cause some uncertainty about how many cargoes are being offered.

With assistance by Sherry Su and Sheela Tobben

QatarEnergy enters into 'farm-in' agreement with ExxonMobil Canada for two offshore exploration licences



QatarEnergy has entered into a farm-in agreement with ExxonMobil Canada for two exploration licences offshore the province of Newfoundland and Labrador in Canada.

Pursuant to the agreement, QatarEnergy holds a 28% working

interest in licence EL 1167, where the Gale exploration well and associated activities are planned.

ExxonMobil Canada (operator) holds 50% while Cenovus Energy holds 22%. QatarEnergy also holds a 40% working interest in licence EL 1162, while ExxonMobil Canada (operator) holds the remaining 60%.

The transaction has completed all necessary formalities with the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB).

Commenting on this occasion, HE the Minister of State for Energy Affairs, Saad bin Sherida al-Kaabi, also the President and CEO of QatarEnergy, said: "We are pleased to sign this agreement with our strategic partner, ExxonMobil, to further grow our offshore Atlantic Canada portfolio as part of our international growth drive, and look forward to continue working within Canada's transparent and stable regulatory environment."

Al-Kaabi added: "I would like to take this opportunity to thank the Canada-Newfoundland and Labrador Offshore Petroleum Board, which has been very supportive of this process, and look forward to a successful exploration campaign with our partners."

Located offshore Eastern Canada, EL 1167 and EL 1162 lie in water depths ranging from 100 to 1,200 metres and cover an area of approximately 1,420 and 2,400 square kilometres, respectively.

GECF member countries' petrochemical expansion set

to boost exports



The export value of selected petrochemicals such as methanol, ammonia, ethylene, propylene, polyethylene, and polypropylene from GECF member countries was estimated at \$28.8bn in 2021, Doha-headquartered Gas Exporting Countries Forum said in an expert commentary.

Polyethylene exports from GECF member countries accounted for the bulk of the petrochemical export value with a share of 44%, followed by methanol (21%), ammonia (19%), polypropylene (13%), ethylene (2%), and propylene (1%).

"Given the petrochemical sector expansion plans in the GECF member countries and their competitive advantages, petrochemicals exports value may increase in coming years," GECF's Gas Market Analysis Department noted in the commentary.

Export value of selected petrochemicals such as methanol, ammonia, ethylene, propylene, polyethylene, and polypropylene from GECF member countries was estimated at \$28.8bn in 2021; Doha-headquartered Gas Exporting Countries Forum said in an expert commentary

Moreover, a significant portion of petrochemicals and fertilisers are consumed domestically in GECF member countries. Some endogenous factors are critical for determining whether to export or domestically consume petrochemical products. For example, geographic location, access to the export infrastructure such as seaports, economy's structure, climate, and agriculture sector's potential impact decision-making on whether to consume petrochemical products domestically or export them.

Global natural gas consumption continues to be dominated by the power generation, industrial and residential sectors, where it is used as an energy fuel source. In the meantime, non-energy use of natural gas, mainly in the petrochemical industry, represents only 6% of global natural gas consumption — around 230bn cubic meters (bcm) per year.

In this context, there is plenty of room for further penetration of natural gas in the petrochemical sector, with natural gas used as a feedstock to make higher value-added products.

GECF member countries, endowed with the world's largest proven natural gas reserves, have a prominent potential to monetise their natural gas resources through developing higher valueadded petrochemical products.

For many countries, the establishment of a petrochemical value chain can secure a number of potential benefits for their economies and societies.

These include diversification of the national economy away from one major source of export revenues; growth of the national economy, mainly through the addition of value to raw materials; sustainable export revenues amidst the volatility of oil and gas prices; potential socio-economic benefits on the state level (job creation, higher wages) and potential environmental advantages of developing the petrochemical industry.

The petrochemical industry has shown significant growth in recent years, and GECF member countries continued to be the leaders in the global petrochemical industry. While each GECF member country has its own specific strengths, they have some common advantages.

Firstly, the major advantage of GECF member countries is the availability of natural gas resources which is one of the key

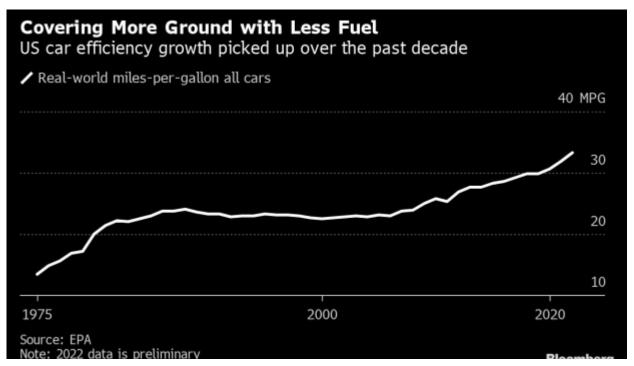
feedstock in the industry, with more than 70% of global proven natural gas reserves concentrated there.

Secondly, petrochemical producers in GECF member countries are likely to enjoy low-cost feedstock, and in this context they have a competitive advantage compared to other producers, particularly in Europe and Asia, when gas prices are relatively lower than oil and coal prices.

Thirdly, GECF member countries also have the relevant infrastructure and integrated supply networks. In addition, they have the well-established expertise in the managerial and technical aspects of the industry. Moreover, the Forum presents GECF member countries with a unique opportunity to collaborate and share knowledge and best practices.

The GECF analysis shows that there is a great potential for its member countries to monetise their natural gas through the petrochemical industry. This is supported by their leading role as a reliable supplier of petrochemicals globally, abundance of untapped natural gas reserves and a bright outlook for demand for petrochemicals.

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 ّ"؟

کتب نادر حجاز في موقع mtv:

أعاد الأمين العام لحزب الله السيد حسن نصرالله الى الواجهة الحديث عن استخراج النفط في البر "بعد اكتشافه في البحر، جازما أن لبنان يملك ثروة نفطية في اليابسة وأن السياسة عطلّت أن لبنان يملك ثروة نفطية في اليابسة وأن السياسة عطلّت.

تصريح نصرالله يذكر بدراسات عدة أشارت الى هذا الأمر، بدءا من العالم غسان قانصوه وصولا الى المسوحات التي سبق وأجريت في مهل زمنية مختلفة ومتباعدة. فهل لبنان يملك فعلا 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 ذكر ت بالمحطات التاريخية التي برز فيها الحديث عن النفط في البر، بدءا من الفترة الممتدة بين 1947 و1967، حيث حصلت محاولات للبحث عن النفط في البنان في البنانية، وخلصت الى أنه يوجد نفط في لبنان في الكن الاستخراج مكلف جدا ً. وأ قفل الملف حتى العام 1993 حين حصلت محاولة في البحر في شمال لبنان، ليعاد ويرُطوى الملف وصولا ً الى مرحلة ما بعد العام 2000 حتى اليوم، مشيرة الى مسوحات أجريت من مرحلة ما بعد العام 2000 حتى اليوم، مشيرة الى مسوحات أجريت من قبل الدولة اللبنانية في هذه الفترة ولكن لم يرُعلَّ ن 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 ي'قر"". واعتبرت هايتيان أنه "بناء 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 و'جد

وتعليقا على طرح نصرالله، قالت هايتيان: "نصرالله يتحدث عن زمن ولسعي للتحوسل الى دولة نفطية ولسي في فلاعتماد على النفط والغاز والسعي للتحوسل الى دولة نفطية أصبح "دقية 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 وإذا كانوا يعتبرون أن هذا النهج سينقذ لبنان، فلن يكون له مكان

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 فعلا ً 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 يقم لبنان بالاصلاحات وتحصين مؤسساته في وجه الفساد، وإلا لن تحمل الأيام المقبلة ما هو أفضل من واقع حالنا حتى ولو كانت .نفطية