

Gasoline, diesel, jet fuel refining capacity too low in US to meet demand



Bloomberg / New York

From record gasoline prices to higher airfares to fears of diesel rationing ahead, America's runaway energy market is disquieting both US travellers and the wider economy. But the chief driver isn't high crude prices or even the rebound in demand: It's simply too few refineries turning oil into usable fuels.

More than 1mn barrels a day of the country's oil refining capacity – or about 5% overall – has shut since the beginning of the pandemic. Elsewhere in the world, capacity has shrunk by 2.13mn additional barrels a day, energy consultancy Turner, Mason & Co estimates. And with no plans to bring new US plants online, even though refiners are reaping record profits, the

supply squeeze is only going to get worse.

"We are on the razor's edge," said John Auers, executive vice president at Turner, Mason & Co in Dallas. "We're ripe for a potential supply crisis."

The dearth of refining capacity has dire implications for both US consumers and global markets. At home, retail gasoline prices continue hitting new records, exacerbating some of the worst inflation American households have ever seen.

Meanwhile, the East Coast is on the brink of a diesel shortage that risks crippling already strained supply chains that have disrupted the flow of everything from grocery staples to construction supplies in the last two years. The factors fuelling the refining shortage won't surprise anyone: With demand for gasoline and jet fuel practically vanishing during the height of the pandemic, companies closed some of their least profitable crude-processing plants permanently.

Some of those plants had been affected by fires, explosions and hurricanes and were just too expensive to fix, especially because an eventual transition toward cleaner energy makes their long-term business model unprofitable and makes them less likely to attract buyers. By the end of 2023, as much as 1.69mn barrels of US capacity is targeted for closure compared to 2019 levels, according to Turner, Mason & Co.

At the same time American refining shrinks, the war in Ukraine has made the global divergence between supply and demand even more acute. With many countries shunning Russian fuel exports in the wake of the war, the US is now supplying more of the world's fuel with an ever-shrinking fleet of plants. Europe has been seeking alternatives to Russian diesel since the war began, while fuel demand in Latin America, the largest buyer of US refined products, is strong and growing. Meanwhile, the US is itself gearing up for a spike in consumption this summer.

That's setting up refiners to reap record profits this year. Valero Energy Corp is seen generating the most cash from operations since its stock started trading in 1997, while top refiner Marathon Petroleum Corp. is expected to post its

highest margins in a decade. The two companies are the second and 10th best performers, respectively, in the S&P 500 index this year as of Friday morning.

Retail prices for both gasoline and diesel climbed to fresh records of \$4.432 and \$5.56 a gallon respectively, AAA data showed on Friday. US gasoline futures also rose to a new high. In other kinds of markets, a surge of demand and shortage of supply would trigger more investment, especially with such swelling cash hordes. But the longer-term transition away from fossil fuels dims the outlook for demand, making companies unwilling to put up the billions of dollars needed to build new plants.

Even resurrecting idled plants can be prohibitively costly at a time when construction and labour costs in the US are booming. With California unveiling this week a roadmap to slash oil use by 91% from 2022 levels by 2045 and other places moving to limit fossil-fuel use in the decades ahead, refining companies and their investors can see the writing on the wall. "Nothing about the current environment is promoting investments in fossil fuels," said Bloomberg Intelligence analyst Fernando Valle. "It's a 15 to 20 year payback on most of these investments."

Phillips 66, for example, would have to spend more than \$1bn to restart its Alliance refinery in Louisiana that was shut after damage from Hurricane Ida, Bloomberg Intelligence estimates. LyondellBasell Industries NV has opted to shut its Houston Refinery no later than the end of 2023 over cost concerns related to keeping the 104-year-old facility running. A portion of shuttered plants are now being converted into smaller renewable-diesel facilities, including Phillips 66's refinery in Rodeo, California, which was confirmed this week. As for selling those assets to someone who could ramp up production, no one's buying – even as industry players are sitting on massive piles of cash. "We feel we've got higher returns, better uses for the capital to employ than buying a refinery that's on the market at this point in time," Valero chief executive officer Joe Gorder said in a conference call

with analysts in late April.

To be sure, there could be some small-scale relief ahead. US refiners ran at 90% last week, and that percentage will increase as seasonal maintenance wraps up this month. Some units can then even run 10% or 20% beyond their nameplate capacity to maximise production in the short term.

But that's a rate that can't be sustained without risking damage. A few refineries are also focusing on debottlenecking or even adding new units inside existing facilities to boost capacity, though it's a drop in the bucket volumewise compared to the total already lost – and it won't come until 2023 or 2024. In short, “too much refining capacity was closed during the pandemic,” Bloomberg Intelligence's Valle said. “Diesel shortages and the price surge are likely here to stay.”

U.S. diesel shortages lift refining margins to a record



LONDON, May 10 (Reuters) – Global stocks of refined petroleum products have fallen to critically low levels as refineries prove unable to keep up with surging demand especially for the diesel-like fuels used in manufacturing and freight transportation.

The result has been a surge in prices refiners receive for selling fuels compared with prices they pay for buying crude and other feedstocks, boosting their profitability significantly.

In the United States, refiners currently receive roughly an average of more than \$150 per barrel from the sale of gasoline and diesel at wholesale prices, while paying only around \$100 to purchase crude.

The indicative 3-2-1 margin of \$50 per barrel is based on the assumption a refinery produces two barrels of gasoline and one barrel of diesel from refining three barrels of crude.

The margin is meant to be representative for an “average”

refinery and is a gross figure out of which refiners have to pay for labour, electricity, gas, hydrogen, catalysts, pipeline transport and the cost of capital.

Net margins are narrower and refinery costs have been rising rapidly as result of widespread inflation ripping through the economy following the coronavirus pandemic.

Nonetheless, even allowing for rising input costs, gross margins have more than doubled from \$20 at the end of 2021, ensuring refiners have a strong financial incentive to maximise crude processing and fuel production.

DISTILLATE FOCUS

Gross margins are currently higher for making diesel (almost \$60 per barrel) than for gasoline (\$45 per barrel) reflecting the relative shortage of middle distillates.

(Chartbook: <https://tmsnrt.rs/3PdSJdC>)

U.S. distillate fuel oil stocks are 31 million barrels (23%) below the pre-pandemic five-year average compared with a deficit of only 6 million barrels (3%) in gasoline.

The squeeze on fuel inventories and refinery capacity is compounding already high prices for crude caused by sanctions on Russia and output restraint by OPEC+ and U.S. shale producers.

The resumption of international passenger aviation as quarantine restrictions are lifted is tightening the fuel market even further because jet fuel is broadly similar to diesel and gas oil.

The effective wholesale price of diesel has climbed to over \$160 per barrel while gasoline is trading at over \$150, based on futures for delivery in New York Harbor.

Once distributors' and retailers' margins and taxes are included, the average price at the pump paid by motorists has climbed to \$236 per barrel for diesel and \$186 per barrel for gasoline.

The refining margins and fuel prices cited in this column are all for the United States but the same shortage of refining capacity and fuel inventories is boosting diesel prices in Europe, and dragging up gasoline prices with them.

SLOWDOWN AHEAD

There is scope for refiners to increase fuel production by postponing non-essential maintenance and running refineries flat out into the early autumn.

And some room to adjust the output mix by switching from maximum gasoline to maximum diesel mode in downstream processing units.

But any increase in diesel production is unlikely to be able to reverse the depletion of inventories fully and return them to pre-pandemic levels.

Prices will therefore have to continue rising until they begin to restrain consumption or the economy enters a cyclical downturn.

Consumers can reduce fuel use in the short term by consolidating freight loads (fewer voyages, flights and deliveries), reducing speeds (slower voyaging, flying and driving) and eliminating engine idling.

But the fuel savings are relatively modest and tend to degrade service levels, reduce capacity and increase capital costs.

By contrast, a slowdown in the business cycle delivers large simultaneous reductions in diesel use – absolutely or relative to trend – by freight firms, manufacturers, miners and

construction firms.

Business cycle slowdowns have therefore tended to be the main path by which the distillate market and other fuel markets have rebalanced in the past.

The adjustment process is probably underway in 2022. The cyclical slowdown and reduced fuel demand could occur in one, two or all three of the major consuming regions.

Parts of China's economy appear to be in recession already as coronavirus lockdowns paralyse factories and transport systems and depress consumer spending.

Europe's economy is on the verge of recession as Russia's invasion of Ukraine, the sanctions imposed in response, soaring energy prices and rampant inflation disrupt manufacturing and depress household spending.

The only major economy with significant momentum is the United States, but there, too, the rate of expansion is slowing, which will likely result in slower growth in distillate consumption later in the year.

Big Oil Spends on Investors, Not Output, Prolonging Crude Crunch



By
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Big Oil is raking in historic amounts of cash, but the windfall isn't being invested in new production to help displace Russian oil and gas. Instead, executives are rewarding shareholders – setting the world up for an even tighter energy market in the years ahead.

The West's five biggest oil companies together earned \$36.6 billion over and above their spending in the first quarter, or about \$400 million in spare cash a day. It was the second-highest quarterly free cash flow on record and enough to relegate billions of dollars of Russia-related writedowns to mere footnotes in their recent earnings reports.

Oil booms typically spark a chase for higher production – but not this time. All five supermajors have kept their capital expenditure budgets firmly in check and pledged that this discipline will hold in future years – even as oil prices have

closed above \$100 a barrel on all but five days since Russia invaded Ukraine in February. With wells naturally declining in production every year and large projects taking half a decade or more to come online, any expansion lag happening now will push the possibility of new production even further into the future.

“In prior cycles of high oil prices, the majors would be investing heavily in long-cycle deepwater projects that wouldn’t see production for many years,” said Noah Barrett, lead energy analyst at Janus Henderson, which manages \$361 billion. “Those type of projects are just off the table right now.”

In short, if consumers are looking for Big Oil to replace Russian production with any urgency, they better look elsewhere.

The last time crude was consistently over \$100 a barrel in 2013, Big Oil’s combined capital expenditure was \$158.7 billion, almost double what the companies are currently spending, according to data compiled by Bloomberg. The group includes Shell Plc, TotalEnergies SE, BP Plc, Exxon Mobil Corp. and Chevron Corp.

“Discipline is the order of the day,” BP Chief Executive Officer Bernard Looney told analysts Tuesday. The London-based major isn’t budging on its \$14 billion to \$15 billion spending plans for the year, with its mid-term guidance creeping up to a maximum of \$16 billion despite 10% cost inflation in some parts of its business.

Shell, which posted record profits that exceeded even the highest analyst estimate, was equally clear. In her first set of results as chief financial officer, Sinead Gorman repeated time and time again that Shell would keep within its \$23 billion to \$27 billion range. “Nothing has changed in terms of our capital allocation framework,” she said.

Instead of spending on new projects, companies are opting to reward shareholders after years of poor returns. Exxon, BP and TotalEnergies increased share buybacks while Chevron is already repurchasing record amounts of stock.

There are clear reasons why Big Oil is choosing not to spend more. Chief among them are climate concerns and uncertainty over the future direction of oil demand. Years of pressure from investors, politicians and climate activists came to a head in the past two years, when all the oil majors pledged some form of net zero target by mid-century. BP and Shell actively positioned themselves to move away from oil and gas over the long-term. All are under added pressure to improve returns that dwindled over the past decade due to cost blowouts and low prices.

“Any decision to increase, support or add-in new fossil projects today could see returns risk within a few years,” said Banco Santander SA analyst Jason Kenney. Climate change, technology developments like electric cars and rapidly evolving government policy on emissions are major risks today when deciding whether to invest billions in a new project, he said.

Against that backdrop, investment in the upstream oil and gas sector slumped 30% in 2020, while last year’s spend of \$341 billion was 23% below pre-pandemic levels, the International Energy Forum wrote in a report.

“Two years in a row of large and abrupt underinvestment in oil and gas development is a recipe for higher prices and volatility later this decade,” warned Joseph McMonigle, Secretary General of the IEF.

That message has not gone down well with consumers around the globe. From Pakistan to Paris, billions of people are suffering a cost-of-living crisis fueled in large part by high energy costs. In the U.S., President Joe Biden has implored

oil companies to reinvest profits from surging oil prices into more production to help ease the shortages caused by Russia's war against Ukraine. Some U.S. and European politicians have called for a windfall tax on companies' profits to help ease the burden on consumers.

To be fair, that doesn't mean companies aren't investing in growth at all. But they will "focus only on low risk, high return assets" such as shale or expanding offshore fields near existing operations, according to Kenney.

Exxon and Chevron, for instance, are spending aggressively to grow production in the U.S.'s Permian Basin, the world largest shale oil region, with planned growth rates of 25% and 15%, respectively. BP is boosting investment in U.S. shale, but the company won't be able to ramp up Permian production until it finishes building two large gathering systems at the end of the year.

However, most Permian growth will largely offset declines from elsewhere in the U.S. supermajors' global portfolio, rather than adding to total barrels. Exxon's first quarter production of 3.7 million barrels per day was the lowest since its merger with Mobil in the late 1990s. Together Exxon and Chevron plan to spend more on buybacks and dividends this year than they do on production.

"For so long the industry has been told by investors and politicians we need less oil and executives remember that," said Barrett of Janus Henderson. "If the world needs an extra million barrels a day to ease prices, I'm not sure where it will come from."

Iraq may make decision on Halliburton gas deal in May



(Bloomberg) – Iraq’s cabinet may reactivate a deal with Halliburton Co. to drill wells in a western gas field in Akkas next month, Oil Minister Ihsan Abdul Jabbar told local media.

An agreement with Halliburton would enable the oil ministry to get clear data on the production capacity of the Akkas field and it may reach a decision after the Islamic holy month of Ramadan, which ends in early May, the minister said.

If the government decides to develop the field, which has been idle since Baghdad retook it from Islamic State militants in late 2017, it would have to pick a production company for the project.

Officials have been in talks with Chevron Corp. and Saudi Aramco about investment in the region. That “will depend on the data we get from the exploration and well-drilling operations,” Abdul Jabbar said in an interview on Al-Forat channel.

Kurdistan Talks

Abdul Jabbar said 80% of the contracts that the Kurdistan Regional Government signed with oil companies are correct and the rest need to be reviewed. The KRG has no problem with half the solutions the federal government offered to resolve the oil issues in Kurdistan.

The Kurdish region exports 430,000 barrels of oil per day, Abdul Jabbar said.

Baghdad has long sought to bring Kurdish production under its control in exchange for funds from the national budget. A February ruling in Iraq's top court asserted the central government's right to the semi-autonomous region's hydrocarbons. The KRG has said its rights to control the region's oil and gas are enshrined in the Iraqi constitution.

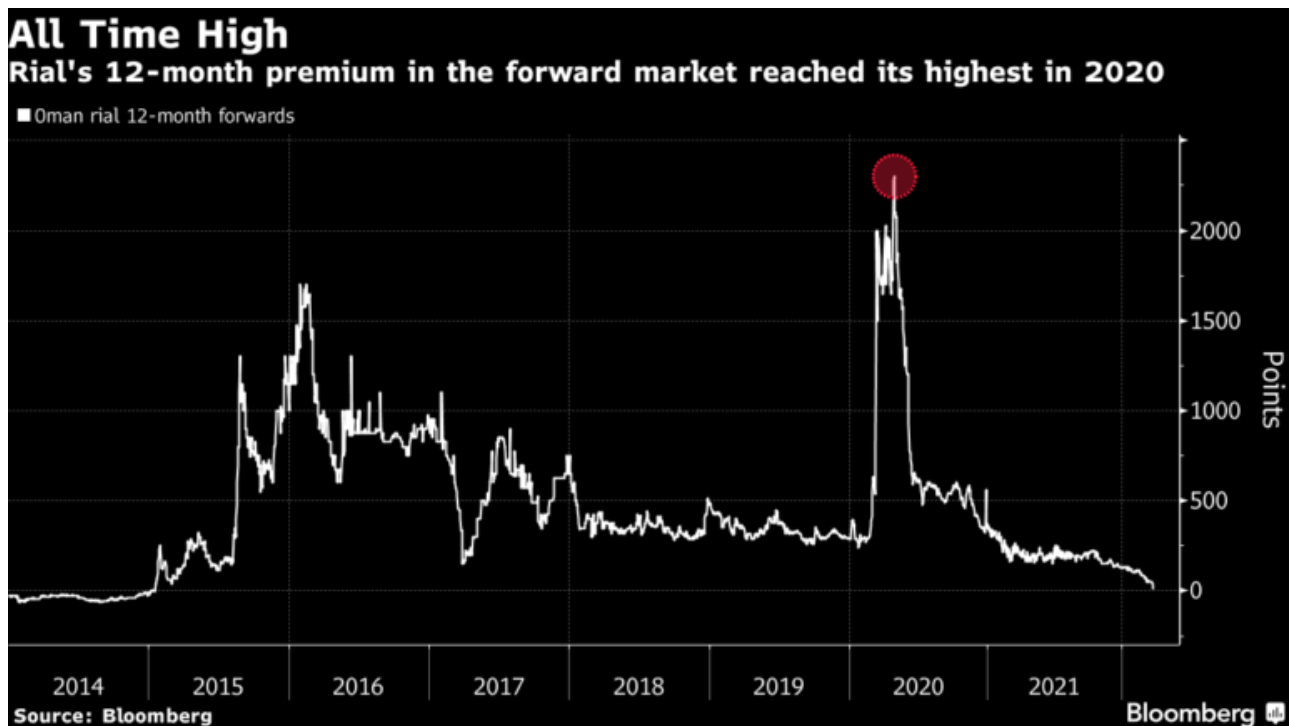
High Oil Prices

Iraq will probably sell its oil for an average of \$106-\$107 a barrel this month if prices remain at current levels, the minister added.

The oil ministry is providing 30 million liters of gasoline a day for local consumption, which Abdul Jabbar called a "big" number. Work on a new refinery in Karbala has been delayed by Covid-19 but the facility is expected to enter service in the first quarter of 2023, he added. The country will continue to import gasoline until 2024.

Why Gulf Dollar Pegs Survive

Through Wars, Oil Shocks



Gulf Arab nations have pegged their currencies to the dollar for decades. There's a reason for that: they reduce foreign-exchange risk for states in the region because so much of their revenue comes from oil, which is priced internationally in the U.S. currency. Periodically the mechanisms are tested, as they were in 2020 when a price war sent crude plummeting below \$20 a barrel. With oil back around \$100 in 2022, they appear to be in good shape, despite questions about the dollar's role in the global economy.

1. Who has currency pegs and why?

The six members of the Gulf Cooperation Council – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates – have been running currency pegs or managed foreign-exchange regimes since the 1970s and 1980s. Kuwait's dinar tracks the value of a basket of currencies believed to be dominated by the dollar, while others are linked solely to the greenback. The pegs have helped to shield the region's economies from the volatility of energy markets and allowed central banks to accumulate reserves in the good times. Those reserves, along

with foreign assets held by the region's sovereign wealth funds, are used in turn to defend the pegs.

2. What could put the pegs under stress?

Fixed exchange-rate regimes in Asia were swept away during the currency crisis of the late 1990s, when speculators forced the likes of Thailand and South Korea to abandon their links with the dollar. They're now largely confined to the major oil producers in the Middle East along with Hong Kong, whose dollar has been pegged to the U.S. currency since 1983. The Gulf pegs mean local central banks often take a cue on monetary policy from the U.S. Federal Reserve, which creates the risk of policy misalignment when business cycles are out of step. Today, the Gulf region is grappling with heightened inflation and the prospect of global interest-rate increases led by the Fed. There is disquiet about global dollar dominance, and the U.S.'s willingness to use the dollar as a weapon in sanctions to punish Russia for its invasion of Ukraine.

3. What might the Gulf states do next?

None of the region's governments have suggested they might abandon the pegs and let markets decide the value of their currencies. However, Saudi Arabia, the biggest economy in the region, is said to be considering accepting yuan payments for its oil exports to China. If the kingdom does take that step, the petrodollar system would be tested, especially if neighbors follow suit, with China accounting for over 20% of the bloc's total oil shipments. Currency strategists said Saudi Arabia appeared to be sending a political message to the U.S. with the yuan reports, amid strained relations with Washington, and played down the likelihood of any immediate action.

4. What stresses have there been in the past?

The system has survived stern tests, including successive

years of low oil prices in the 1990s, a period of dollar weakness before the financial crisis in 2008 and an oil-price crash in 2014. Speculators jumped in at that point in a failed effort to challenge the Saudi peg, boosting the price of 12-month forward contracts used by investors to bet on the peg breaking or to hedge in case it does.

5. How did Saudi Arabia react?

Instead of choosing to devalue the riyal, the kingdom cut spending and subsidies and turned to debt markets to fund its budget deficit. Its neighbors have adopted similar strategies. The Saudi forward contract jumped again in 2020 amid the double-hit of weaker crude prices and the pandemic. Oman's rial forwards reached a record high that year, before edging lower.

6. What happens to Gulf economies if the U.S. hikes rates?

The risk is that, to maintain their pegs, the region's governments are forced to follow the Fed with a succession of interest rate rises that end up hammering their own economies. If they do, there's still a way for them to avoid recessions: Oil prices are riding high, leaving them with plenty of ready cash to boost state spending and support growth.

7. Which pegs appear most vulnerable to speculators?

The weakest economies in the region have for long been Oman and Bahrain, with the latter being the only nation in the region needing oil above \$100 a barrel to balance its budget, according to the International Monetary Fund. The two countries have fared better recently, with S&P Global Ratings raising Oman's credit ratings in April. The oil rally has eased concerns about the sultanate's ability to keep the rial pegged, prompting traders to slash bets on a devaluation. Saudi Arabia, the UAE, Kuwait and Qatar have for the most part always had firepower in the form of sizable currency reserves to defend their pegs.

8. What if dollar pegs were abandoned?

While the pegs give the region's governments less freedom to pursue policy goals like reviving growth or creating jobs, they provide more predictability for investors and foreign residents. The dollar's status as a global reserve currency would be undermined if GCC countries dismantled the pegs. Middle East countries account for between 10% and 15% of global foreign exchange reserves outside of China, according to Goldman Sachs. Saudi Arabia alone makes up around 5%. If Saudi Arabia accepted yuan for oil, it would accumulate big yuan reserves that it would then need to allocate, Goldman pointed out in a research note in March. This could pose challenges of its own, given the size of China's bond market.

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Germany faces \$240bn hit if Russian energy cut off

Bloomberg / Berlin

Germany was warned it could face a €220bn (\$240bn) hit to output over the next two years in the event of an immediate interruption in Russian energy supplies over the war in Ukraine.

Economic institutes advising the government in Berlin said on Wednesday in a joint forecast that a full halt in Russian natural gas imports would result in a "sharp recession."

"The decision to become independent from Russian supplies of raw materials is likely to remain valid even when the military

and political situation calms down again," the report said. "That means part of the energy supply and energy-intensive industry must realign itself."

While the €220bn estimate is the equivalent of 6.5% of annual output, it's nowhere near the almost €890bn in borrowing Germany carried out in 2020 and 2021 to shield the economy from the fallout of the pandemic.

Amid mounting casualties and reports of brutal atrocities, Germany has been under increasing pressure to justify its resistance to an embargo on Russian gas – widely seen as the ultimate leverage against President Vladimir Putin.

Ukraine snubbed a request by Frank-Walter Steinmeier, Germany's president, to visit Kyiv this week following criticism for his past support for the Nord Stream 2 gas pipeline from Russia to Germany and for his role when foreign minister in encouraging reconciliation and dialogue with the Kremlin.

Finance Minister Christian Lindner highlighted the huge challenges facing Germany as it tries to wean itself off Russian energy as quickly as possible while also pursuing a goal of climate neutrality by 2045.

"Our world will not be the same again as it once was," Lindner, who's chairman of the pro-business Free Democrats, wrote in a guest article for the Handelsblatt newspaper published on Wednesday.

"We need new business models, new ideas, new supply chains and new trade relationships," he said. "We have to reduce one-sided dependencies, be it when it comes to importing energy from Russia or exporting to China."

Berlin-based DIW, one of the institutes involved in the estimate, said on Friday that Germany could be in position to survive without Russian gas, which currently accounts for two-fifths of its gas deliveries. The group said a combination of high storage, bolstering other energy supplies and implementing programmes to lower demand could offset Russia as soon as this winter.

That's not a view that's generally shared by the business

community, with industry leaders including Deutsche Bank AG Chief Executive Officer Christian Sewing warning of dire economic consequences if Russian supplies are severed.

Even absent a cutoff, Wednesday's report pared the outlook for Germany's economy, predicting growth this year of 2.7% and 3.1% in 2023. Those numbers compare with previous projections for expansion of 4.8% and 1.9%. Inflation will average 6.1% in 2022 – the most in 40 years.

“The shock waves from the war in Ukraine are weighing on economic activity on both the supply side and the demand side,” said Stefan Kooths, vice president of the Kiel Institute for the World Economy. “Increasing prices of critical energy commodities following the Russian invasion further fuel the upward pressure on prices.”

Germany's industry-heavy economy faces considerable hurdles after the war sent energy prices higher while disrupting supply chains that had already been suffering from pandemic-related snarls. Inflation reached 7.6% in the first full month of the war – the highest level since records began after reunification in the early 1990s.

Companies are seen as particularly vulnerable because of Germany's reliance on Russian gas. The ruling coalition last week agreed on an aid package for suffering businesses that includes loans, loan guarantees and capital injections, and is meant to help energy firms in particular.

IEA cuts oil demand forecast as China reimposes lockdowns



Bloomberg / London

The International Energy Agency cut its forecast for global oil demand this year after China reimposed lockdowns to contain the spread of a resurgent coronavirus.

With the weaker demand outlook and the massive release of emergency oil reserves by IEA members, the agency now sees global markets in balance for much of the year. Crude prices have already lost most of their gains since Russia's attack on Ukraine, to trade near \$100 a barrel in New York on Wednesday.

"We're seeing now that economic forecasters are continuing to downgrade their outlook for the world economy, and obviously this will have an impact on oil demand," Toril Bosoni, head of the IEA's markets and industry division, said in a Bloomberg Television interview. "The market does look more balanced."

The Paris-based agency, which advises most major economies, lowered projections for world fuel consumption this year by 260,000 barrels a day, with a particularly steep reduction of 925,000 a day for China in April. Still, global demand remains on track to increase this year.

The IEA also dialled back estimates for the loss of Russian supplies from an international boycott over its military aggression. Production in April may be 1.5mn barrels a day

lower than the prior month – roughly half the drop that was previously expected. Those losses may still double in May, the IEA said.

Oil surged well above \$100 a barrel following Russia's attack on its neighbour. While prices have eased, they are still high enough to stoke inflationary pressures and exacerbate a cost-of-living crisis for millions of consumers. To counter this, IEA members announced last week that they will deploy 240mn barrels from emergency reserves, the biggest stockpile release in the agency's history.

"Prices are now back to near pre-invasion levels, but remain troublingly high and are a serious threat for the global economic outlook," the IEA said.

World oil consumption will expand by 1.9mn barrels a day to average 99.4mn a day this year, according to the IEA.

"Oil demand is still recovering from Covid," said Bosoni. "The aviation sector is recovering, there's pent-up demand, so we are expecting growth. But obviously downside risk if the economic outlook deteriorates."

China's fierce zero-Covid policy has diminished demand growth, as millions are locked down in their homes, imports drop and business activity slows in the world's second-biggest economy. The IEA noted that Saudi Arabia and other members of the Organization of Petroleum Exporting Countries have refused to open the taps faster, partly from a belief that markets didn't face a genuine shortage, and partly to preserve the Opec+ coalition they lead with Russia.

Opec+ members managed to provide just 10% of the supply increase scheduled for March, according to the IEA. The 19 coalition members, which have been engaged in a pact to stabilise markets since the start of the pandemic, added a mere 40,000 barrels a day as diminished investment erodes production capacity across the group.

The clash over policy between Opec+ and the IEA – which has openly expressed disappointment with the group's inaction – came to a head last month with Opec abandoning the agency as one of its data sources.

Why Japan will struggle to do without Russian energy



After reports of alleged war crimes in Ukraine by Russian forces, Japan said it will follow the European Union and Group of Seven countries and ban imports of Russian coal. Prime Minister Fumio Kishida said the country will secure alternative sources of energy in a speedy manner, although no time frame was given. But shifting away from Russian fuel will be easier said than done for resource-poor Japan.

WHAT SANCTIONS HAS JAPAN IMPOSED ON RUSSIA?

Ever since the invasion of Ukraine in late February, Japan has joined the US and European countries in sanctioning Russia. It has imposed export controls, including on semiconductors and has sanctioned some oligarchs and their family members. Russia is barred from issuing government bonds in the country. Japan is also taking in Ukrainian refugees.

WHAT ABOUT ENERGY?

Japan had drawn a line there, as it has few resources of its own. Russia supplies Japan with 13 per cent of its coal for power generation, known as thermal coal; 8 per cent of the coal used in steelmaking and 9 per cent of its liquefied natural gas. Japan has stakes in the Sakhalin-1 and 2 oil and gas projects in Russia, which Kishida has called “an extremely important project for energy security.” But on Apr 8 trade minister Koichi Hagiuda said Japan “will aim to stop importing coal from Russia” as a longer-term goal.

WHY THE CHANGE?

Japan was standing with its G7 partners, who expressed outrage over reports of atrocities committed by Russian forces in Ukraine. “There needs to be accountability for such inhumane acts,” Kishida said, adding that he believes Russia committed war crimes in Ukraine.

WHAT ARE THE CHALLENGES FOR JAPAN?

The global market for thermal coal is already tight, and with the EU also phasing out Russian coal, competition from other countries will increase, said Ali Asghar, an analyst at BloombergNEF. That means prices could rise, which could then translate into even higher electricity bills. Energy-intensive industries such as chemical manufacturers would be especially hard hit, and some might look for other sources of fuel.

Longer term, a drive to cut Japan’s dependency on coal could accelerate the transition to renewable energy and the restarting of nuclear power plants that were taken offline following the 2011 Fukushima disaster, said Isshu Kikuma, another analyst at BloombergNEF.

That said, neither offer immediate solutions. Hagiuda, the trade minister, said Japan will, over time, use energy conservation, other power generation and supplies from alternative countries to reduce its dependency on Russia.

CAN OTHER SUPPLIERS REPLACE RUSSIAN COAL

Not exactly, as Japan will have to take into account the variety of coal grades. Some power plants and furnaces are most suited for Russian coal and can't easily replace it with supplies from Australia or Indonesia.

There are also logistical complications when it comes to quickly pivoting to new sources, as shipments may come from producers that are farther away or there may not be vessels readily available.

WHAT ABOUT THE OTHER FOSSIL FUELS?

Japan is facing a pretty tight supply situation. Tokyo hasn't announced any intention to walk away from its energy projects in Russia, as UK oil majors BP and Shell have said they would do. It also has avoided any direct action on Russian oil and gas so far, in line with the EU.

Russian oil exports forced to take longer journeys to find buyers

Not All Plain Sailing

Cargo from Russia headed initially for Philadelphia, turned back and sailed toward the Mediterranean with no clear destination



Russia's crude oil exports, a vital wellspring of income for Vladimir Putin's regime, are giving no indications that they are beginning to crumble in the midst of the vanishing of European purchasers. Shipments in the seven days to April 8 proceeded with a bounce back that started the earlier week, after reliably falling since Russia's Feb. 24 invasion of Ukraine. That is as per Bloomberg News' first tracker of all crude leaving the nation's export terminals on ocean-going

tankers. Week by week shipments hit very nearly 4 million barrels every day in the first full week of April, the most significant level seen up until this point this year. That was up by just about one quarter over the earlier week.

Boosted by a combination of higher export volumes and an increase in the duty payable per barrel in April, the Kremlin earned an estimated \$230 million from seaborne crude exports in the week to April 8, based on calculations of the amount payable on each cargo that left Russian ports that week.

And the same pattern holds for the export duty revenues that the Russian state receives on overseas shipments. In the week to April 8, they jumped back to equal their highest level this year, after falling in each of the two previous weeks.

But while overall export volumes are shrugging off import bans and self-sanctioning, there is one area where a clear impact is already being seen – the distances that cargoes are being shipped to find willing buyers.

At the same time, there are signs traders are starting to work on ways to get more crude to Asia, where buyers are willing to take advantage of big discounts on Russian oil. Increasing numbers of Very Large Crude Carriers, supertankers able to carry two million barrels, are loading Russian crude from smaller ships in the Mediterranean Sea and elsewhere.

European oil majors including Shell Plc and TotalEnergies SE, which normally run tanker loads of Russian crudes through their refineries every week, have said they will stop buying out of revulsion over the war in Ukraine. The U.S. has stopped buying all Russian oil and the U.K. will follow suit by the end of the year. The early data suggest it's having an impact.

Before the war, Russia was the world's second-largest oil exporter, behind Saudi Arabia, shipping almost 5 million barrels of crude oil every day with a spot-market value of more than \$500 million. Some of that crude is delivered by

pipeline directly to refineries in Europe and China, but about 60% moves by sea. In the coming months, we plan to systematically track the flow of seaborne crude from Russia, providing week-by-week insight into how the war is affecting those flows, and showing the impact on Russia's petro-reliant economy.

Disappearing Markets

Traditional markets in Northwest Europe for Russia's Baltic Sea exports are disappearing fast, as buyers self-sanction Moscow's crude. Half of the ships loading at the northwest Russian ports of Primorsk and Ust-Luga last week are either heading to Asia, or not showing final destinations. Most of that second group are signaling destinations such as Gibraltar or Malta, suggesting that they may either be heading to Asia via the Suez Canal or to conduct ship-to-ship transfers in the Mediterranean (see below). The Mediterranean is starting to become a preferred location for transfers of cargoes of Russian crude from smaller vessels onto giant intercontinental supertankers for shipment to Asia.

Exports from the Black Sea terminal at Novorossiysk soared in the past week, surging to just under 800,000 barrels a day, more than three times the volume shipped in the previous week, when a backlog of vessels waiting to load built up off the port. Most shipments from Novorossiysk are staying within the Mediterranean region, which includes the Black Sea ports of Bulgaria and Romania, where three of the seven cargoes have discharged.

Of 21 Urals cargoes loaded from Primorsk, Ust-Luga and Novorossiysk in the week to April 8, six are heading to India, four have unknown destinations and the remainder look set to deliver their cargoes within Europe, according to their destination signals. Shipments from the Arctic port of Murmansk are still finding outlets in northwest Europe, with all three cargoes that loaded in the week to April 8 heading

either to Rotterdam in the Netherlands or Wilhelmshaven in Germany, according to their destination signals.

Shipments from Russia's three Pacific Ocean terminals, dominated by exports of ESPO crude from Kzmino, are almost all now heading to China, with only occasional cargoes going elsewhere. Perhaps the biggest initial impact of the import bans and self-sanctioning of Russian crude is to be seen in the very long and unusual journeys that some cargoes are beginning to make.

Cargoes are being transferred from the ships that call at Russian terminals onto much bigger vessels in order to benefit from economies of scale on the long voyages to China and India. A supertanker, known in industry speak as a Very Large Crude Carrier, or VLCC, can be used to accumulate the cargoes from three smaller vessels, known as Aframaxes, that often load west Russian barrels. Vitol Group, the world's biggest independent oil trader, booked a supertanker, Searacer, to load from Denmark's Skaw, a popular location for ship-to-ship transfers of Russian cargoes.

**Russia-Ukraine War Could
Delay Europe's
Decarbonization Plans for a
Decade "The Whole Situation
is Very Sad" – Energy Expert**



8 April 2022

Roudi Baroudi

DELPHI, Greece: Russia's invasion of Ukraine could force Europe to delay key decarbonization efforts for up to a decade, a prominent regional energy expert warned on Friday.

"They don't have many choices left," said Roudi Baroudi, CEO of Doha-based Energy and Environment Holding, an independent consultancy. "Unless some European countries pull out all the stops, much of the continent could soon be looking at crippling shortages, prohibitively high prices, or both."

Now that Europe is moving to reduce imports of Russian oil and gas, he explained, some of the measures expected to reduce carbon emissions may have to be put off "for eight, nine, maybe ten years", as would planned shutdowns of nuclear generating stations.

"The European Union will need to provide the necessary permissions in some cases, plus financing in others," he said. "Eight to ten nuclear plants and as many as 30 coal stations slated for decommissioning will have to remain online to keep up with electricity demand, and several projects required to replace Russian gas will need to be accelerated with additional funding and/or guarantees."

If and when gas stops flowing through pipelines from Russia, Baroudi told the conference, "it cannot be replaced by simply

ordering more liquefied natural gas from Qatar, the United States, and/or other producers. Europe doesn't have enough receiving facilities to re-gasify such huge amounts, which is why efforts to expand capacity in Germany and the Netherlands are so urgent."

Coordinated releases of strategic oil reserves by the US and other countries are helping to contain upward pressure on crude and other energy prices, he said, but reasonable levels "cannot be maintained unless more supply makes it to market and that means oil producers –primarily OPEC but others as well – have to start pumping more."

On yet another front, "Spain has both spare LNG receiving capacity and an undersea pipeline for imports of gas from North Africa – but very little of that can reach the rest of Europe unless and until a new pipeline connects the Iberian Peninsula to the rest of Europe via France," said Baroudi, who has been advising companies and governments on energy policy for decades. "Paris has recently voiced new openness to that idea, but the EU can and should do more to facilitate it. It should also do more to establish an agreed route for another pipeline to carry gas from the Eastern Mediterranean to Greece and/or Turkey."

Baroudi also argued that the EU would be wise to ensure adequate capital flows into renewables such as wind and solar. "We might have to retain fossil fuels longer than we had planned, but that's no reason to stop funding a cleaner future," he said. "In fact it's a reason to move as quickly as possible."

"The whole situation is very sad," he added. "Ever since the Paris Agreements of 2015, and especially since the Glasgow climate summit last year, Europe had been on the right track to be ready for a decarbonized economy. But now those plans are temporarily being pushed to the back burner. Apart from the lives being lost in the fighting, the energy and economic

implications will mean severe hardships across the continent and even beyond, especially for lower-income people, who are the most vulnerable as rising energy prices cause the cost of food to spike as well. So there will be hunger, too. And much of the cause is due to repeated delays in the diversification of Europe's sources of supply. Now it finds itself scrambling to prevent an economic disaster."