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Traders See Only Supply Risk From Price Cap

EU embargoes could choke off Russian crude and refined product exports to such a degree that traders think the policy architects must alter their plans avoid an oil market disaster in the coming months. The first EU ban says bloc members, with some exceptions, can no longer import Russian crude. The second bans use of EU insurance or finance for tankers transporting Russian oil anywhere. The import ban impacts the remaining 2.2 million barrels per day of Russian crude and products that are still flowing to the EU. Some critics are skeptical the EU can achieve this without serious rationing, particularly as it reels from soaring natural gas prices. But the shipping ban could be even more problematic for oil markets, since it impacts all of Russia's 5.7 million b/d of global seaborne exports. The EU bans the import of Russian crude from Dec. 5 and refined products from Feb. 5, 2023. In August, EU countries were still importing 755,000 b/d of crude oil via the Druzhba pipeline and loading 1.08 million b/d of seaborne crude at ports. In addition, they loaded 900,000 b/d of refined products. Three countries on the Druzhba will be exempt from the ban: Hungary, Slovakia and the Czech Republic. They took a combined 240,000 b/d of crude in 2021 via the pipeline. Also exempt are Bulgaria and Croatia, which combined can buy about 160,000 b/d, mostly via the Black Sea. That leaves the EU seeking alternatives for 1.29 million b/d of Russian crude over the next three months and 900,000 b/d of products over the next five months.

The G7 believes it has a clever way of keeping Russian oil flowing to markets outside the EU: If Russia sells its oil at a G7-dictated price below market rates, it can still use EU-linked tankers. The G7 — the US, UK, Canada, Germany, France, Italy and Japan — is betting that Russia will be so
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Radical Plans Put EU Gas on Dubious Path

The EU's unprecedented intervention in its gas and power sectors looks set to radically alter the design of both markets in coming years. But energy executives at this week's Gastech conference in Milan were struggling to anticipate the profound impact of proposed EU reforms. Amid no signs of Russia's Gazprom restarting gas flows via the Nord Stream 1 pipeline — and fears among Gastech delegates that piped flows via Ukraine may also be cut this winter — the European Commission will discuss this week five key measures that seek to cut electricity demand, provide liquidity support to energy companies while considering a range of caps on oil and gas company revenues, a Russian gas price cap and a similar cap on LNG imports. These potentially deep structural changes could fundamentally reshape Europe's energy landscape, with possible ramifications around the world in increasingly globalized gas markets. Norway, Europe's biggest gas supplier, says it is open to discussing voluntary gas price caps with its European buyers. "I am not closing the door to any ideas that can take Europe forward," Norwegian Prime Minister Jonas Gahr Store told the *Financial Times* as the commission is set to recommend member states adopt an emergency wholesale price cap for gas. The front-month October futures contract on the Dutch TTF hub soared over €60 early this week to over €280 per megawatt hour (\$81.75 per million Btu) as the market digested the Nord Stream shutdown before settling around €240/MWh.

Political momentum is building behind the gas price cap as European states look ahead to a

winter of discontent. Italy is pushing hard for it with German support amid a raft of recent state interventions, which have seen both Finland and Sweden offer €10 billion (\$10 billion) and €23.4 billion, respectively, in liquidity guarantees to their power companies on Sep. 4, Austria providing a €2 billion credit line, and Germany considering an energy windfall tax to fund a €65 billion fund to help consumers and industry. A series of commission draft proposals obtained by Energy Intelligence have shown a range of options emerge on price caps. These include a temporary price cap for gas used in electricity generation, a temporary price cap on gas imported from Russia, the creation of administrative gas pricing zones within the EU for the most impacted countries, a single entity buyer of Russian gas, or a possible temporary exclusion of gas from the merit order in power markets.

Potential caps provoked deep unease among Gastech delegates, which included executives from oil majors, national oil companies and trading firms. A key risk, many say, is that any temporary cap might prompt gas producers to decline to bid in the European market, while LNG suppliers could simply seek out higher prices in Asia. In winter 2023-24, Europe could find it much harder to meet its gas storage targets with less gas available. And excluding gas from price setting in the power market may incentivize gas-fired power generation — the opposite of what the EU wants to achieve on cutting gas demand by 15% between August 2022 and March 2023. A case study of what might happen can already be seen in Portugal and Spain, where a cap on gas prices was set for electricity generation, lowering power prices where gas is the dominant price-setting fuel. While Spain's average spot power prices in June and July were €169.73/MWh and €143.23/MWh respectively, operator Omie data shows, Northwest European power prices were soaring. But this led to higher demand — Spain's share of gas-fired power generation was up almost 15% in June from May and was up another 4% in July.

On the storage and supply side, Commission President Ursula von der Leyen has pointed to the success of filling European gas storage ahead of schedule, reaching 82% of capacity before the 80% goal in October. But industry executives like RWE supply and trading CEO Andree Stracke warned against any early backslapping ahead of a rebound in Chinese demand. “Next winter is a different ballgame,” he insisted. “The question is how much gas is coming in the meantime and how [many] more LNG terminals will be available next winter.” Indeed, maintaining the REPowerEU target of replacing 155 billion cubic meters of Russian gas entirely by 2030 remains a challenge. In this context, it is interesting that only one major long-term LNG deal — between Germany's Uniper and Australia's Woodside — has been signed at Gastech so far this week. Under the deal, Woodside will supply 1 Bcm/yr to Europe, with shipments starting from January 2023 and potentially running until 2039.

Fuel Switching to Keep Oil Demand Buoyant

Soaring prices for natural gas and LNG have incentivized fuel switching for heat and power generation in Europe and Asia. Dutch TTF benchmark gas touched €350 (\$300) per megawatt hour on Aug. 26 and is now trading at around €240/MWh — the oil equivalent of \$414 per barrel. The shutdown of Nord Stream 1, the main Russian gas pipeline to Europe, in retaliation for Western sanctions will keep prices under pressure. Oil is now so much less expensive than gas — or even coal — in Europe that potential oil switching could mitigate, if not offset, the demand erosion linked to recessionary pressures. Gas-to-oil substitution is already happening, especially in Germany where residential and industrial users will have to reduce their gas demand by 25% by the end of April 2023. The European Commission estimates that to cope with Russia cutting back supplies, member states will need to replace 7 billion cubic meters of gas with burning oil. Replacing this gas would require an additional 42 million bbl of fuel oil for industrial use or power generation, or at least 230,000 barrels per day if used over a six-month period. Globally, Energy Intelligence estimates additional demand from fuel-switching will boost oil consumption by up to 1 million b/d.

Substitution is especially key for industrial use, which represents about 32.5% of fuel oil demand in the EU, after power generation (54%), according to Eurostat data. In both Germany and the Netherlands, reductions in industrial gas demand have so far occurred without major drops in industrial output thanks to fuel switching opportunities. But price volatility and technical constraints

are two hurdles to substitution. Volatility does not encourage substitution when an expensive change of fuel burning equipment is involved. Unlike in the US, combined-cycle gas turbines (CCGT) for power generation in Europe do not have emergency fuel oil tanks in case their main gas supply is disrupted. Running fuel oil instead of gas in a European thermal plant is technically possible but may damage the expensive turbine blades if they have not been specifically designed for dual use. Running fuel oil instead of gas for industrial heat generation, however, is relatively easy. It might only require to change or tweak burners. Running heavy-sulfur fuel oil (HSFO) is more economical but produces more CO2 emissions that local regulations may block.

This additional demand will weigh on already razor-thin global product balances. With seasonal consumption ticking up and an EU ban on Russian refined products kicking into gear on Feb. 5, 2023, the market will get dramatically tighter. Both Europe and Asia are expected to use much more fuel oil, which has been a mainstay of Russia's petroleum exports. The surge in winter demand could further spike product prices, especially as new refinery capacity is slow to come on to offset the Russian shortfall. In Europe, heavy industries will compete with the shipping sector for very-low-sulfur fuel oil (VLSFO). In Asia, VLSFO has been chronically more expensive than diesel, jet fuel or gasoline. Bangladesh and Pakistan have started to scoop up cargoes of cheaper Russian fuel oil to replace expensive LNG. About 28% of power is generated with fuel oil in Bangladesh, and about 14% in Pakistan. Both countries have under-utilized their capacity, either because of technical issues (Pakistan) or because private utilities do not get the adequate fuel quality from the state-owned fuel importer (Bangladesh). South Korea also burns fuel for power generation, but its capacity for this is only 2.5 gigawatts.

Energy Security Keeps Japan in Sakhalin-2

The Sakhalin-2 LNG project has become a flashpoint in Russia's nationalization drive aimed at punishing foreign investors in the aftermath of its invasion of Ukraine. Recent developments show that Moscow wants to keep LNG exports uninterrupted — but only on its own terms, which its customers and partners must also follow. Sakhalin-2's largest buyer, Japan, has been labeled an "unfriendly state" by the Kremlin for its opposition to the invasion, but the world's largest LNG market has little choice but to cling to Russian LNG. Without access to pipeline gas and with only modest renewables and nuclear generation, Japan can not afford to turn its back on Russia, not with global LNG markets so tight and expensive. Japan is risking the wrath of fellow G7 members by choosing to retain its stakes in Sakhalin-2 and continuing its term offtake from the project in Russia's Far East. In line with a presidential decree signed in late June, a new Russia-registered operator, Sakhalinskaya Energiya, or Sakhalin Energy LLC, has been set up to replace Bermuda-registered Sakhalin Energy Investment Co.. Shareholders are required to apply for stakes in the new operator, but ownership remains subject to Moscow's approval. Urged by the Japanese government to stay in Russia, trading houses Mitsui and Mitsubishi have sought and received approvals for their respective 12.5% and 10% stakes in Sakhalin-2, while Shell declined to keep its 27.5% minus one share. Gazprom retains its 50% plus one share.

Japan's decision to stay in Russia contrasts with its exit from Myanmar following a 2021 coup, underscoring the importance of Russian LNG to the country's energy security. Japan is also unwilling to give up its strategic interests to opportunistic buyers from longtime regional rival China. Japan buys 5 million tons per year in term supplies from the 11 million plus ton per year Russian project, accounting for roughly 10% of its total imports. Most existing buyers have signed new contracts with the new operator, and most key contractual terms are unchanged, much to their relief. Mitsui and Mitsubishi have reduced estimates for the combined value of their stakes by \$1.7 billion; a complete exit would result in greater balance sheet losses. Staying put, however, will subject Japanese firms to Russia's unpredictable whims. The presidential decree has jolted Japanese memories of 2006 when Mitsubishi and Mitsui were forced to halve their shareholdings from their original 20% and 25%, respectively, as state-controlled Gazprom sought greater control of Sakhalin-2.

Moscow looks likely to hand over Shell's stake to domestic LNG player Novatek, which would bolster the privately-owned firm's ambition of becoming Russia's LNG export champion. Novatek CEO Leonid Mikhelson said on Sep. 7 the company is interested in joining the project but needs to complete an audit first. Novatek and Gazprom are rivals in competition for Arctic resources and export markets. Sakhalin-2 fits well into Novatek's strategy to build up LNG sales in Asia-Pacific, while Gazprom might benefit from having a strategic LNG developer that has experience operating in a hostile subarctic environment. Chinese and Indian players were thought to be potential candidates too. But sources say Chinese buyers are not eager as they weigh the sanctions, political and operational risks.

There are limits to Japan's interest, however, and Japanese firms are not expected to further increase their presence in Russia given the potential political backlash and sanctions risk. The

Japanese government supported investing in Novatek's Arctic LNG-2 project in 2019 despite Russia's annexation of Crimea in 2014, but the international environment has changed dramatically since the Russian invasion of Ukraine in February. Tokyo will not want to be isolated at the G7 by supporting a new Russian project, said James Brown, associate professor at Temple University's Tokyo campus.

Traders See Only Supply Risk From Price Cap

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financially desperate it will need to sell under this price cap system. And even if consumer countries do not sign on to the price cap, Washington believes the system would give these nations more leverage to negotiate lower prices for Russian oil, thus dealing a blow to Moscow's oil revenues. The G7 thinking is that the price of Russian oil in the international market will drop towards the artificial price the group will set for crude and refined products — a price that will be higher than Russia's production costs but below market rates. Russia can sell into the price cap, the G7 argues, or sell outside it and face higher shipping and insurance costs. "The overarching goal is to give Russia hard choices," one US official said.

That thinking may be flawed, however. Traders note that Russia, a critical member of Opec-plus, might respond by limiting supply, as it has done with gas to Europe. That would increase global oil prices and income for Moscow, even at lower volumes. Russia already plans to halt exports to countries that support the price cap, and China and India — the most critical buyers of re-routed Russian oil — say they will not abide. Traders repeatedly warn that the price cap is not practical and unenforceable. Some believe Russia will simply sell more barrels to India, China and perhaps Turkey, using mostly Russian, Chinese and Turkish ships and offering nice discounts. What can't be sold this way — or stored — could be shut in, they think. Goldman Sachs this week said the key risk to the price cap "is the potential for Russian retaliation, which would turn this into an additional bullish shock for the oil market."

So far, the oil market does not foresee disaster, as prices continue to sag on economic concerns, even as G7 finance ministers have moved into the "implementation phase" of the cap. Brent has dropped below \$90 per barrel and US West Texas Intermediate below \$80/bbl. Gasoline prices also keep falling. The lone holdout is diesel, which is set to benefit from fuel switching away from sky-high gas prices. The calculation so far has been that high energy prices and a potential recession will not push oil demand beyond the limits of either crude supply or global refining capacity — except for diesel. The price cap system must be in place well ahead of the Dec. 5 ban, since refiners must plan. Analysts fear the G7 thinking is naïve. "The architects of the plan," PVM brokers said in a note, "must be convinced that the price-supportive impact of any Russian retribution will be short-lived, lost supply will be replaced from alternative sources as the re-alignment of Russian flows is under way, energy security will be guaranteed and the dependence on Russian energy will be negligible going forward." In August, Russia exported 4.9 million b/d of crude oil and 2.1 million b/d of refined products globally by tanker, pipeline and railroad.

Opec Sends Big Message With Little Cut

Opec-plus' decision this week to cut its targeted output by 100,000 barrels per day in October — effectively returning to August production levels — will not impact oil balances much. Most members have been producing significantly below target, with preliminary Energy Intelligence assessments for August output showing under-production running at a staggering 3.3 million b/d. As such, the only tangible cuts in real barrels might come from Saudi Arabia, the United Arab Emirates and Kuwait — amounting to a paltry 40,000 b/d. Nevertheless, given current global concerns over high energy prices, the first cut since Opec-plus' historic Covid-19 response in May 2020 serves as a wake-up call for a market now accustomed to automatic monthly increases. The move also sends a message that producers are willing to use "all of the tools" at their disposal to maintain control of the market, according to the Saudi energy minister. Opec-plus is "attentive, pre-emptive and proactive," Prince Abdulaziz bin Salman told Energy Intelligence in an interview. The market has been hit lately by excessive "speculative reports and analysis about demand destruction, possible return of large supply volumes, and measures related to price caps, embargoes and sanctions," he said. The "jury is still out" regarding a possible recession, with "mixed signals" coming from different parts of the world, the minister added.

Rarely have producers faced such a policy minefield. Against mounting concerns over high energy prices and calls for more supply, producers must balance signs of demand weakness and continued market interventions by consuming nations. The cut announcement overturned pre-meeting expectations and raised consumer eyebrows. But it is noteworthy that Brent prices slumped below the \$90 per barrel mark for the first time since January after the decision. Amid such uncertainty, Opec-plus' best weapon is its ability to respond to events quickly through its regular monthly meetings. Certainly, if events of the last week are anything to go by, the market is in

for a rocky ride. On top of sanctions announced earlier this year, G7 finance ministers this week committed to implementing a price cap on Russian crude exports. The EU also proposed other measures aimed at undermining Russia's gas exports and softening the consumer impact of high prices. Energy, according to a recent study by the OECD, is the number one driver of rising prices in the euro-zone, making up 54% of inflation, compared to just 24% in the US.

At the same time, fossil fuel subsidies to enable populations to cope with cost-of-living hikes are surging. A joint International Energy Agency-OECD survey of 51 countries shows government support for fossil fuels almost doubling from \$362 billion in 2020 to \$697 billion in 2021, with further big increases expected this year. Riots in Indonesia over the weekend, after the government lifted some subsidies, underlined just what a political hot potato energy prices have become. And while support for EU sanctions against Russian oil exports is holding, protests calling for an end to anti-Moscow measures and more government actions to mitigate the effects of high prices are rising in Europe.

It is not entirely clear how much ability Opec-plus, outside of big spare capacity holders Saudi Arabia and the UAE, has to alleviate the situation. Russia's status as a critical Opec-plus member complicates matters, too. The latest monthly supply figures highlight an uncomfortable truth. Erosion of production capacity among many Opec-plus members threatens to weaken the producer alliance's market flexibility — certainly in terms of supply upside. And 18 months of steadily rising prices — for the most part — has not sparked a big rebound in upstream investment. Outside the US, active rig counts are only up 14% on 2021 levels, according to Baker Hughes. True, the data does not reflect major drilling campaigns about to be launched by Saudi Arabia and the UAE as they look to fast-track their upstream expansions. Nevertheless, the figures make for grim reading, with near-term production prospects among Opec's African members, especially bleak.

West Africa Has Mixed Results With Investors

With another — albeit slimmer — majority under his belt in August parliamentary elections, Angola's President Joao Lourenco and the ruling MPLA can focus on making the most of the country's growing strategic importance as the West tries to wean itself off Russian oil and gas. They aren't alone. Other West African governments like Nigeria and Namibia are determined to exploit the relaxation of pressures to shift from fossil fuels amid global supply concerns. Lourenco, who inherited a sector in deep decline in 2015, legislated to encourage short-cycle oil and gas projects as investors started chasing advantaged barrels well before the latest energy crisis. TotalEnergies and Eni remain stalwarts in Angola, BP has found a way to continue investing with lower costs through its Azule joint venture with Eni, and former waverers Exxon Mobil and Equinor also appear set to stay.

Angola is attracting investment in stand-alone developments of oil and non-associated gas fields and in exploration. While the results won't be spectacular, the narrative has at least shifted from slowing decline to forecasts of a net hike in output of 153,000 barrels per day by 2025, when oil production is projected at 1.4 million b/d. Of that, Azule will account for a net 50,000 b/d. Another 50,000 b/d will come from new short-cycle projects on Total's Block 17. Even more ambitious, Total even appears set to sanction a standalone development of the 100,000 boe/d Golfinho and Cameia fields on blocks 20/11 and 21/09. The New Gas Consortium, owned by Chevron, Total, BP and Sonangol gave a green light to the shallow-water Quiluma and Maboqueiro non associated gas fields in July. This will top up supplies to Angola LNG.

Nigeria's Oil Minister Timipre Sylva has talked up the country's strategic importance as an oil and LNG supplier to the West. He has sought funds for abandoned LNG schemes and dusted off old projects to pipe gas to North Africa. However, the government's failure to stop crude oil theft and its mishandling of international oil companies' (IOCs) asset sales have deterred much new investment. Output of crude and condensates tallied less than 1.3 million b/d in recent months, compared with 2.5 million b/d a decade ago. The only potential bright spot is the government's recent renewal of deep-water licenses. However, Nigeria's unattractive investment climate will limit progress to a few short-cycle schemes and tiebacks: Elections in February 2023 could usher in a more investor-friendly government, though Nigeria's ruling elite of recycled generals and corrupt powerbrokers seem to have a permanent grip on the economy and oil sector. High oil prices this year have encouraged more theft and illegal export, depriving investors of hard earned barrels and forcing Nigeria LNG to cut shipments due to insufficient feedstock of associated gas. Nigerian National Petroleum Corp. (NNPC) has derailed Exxon's sale of its shallow water Qua Iboe assets to London-listed Seplat, sending negative signals to investors. Still, the license renewals will at least pave the way for more short-cycle drilling to revive output at the declining Agbami and Akpo fields. All told, Nigeria is likely to add a net 150,000 b/d to deep-water output by 2028 — comprising the 120,000 b/d Bonga North tieback to the Bonga main field, and

Total's 30,000 b/d Preowei tieback to Egina, which is due to get a green light soon.

For all the risk aversion and short termism that slashed exploration budgets since the 2015 oil price crash, big dollars are flowing to West Africa's frontiers — but only to the deep offshore, and mainly to investor-friendly countries like Namibia and Senegal, which, as new players, offer better terms than mature producers. While the exploration started well before this crisis, IOCs are accelerating appraisal work and embracing development concepts offering faster delivery. In Namibia both Total and Shell appear set to sanction development of their Orange Basin Venus and Graaf discoveries in 2023, with first oil and floating LNG schemes that could start delivering by 2028. While the IOCs and government remain coy about production levels and oil/gas ratios, it could be safe to assume output of at least 300,000 boe/d given the size of the discoveries. Total's Venus find, touted as the largest deepwater discovery ever, has been estimated at between 3 billion bbls and 13 billion bbls, while Shell's Graaf discovery has been estimated at up to 2 billion bbls with plenty of gas.

Price Spike Curbs US ESG Momentum

Rising oil and gas prices and pressure from Republican lawmakers are curbing some of the momentum in the US behind the corporate push toward environmental, social and governance (ESG) principles, which generally favor investment in green energy over fossil fuels. The ESG movement will not suddenly dissipate in response to high prices, but some important investors and banks like BlackRock and JPMorgan are making it clear that they recognize more investment is needed in some new oil and gas supplies in the near-term. In many cases, this does not constitute a real shift in investment philosophy, but rather a change in tone and messaging. For instance, investment giant BlackRock, which manages a \$10 trillion asset portfolio, never gave up on oil and gas, but it has become the face of the ESG push due to recent statements by its chairman and CEO, Larry Fink. In 2020, Fink used his annual letter to CEOs to focus on climate change, saying the matter was becoming a “defining factor” in BlackRock's assessment of companies. In response, several corporations announced plans to slash their carbon footprints, showing BlackRock's influence. While Fink's 2022 letter also acknowledged that “the tectonic shift towards sustainable investing is still accelerating,” it included some caveats about the pace of the energy transition and the need to keep supplies “reliable and affordable.” Businesses “cannot be the climate police,” he said, stressing that governments must lead the way with regulations and disclosure requirements. Fink emphasized the need to “pass through shades of brown to shades of green” in pursuit of net-zero greenhouse gas emissions, adding that “traditional fossil fuels like natural gas will play an important role both for power generation and heating in certain regions” in the transition.

Over the past year, there has been significant backlash toward ESG investing in Republican-leaning states like Texas, Oklahoma and West Virginia. These fossil fuel-producing states have threatened to cut ties with ESG-focused fund managers, prompting some of these firms to promote their fossil fuel investments — and even promise more. Texas started the movement of US states pushing back on asset managers they believe are limiting investments in the oil and gas sector — a practice termed “energy boycotting” by Republican policymakers. Texas passed a law that went into effect last month to prevent state funds from contracting with or investing in firms on their list of boycotters, which includes about 350 financial companies including BlackRock and European banks Credit Suisse, BNP Paribas and UBS. State pension funds now have 30 days to inform the state comptroller of their involvement with these investors. BlackRock disagreed with its inclusion. “BlackRock does not boycott fossil fuels — investing over \$100 billion in Texas energy companies on behalf of our clients proves that,” it said, also warning of the dangers of “politicizing” state pension funds. Credit Suisse also took exception, citing its “ongoing partnerships and strong client relationships in the energy sector,” while UBS said it “does not boycott energy companies even under a broad interpretation of Texas law.” JP Morgan and other top US banks did not find themselves on the list. In an earlier letter to Texas officials aimed at proving the bank's oil and gas credentials, JP Morgan general counsel Stacy Friedman noted the bank provides financial products and services to fossil fuel companies “and intend[s] to do so in the future.”

Investors like BlackRock still hope Washington will take the lead on climate change with balanced policies that alter consumer energy demand patterns over time. The recent Inflation Reduction Act included some provisions for continued investments in oil and gas supply, but the industry still says it is getting, at best, mixed messages from the climate-focused Biden administration. “They have an incoherent message,” ConocoPhillips CEO Ryan Lance said of the White House on the sidelines of this week's Gastech conference in Milan. “[They tell us] we need more production in one ear and then say we want you to go away in five years in the other.” As for the current energy debate with the White House, “It's not substantial, and it's not constructive,” he said.

What's New Around the World

COUNTRIES

UNITED KINGDOM — New Prime Minister Liz Truss said the UK will freeze retail energy prices for two years at roughly £2,500 (\$2,889) annually for an average household, starting Oct. 1, and announced that a 2019 moratorium on hydraulic fracturing for gas (fracking) would be lifted. The retail measures will be paid for through increased public borrowing rather than a windfall tax on energy companies. Truss said new licenses for oil and gas exploration would be issued, with speculation up to 130 could be made available in an announcement later this week. Upstream lobby group Offshore Energies UK earlier this week urged Truss to “prioritize reliable producers and minimize reliance on LNG, which has three times the emissions of UK gas” and to “cement the UK’s position as a responsible oil and gas producer” and urged new licenses to be awarded “as soon as possible” as Europe considers more radical policies to address a worsening energy crisis. “We are renewing our offer to the government to drill a shale gas test well in the UK,” said Tom Crotty, director at chemicals group Ineos, which has shale gas license interests in central and northern England. “We have promised to invest the first 6% of the value of the gas back into the local communities,” he added.

JAPAN — Japan became almost completely reliant on Mideast crudes in July as its imports spiked. Total crude imports spiked by 336,000

b/d from June to 2.62 million b/d in July, according to data from the Ministry of Economy, Trade and Industry (Meti). This was almost entirely driven by increases in Mideast crude volumes, which surged by 396,000 b/d. On the flip side, Japanese refiners cut their imports of non-Mideast crudes by half to 61,000 b/d in July. Mideast crudes’ share of total Japanese imports hit nearly 98% in July, up from about 95% in June. The July figure is extraordinarily high, even for Japan, which is typically heavily reliant on Mideast crude. Mideast crudes made up almost 93% of total imports in 2021. Emirati and Qatari crudes were the main driver of the July spike in Mideast imports. Imports from the UAE, which are predominantly Abu Dhabi grades, increased by 193,000 b/d from June, with inflows of key light, sour Murban crude jumping by 98,000 b/d. Qatari crude imports surged by 85,000 b/d from June.

Japan's Top Crude Suppliers

	Jul '22	Jun '22	Chg.	Jul '21	Chg.	Jan-Jul'22
(‘000 b/d)						
UAE	1,097	904	193	818	278	983
Saudi Arabia	918	912	7	735	183	1,023
Qatar	237	152	85	187	50	217
Kuwait	213	190	23	232	-20	207
Ecuador	47	46	1	23	24	50
Bahrain	43	0	43	22	21	34
Oman	32	0	32	12	20	31
Neutral Zone	14	0	14	0	14	8
Vietnam	10	0	10	0	10	6
Australia	3	5	-2	7	-4	7
Others	1	70	-69	47	-45	106
Total	2,615	2,279	336	2,083	531	2,672

Source: Ministry of Economy, Trade and Industry (Meti)

Global Output Surpasses 101 million b/d

World output of hydrocarbon liquids climbed by 520,000 b/d in August to reach 101.2 million b/d, the highest level since December 2019, when production was 101.3 million b/d. Output by countries not aligned with Opec-plus came in flat for the month at 46 million b/d. Similarly, US output remained on July’s level at 19 million b/d. Norway, however, managed to raise liquids production by 190,000 b/d to get back over the 2 million b/d milestone. Norway is forecast to reach 2.3 million b/d by year’s end thanks to the launch of Johan Sverdrup Phase 2. Liquids production by Opec-plus, meanwhile, jumped by 480,000 b/d.

World Crude Oil and Other Liquids Supply

	Jul '22	Aug '22	Chg.	Crude Aug	Other Aug
(‘000 b/d)					
Non-Opec-Plus	45,945	45,949	3	32,491	13,457
US	19,015	19,026	11	11,900	7,126
Canada	5,570	5,449	-121	4,500	949
Brazil	4,293	4,173	-120	3,004	1,169
Colombia	734	751	17	733	18
Norway	1,876	2,004	128	1,696	308
UK	896	861	-36	795	65
Egypt	663	659	-4	547	112
Qatar	2,128	2,134	6	613	1,521
China	4,236	4,276	39	4,171	105
India	758	755	-3	579	176
Indonesia	798	798	0	621	177
Other Non-Opec-Plus	4,979	5,064	86	3,332	1,732
Opec-Plus	52,384	52,867	483	45,087	7,780
Opec	34,693	35,315	622	29,878	5,437
Saudi Arabia	13,183	13,318	135	10,944	2,374
Iraq	4,471	4,548	77	4,480	68
Iran	3,464	3,514	50	2,620	894
UAE	4,177	4,232	55	3,184	1,048
Kuwait	2,937	2,975	39	2,811	164
Nigeria	1,367	1,229	-137	1,056	173
Libya	918	1,271	353	1,208	63
Algeria	1,497	1,550	53	1,063	487
Angola	1,247	1,257	10	1,219	38
Other Opec	1,434	1,422	-12	1,293	129
Non-Opec	17,691	17,552	-139	15,209	2,342
Russia	11,214	11,025	-189	9,763	1,262
Kazakhstan	1,690	1,642	-49	1,368	274
Azerbaijan	706	703	-3	554	149
Mexico†	1,947	1,942	-5	1,716	226
Oman	1,084	1,114	30	893	221
Malaysia	535	563	28	374	189
Other Non-Opec	514	562	48	541	21
World Supply	98,329	98,816	486	77,578	21,237
Refinery gains	2,360	2,392	33	0	0
Total	100,689	101,208	519	77,578	23,629
World					

*Other liquids include natural gas liquids, biofuels, gas-to-liquids, coal-to-liquids, refinery additives. †Mexico nominally is a member of the Opec-plus alliance but has no production quota. Source: IEA, EIA, Jodi, government and trade data, Energy Intelligence.

Opec-Plus Falls Way Short in August

Opec-plus boosted crude output in August by only 160,000 b/d, according to Energy Intelligence’s assessment, which compares to the 648,000 b/d monthly increase the alliance had approved during its Jun. 30 meeting. Total production by the 19 members with a quota came to 38.8 million b/d — a staggering 3.3 million b/d short of target. Russia accounted for over half of the shortfall: its 9.76 million b/d for the month,

down 50,000 b/d on July, was 1.2 million b/d shy of its production target. To be sure, Russia’s ceiling of 11 million b/d is 800,000 b/d beyond its crude output capacity. Meanwhile, Iraq continues to surprise to the upside — its August output rose 70,000 b/d to 4.48 million b/d. Among the four members without a quota, Libya was the winner as it raised production by nearly 360,000 b/d to 1.2 million b/d.

Compliance With Opec-Plus Production Cuts

Opec	Base	Aug Ceiling	Aug Production	Target	Compliance Rate	Non-Opec	Base	Aug Ceiling	Aug Production	Target	Compliance Rate
Saudi Arabia	11,500	11,004	10,944	-60	112%	Russia	11,500	11,004	9,763	-1,241	350%
Iraq	4,803	4,651	4,480	-171	213	Mexico*	1,753	1,753	1,716	0	NA
UAE	3,500	3,179	3,184	5	98	Kazakhstan	1,709	1,706	1,368	-338	11,370
Kuwait	2,959	2,811	2,811	0	100	Oman	883	881	893	12	NA
Nigeria	1,829	1,826	1,056	-770	25,767	Azerbaijan	718	717	554	-163	16,400
Angola	1,528	1,525	1,219	-306	10,300	Malaysia	595	594	374	-220	22,070
Algeria	1,057	1,055	1,063	8	NA	Bahrain	205	205	210	5	NA
Congo (Br.)	325	325	254	-71	7,100	South Sudan	130	130	167	37	NA
Gabon	187	186	229	43	NA	Brunei	102	102	86	-16	1,606
Eq. Guinea	127	127	65	-62	6,200	Sudan	75	75	78	3	NA
Opec 10	27,815	26,689	25,305	-1,384	223	Non-Opec 9	15,917	15,414	13,493	-1,921	482
Iran	3,296	NA	2,620	NA	NA	Combined 19*	43,732	42,101	38,798	-3,305	303%
Venezuela	1,171	NA	745	NA	NA	Opec-Plus 23	51,066	NA	45,087	NA	NA
Libya	1,114	NA	1,208	NA	NA						
Opec 13	33,396	26,689	29,878	-1,384	223%						

For countries with a zero pledge in August, the compliance rate is approximated by dividing by ‘1’. In ‘000 b/d. Opec and non-Opec compliance based on crude oil only. Mexico no longer has a quota but nominally is a member of the non-Opec alliance. Source: Opec, government data, Jodi, Energy Intelligence.

Marketview

Wild Ride

Benchmark Brent fell below \$90 per barrel for the first time since early this year, bleeding another \$3/bbl in the past week and triggering alarm at Opec-plus. The alliance reasserted its intent to be “attentive, pre-emptive and proactive” in supporting market stability, but volatility may be out of its control.

Brent is now trading November barrels, with none of the main market drivers moving in a direction that would help restore a sense of balance. Instead, G7 countries have engaged in a power play with Russia over its 5.7 million barrels per day of crude and refined product exports, and it is unclear who has more to lose in this game of chicken in energy markets.

In Europe, a deeper recession is looming and impacts can already be seen on energy consumption. The end of the driving season in the US and Europe has dragged on light-end margins and spread to other petroleum products, even if diesel margins remain relatively strong ahead of the winter. In Asia, Chinese demand remains lackluster as the “zero-Covid policy is now impacting areas and a population that accounts for around 25% of GDP,” Saxo Bank notes. The market focus has been less on flat prices than on forward spreads and their potential disconnect with market fundamentals. Some traders are concerned that a recent selloff in gasoil cracks was not sending refiners the right signal ahead of potential winter shortages.

On the supply side, a nuclear deal with Iran now looks less likely, and even if it happened the additional Iranian barrels would not cover the impending loss of Russian crude

and refined product exports to Europe. But G7 countries want to have their cake and eat it — they would like to keep Russian oil flowing while reducing Moscow’s revenue, hence the controversial price cap scheme.

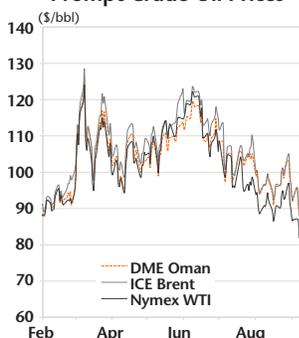
The market has warned that capping oil or gas prices is wishful thinking: traders will find a way to circumvent sanctions if they can make a buck out of it. And whether or not

Russia cuts oil supply to countries signing up to the scheme, there is potential for higher prices. Under a price cap, competition for Russian barrels is likely to increase and discounts to narrow as more participants are brought to the fold. And if Russia retaliates with supply cuts, experts think every 1 million barrel per day cut could add up to \$20/bbl to the current oil price.

The policy mistakes made over the past decade could prevent a rapid return of adequate energy supplies to Europe for years. With unprecedented releases from the US Strategic Petroleum Reserve set to cease in October, cynics say the EU will end up buying re-routed Russian crude from other sellers to fill the gap. Regardless, Europe is scrambling for options to source alternative oil and gas and shield consumers from skyrocketing energy prices.

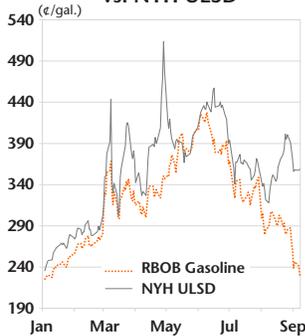
And while Opec-plus would like to reconnect the physical and paper markets, the EU would like to do the opposite: delink energy prices from well-entrenched market dynamics, with the risk of creating further supply havoc. Solutions to mute the dramatic spikes in prices are at best wobbly and fall into the traditional welfare state arsenal: windfall taxes and subsidies. It may temporarily alleviate pain on taxpayers, but how this will help add supply and fend off further energy inflation remains unclear.

Prompt Crude Oil Prices



Source: Nymex, ICE, DME

Nymex Prompt Gasoline vs. NYH ULSD



PIW Market Indicators

(\$/barrel)	Sep 5- Sep 7	Aug 29- Aug 12	Aug 8- Aug 12
Spot Crude			
Opec Basket	\$98.28	\$101.96	\$101.88
UK Brent (Dtd.)	90.74	96.54	104.57
US WTI (Cushing)	84.83	90.77	94.65
Nigeria Bonny Lt.	94.96	100.83	110.95
Dubai Fateh	94.25	98.00	95.85
US Mars	83.83	89.29	93.13
Russia Urals (NWE)	67.96	73.03	71.75
Crude Futures			
Brent 1st (ICE)	92.19	97.25	97.62
Brent 2nd (ICE)	91.19	95.91	96.28
B-wave (ICE)	93.24	97.86	97.00
WTI 1st (Nymex)	84.41	90.34	91.92
WTI 2nd (Nymex)	84.07	89.82	91.16
Oman 1st (DME)	90.66	96.47	97.45
Oman 2nd (DME)	88.21	94.81	93.83
Murban 1st (ICE)	91.99	98.16	98.12
Murban 2nd (ICE)	89.16	95.89	95.23
Forward Spreads			
Brent (1st-Dtd.)	+\$1.45	+\$0.71	-\$6.95
Brent (2nd-1st)	-1.00	-1.35	-1.34
WTI (2nd-1st)	-0.34	-0.52	-0.77
WTI (3rd-2nd)	-0.43	-0.75	-0.74
Oman (2nd-1st)	-2.45	-1.66	-3.62
Oman (3rd-2nd)	-0.19	-2.47	-2.37
Murban (2nd-1st)	-2.83	-2.27	-2.89
Murban (3rd-2nd)	-0.16	-2.10	-1.52
Grade Differentials			
WTI-Brent (1st)	-\$6.35	-\$7.07	-\$6.46
WTI-LLS	-2.45	-2.40	-2.50
WTI-Mars	+1.00	+1.48	+1.52
Brent(Dtd.)-Dubai	-3.50	-1.45	+8.72
Brent(Dtd.)-Urals	+22.78	+23.51	+32.82
Brent(Dtd.)-Bonny Lt.	-4.22	-4.29	-6.38
Term Crude Formulas			
Arab Lt.-US (c.i.f.)	\$91.46	\$96.92	\$100.26
Arab Lt.-Europe (Med)	97.94	102.56	102.10
Arab Lt.-Far East (f.o.b.)	104.74	108.73	107.20
Nigeria Bonny Lt.	96.65	102.45	111.03
Arab Light Gross Product Worth			
Rotterdam	\$100.22	\$103.45	\$105.65
US Gulf Coast	101.66	108.37	109.98
Singapore	100.80	102.48	99.31
Gross Product Worth & Margins			
Rotterdam			
UK Brent GPW	\$112.62	\$115.31	\$105.02
UK Brent Margin	+19.74	+17.36	-1.07
US Gulf Coast			
Mars GPW	95.83	102.75	106.06
Mars Margin	+11.90	+13.36	+12.83
Singapore			
Oman GPW	100.35	101.14	98.79
Oman Margin	+3.83	+0.28	-1.93
US Nymex			
WTI 3-2-1 Crack	+\$31.84	+\$34.64	+\$39.66
Refined Products			
Rotterdam (\$/ton)			
Eurobob Gasoline	\$829.27	\$832.15	\$939.56
Gasoil (0.1%)	1086.75	1111.20	1032.90
Fuel Oil (0.5%)*	644.33	657.75	696.40
US Gulf Coast (¢/gal)			
RBOB Gasoline	231.38¢	248.95¢	277.51¢
ULS Diesel	353.29	363.59	331.70
Fuel Oil (0.5%, \$/ton)	\$693.00	\$724.20	\$744.60
Singapore (\$/bbl)			
Naphtha	\$71.97	\$71.55	\$76.61
Gasoil (0.05%)	135.65	140.67	123.85
Fuel Oil (0.5%, \$/ton)	700.00	733.00	758.40

*ARA fuel oil prices for 1% sulfur fuel oil (LSFO) have been discontinued as the market becomes increasingly illiquid. The new 0.5% sulfur fuel oil (VLSFO) specs reflect the transition to new emissions standards set by the International Maritime Organization effective Jan. 1 2020. Latest week's data are preliminary. For GPW and margin calculations, see Refining Profitability Methodologies on the Energy Intelligence website in Reference Tools Publication Methodologies. Spot prices from Thomson Reuters. Opec basket source, Opecna. 3-2-1 crack spread for 3 parts crude, 2 parts gasoline, and 1 part heating oil. PIW Numerical Datasource subscribers can download all indicators in Excel worksheets.

EIA Warns of Oil Price Volatility

The US Energy Information Administration’s (EIA) latest forecast sees oil prices hovering in a \$90-\$100 per barrel band through the end of next year, but warned that “the possibility for significant volatility around those averages is high.” The agency noted that volatility can come from many corners, including demand, supply, crude oil and refined products. On the crude supply side, the EIA sees volatility as the result of lower Opec-plus output, potential supply disruptions in Libya, the end of oil sales from strategic petroleum reserves from November, a new Iran nuclear deal and potential outages from hurricanes in the US. Price volatility could be triggered by the refined product market as well, especially from ultra-low-sulfur diesel (ULSD) due to fuel-switching away from expensive natural gas.