Energy Intelligence

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INTERNATIONAL OIL DAILY®

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In Brief

Data Snapshot

Adnoc, Exxon Mull Major Upper Zakum Expansion

Abu Dhabi National Oil Co. (Adnoc) and Exxon Mobil are understood to be exploring a major expansion of the giant Upper Zakum oil field that might push it well above its current production capacity of 1 million barrels per day.

Discussions about the potential expansion plan are under way but are still at an early stage, Energy Intelligence understands.

The outcome will depend on the joint venture partners — which also include Japan's Inpex — reaching an agreement on key issues such as fiscal terms.

However, it's understood that there is strong interest among the partners in proceeding with an expansion of the field.

It's not clear how much capacity might be added, but an expansion to as much as 2 MMb/d is understood to have been floated.

With proven reserves of around 50 billion barrels, Upper Zakum is Adnoc's largest producing oil field. Combined with the lower portion of the field, known as Lower Zakum, it is the world's second-largest offshore oil field.

Upper Zakum alone has had a production capacity of 1 MMb/d since the so-called UZ1000 expansion project was completed ahead of schedule in late 2021.

ADNOC OFFICIAL CRUDE PRICES

	Oct '22	Sep '22	Chg.
Murban	98.06	105.96	-7.9
Umm Lulu	98.06	106.06	-8
vs. Murban	0	0.1	-0.1
Das	96.96	105.16	-8.2
vs. Murban	-1.1	-0.8	-0.3
Upper Zakum	96.21	102.96	-6.75
vs. Murban	-1.85	-3	1.15

Source: Abu Dhabi National Oil Co.

In addition to oil, Upper Zakum also produces some 200 million cubic feet per day of associated gas.

Adnoc holds a 60% stake in the concession, with Exxon Mobil owning 28% and Inpex 12%.

Adnoc declined to comment about any expansion plans for Upper Zakum.

Any significant capacity increase could be a real game changer for plans to establish an Upper Zakum futures contract, enabling the grade to potentially replace Oman crude as a regional sour crude benchmark.

However, to become a successful benchmark, Adnoc would probably also need to take steps to encourage more players to trade Upper Zakum in order to boost transparency and spot market liquidity, a trading source tells Energy Intelligence.

Critical Part of Larger Plan

Upper Zakum and other big offshore concessions are integral to Adnoc's drive to raise its overall crude production capacity to 5 MMb/d from above 4.2 MMb/d now.

The 5 MMb/d target is understood to have been shifted to 2027 from 2030, and might even be brought forward to 2025, Energy Intelligence understands.

A further expansion of Upper Zakum would likely play a critical role in a potential plan to upsize Adnoc's current expansion program and take capacity to 6 MMb/d as early as 2030.

Adnoc has been pressing ahead with its expansion plans — which also include achieving self-sufficiency in gas by 2030 — even as the world's shift to low-carbon energy gains momentum.

Abu Dhabi argues that its low-cost and relatively low-carbon crude puts it in a stronger position relative to some other producer nations, even as global oil demand peaks and declines in the longer term.

At the same time, the emirate has committed to achieving net-zero emissions by 2050 by investing more in renewables, adding more nuclear power and implementing technologies such as carbon capture and storage (CCS).

Concession Could Be Extended

When the UZ1000 contract was awarded in 2017 to raise Upper Zakum's capacity from 750,000 b/d to 1 MMb/d by 2024, it was originally estimated to cost $8 billion.

Under new fiscal terms agreed in the same year, Abu Dhabi raised the amount that Exxon and Inpex are paid to $2.85 per barrel from the previous level of $1/bbl. The concession was extended to 2051.

An agreement to further expand the capacity of the field would be expected to go hand in hand with a further expansion of the concession.

For Exxon Mobil, the field is the US major's only significant upstream asset in the Middle East outside of Qatar.

Oliver Klaus, Dubai and Rafiq Latta, Nicosia

UK to Freeze Retail Energy Bills for Two Years

UK Prime Minister Liz Truss has announced a two-year freeze on household energy bills and measures to boost domestic oil and gas production as Europe grapples with its worst energy crisis since the 1970s.

She said on Thursday that under her government's "energy price guarantee" the typical UK household will pay no more than £2,500 per year (about $2,900) for gas and electricity over the next two years starting Oct. 1.

Regulator Ofgem had recently announced that that the price cap for the average annual UK energy bill was set to rise to £3,549 on Oct. 1 from £1,971.

Truss — who succeeded Boris Johnson as prime minister just a few days ago — said the lower price cap will be funded through increased public borrowing, rather than a windfall profits tax on energy companies.

Chancellor Kwasi Kwarteng will provide details of the expected costs in a fiscal statement later this month, but UK press reports pointed to an estimated cost of around £100 billion ($115 billion).

There will also be a reduced six-month cap on energy bills for businesses, schools and hospitals, which will be reviewed after three months.

The government said it will launch a new oil and gas licensing round as early as next week — with over 100 new licenses being offered — to help boost the UK's declining domestic oil and gas output.

It also announced the lifting of a 2019 moratorium on hydraulic fracturing of shale gas formations (fracking).

The Treasury and the Bank of England will also provide short-term financial support — reportedly up to £40 billion — to energy companies that have been hammered by soaring wholesale gas and power prices.

'Extraordinary Challenges'

Truss said Russia's war in Ukraine had exposed flaws in UK energy security and driven prices higher. "Extraordinary challenges call for extraordinary measures," she said.

Earlier this week, industry group Offshore Energies UK urged the government to take measures to accelerate investment in North Sea gas, oil and wind power to reduce dependence on imported energy.

Truss had previously indicated that she would make more oil and gas licenses available, but any new licenses issued will have to be checked to ensure that they are compatible with the UK's commitment to achieve net-zero emissions by 2050.

The government suggested on Wednesday that the lifting of the moratorium on shale gas drilling and fracking could lead to new gas production within six months.

However, very few countries have significant oil and gas production from fracked shale formations. The exceptions include the US, China and Argentina.

Previous efforts to test the UK's shale gas potential were hampered by local opposition and the moratorium.

Chemicals giant Ineos — one of the few large companies to show much interest in UK shale gas — said on Thursday that it was renewing its offer to the government to drill a shale gas test well.

"We have promised to invest the first 6% of the value of the gas back into the local communities," said Ineos director Tom Crotty. The company holds interests in shale gas licenses in central and northern England.

A government survey of public opinion released in December showed that only 4% of the UK population strongly supported fracking/shale gas, while 54% strongly supported renewable energy.

The government made clear on Thursday that shale gas development would only proceed in areas where there is public support for it.

Greenpeace UK oil and gas campaigner Georgia Whitaker said the lifting of the moratorium breached an election pledge that "fracking would not happen unless the science changed, which it most emphatically has not."

Jason Eden, London

Proposed EU Gas Price Cap Struggles for Support

Proposals that would cap the price of natural gas imports into the EU are struggling to gain support from member states, but diplomats are lining up behind a handful of other measures aimed at stabilizing the continent's energy markets.

European Commission President Ursula von der Leyen included options to cap the price of Russian gas imports and LNG imported from any source in a range of measures to be discussed at an emergency meeting of energy ministers on Friday.

After previously shrugging off the potential impacts of curbs on Russian energy imports, countries are now very concerned about how they might further fuel the soaring cost of living throughout the 27-nation bloc.

One EU diplomat acknowledged that high energy prices had "a very destructive potential."

"You can feel it everywhere, not only economically but also socially and politically," he said.

The proposals to cap gas prices have drawn lots of media attention but they may be the least likely options to be forwarded for further consideration after Friday's meeting.

"There are more member states that are not in favor of such a measure than there would be in favor," one EU diplomat said of the proposal to cap the price of Russian gas imports.

Putin's Warning

Countries that are still receiving Russian gas seem to be taking seriously a threat by President Vladimir Putin to stop all Russian gas exports to Europe if the EU tries to cap the price of Russian gas.

"At that point, Europe will have less gas to get through the winter," Jonathan Stern, professor at the Oxford Institute of Energy Studies told Energy Intelligence.

“And the question is — is that a good idea given the problems we are already facing with the amount of gas that we have already got."

While Russia now accounts for less than 10% of the EU's total supplies, its gas remains important in many countries that do not have access to LNG.

Capping LNG prices — or setting them at levels just above those at Asian hubs, as proposed in one EU document — could be equally problematic.

EU countries understand they are competing for gas supplies in a global market and that mechanisms to artificially depress prices could backfire and result in less gas arriving at European LNG import terminals.

One EU diplomat predicted that ministers would not recommend for immediate adoption any of the various proposals to cap natural gas prices.

Some Measures Find Favor

However, looking beyond those proposals, there seems to be a growing consensus around a few of the measures that do not represent such drastic market interventions.

For example, officials hope to replicate the success of a framework passed in July to reduce gas demand by 15%, with a similar measure to reduce electricity demand.

Such voluntary or controlled conservation measures are now seen as vital to address the high prices for power and gas that have been spurring involuntary demand destruction from households that are unable to pay their bills or from industrial customers that find it uneconomic to keep their factories running.

Diplomats also expressed support for measures to help member states bolster the liquidity of utility companies that need to procure and trade gas and electricity at sky-high wholesale market prices.

Finally, there appears to be agreement on an initiative to cap the revenues of power producers with low costs — for example, those with wind or solar generation assets — and use those funds to help struggling consumers.

However, thinking around a proposed "solidarity contribution" that fossil fuel companies would pay from their own windfall profits seems to be less advanced.

One EU source said this "was proposed as food for thought" and had not been central to discussions thus far.

However, that does not necessarily mean that the idea of tapping oil and gas profits to help defray the high energy costs borne by households, businesses and electricity providers does not appeal to some countries.

For more coverage of the Ukraine crisis, visit Ukraine Crisis: Energy Impact >

Noah Brenner, Brussels

Russia Makes Progress on Currency Switch

Russia is making progress in its efforts to shift away from the use of the US dollar and the euro in international financial transactions, including oil and gas exports, which play a pivotal role in the country's economy and public finances.

Expanding the role of the ruble and other currencies in international trade became an even higher priority for Moscow when Western countries froze more that $300 billion of Russia's foreign currency reserves after the Feb. 24 invasion of Ukraine.

President Vladimir Putin said earlier this week that Russia has "lost confidence in the dollar, euro and pound sterling as currencies in which we can make settlements, keep reserves and nominate assets."

"We are step by step moving away from the use of such unreliable, compromised currencies," he told the Eastern Economic Forum in Vladivostok. Meanwhile, Russia's top oil producer Rosneft is reportedly planning the largest ever bond issue by a Russian company denominated in Chinese yuan.

Rosneft is targeting proceeds of at least 10 billion yuan (about $1.4 billion) for the 10-year bond, with bids due on Sep. 13, according to a banking source.

Gazprom, CNPC Update Deal

Gazprom and China National Petroleum Corp. (CNPC) agreed this week to switch payments under their long-term pipeline gas supply agreement to rubles and yuan. Putin said payments would be split equally between the two currencies.

Russia and Turkey had previously agreed on partial payment in rubles for supplies of Russian gas.

Oil producers have also been urged to shift away from Western currencies in their contracts. Some are already using the yuan and the United Arab Emirates' dirham.

Speaking on the sidelines of the Vladivostok forum, the head of Russian gas and LNG producer Novatek, Leonid Mikhelson, said his company is already selling petroleum products to China in yuan.

The company has not dropped the dollar or the euro from its long-term LNG supply contracts, but might gradually do so for spot LNG sales, he added.

Novatek Encounters Problems

Mikhelson said Novatek had encountered problems with bank transfers for LNG supplies to Europe that prompted the company to seek out more LNG buyers in Asia.

"It's getting harder to work with Europe in terms of the banking sector. The buyer pays, but the banks do not transfer [the money] for gas," he said.

Similar payment problems recently led Russian oil pipeline operator Transneft to temporarily halt crude supplies via the Druzhba oil pipeline.

Russian petrochemical giant Sibur — which is already paid in yuan for sales to China — told the gathering in Vladivostok that it might also switch to using national currencies in its transactions with Vietnam.

Myanmar has also indicated that it is willing to pay in rubles for purchases of Russian petroleum products.

Andrei Kostin, chairmen of Russia's VTB bank said he does not think Russian companies will go back to using Western currencies because of the potential threat of assets being frozen.

Kostin said that while Russia is open to using currencies such as the Tukish lira and the Indian rupee, yuan transaction volumes are likely to be greater because of the higher level of trade between Russia and China and because inflows and outflows of yuan are more evenly balanced.

For more coverage of the Ukraine crisis, visit Ukraine Crisis: Energy Impact >

Staff Reports

Chevron CEO Eyes New Export Routes for Kazakh Oil

Chevron — operator of the giant Tengiz oil field in Kazakhstan — will work with that country's government to evaluate new oil export routes but will continue to rely on the CPC pipeline as its main export outlet for now, says CEO Mike Wirth.

Loadings at the CPC (Caspian Pipeline Consortium) marine terminal near Russia's Black Sea port of Novorossiysk have been disrupted several times this year.

In addition to exports of crude oil from Tengiz — the largest oil field in Kazakhstan with output of around 650,000 barrels per day — the CPC pipeline also carries crude from two other big Kazakh fields — Kashagan and Karachaganak.

Speaking at the Barclays CEO Energy-Power Conference this week, Wirth acknowledged that few investments had been made so far in alternatives to CPC, but added that there were some options available to Chevron and its partners. These include moving oil by rail, a method that Chevron used extensively for many years and which "costs a little bit more."

In the late 1990s Chevron deployed thousands of rail tank cars that would transport oil north to Russia, Ukraine and the Baltic states, as well as using the "western corridor" through Azerbaijan and Georgia.

Kazakhstan is urging Chevron to invest in a costly new scheme that would involve shipping oil across the Caspian Sea to Azerbaijan, then using spare capacity in the 1.2 million b/d Baku-Tbilisi-Ceyhan pipeline to Turkey's Mediterranean coast.

In June President Kassym Zhomart Tokayev told national oil company Kazmunaigas to liaise with Chevron and other oil producers on this project.

Tokayev also called for expansion of the Kazakhstan-China pipeline that can currently pump around 200,000 b/d of crude from the Caspian Sea to border with China.

Chevron is close to completing a $45 billion expansion that will increase production at Tengiz by more than 25%. Most of the oil is still moved via the CPC line, which has a capacity of 1.4 million b/d.

Two of the three single point moorings at the CPC marine terminal are currently closed down for repairs, but this route still has capacity of around 1 million b/d.

"The reality is [that] in the near-term, the primary and the large scale option remains this pipeline," Wirth said.

Chevron holds a 50% stake in the Tengiz joint venture with partners Exxon Mobil (25%), Kazmunaigas (20%) and Lukoil (5%).

Chevron is also the largest western shareholder in the CPC group with a 15% interest.

Paul Sampson, London

Despite Sluggish Economy, China-Russia Trade Grows

Amid expectations that presidents Xi Jinping and Vladimir Putin will meet next week, Chinese trade and shipping data for August point to rising exports of Chinese goods to Russia and strong imports of Russian oil.

The growing bilateral trade flows set the scene for a cordial face-to-face meeting — the first since the two leaders proclaimed a relationship with "no limits" in February, just days before Russia invaded Ukraine.

China's August exports to Russia of 53.94 billion yuan ($8 billon) rose by 32% versus the same month of last year and were up 18% from July.

Exports in the second quarter of this year came in lower than in the first quarter when Chinese companies exercised caution as they assessed the potential threat of secondary Western sanctions on exports to Russia.

The rise in August exports may also signal decreasing competition from Western sellers as they withdraw from the Russian market.

The value of China's exports to Russia for the first eight months of this year was up 8.5% from a year ago to $44.26 billion.

Over the same period, the value of its imports rose 50.7% to $79.9 billion, reflecting increased oil and gas imports at much higher prices.

The increase in trade between Russia and China is all the more remarkable in that it comes against the backdrop of a broader slowdown in China's exports and imports in August as global demand and China's economy lost steam.

Seaborne Crude Imports

China's imports of seaborne Russian crude oil amounted to around 1.1 million barrels per day in August, shipping data firm Vortexa's China analyst Emma Li told Energy Intelligence on Thursday.

Those volumes mainly consisted of Espo crude but also included a few cargoes of Urals crude reported as Malaysian grades to the customs service. Those seaborne volumes were largely steady compared with Vortexa's estimates for July.

Adding an estimated 800,000-880,000 b/d of crude delivered by pipeline, Russia's August crude exports to China could have amounted to 1.90 million-1.98 million b/d, which would make Russia China's largest oil supplier for the fourth month in row.

By comparison, China's imports of Russian crude in August 2021 amounted to 1.54 million b/d.

Higher imports of Russian crude come as China's overall crude imports remain sluggish.

Customs data released Wednesday showed China's overall August crude imports came in at 9.5 million b/d — up 8.1% from July, but down 9.4% from August 2021 — as China struggles to bounce back after widespread Covid lockdowns in the second quarter.

China's crude imports for the first eight months of 2022 were down 4.7% from the same period of last year to 9.96 million b/d.

China's customs service is expected to report country-by-country crude imports on Sep. 18.

China stopped breaking down the volumes of its pipeline gas imports by country after Russia invaded Ukraine in February. However, Russian data indicate that those volumes have continued to rise.

The Power of Siberia pipeline carried 8.76 billion cubic meters of gas from Russia to China last year, less than had been expected. It had initially been forecast to carry at least an additional 5 Bcm this year.

The supply contract between the two countries calls for those pipeline volumes to rise to 38 Bcm/yr by 2025.

Maryelle Demongeot, Singapore

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Paul Sampson, London

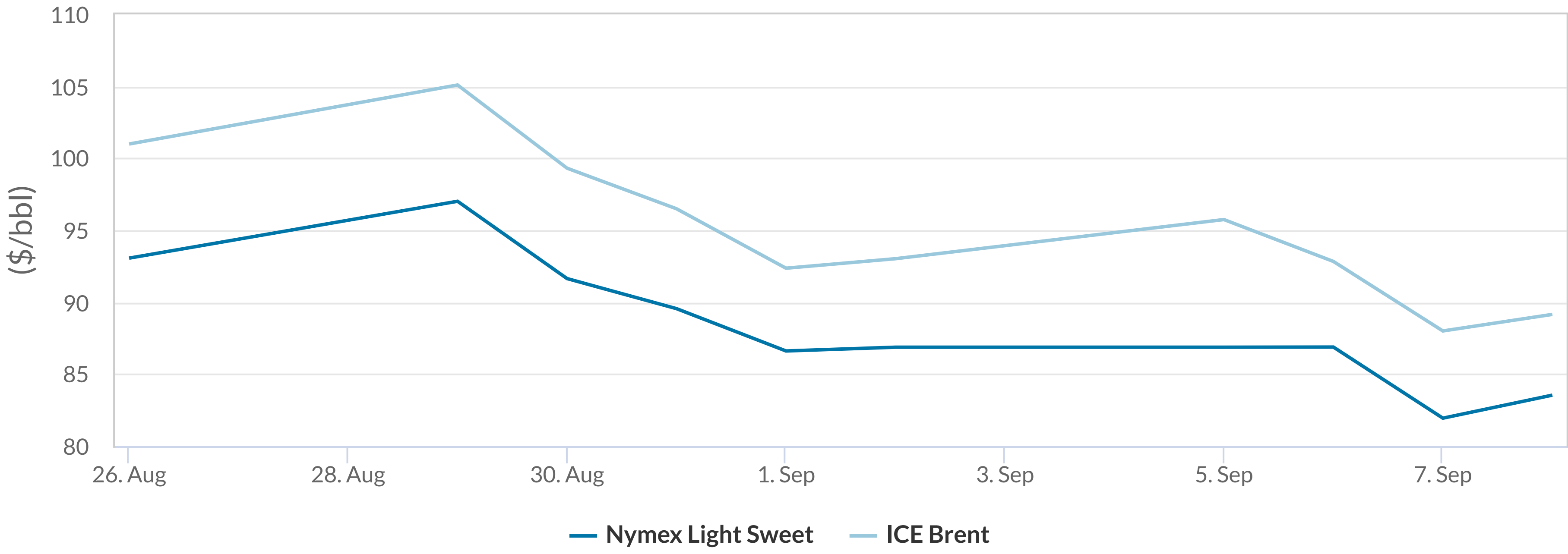
Oil Prices Whipsaw Back Into Black

Oil futures clawed back lost ground on Thursday despite sizable builds in US petroleum inventories as the market continued to navigate cross currents.

In London, Brent crude for November delivery settled $1.15 higher at $89.15 per barrel. In New York, October West Texas Intermediate (WTI) closed up $1.60 at $83.54/bbl, while the November contract climbed $1.44 to end the session at $83.07/bbl.

ICE BRENT VS. NYMEX WTI FUTURES

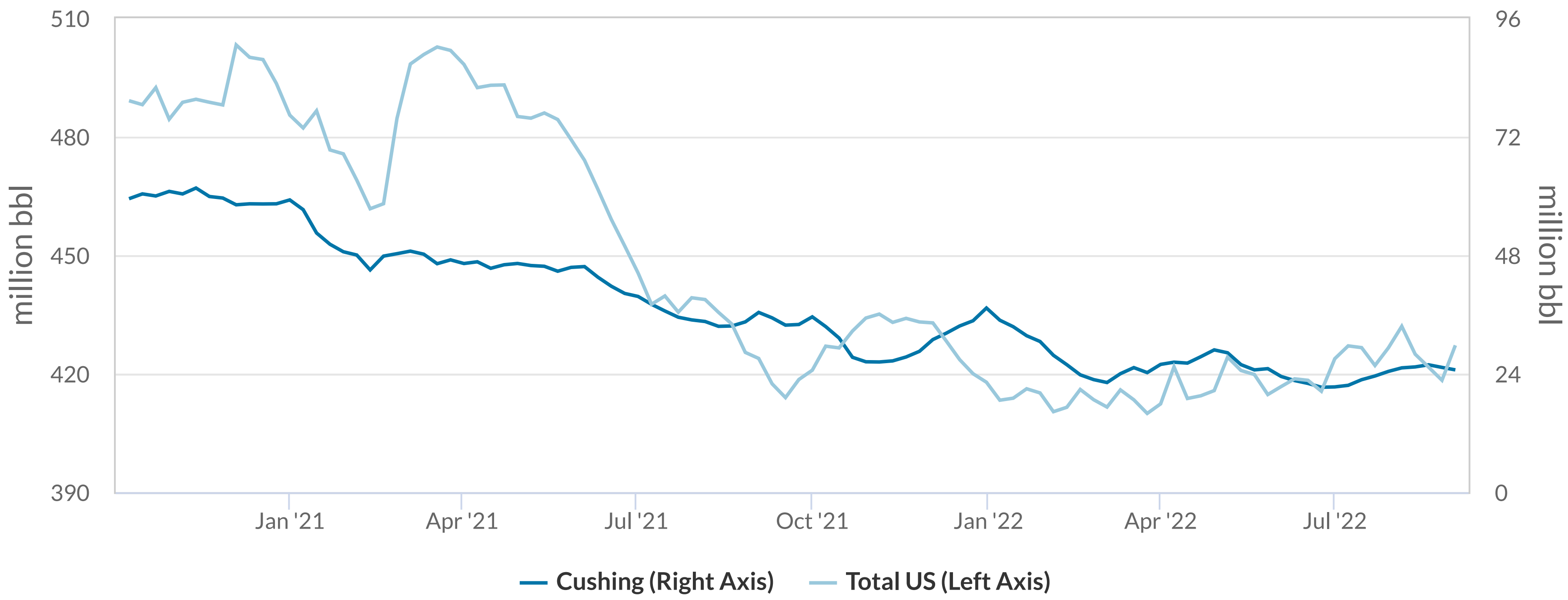
Front Month Contracts



Data from the US Energy Information Administration (EIA) show commercial crude stocks in the world's largest economy jumped a whopping 8.8 million bbl to 427.2 million bbl during the week ended Sep. 2.

The build came as net imports rose and refinery throughputs fell. Gross US crude imports jumped by 824,000 barrels per day for the week while exports fell 534,000 b/d, leaving net imports at some 3.3 million b/d, up almost 1.4 million b/d from the previous seven days.

US & CUSHING CRUDE OIL STOCKS



Source: EIA

Refiners, meanwhile, processed 310,000 b/d less than the prior week, with throughputs at 15.9 million b/d.

The EIA's data showed builds for products as well, with gasoline stocks up 300,000 barrels for the week at 214.8 million bbl and inventories of distillate fuel oils such as diesel up 100,000 barrels at 11.8 million bbl.

October Nymex gasoline settled 3.84¢ higher at $2.3461 per gallon, while the diesel contract fell 4.59¢ to close at $3.5401/gallon.

The report followed a significant sell-off in the previous session and prompted another brief pullback, but prices quickly rallied.

Bull Support

Some market watchers say that while there is no shortage of bearish news and data, the surprise may be wearing off.

"Energy traders have mostly priced in the Chinese Covid-19 shutdowns and demand concerns from aggressive tightening signals by the [European Central Bank] and [US Federal Reserve]," said Edward Moya of Oanda.

Technical traders with Icap noted that while oil had a "breakdown" on Wednesday, the commodity remains supported around current levels. Both Brent and WTI remain well above their next key support levels at $85.30/bbl and $79.05/bbl, respectively.

"Some congestion can not be ruled out as we move into the end of the week," the Icap traders said. "[We] will be inclined to treat any such price action as corrective."

Bear Claw

Significant downside price risks remains, however.

In Europe, a deeper recession is looming and already taking a toll on energy consumption. The end of the driving season in the US and Europe has also 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 analysts said in a note.

On the supply side, an oil deal with Iran looks increasingly less likely, and even if it happened it would not cover for the loss of Russian crude and refined product exports to Europe.

However, the administration of US President Joe Biden has engaged in a massive release of strategic petroleum stocks, and US Energy Secretary Jennifer Granholm recently said that the White House is considering releasing more.

Frans Koster, New York

IN BRIEF

India Seeks Closer Ties with Russia

Prime Minister Narendra Modi has told President Vladimir Putin that India sees "immense potential for cooperation in the field of energy" with Russia.

Modi made the remark via a video link to the Eastern Economic Forum in Vladivostok on Wednesday.

Despite western pressure to shun Russia following that country's invasion of Ukraine, India has ramped up its purchases of Russian crude oil this year, taking advantage of deep price discounts offered by Russian producers.

Prior to the war in Ukraine, Indian oil and gas companies invested some $16 billion in upstream assets in Russia.

The two countries are also working together to improve transport links, via the Chennai-Vladivostok Maritime Corridor and the International North-South Corridor.

"Connectivity will play an important role in the development of our relations in the future," Modi said.

Rakesh Sharma, New Delhi

DATA SNAPSHOT

Oil and Gas Prices, Sep. 8, 2022

All data are produced by Energy Intelligence in cooperation with Refinitiv.

CRUDE OIL FUTURES

($/bbl)	Chg.	1st Mth.	2nd Mth.
ICE Brent	+1.15	89.15	88.25
Nymex Light Sweet	+1.60	83.54	83.07
DME Oman	+1.42	89.92	87.22
ICE Murban	+1.19	90.76	87.84

INTERNATIONAL SPOT CRUDES

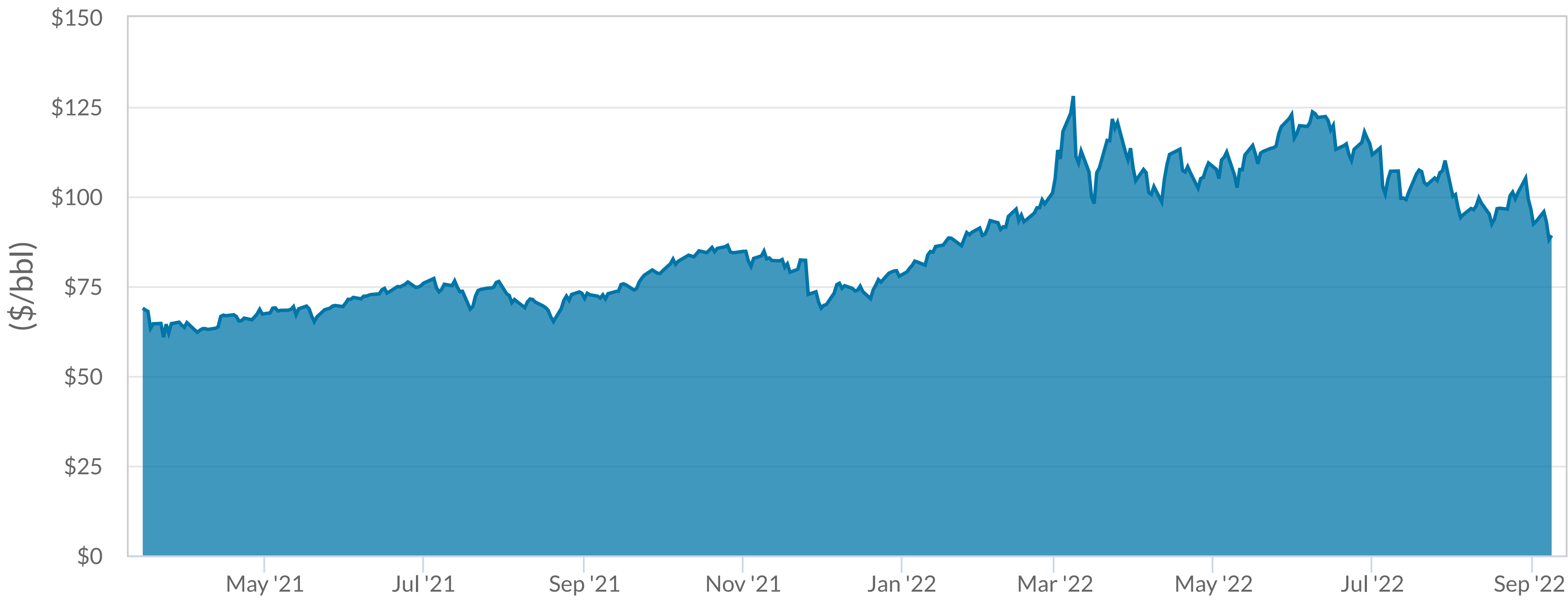
($/bbl)	Chg.	Price	Prior Close
Brent (Dated)	+1.17	87.99	86.82
Dubai	-4.20	88.00	92.20
Forties	-0.40	87.30	87.70
Bonny Light	-0.98	90.80	91.78
Urals	-0.48	69.30	69.78
Opec Basket*			95.96

*Opec price assessed.

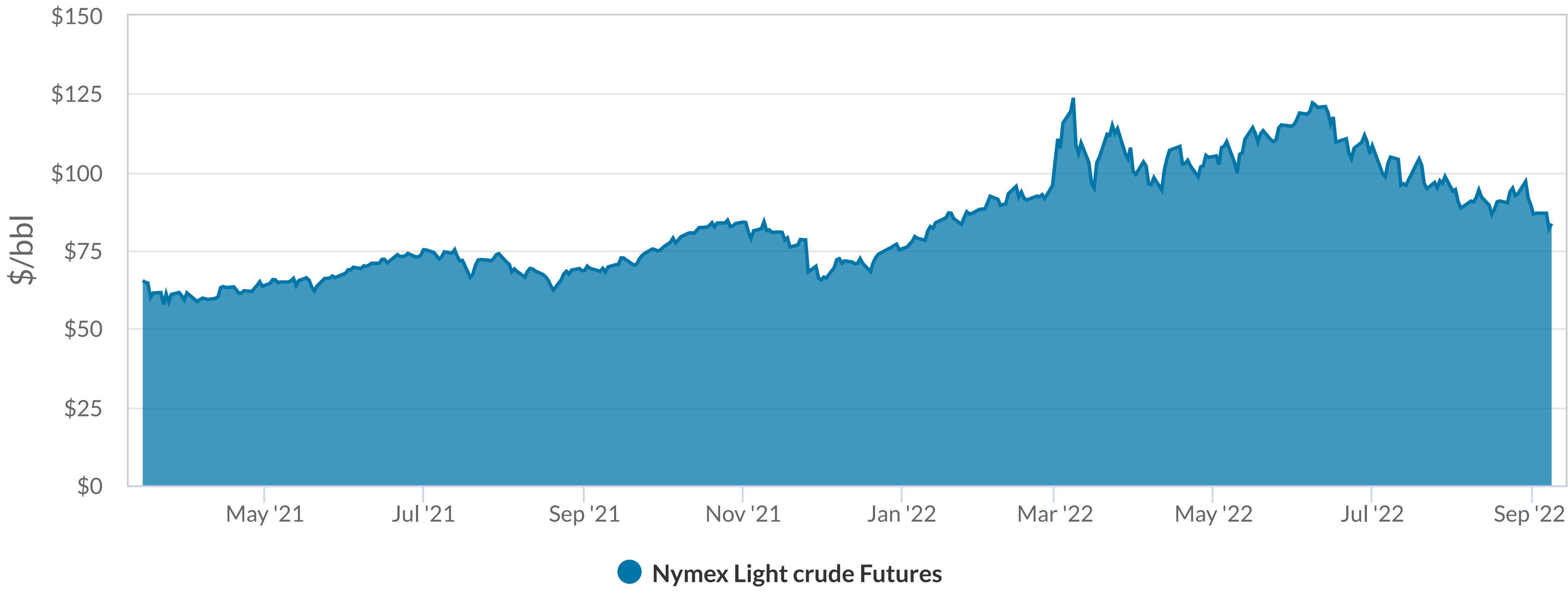
NORTH AMERICAN SPOT CRUDES

($/bbl)	Chg.	Price	Prior Close
WTI (Cushing)	+1.54	84.04	82.50
WTS (Midland)	+1.54	83.64	82.10
LLS	+1.54	86.34	84.80
Mars	+1.54	82.94	81.40
Bakken	+1.54	88.54	87.00

ICE BRENT CRUDE FUTURES



NYMEX LIGHT CRUDE FUTURES

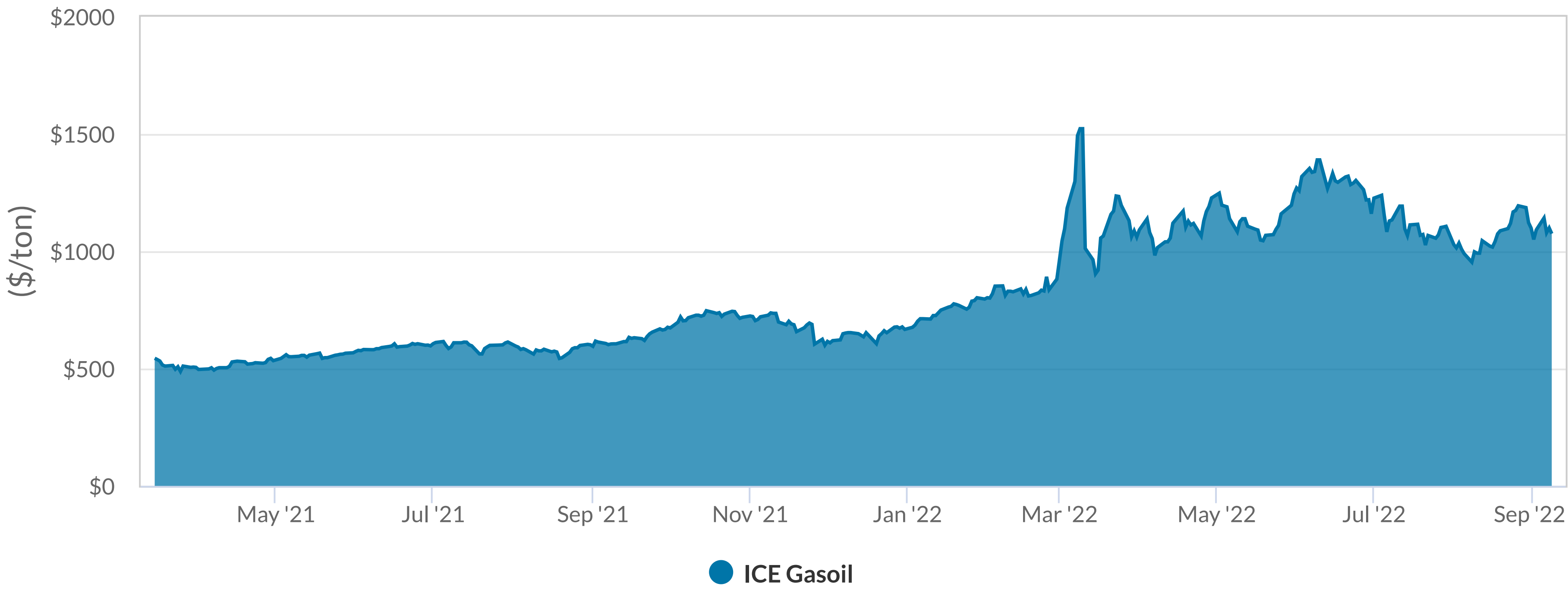


Energy Intelligence

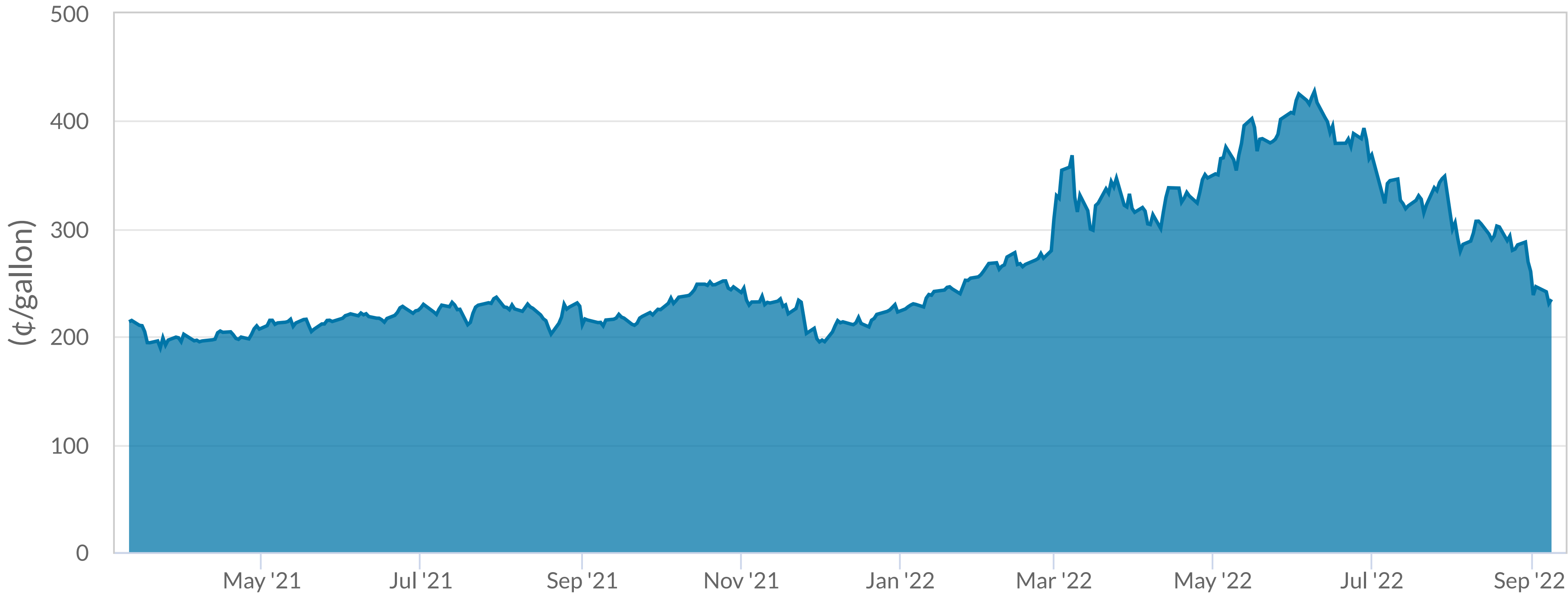
REFINED PRODUCT FUTURES

Nymex	Chg.	1st Mth.	2nd Mth.
Gasoline (¢/gal)	+3.84	234.61	230.77
ULSD Diesel (¢/gal)	-4.59	354.01	347.07
ICE			
Gasoil ($/ton)	-24.50	1075.00	1038.25
Gasoil (¢/gal)	-7.82	343.10	331.37

ICE GASOIL FUTURES



NYMEX GASOLINE FUTURES



US SPOT REFINED PRODUCTS

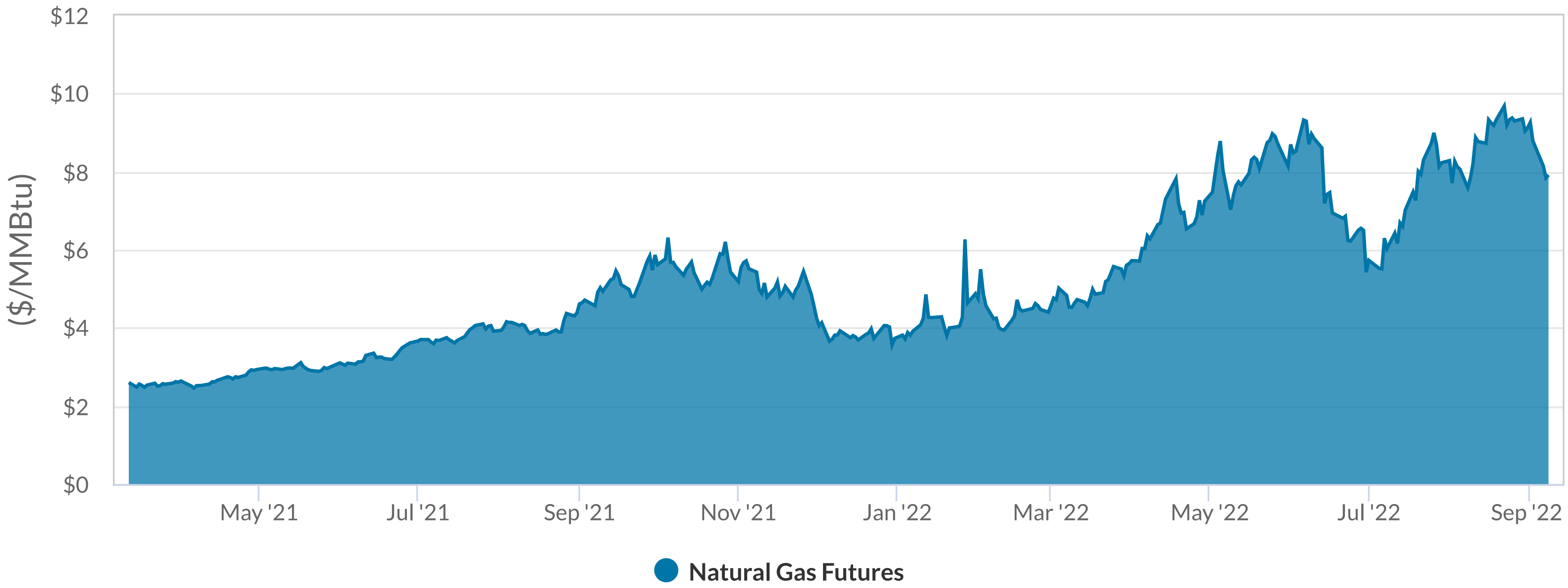
New York (¢/gal)	Chg.	Price	Prior Close
Regular Gasoline	+1.66	258.25	256.59
No.2 Heating Oil	-2.62	340.16	342.78
No.2 ULSD Diesel	-3.37	356.91	360.28
No.6 Oil 0.3% *			80.69
No.6 Oil 1% *			77.37
No.6 Oil 3% *			71.52
Gulf Coast (¢/gal)			
Regular Gasoline	-0.84	244.25	245.09
No.2 ULSD Diesel	-3.62	349.16	352.78
No.6 Oil 0.7% *			79.22
No.6 Oil 1% *			79.22
No.6 Oil 3% *			65.37

*Price in $/bbl. Percentages refer to sulfur content.

INTERNATIONAL SPOT REFINED PRODUCTS

Rotterdam ($/ton)	Chg.	Price	Prior Close
Regular Gasoline	-19.70	795.30	815.00
ULSD Diesel	-0.75	1079.75	1080.50
Singapore ($/bbl)			
Gasoil	-0.79	129.73	130.52
Jet/Kerosene	-1.22	129.87	131.09
VLSFO Fuel Oil ($/ton)	-28.95	618.40	647.35
HSFO Fuel Oil 180 ($/ton)	-28.18	408.71	436.89

NYMEX NATURAL GAS FUTURES



Refinitiv

NATURAL GAS PRICES

($/MMBtu)	Chg.	Price
Henry Hub, Nymex	+0.07	7.92
Henry Hub, Spot	-0.04	8.08
Transco Zone 6 - NY	-0.22	7.38
Chicago Citygate	-0.07	7.54
Rockies (Opal)	-0.03	7.66
Southern Calif. Citygate	-0.87	12.09
AECO Hub (Canada)	+0.48	3.58
Dutch TTF (euro/MWh)	+2.30	210.60
UK NBP Spot (p/th)	+100.00	340.00

US/Canada spot prices from Natural Gas Week

Equity Markets, Sep. 8, 2022

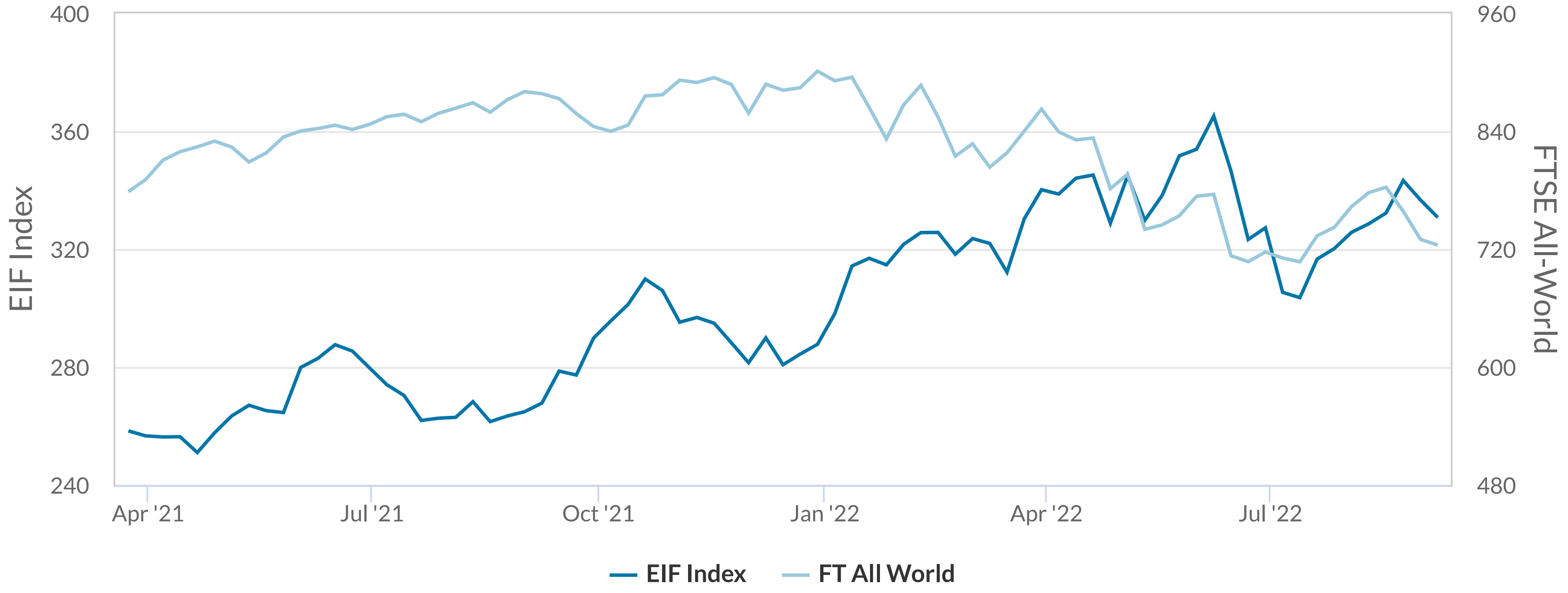
All data are produced by Energy Intelligence in cooperation with Refinitiv.

EQUITY MARKET INDEXES

	Chg.	Index	YTD %Chg.
EIF Global*	-2.95	330.78	+15.35
S&P 500	+26.31	4,006.18	-16.42
FTSE All-World*	+6.72	724.10	-19.65

*Index for previous day

EIF INDEX



EIF Global Oil and Gas Index of 21 traded equities