Energy Intelligence

July 6, 2022

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OIL DAILY®

CONTENTS

In Brief

Data Snapshot

ConocoPhillips Teams With Hess on Bakken EOR Pilot

ConocoPhillips is partnering with Hess on a project to investigate enhanced oil recovery (EOR) projects in the Bakken Shale, joining a growing number of operators looking for ways to boost future output as the play matures.

Mohan Chahal, ConocoPhillips' Williston and Rockies asset manager, told Energy Intelligence the pilot would kick off at the end of the year, with firm results expected some 12 months after that.

"We've trialed EOR in the past in other areas of the lower 48," he said on the sidelines of the DUG Bakken + Rockies conference in Denver last week. "But we recognize the success is very specific to the rock type and rock quality, and so we'll see how that pilot plays out."

Perfect Partner

Partnering with Hess on an EOR pilot makes sense, as the New York-based independent has already conducted several trials to test the feasibility and economic viability of the technology in the Bakken.

Hess has said it views EOR as something that could provide a "step change" in recovery efficiency, and its ultimate goal is to develop a scalable approach to implement the technology at the field level.

A spokesperson told Energy Intelligence that the volumetric prize for EOR in Hess' Bakken assets could be more than 100 million barrels of oil equivalent.

"While EOR has yet to be proven technically feasible at the field scale in the Bakken, we are excited by the opportunity and are devoting resources to understand and realize EOR's potential," the spokesperson said. "In fact, Hess has been advancing EOR assessments and technical work for many years, both in the lab and the field. "

One of those assessments, a single-well propane injection test begun in 2017, proved successful by providing a 25% oil production uplift.

Hess is currently collaborating with the US Department of Energy, Dow and the University of Wyoming on a different pilot to inject field gas into horizontal wells in the East Nesson area.

Maturing Play

Earlier this year, a North Dakota official said the Bakken likely had about a decade of low-single-digit production growth left, and more operators were looking into technology improvements to make enhanced recovery work in the play.

Chahal said ConocoPhillips was looking into other secondary recovery options, such as refracks, to boost output.

"We're fortunate that there's still plenty of running room in primary development in the Bakken," he said. "But the reality is, a lot of us are in the mid-cycle of that primary development, and so we are looking to growing our inventory by other means."

Caroline Evans, Denver

Canada Gas Plant to Begin CCS Injection

Carbon capture and storage (CCS) specialist Entropy expects to soon inject its first volumes of carbon dioxide (CO_2) captured from a natural gas plant in Alberta as it presses forward on a growing pipeline of projects.

Entropy, a subsidiary of Calgary-based Montney Shale producer Advantage Energy, said it has begun commissioning the first phase of a post-combustion CCS project at the Glacier Gas Plant and could start injecting CO_2 within four weeks.

“Entropy believes that this will be the world's first commercial project to capture and sequester carbon dioxide from the combustion of natural gas,” it said in a statement.

Phased Development

The first phase at Glacier would capture and store 47,000 tons per year of CO_2 equivalent. Entropy has also taken a final investment decision (FID) on what it calls Phase 1b, which would add another 16,000 tons/yr of CCS capacity, due on line in the second quarter of 2023.

Entropy aims to sanction the full second phase by the fourth quarter of this year, with additional capture capacity of 136,000 tons/yr and a start-up date by the end of 2023. That would bring the total capture capacity at Glacier to around 200,000 tons/yr, accounting for over 90% of the emissions from the gas plant.

Phase 1 and 1b are expected to cost C$31million and C$8 million, respectively. The Phase 1 cost is about 10% higher than the original budget due to recent inflation, primarily in steel and copper pricing, the company said. It has not disclosed an updated cost estimate for Phase 2, which will also likely rise due to inflation.

Oil Sands CCS

Meanwhile, Entropy is getting close to FID for a larger CCS project, attached to the Leismer oil sands development, operated by Athabasca Oil.

The two companies have made “substantial progress” on preparing to install Entropy’s patent-pending Modular Carbon Capture and Storage process equipment at Leismer, a technology that will also be deployed at Glacier.

FID on the first phase at Leismer is expected during the third quarter of 2022, with a projected capture rate of 156,000 tons/yr. The two-phase Leismer CCS project would capture over 440,000 tons/yr, assuming FID and regulatory approvals for the geological storage.

“This is the first commercial CCS project on a once-through steam generator, which are widely deployed in thermal oil operations globally,” Entropy said.

Entropy says its pipeline of CCS projects “continues to grow rapidly,” including discussions with “five separate investment-grade counterparties on global-scale projects.”

In total, the company says it is approaching 10 million tons/yr of projects under development “in different levels of maturity and different forms of engagements.”

Luke Johnson, Houston

Widening Brent-WTI Price Spread Puzzles Oil Market

The spread between Brent and West Texas Intermediate (WTI) crude prices is widening at a time when, given higher demand for prompt oil, both benchmarks would be expected to converge.

The Nymex WTI front-month future contract is trading $6.50 below its ICE Brent equivalent, and the gap is widening. Seaborne volumes of US light oil were trading almost $10 below Brent-linked barrels, confounding traders for an explanation.

The unwavering demand for refined products and the market’s inability to offset the Russian supply shortfall have been the main drivers of crude prices.

The global product tightness has pushed crack spreads to stratospheric heights and enticed refiners to run as hard as they technically can, chasing prompt barrels to meet the world's unquenchable thirst for transportation fuels.

Most light, sweet crudes in the Atlantic Basin are now selling at higher premiums, including longer-haul crude from West Africa, with flat price assessments at or above $120 per barrel — all except seaborne US crude volumes.

Light Louisiana Sweet or Magellan East Houston crudes, for example, were trading closer to $110/bbl, according to trading sources. Given the price difference, buyers would normally rush to buy those barrels and prices would rapidly rally.

Traders surmised that several drivers might be at play.

Short-Haul

One is that Europe could be pulling harder on suppliers that are closer to them than the US Gulf, given how long that voyage takes relative to West Africa or the North Sea.

Given the current backwardation, hedging the price risk related to a long-haul cargo can be a big issue. The Brent prompt premium over deliveries in six months is straying north of $15, in large part pulled up by higher physical prices.

Given the additional volatility and more frequent margin calls that wild price gyrations are pushing on traders, less credit is available for hedging — or at least, for hedging fully. Short-haul crude is hence more attractive than longer-haul cargoes.

Internal Caps

A second explanation is that the relatively high level of US exports — about 3 million barrels per day — is partly supported by the recent sales from the US Strategic Petroleum Reserve. Hence more crude is available but prices have remained sticky given the higher domestic supply.

Analysts also note that the US oil market may now be pricing in recession fears to a greater extent than Europe, where the EU embargo on Russian oil remains the main underlying price driver.

The interplay between these two factors may have contrived to keep a cap on US spot prices.

"When you look at prices at export terminals, the differential [to Brent] seems to be within normal limits," said Jay Hatfield, portfolio manager at Amza.

External Pressure

The wider Brent-WTI spread could also reflect the situation in Europe more than specific circumstances in the US.

Brent-linked barrels have been on a bull run since the beginning of May, coinciding with the start of the driving season. Forties, one of the five crude streams that make up the Brent benchmark, is now trading at a whopping premium of $5 to dated Brent after selling at a $1 discount as recently as late April.

The weekly Brent CFD swaps, which tie the Brent forward and dated Brent prices together, show a steep backwardation of more than $8 for the first front-week swap, part of which reflects aggressive bidding strategies in the paper market, an oil broker told Energy Intelligence.

If anything, that helped push dated Brent spot prices higher, and by extension, worked to widen the gap between Brent-linked prices and the WTI complex.

Julien Mathonniere, London

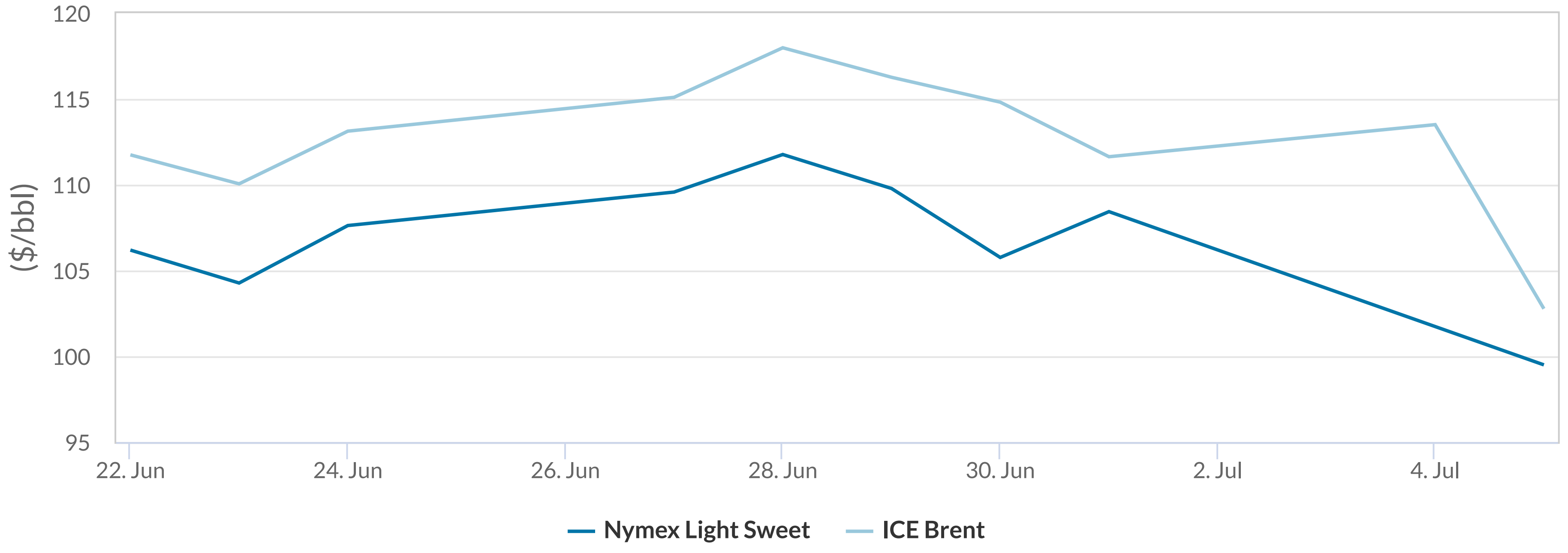
Oil Prices Fall Again Amid Risk-Off Trades

Brent crude prices plunged below $100 on Wednesday, breaking through a key psychological floor amid ongoing recession fears, with other technical causes also at play.

In London, the September Brent contract was down $2.08 and settled at $100.69 per barrel after dipping to an intraday low of $98.5/bbl. In New York, the front-month Nymex West Texas Intermediate (WTI) August contract shed 97¢ and closed at $98.53/bbl.

ICE BRENT VS. NYMEX WTI FUTURES

Front Month Contracts



Recession Fears

As of late, rising concerns over a possible economic recession have emerged as a convenient culprit for the late-session selling frenzy.

“The recession trade returned in a big way in the US session, leading to lower bond yields and a wholesale capitulation in commodities. The biggest pain was seen in copper and crude oil,” analysts at Saxo Bank wrote in a note.

In the last two days, however, economic conditions have not materially deteriorated to the point of prompting such a sudden sell-off.

“There has been no change in oil fundamentals," said PVM Oil analyst Stephen Brennock. "The near-term outlook remains supportive.”

So why now? Among possible causes, analysts pointed to the brutal surge of an already perky US dollar. The dollar index gained 1.87% over the past two trading sessions, trumping hopes that it was plateauing.

A stronger greenback is not supportive of demand for non-US countries obliged to foot their commodity bills in the currency, and even less so if a recession is looming.

Premature Despair

Traders noted that while crude prices have nosedived in recent days, the rest of the complex has remained relatively tight.

“While the odds of a recession are indeed rising, it is premature for the oil market to be succumbing to such concerns,” investment giant Goldman Sachs said.

The Brent prompt premium to deliveries in six months was still well north of $13/bbl on Wednesday, and given the recent selloff, time spreads between futures contracts were holding relatively well.

Front-month ICE low-sulfur gasoil futures have fallen by more than 14% in the space of three days, while product curves for gasoline, diesel and jet across all locations remain in backwardation, showing a persistent global product deficit.

Diesel is ubiquitous in all aspects of global economic activity. The late dip could be the harbinger of more weakness down the line if a recession eventually materializes.

Risk-Off Trade

An alternative explanation to the recent selloff could be a risk-off move, where financial investors tracking specific market signals decided to reduce their risk exposure and protect their capital.

The options market is providing plenty such signals, and systematic traders like commodity trading advisor (CTA) funds are usually quick to pick up on them and act.

One such key metric, the so-called “gamma,” measures the rate of change in an option price with respect to its underlying commodity — in this case, crude oil. A higher gamma means that the oil that underlies the option is experiencing accelerated movement and can become the source of large and rapid losses, which usually pushes traders to quickly exit their positions.

Gamma signals were in full display on Tuesday and Wednesday.

“While option gamma is the first one to blame on days like today, this time it's a combination of CTAs reacting to momentum crossover — medium-term price average is now over the short-term price — and a bit of back-end hedging,” said Ilia Bouchouev, a former trader and managing partner at Pentathlon Investments.

The reason why the back-end of the curve is down so much is because most speculative money currently sits in spreads rather than in outright trades, sources said. In addition, money managers exited their December 2023 and December 2024 futures positions, figuring that too much risk was concentrated there.

Julien Mathonniere, London

Opec Secretary-General Barkindo Dies in Nigeria

Opec Secretary-General Mohammed Barkindo, 63, died late on Tuesday in his home country Nigeria, officials in Nigeria told Energy Intelligence.

The news came as a shock to the industry and the energy world who knew him for decades in his role at Opec and in Nigeria’s oil ministry.

“He was the much-loved leader of the Opec Secretariat and his passing is a profound loss to the entire Opec family, the oil industry and the international community,” the Opec secretariat posted on their Twitter account on Wednesday.

Earlier on Tuesday Barkindo delivered a speech at an industry event in Abuja and later he met with Nigeria’s President Muhammadu Buhari and other officials including Nigeria’s Minister for State Petroleum Timipre Sylva.

During the meeting, President Buhari congratulated Barkindo for his “distinguished achievements” at Opec.

“You were able to successfully navigate the organization through turbulent challenges,” he said.

Barkindo was due to step down from his role at the head of Opec at the end of this month after leading the organization for six years.

In his last public remarks, Barkindo argued easing sanctions on Venezuelan and Iranian oil could ease the current energy crisis. “We could ... unlock resources and strengthen capacity if the oil produced by the Islamic Republic of Iran and Venezuela were allowed to return to the market,” Barkindo said during an energy conference in Nigeria’s capital.

Nigerian officials said early Wednesday that Barkindo died of natural causes.

According to sources close to Barkindo he was planning to visit his mother in Yola on Wednesday.

Huge Loss

Barkindo was seen globally as a consummate diplomat.

Appointed in 2016, Barkindo, as Opec secretary-general, helped guide the creation of the Opec-plus producer alliance that resulted in Russia joining the group’s global supply agreement.

He was a key figure in the historic deal to respond to the crash in oil demand triggered by the Covid-19 pandemic.

Barkindo was an ardent believer in the power of communication and took every opportunity to advocate strongly for the interests of producing countries.

Unusual for an oil technocrat, he had a political science background and a love of literature, frequently peppering his press statements with Shakespearean quotes.

Ahead of his departure, Barkindo had highlighted some of the most memorable moments in his six years as secretary-general in a series of letters which were sent to various delegations.

“I will never forget how we put together the Declaration of Cooperation (DOC) back in 2016; it was a herculean task to bring countries together, but we did thanks to everyone having a common goal,” said Barkindo in a recent letter seen by Energy Intelligence.

“I will also never forget the seminal 9th and 10th (Extraordinary) Opec and non-Opec Ministerial Meetings on 9 and 12 April 2020, respectively,” he continued. “Twenty-three countries agreed on the largest-ever production adjustments by DOC participants, the largest in the history of Opec and the largest in the history of the oil industry, and for the longest in duration in the history of the organization.”

In April 2020 and a response to the pandemic slowing down oil demand, Opec-plus agreed to collectively cut production by 9.7 million barrels per day, the single largest output cut in history.

Barkindo’s high-energy diplomatic skills played a pivotal role in keeping Opec-plus members talking in 2020, when cooperation had fallen apart due to a disagreement on policy between Saudi Arabia and Russia, sparking a devastating price war.

He was a keen follower of all news impacting oil markets and kept good relations with all delegations from Opec and non-Opec which helped during times of conflict.

His respect for journalism and generosity with his time despite his busy schedule made him one of the most popular Opec officials with the press. He was known for answering messages tirelessly to help explain the group’s decisions.

"It has been the honor of a lifetime to serve as Opec secretary-general for the past six years,” he said in a recent letter.

Amena Bakr, Dubai, and Rafiq Latta, Nicosia

US Sanctions Iran Oil Sales Network

The US Treasury Department on Wednesday blacklisted an alleged network of companies brokering the sale of Iranian oil and petrochemicals.

The fresh sanctions come after diplomatic talks in Doha last week aimed at curbing Iran’s nuclear program in return for sanctions relief broke down.

The companies being blacklisted are located in Vietnam, Singapore, the United Arab Emirates and Hong Kong. They largely facilitated oil trade into China and worked on behalf of Iranian firms that have already been sanctioned by the US. Last month the US targeted several other companies and people for related petrochemical trade.

Iran has continued to trade oil in spite of US sanctions, which were reimposed after the US withdrew from the 2015 Joint Comprehensive Plan of Action (JCPOA) in 2018.

Diplomatic Breakdown?

The new blacklisting came a day after the top US negotiator for the Iran deal expressed skepticism about whether Tehran would sign onto an updated version of the JCPOA, which limited Iran’s nuclear program and eased energy sector sanctions.

“We’re waiting to see whether Iran can get itself to cross the finish line,” Rob Malley, the US negotiator, said on US broadcasting network NPR on Tuesday. "Our assessment is that they haven’t made the fundamental decision whether they are interested or not.”

Malley accused the Iranians of bringing up topics not related to the JCPOA.

“They have, including in Doha, added demands that I think anyone looking at this would be viewed as having nothing to do with the nuclear deal," he said.

Iranian officials in turn have pointed the finger at Washington, with the country's ambassador to the UN, Majid Takht Ravanchi, saying last week that the "ball is in the US' court."

Iran on Wednesday accused the UK deputy head of mission in Iran, Giles Whitaker, and several other diplomats of spying on Iran by taking samples from the soil during a missile exercise.

Emily Meredith, Washington

IN BRIEF

PDVSA Exports Soar in June

Oil exports by Venezuelan state oil company Petroleos de Venezuela SA (PDVSA) surged by 61% in June from the previous month, buoyed by shipments to Italy's Eni and Spain's Repsol.

PDVSA said it exported 630,500 b/d of crude oil and fuel in June, in line with what it shipped during the same month a year ago.

The exports were facilitated by oil-for-debt exchanges, which were recently allowed by the US State Department as a way for Europe to make up for the shortfall caused by Russia's invasion of Ukraine and subsequent sanctions and embargoes.

PDVSA's ramp in exports were the latest signal of a possible thawing of relations between US President Joe Biden and Venezuela President Nicolas Maduro, who is widely regarded both within Venezuela and by many foreign governments as authoritarian and illegitimate.

In another sign of possible détente, US investment firms Gramercy Funds Management and Atmos Global Energy announced earlier this week that they were forming a joint venture with Caracas-based Inelectra Group to explore possible oil and gas projects.

Since 2018, US companies have been legally forbidden from doing business with PDVSA.

Michael Deibert, Washington

Ovintiv Sells Noncore Assets

Denver-based E&P Ovintiv said Wednesday that it is selling some of its noncore assets in the Bakken Shale and Uinta Basin for a combined $250 million, which will help it speed up its plans to double its shareholder returns.

The company said it is divesting mature waterflood properties consisting of 3,000 gross vertical wells in the Utah Uinta, while further north, it is selling "approximately" 88 wells mostly in Richland County, Montana. The assets have a combined output of about 5,000 boe/d (98% oil and condensate).

Ovintiv did not provide the names of the buyers for either deal. Both sales have an effective date of Apr. 1, 2022, and are expected to close in the third quarter.

Ovintiv said that the divestitures will enable it to immediately boost its shareholder returns to 50% of the previous quarter's non-GAAP free cash flow after its base dividend. The company had previously planned to scale up its returns on Oct. 1.

Jeffrey Cavanaugh, New Orleans

Canada Regulator Levies Hibernia Spill Charges

A Canadian oil regulator said Tuesday that it is levying three charges against Hibernia, an offshore developer owned by Exxon Mobil, Chevron and Suncor Energy, over an oil spill that occurred in 2019.

The Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) said the Exxon-led project off the coast of Newfoundland did not do enough to ensure the prevention the July 2019 spill, which resulted in about 75 barrels of crude oil leaking into the water, causing a thin slick to form and killing some water fowl.

Specifically, the regulator said that Hibernia did not ensure that operations that were likely to cause pollution were immediately stopped, nor did it comply with its own risk-management procedures.

C-NLOPB and Hibernia's management outfit, Hibernia Management and Development Co., are scheduled to appear in provincial court in St. John's, Newfoundland and Labrador, on Aug. 24.

The Hibernia platform sits 315 km from St. John's in the Jeanne d'Arc Basin and currently produces about 100,000 boe/d. Exxon holds the largest stake with 33%, with Chevron holding 27% and Suncor 20%. Canada Hibernia Holding Corp., Murphy Oil and Equinor control the remainder.

C-NLOPB is also carrying out another unrelated Hibernia safety investigation. In March, the agency opened a file on a near-miss involving a crane, the third such incident in less than a year.

Jeffrey Cavanaugh, New Orleans

DATA SNAPSHOT

Oil and Gas Prices, Jul. 6, 2022

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

CRUDE OIL FUTURES

($/bbl)	Chg.	1st Mth.	2nd Mth.
ICE Brent	-2.08	100.69	97.09
Nymex Light Sweet	-0.97	98.53	94.98
DME Oman	-2.74	97.29	93.04
ICE Murban	-2.18	101.37	96.57

INTERNATIONAL SPOT CRUDES

($/bbl)	Chg.	Price	Prior Close
Brent (Dated)	-1.94	108.54	110.48
Dubai	-9.31	101.70	111.01
Forties	-1.72	113.71	115.43
Bonny Light	-1.72	114.78	116.50
Urals	-1.72	79.76	81.48
Opec Basket*			114.30

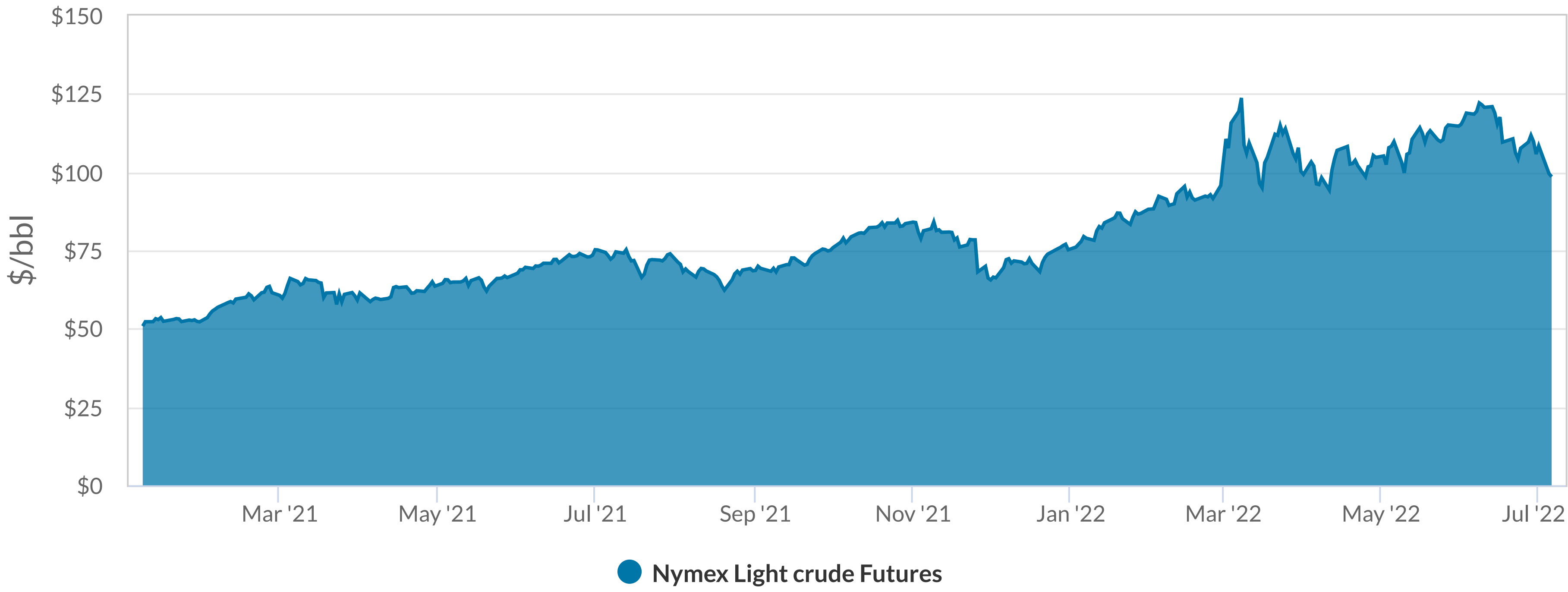
*Opec price assessed.

NORTH AMERICAN SPOT CRUDES

($/bbl)	Chg.	Price	Prior Close
WTI (Cushing)	-1.24	100.31	101.55
WTS (Midland)	+0.26	102.31	102.05
LLS	-1.14	102.01	103.15
Mars	-1.94	96.61	98.55
Bakken	-1.24	104.31	105.55

ICE BRENT CRUDE FUTURES

NYMEX LIGHT CRUDE FUTURES



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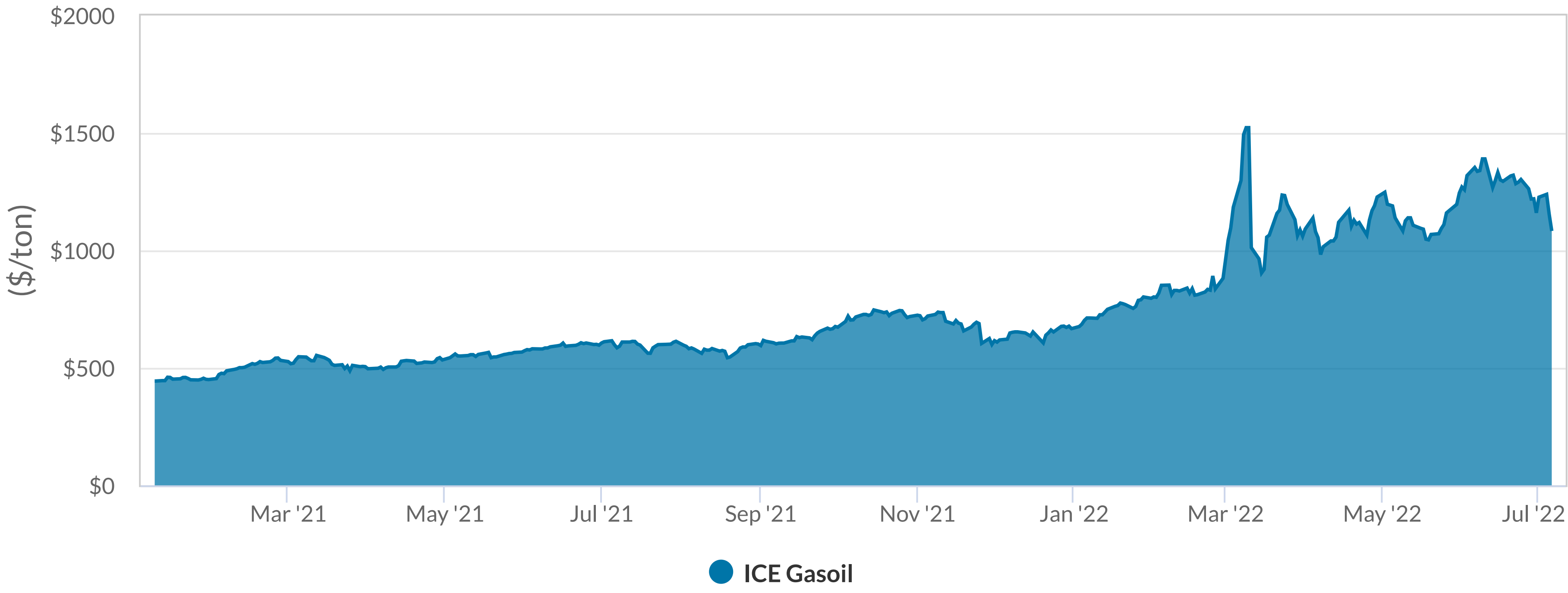
REFINED PRODUCT FUTURES

Nymex	Chg.	1st Mth.	2nd Mth.
Gasoline (¢/gal)	-9.24	323.66	309.05
ULSD Diesel (¢/gal)	-19.10	341.06	334.66
ICE			
Gasoil ($/ton)	-71.00	1082.75	1024.00
Gasoil (¢/gal)	-22.66	345.57	326.82

ICE GASOIL FUTURES



NYMEX GASOLINE FUTURES

US SPOT REFINED PRODUCTS

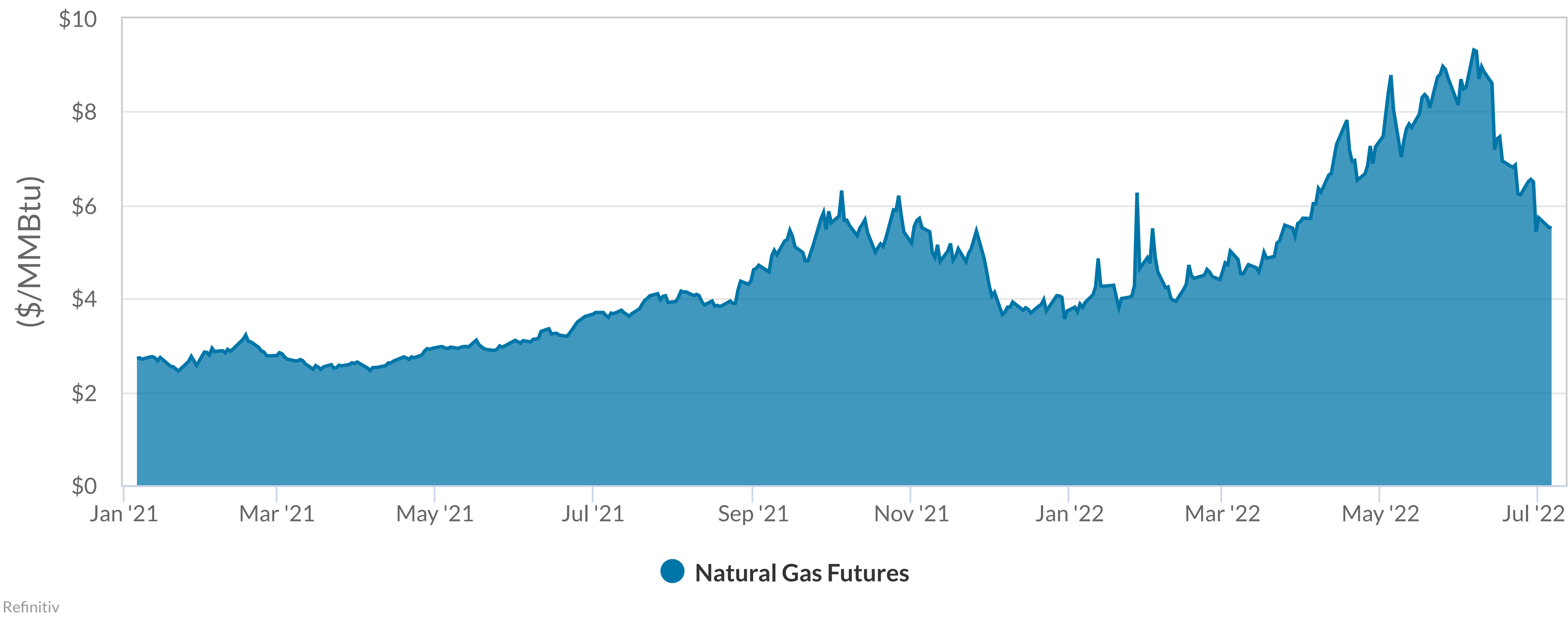
New York (¢/gal)	Chg.	Price	Prior Close
Regular Gasoline	-9.86	339.33	349.19
No.2 Heating Oil	-16.04	331.30	347.34
No.2 ULSD Diesel	-14.04	350.30	364.34
No.6 Oil 0.3% *			110.21
No.6 Oil 1% *			108.82
No.6 Oil 3% *			103.73
Gulf Coast (¢/gal)			
Regular Gasoline	-14.36	330.33	344.69
No.2 ULSD Diesel	-15.79	340.80	356.59
No.6 Oil 0.7% *			111.64
No.6 Oil 1% *			111.64
No.6 Oil 3% *			99.21

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

INTERNATIONAL SPOT REFINED PRODUCTS

Rotterdam ($/ton)	Chg.	Price	Prior Close
Regular Gasoline	-77.20	1133.80	1211.00
ULSD Diesel	-63.25	1101.00	1164.25
Singapore ($/bbl)			
Gasoil	-9.55	143.44	152.99
Jet/Kerosene	-7.16	140.83	147.99
VLSFO Fuel Oil ($/ton)	-76.77	946.23	1023.00
HSFO Fuel Oil 180 ($/ton)	-32.33	519.55	551.88

NYMEX NATURAL GAS FUTURES



NATURAL GAS PRICES

($/MMBtu)	Chg.	Price
Henry Hub, Nymex	-0.01	5.51
Henry Hub, Spot	-0.03	5.64
Transco Zone 6 - NY	-0.15	5.18
Chicago Citygate	-0.05	5.35
Rockies (Opal)	-0.11	5.17
Southern Calif. Citygate	-0.02	5.45
AECO Hub (Canada)	+0.08	3.63
Dutch TTF (euro/MWh)	+12.75	175.00
UK NBP Spot (p/th)	-90.00	175.00

US/Canada spot prices from Natural Gas Week

Equity Markets, Jul. 6, 2022

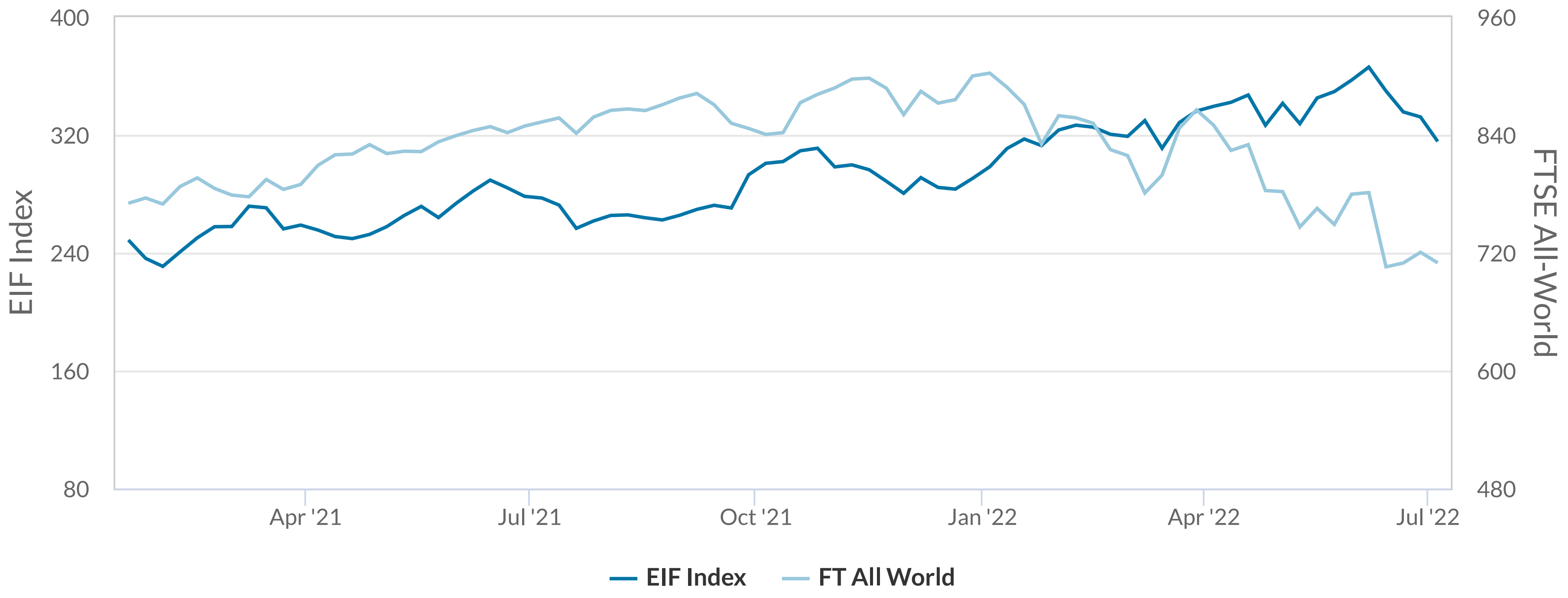
All data are produced by Energy Intelligence in cooperation with Refinitiv.

EQUITY MARKET INDEXES

	Chg.	Index	YTD %Chg.
EIF Global*	-8.10	315.58	+9.38
S&P 500	+13.69	3,845.08	-19.78
FTSE All-World*	-3.93	709.76	-21.24

*Index for previous day

EIF INDEX



EIF Global Oil and Gas Index of 21 traded equities