Energy Intelligence

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In Brief

Data Snapshot

What's At Stake for Energy in Democrats' New Bill?

The compromise Democratic legislation that took Washington by surprise this week includes significant new clean energy spending, a methane charge for oil and gas operations and leasing reforms long sought by environmentalists.

The legislation also includes items that will please many in the oil and gas industry, including measures to force the US Department of Interior to reinstate previously scrapped lease sales in the US Gulf of Mexico and Alaska's Cook Inlet — and hold new ones — as well as increased incentives for carbon capture and storage (CCS).

The bill, known as the "Inflation Reduction Act" — changed from the "Build Back Better" title of prior iterations that had evolved into a political liability for Democrats — was unveiled late Wednesday after swing vote US Senator Joe Manchin (D-West Virginia), announced an agreement with Democratic leadership after appearing to have abandoned efforts to pass something just days earlier.

Speaking to reporters Thursday morning, Manchin described the bill as a "balance," saying it has energy provisions that "should knock down [gasoline] prices" and streamline energy infrastructure permitting while investing in clean energy without a sharp pivot away from fossil fuels.

Manchin also indicated during the call that Democratic leadership agreed to a series of permitting reforms for transmission and other energy infrastructure, and that he hopes those might lead to advancing the Mountain Valley natural gas pipeline, a longtime priority of his.

US President Joe Biden called the bill's reported $369 billion in climate and clean energy spending the "most significant bill in history to tackle the climate crisis," although the spending falls short of the initial $500 billion Biden sought in clean energy funding.

A vote on the bill is expected next week.

Below, Energy Intelligence breaks down of some of the big-ticket energy items contained in the 725-page legislation.

- **Oil and Gas Leasing:** Most notably on the leasing front, the bill would require the reinstatement of the US Gulf lease sale that was vacated by a federal court last November. The bill directs Interior to accept the highest valid bids offered for each unit in Lease Sale 257, and sets a timeline for the other currently defunct remaining sales to be held before the end of 2023. The bill also includes language requiring onshore and offshore oil and gas sales for every comparable renewable energy auction Interior decides to hold. However, the bill also would hike federal royalty rates and minimum lease bids, end non-competitive leasing, substantially raise bonding requirements for oil and gas wells, and create a methane-specific royalty for vented and flared gas.

- **Carbon Capture:** The bill includes a spate of extensions and enhancements to the existing CCS tax credit known as 45Q, including hiking the per-ton values of CO_2 captured and stored from industrial and power facilities to $85 per ton, from $50/ton currently (raised to $60/ton for captured CO_2 used in enhanced oil recovery (EOR)). Values for direct air capture would range from $130-$180/ton depending on whether it is stored in saline geologic formations or used for EOR. The bill would also offer a multi-year extension of the window for projects to have broken ground to qualify for the credit — to Jan. 1, 2033 — and add a direct pay mechanism for companies whose tax burden is too low to qualify for the credit. Thresholds for the size of capture projects would also be dramatically lowered, allowing a wider universe of projects to take advantage of the credit.

- **Methane**: The bill would enact a pared down version of the methane “fee” that incensed oil and gas lobbies earlier in the legislative discussions, which Manchin largely opposed. This version ties the penalty — which starts at $900/ton of methane over a 25,000-ton threshold in 2024 and escalates each year — to compliance with the US Environmental Protection Agency’s (EPA) pending methane standards for the oil and gas sector. Once a facility complies with the EPA regulations, the fee no longer applies.

Bridget DiCosmo, Washington

Valero Sees Demand Stubborn, Diesel Tightness Ahead

Independent refiner Valero said recent concerns about lower fuel demand in the US are likely overblown.

The company, considered a bellwether for the independent downstream industry, also warned that supplying Europe with more diesel would be difficult given current capacity restraints.

'Bit of a Lull'

Recent weekly data from the Energy Information Administration (EIA) has amplified concerns that gasoline consumption in the world’s largest economy is coming under pressure.

But Valero said that while demand did dip in early July, there appear to be no signs of more structural declines.

“There’s really no indication of any demand destruction,” said Chief Commercial Officer Gary Simmons during Valero's second-quarter earnings call, adding that June saw record sales.

“We read a lot about demand destruction, mobility data showing in that range of 3% to 5% demand destruction — again, we're not seeing it in our system,” he continued. “We did see a bit of a lull in the first couple of weeks of July, but our seven-day averages now are back to kind of that June level, with gasoline at pre-pandemic levels and diesel continuing to trend above pre-pandemic levels.”

Diesel Drama

Fallout from the Russia-Ukraine war has left Europe in particular short fuels. And with winter approaching, the continent will need more diesel.

But Valero executives said boosting flows across the Atlantic faces significant headwinds, on both the operational and the economic front.

For one thing, refiners in the US — which has emerged as a key source of replacement volumes — cannot run any harder. Higher utilization increases the risk of unplanned outages, and outright capacity has dropped since before the pandemic.

In addition, downstream producers have already maxed out diesel volumes.

“Our assets have been in max distillate mode for a few weeks," explained COO Lane Riggs. "There's not a lot of additional diesel outside of incremental runs that somebody might have and the industry is running at a pretty high utilization rate."

He added that as jet fuel demand recovers, refiners will need to produce more of that product — at the expense of diesel.

Meanwhile, shipping costs favor shorter voyages.

“In the short term, freight rates are high, and we see a better incentive going into Latin America,” said CFO Jason Fraser.

Results

Valero reported adjusted net income of $4.6 billion the second quarter of 2022, up from $260 million the same period last year.

Refining contributed a whopping $6.2 billion in operating income amid sky-high crack spreads.

The company said it expects its coker at Port Arthur to be in service the first half of 2023.

Frans Koster, New York

Cenovus Raises Capex, Focuses on Organic Growth

Canadian oil sands producer Cenovus Energy said it is increasing its spending this year by around C$400 million ($312.3 million), but remains wary of taking on significant new projects.

Instead, Cenovus will concentrate on organic growth, mostly through incremental brownfield development and debottlenecking, CEO Alex Pourbaix said.

About half of the additional spending, around C$200 million, will go toward optimizing production at Cenovus' existing oil sands mines and increased investment at the Sunrise project. Cenovus will soon be a 100% owner at the oil sands project after acquiring BP's 50% interest earlier this year.

Another C$100 million more will be spent on preliminary work related to the restart of the West White Rose project offshore Newfoundland and Labrador, which Cenovus acquired when it bought Husky Energy last year.

The rest of the capital expenditure boost, or about C$100 million, will go to cover higher oil-field costs driven by widespread inflation.

That pushes the company's total 2022 capex budget to around C$3.3 billion-C$3.7 billion, a 12% increase from previous guidance.

Cenovus expects to add around 15,000 barrels per day of production in 2022 beyond what was previously guided, which would push the company's output to 780,000-810,000 b/d by year-end.

Most of the additional output will come from the company's increased stake in Sunrise, short-cycle barrels from Canada's shale patch and deferred maintenance at some projects.

'Conservative Outlook'

Pourbaix said the extra spending met Cenovus' "hurdle rate" of profitability at $45 per barrel. He said the company pegs "mid-cycle prices" at $60-$65/bbl, noting that he remains wary of significant swings in oil prices.

"I'm a simple guy, and I'm not sure the world has changed that much," he said.

"A lot of people in my position have gotten in a lot of trouble by assuming we are in a new era of [high] commodity prices," he continued. "A lot of oil can be brought on in this world for $60, and for the time being we are going to continue with that potentially conservative outlook."

Inflation Manageable

Pourbaix also shrugged off oil-field inflation, noting that its oil sands mines and planned offshore spending comprise primarily long-lead items ordered well ahead of time.

"It's not really an issue for us on the oil sands side," he said. For conventional operations, however, he said the company was seeing costs rise by around 10%.

Ottawa Criticized

Pourbaix also criticized plans by Canada's government laid out this month to cap and cut emissions from the country's oil and gas sector to 42% of 2005 levels by 2030.

The plans were "more ambitious than what can reasonably be achieved," he said.

"I am very worried that if we remain on this path, it could lead to shutting in production, and at a time when the world is literally crying out for more oil and gas production," he said.

Cenovus reported revenues of C$19.2 billion in the second quarter of 2022, up 18.5% quarter-on-quarter. Net income rose to C$2.43 billion.

This generated C$2 billion in free cash flow during the quarter, about half of which was returned to shareholders via share repurchases and dividends.

Jeffrey Cavanaugh , New Orleans

PBF Expects Heavy Runs at Refineries to Persist

Refinery utilization and margins are likely to remain high even as new downstream capacity comes into service across the globe, according to independent refiner PBF Energy.

Executives said Thursday that more downstream capacity will be coming into service over the next several months. Indeed, PBF itself is restarting a crude unit it idled last year at its Paulsboro plant in New Jersey, part of a wider rationalization of North America's refinery footprint.

New facilities are also planned in the Middle East, Asia and possibly Mexico. In the US, projects from Valero (Port Arthur) and Exxon Mobil (Beaumont) will add capacity at their respective facilities.

Demand Strength

But PBF executives said even with these additions, the US downstream will be run hard.

“We see demand remaining strong even in the face of economic uncertainty,” CEO Tom Nimbley said on the company's second-quarter conference call, echoing comments earlier in the day from Valero downplaying reports of demand destruction for oil products.

In addition, refiners need to keep the throttle open in order to address critically low product inventories, Nimbley said. That will be the case even with fresh capacity, he added.

“Actually we need capacity to come on line to help replenish … inventory. So I don't think it's going to impact the utilization,” he explained.

“There's going to have to be steps to replenish those inventories, refining utilization is going to have to be very high, and the margins will be above mid-cycle,” Nimbley said.

This is especially true for US refiners, which have access to cheaper natural gas than competitors elsewhere in the Atlantic Basin, executives said. The high price of natural gas makes desulfurization more expensive for European refiners.

PBF reported adjusted net income of $1.2 billion the second quarter of 2022, up from $48.2 million the same period last year.

Frans Koster, New York

Oil Prices Stay Bullish But Lose Some Exuberance

Oil has been tossed around by swings in the market's mood this week, but supply concerns ultimately won out on Thursday, pushing prices higher.

Brent was aiming for a $4 gain on the week, with the front-month September contract closing 56¢ higher at $107.14 per barrel on ICE Futures on Thursday. The September Nymex West Texas Intermediate contract lost 84¢ to close at $96.42/bbl, which is still up about $2 on the week.

After a month of losing value, US gasoline has made gains so far this week. On Thursday it added 3.58¢ to close at $3.4646 per gallon, up 35¢ on the week.

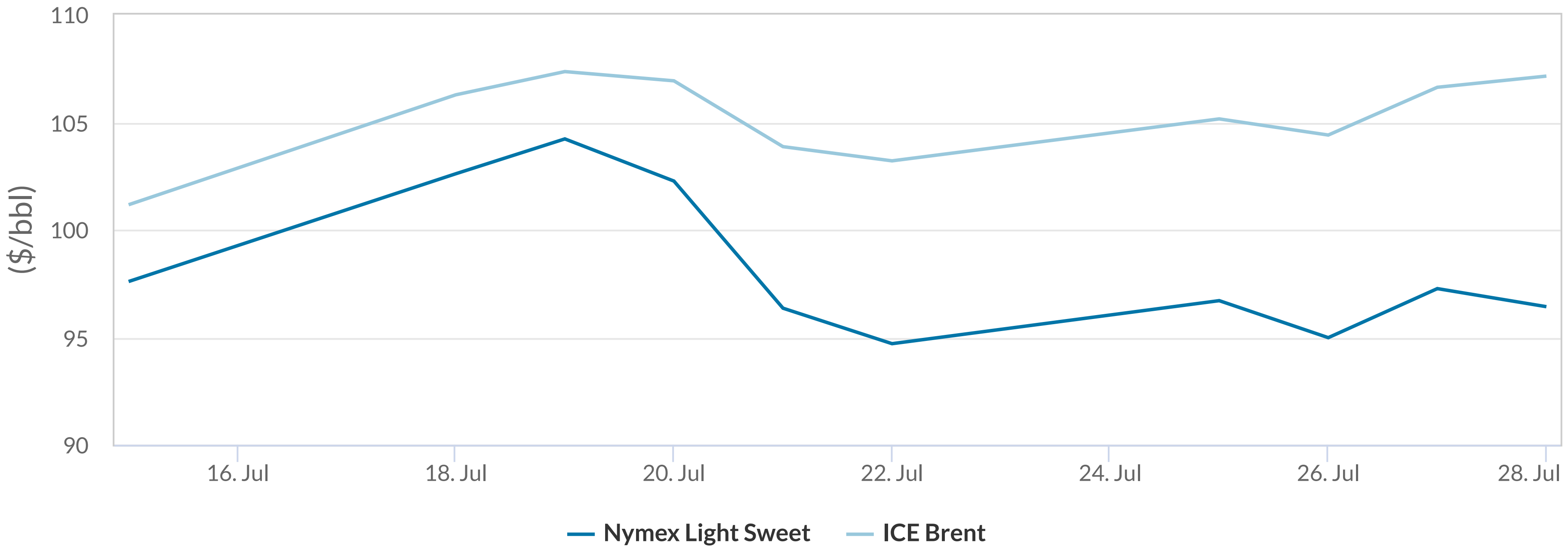
The ICE Brent September contract ceases trading on Jul. 29, meaning that the market is already bidding October barrels with potential winter disruptions in mind. In Europe, all eyes were on oil after the EU formally implemented gas rationing measures.

The spot market for light, sweet crude remains tight, as evidenced by the strength in the Dated Brent spot price. The average spread between the Dated and the Brent front-month futures prices was more than $7/bbl in the past month, including a peak of $11/bbl and a Thursday low of $2.50/bbl.

European refineries are snapping up light, sweet oil faster than medium, heavy crude because the savings on energy costs to process it make it more economical and the higher yields of very-low-sulfur fuel oil for shipping make it more profitable.

ICE BRENT VS. NYMEX WTI FUTURES

Front Month Contracts



“The cost of energy and refining has gone up from something like $5 per ton to $20, $25 per ton [of crude],” TotalEnergies CEO Patrick Pouyanne said on his company’s second-quarter earnings call. This explains why the sweet-sour spread between Brent futures and the Dubai cash market remains obstinately above $10/bbl, essentially signaling that these light barrels are needed in the Atlantic Basin and thus not allowed to move East of Suez.

But refining margins are coming off their highs regardless, and this is especially true for gasoline. One reason is that European refiners produce too much of it and not enough diesel.

“The refining system in Europe was mostly designed to produce gasoline. In the past, we made some investments, but not enough to cover the diesel demand,” Pouyanne said.

Too much naphtha and gasoline come out of the runs, reflecting the typical yields of light, sweet crude and presenting refiners with an insoluble conundrum: saving on energy costs by running sweet oil, or running more expensive sour crude with Russian supply now out of the picture.

So far, exports from the US and Saudi Arabia have more than compensated for the lost Russian volumes. A widening price spread between Brent and West Texas Intermediate (WTI) teased US oil exports to a record 4.55 million barrels per day last week, based on an average differential of $7.30/bbl.

The problem is that the US is also one of the largest buyers of European gasoline. With the Brent-WTI spread now straying north of $9/bbl, the physical arbitrage to the US is shut for European gasoline. A glut has started to show up in European and Asian inventories. To make matters worse, US gasoline demand remains about 500,000 b/d below its 2016-19 average, in large part because of the high prices.

More US crude is likely to be drawn into Europe by the ample price differential. But crude releases from the US Strategic Petroleum Reserve (SPR), which started in May, are set to end in October and will not be extended. It means that global crude supply will lose 1 million b/d when that happens, with a likely effect on prices.

“This was only a stop-gap measure, said Amos Hochstein, president Biden’s energy adviser. "The US [SPR] cannot be an oil supplier."

Julien Mathonniere, London

IN BRIEF

ConocoPhillips Sells Aging Gas Wells

Birmingham, Alabama-based E&P Diversified Energy is buying ConocoPhillips' interest in about 1,500 aging natural gas wells in Oklahoma and the northern Texas Panhandle in a deal valued at $240 million.

Diversified specializes in the purchasing of low-volume but long-lived gas production and is one of the largest operators in the Marcellus Shale in the US Northeast. The firm more recently began to buy aging assets in Texas, Louisiana and Oklahoma in what it dubbed its Central Region.

Since May 2021 it has made six major acquisitions in the Central Region, including the acquisition of Tapstone Energy's Midcontinent assets that it acquired from Chesapeake Energy in October 2020 for $130 million. Those properties are contiguous to ConocoPhillips' assets, Diversified said, creating "further potential to develop operational synergies of scale … and benefits from a constructive regulatory environment."

The 250,000 acres being bought from ConocoPhillips produce roughly 9,000 boe/d (90% gas) and adds 31 MMBoe (186 Bcfe) of net proved and probable reserves to Diversified's portfolio.

The deal is expected to close in late September.

Tom Haywood, Houston

Petrobras Cuts Fuel Prices as Board Gains Oversight

Brazil's state oil company Petrobras said Thursday that it will cut the price of gasoline in the South American country by 3.88%, effective Jul. 29.

In a statement, Petrobras maintained that the "reduction follows the evolution of reference prices, which stabilized at a lower level for gasoline, and is consistent with Petrobras' pricing practice, which seeks to balance its prices with the global market."

The news comes a day after Petrobras announced that its board of directors will now "supervise" the company's pricing structure on gasoline and other fuels — a move seen as giving President Jair Bolsonaro more of a say over company policy.

In a securities filing Wednesday, Petrobras said its board had approved guidelines that enable it to meet quarterly with executives — as well as with Petrobras's fiscal committee — to discuss how the company is setting fuel rates.

Meanwhile, statistics from Brazil's National Petroleum Agency show that fuel prices in the country have, in fact, been falling consistently for a month.

Fuel prices in Brazil have long been a politically charged issue given Petrobras' role in setting prices and claims of a lack of transparency in the process.

They have emerged as a key campaign issue ahead of October's presidential election, in which Bolsonaro has consistently trailed former president Luiz Inacio Lula da Silva in the polls.

Michael Deibert, Washington

Liberty Invests in 'Enhanced Geothermal' Firm

Pressure pumper Liberty Energy has invested $10 million in enhanced geothermal player Fervo Energy, expanding into an emerging field that could someday provide reliable low-carbon baseload power to the energy grid.

Liberty, the second-largest US hydraulic fracturing services provider after Halliburton, sees its expertise in subsurface engineering, network fractures and reservoir fluid flow as "a natural fit" with Fervo's technology approach.

Oil-field services providers are honing in on geothermal as one of the emerging decarbonization technologies with the greatest overlap in their subsurface skillsets. A number of drillers like Nabors Industries and Precision Drilling have invested in geothermal start-ups already, although Liberty appears to be among the first fracking companies to enter the space.

So-called enhanced geothermal involves fracturing subsurface rock to create permeability, similar to the fracking process used in unconventional oil and gas extraction. Because the process creates what are essentially manmade heat reservoirs, enhanced geothermal wells can theoretically be drilled virtually anywhere in the world. The water requirements and potential for induced seismicity are among the key challenges for the technology.

"We chose this investment opportunity because of our belief in the concept viability, the quality of Fervo's team and the size of the potential resource already captured," Liberty CEO Chris Wright said, adding that Fervo's challenges are "similar [to what] we have seen with the shale revolution."

Luke Johnson, Houston

US Natgas Prices Fall Despite Bullish Storage Data

The US Energy Information Administration (EIA) reported a 15 Bcf build for the week ended Jul. 22, bringing the volume of working natural gas in storage to 2,416 Bcf.

It was ostensibly one of the most bullish injections of the season as a blistering heat wave ramped up what were already record gas burns for power generation, pressing the build 17 Bcf below the week's 5-year average of 32 Bcf. The seasonal deficit widened to 345 Bcf, while inventories are 293 Bcf under this time last year.

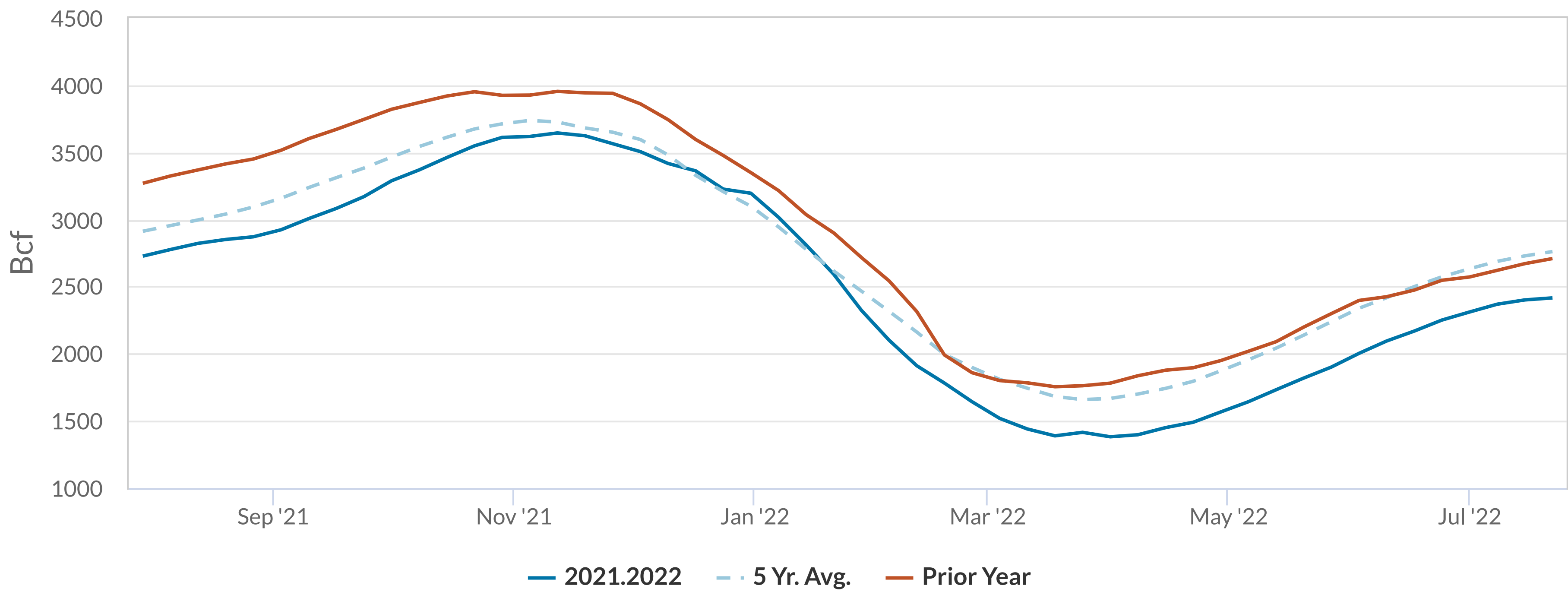
Nonetheless, the September gas futures contract plunged 42¢ on Thursday to $8.134/MMBtu on its first day in the prompt month position as traders looked beyond one of the most anemic refills to date and focused on the potential for growing production and possible LNG outages from tropical storms to temper bullish sentiment.

WORKING GAS IN STORAGE

(Bcf)	Jul 22	Jul 15	2021
East	532	521	559
Midwest	625	608	680
Mountain	144	144	183
Pacific	253	253	247
South Central	862	874	1,001
Total	**2,416**	**2,401**	**2,671**

Source: US Energy Information Administration

US NATURAL GAS STORAGE



Source: US Energy Information Administration Lower 48 Working Underground Storage

Tom Haywood, Houston

DATA SNAPSHOT

Oil and Gas Prices, Jul. 28, 2022

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

CRUDE OIL FUTURES

($/bbl)	Chg.	1st Mth.	2nd Mth.
ICE Brent	+0.52	107.14	101.83
Nymex Light Sweet	-0.84	96.42	94.65
DME Oman	-1.51	103.54	100.58
ICE Murban	+2.99	105.61	102.28

INTERNATIONAL SPOT CRUDES

($/bbl)	Chg.	Price	Prior Close
Brent (Dated)	+0.05	109.68	109.63
Dubai	+3.60	105.00	101.40
Forties	+0.33	114.84	114.51
Bonny Light	+0.48	120.04	119.56
Urals	+0.48	81.34	80.86
Opec Basket*			108.11

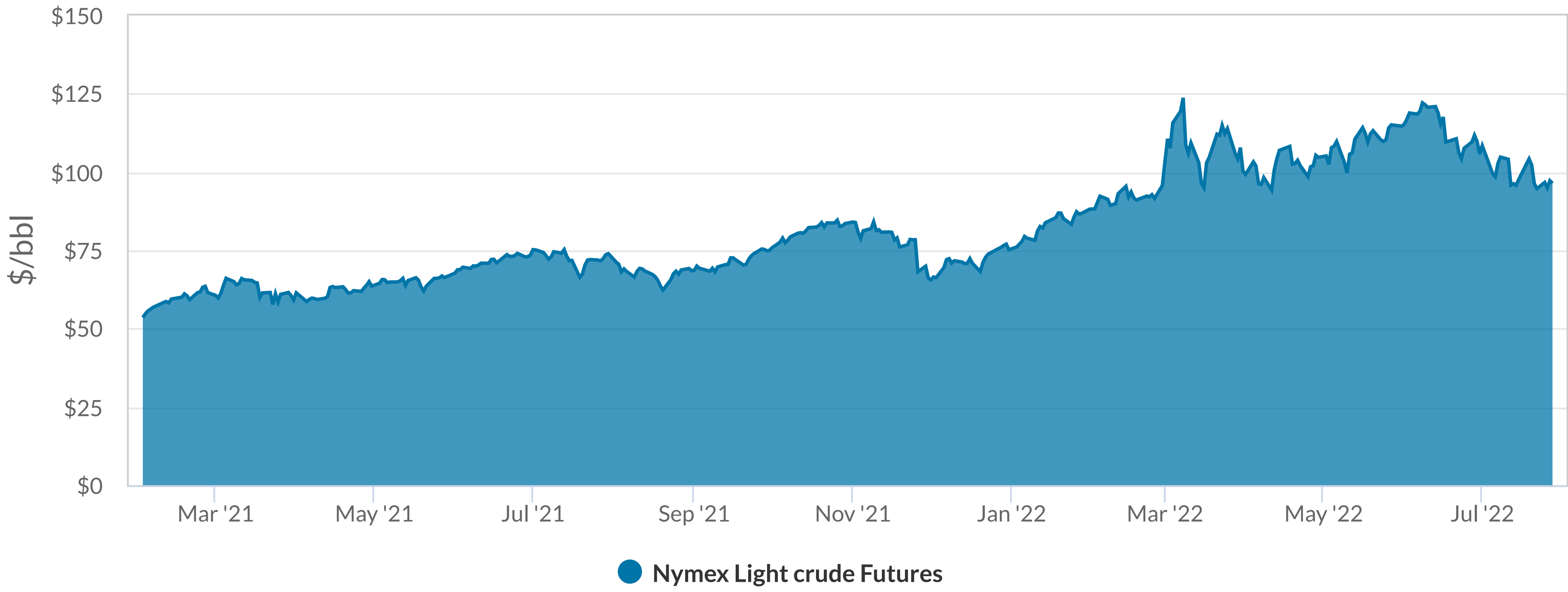
*Opec price assessed.

NORTH AMERICAN SPOT CRUDES

($/bbl)	Chg.	Price	Prior Close
WTI (Cushing)	-0.92	99.11	100.03
WTS (Midland)	-0.42	99.11	99.53
LLS	-1.05	101.36	102.41
Mars	-0.92	96.91	97.83
Bakken	-0.92	102.86	103.78

ICE BRENT CRUDE FUTURES

NYMEX LIGHT CRUDE FUTURES

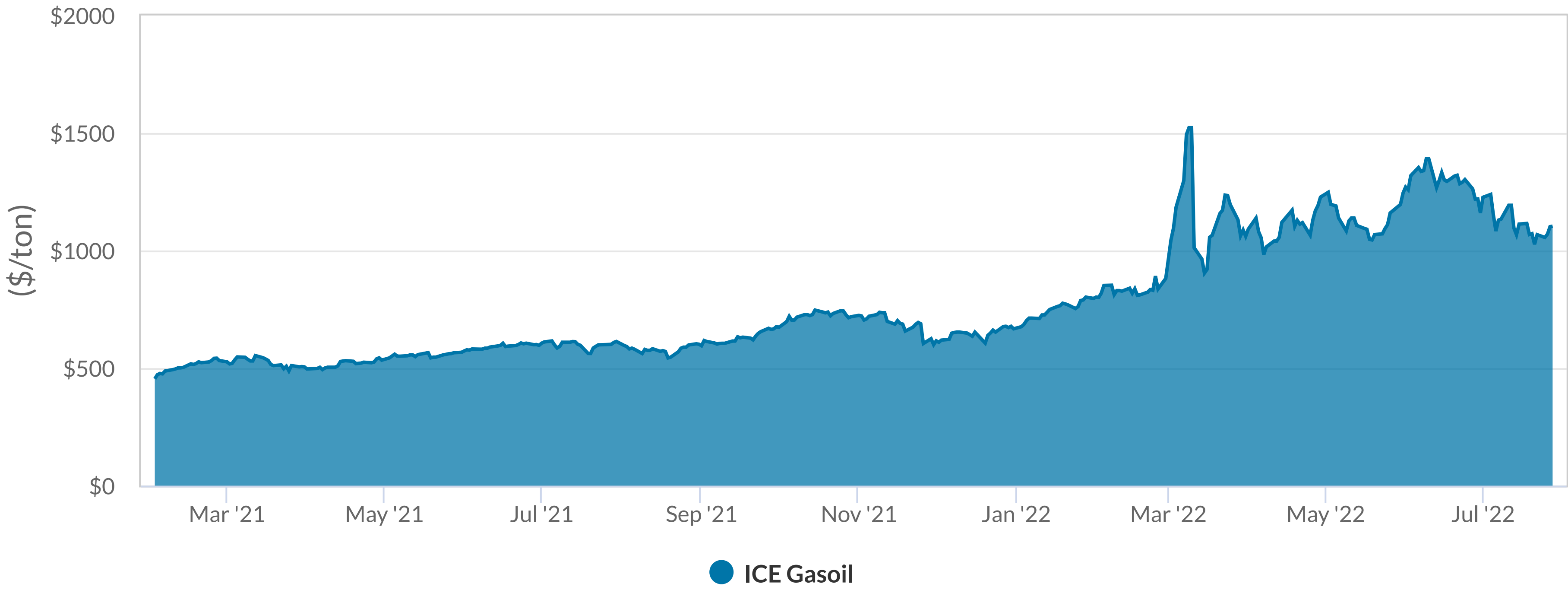


Energy Intelligence

REFINED PRODUCT FUTURES

Nymex	Chg.	1st Mth.	2nd Mth.
Gasoline (¢/gal)	+3.58	346.46	310.18
ULSD Diesel (¢/gal)	-3.10	368.63	361.38
ICE			
Gasoil ($/ton)	+2.25	1103.75	1083.00
Gasoil (¢/gal)	+0.72	352.28	345.65

ICE GASOIL FUTURES



NYMEX GASOLINE FUTURES

US SPOT REFINED PRODUCTS

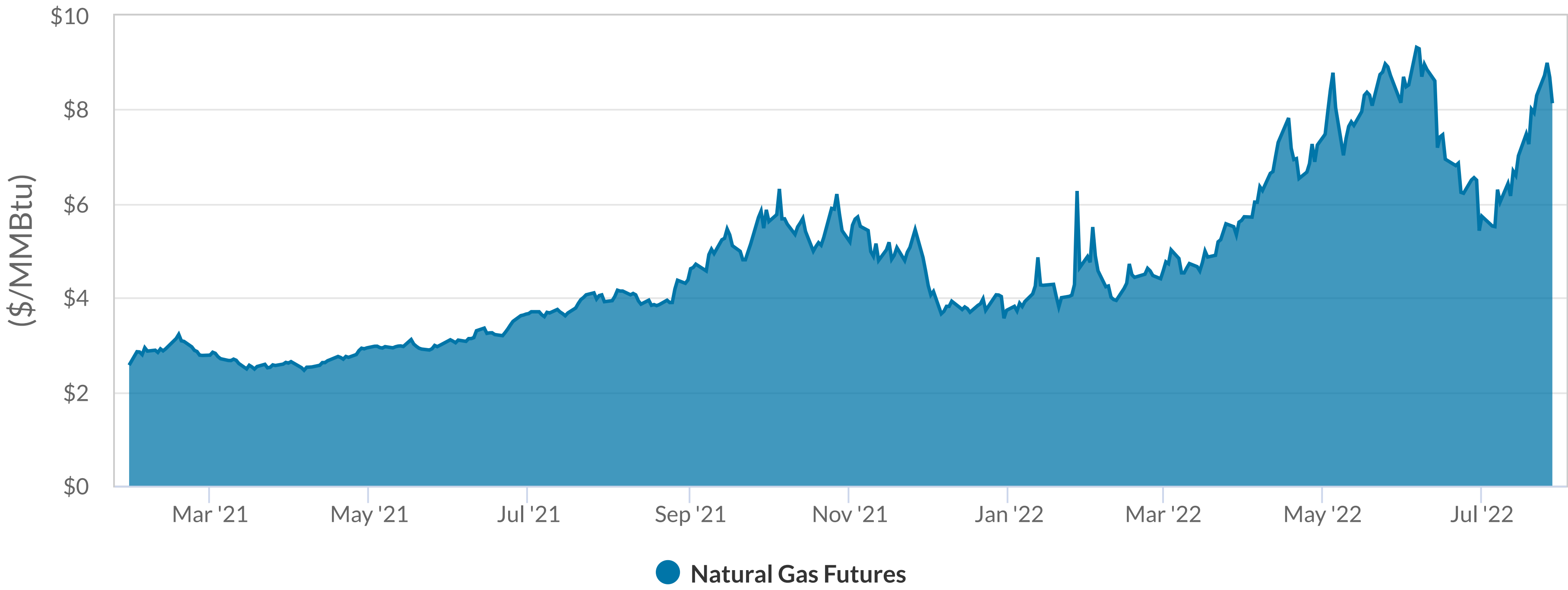
New York (¢/gal)	Chg.	Price	Prior Close
Regular Gasoline	+3.92	356.03	352.11
No.2 Heating Oil	-4.19	360.31	364.50
No.2 ULSD Diesel	-4.94	369.31	374.25
No.6 Oil 0.3% *			108.25
No.6 Oil 1% *			94.83
No.6 Oil 3% *			92.58
Gulf Coast (¢/gal)			
Regular Gasoline	+11.17	346.78	335.61
No.2 ULSD Diesel	-0.19	368.56	368.75
No.6 Oil 0.7% *			103.18
No.6 Oil 1% *			103.18
No.6 Oil 3% *			86.88

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

INTERNATIONAL SPOT REFINED PRODUCTS

Rotterdam ($/ton)	Chg.	Price	Prior Close
Regular Gasoline	+6.00	1066.00	1060.00
ULSD Diesel	-5.00	1107.50	1112.50
Singapore ($/bbl)			
Gasoil	+6.07	137.46	131.39
Jet/Kerosene	+6.10	137.87	131.77
VLSFO Fuel Oil ($/ton)	+19.67	813.02	793.35
HSFO Fuel Oil 180 ($/ton)	+20.84	513.06	492.22

NYMEX NATURAL GAS FUTURES



Refinitiv

NATURAL GAS PRICES

($/MMBtu)	Chg.	Price
Henry Hub, Nymex	-0.55	8.13
Henry Hub, Spot	-0.01	8.66
Transco Zone 6 - NY	-0.32	7.70
Chicago Citygate	-0.26	8.15
Rockies (Opal)	-0.18	8.06
Southern Calif. Citygate	-0.42	8.59
AECO Hub (Canada)	+0.15	5.00
Dutch TTF (euro/MWh)	-5.75	199.25
UK NBP Spot (p/th)	-10.00	350.00

US/Canada spot prices from Natural Gas Week

Equity Markets, Jul. 28, 2022

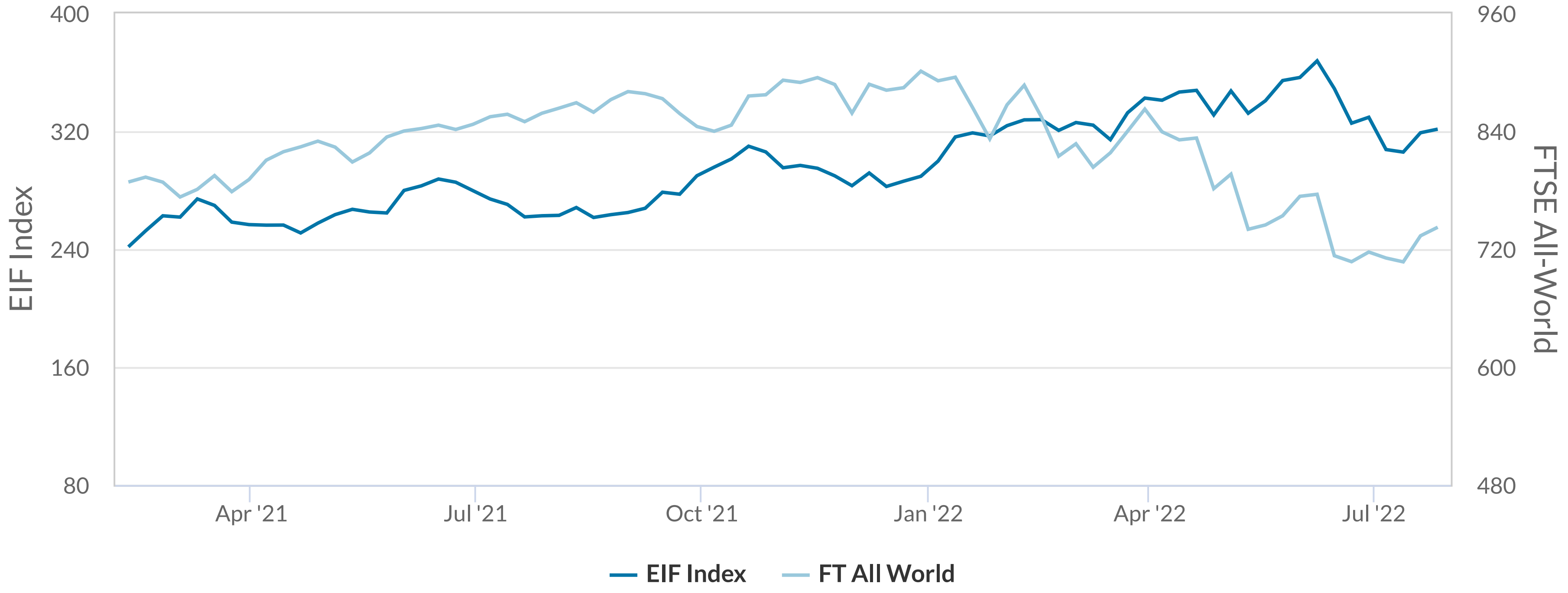
All data are produced by Energy Intelligence in cooperation with Refinitiv.

EQUITY MARKET INDEXES

	Chg.	Index	YTD %Chg.
EIF Global*	+1.90	321.44	+11.41
S&P 500	+48.82	4,072.43	-15.03
FTSE All-World*	+13.21	742.32	-17.63

*Index for previous day

EIF INDEX



EIF Global Oil and Gas Index of 21 traded equities