Energy Intelligence

OIL DAILY®

September 20, 2022

WWW.ENERGYINTEL.COM

CONTENTS

In Brief

Data Snapshot

Climate Week: Path to Net Zero 'Not A Straight Line'

The Climate Week event in New York has rallied around the theme of maintaining efforts to phase out fossil fuels — despite very real complications around the world.

Speakers from the nonprofit, regulatory and research worlds have been quick to defend the need for decarbonization to keep marching forward despite overlapping global pressures, including rampant inflation, the war in Ukraine and the food crisis.

The Ukraine crisis has "reopened the conversation about fossil fuels, but we cannot let the West backslide on this issue," said Helen Clarkson, CEO of Climate Week's main organizer, the nonprofit Climate Group.

She called out oil and gas companies who have sought more exploration in the near or medium term, and governments who have advocated for the same.

"There are those with good intentions in government and business who are genuinely concerned about keeping the heat and lighting on this winter," Clarkson acknowledged, mainly referring to the gas supply crunch in Europe.

"But many want to use this situation to reopen a debate they've already lost. It is clear there can be no new fossil fuels" to avert the worst consequences of climate change, she argued.

Security Front and Center

Australian Minister for Climate and Energy Chris Bowen insisted that low-carbon energy should not receive any blame or hesitation in the midst of the energy crisis.

Rather, he argued that the invasion of Ukraine has reinforced the risk involved in countries relying on fossil fuels, especially fossil fuel imports.

"Renewable energy is good for energy security. There is no geopolitical crisis that can impact the flow of sun to our land mass or the stream of wind on our shores and on our land," he emphasized.

Bowen said renewables are a "very secure" path to replace natural gas — assuming enough transmission lines exist to move the power to high-demand markets, and enough storage is in place to manage the intermittency of solar and wind.

Vigilance Urged for Corporations

Speakers urged continued action by corporations on 2050 net-zero emissions targets. Many large oil and gas firms are among those who have committed to net zero — also known as carbon neutrality — by midcentury.

Moving toward net-zero will be far from easy but companies nonetheless need to stay persistent, said Laura Corb, a senior partner at consultancy McKinsey who advises large companies on sustainability.

This is a big ask. Companies are confronted with a need to reconcile decarbonization goals with energy security, food security, rising inflation and more, she said.

“Just as we thought supply chain disruptions caused by Covid were easing, now we have new challenges caused by geopolitics,” Corb acknowledged. “The path to net zero will not be a straight line.”

Balancing the Economy

With inflation thinning out consumer pocketbooks around the globe, many speakers were quick to deflect common criticisms that climate action could inflict additional economic pain or curb growth opportunities.

UN Meteorological Organization Secretary-General Petteri Taalas joked that he always finds himself the bearer of bad news — but insisted that climate action isn’t all bad news for the economy.

He said 32 countries have generally lowered their greenhouse gas emissions in recent years as their economies have grown. These include Japan, the US, Singapore and multiple European countries.

“There is not an automatic link between economic growth and emissions growth,” Taalas told the conference. “Actually, we have seen quite the opposite happening.”

Lauren Craft, New York

Report: VC Interest in CO2 Removal Hits Record High

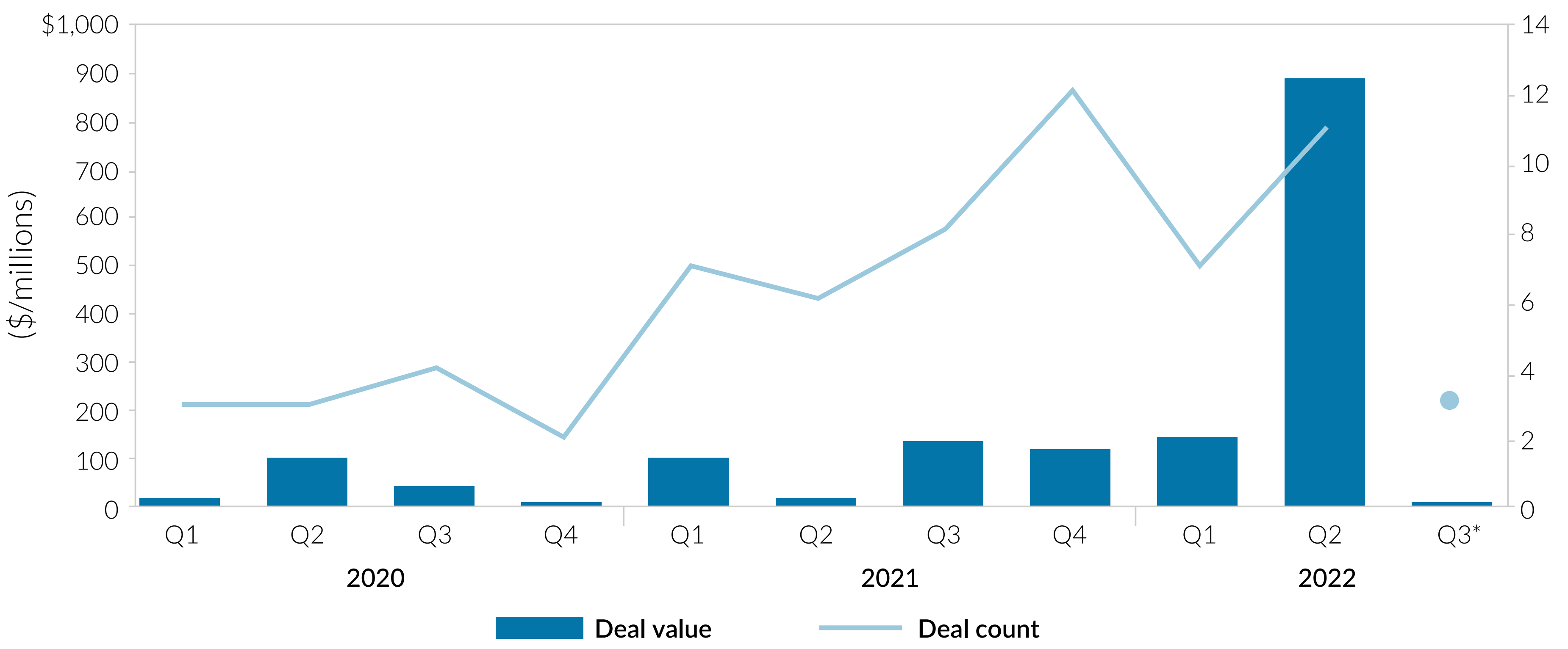
Venture-capital (VC) investor interest in carbon removal hit an apparent record high in the second quarter of this year with nearly $900 million in funds raised over the three-month period, according to a recent report.

Private-capital research and data firm Pitchbook found that some $882.2 million of VC investment flowed into carbon capture startups across 11 deals announced between April and June, dwarfing any previous quarter.

The prior four quarters combined saw less than half of that total invested, at $432.1 million, according to Pitchbook.

“Activity in the first two months of Q3 seems muted, but we expect the pace for VC deals to continue to grow (though likely fall short of Q2 2022), driven by the recent improvements to tax credits for carbon capture in the US and the general tightening of carbon allowances in Europe,” Pitchbook said in the report.

POSTCOMBUSTION CARBON CAPTURE VC DEAL ACTIVITY SINCE 2020



*As of August 29, 2022. Source: PitchBook

The report focuses on fundraising involving “post-combustion carbon removal” technologies, including carbon capture and storage (CCS) and direct air capture (DAC).

The technologies, which can integrate with existing infrastructure, make for “a very appealing investment to those looking to extend the life of their carbon-intensive assets (such as power stations and industrial facilities) during the pivot to a low-carbon paradigm, essentially allowing decarbonization without the immediate upfront costs of building new facilities,” the report says.

The spike in activity in the second quarter was driven by two especially large deals: DAC developer Climeworks' $634.4 million Series F, led by Singaporean sovereign wealth investor GIC, and point-source carbon capture company Carbon Clean's $190.7 million Series C, led by Chevron.

Boosting Incentives

The jump in deal activity comes as demand for CO2 removal ramps up, with a growing consensus among governments, companies and international bodies that CCS, DAC and other related technologies will be essential in efforts to reduce global emissions.

However — deals announced in the second quarter were finalized before passage of the game-changing Inflation Reduction Act (IRA) in the US. The sweeping legislation signed into law last month is expected to accelerate the development of carbon-removal technologies with enhanced incentives, and give investors greater certainty in advancing projects.

“Given capture and storage costs of $52-$90 per ton … the increase in value of the 45Q tax credit will mean that carbon capture and storage is now a net positive (financially speaking) for a large proportion of this range rather than an overall expense,” the Pitchbook report says.

The IRA also expanded the eligibility to qualify for 45Q, which could open even more opportunities for investors looking to provide carbon-removal services for themselves or third parties.

Growing commercial and consumer demand for carbon offsets globally is also poised to drive future investments in carbon-removal technologies, Pitchbook said in a separate report.

Luke Johnson, Houston

Ovintiv Bullish on Montney Shale Asset

Ovintiv is betting big on its Montney Shale natural gas position in Alberta and British Columbia, even as other players are shutting in amid weak short-term pricing.

That's because the company has made a big effort to divert future supply away from the Aeco hub, where prices have recently plunged as pipeline maintenance gets underway.

AECO Break-O

Starting in 2023, the company will sell about 65% of its Montney gas outside the AECO benchmark, Ovintiv officials said.

"We've taken concrete steps to transform our Montney market access,” said Ovintiv CEO Brendan McCracken during an investor presentation Monday.

Aeco can be especially sensitive to fluctuations production, as the basin is landlocked and has limited takeaway capacity.

Ovintiv's steps include firm transportation agreements that last beyond 2025 and include access to the Dawn, Malin and Chicago hubs. For example, the company is increasing its capacity on TC Energy's Alliance pipeline beginning this November for a term of 10 years. The deal increases exposure to "premium" markets in the US Midwest, according to a presentation.

In addition, 20%-25% of Montney price exposure is covered by "financial AECO basis or ratio basis swaps,” according to Jim Zadvorny, VP of Marketing at Ovintiv.

Returns Driven

Still, returns are king for investors, who are seeking big paydays and prudent spending from operators.

To this end, Ovintiv touted the returns potential for the play, which forecasts will generate substantial cash for shareholder returns. The Montney play alone is set to generate $2 billion in free cash flow this year, the highest among all its plays. The cash will underpin a $1 billion buyback program this year as well as debt reduction, and Ovintiv plans to grow shareholder returns next year as well.

Analysts seemed pleased with Ovintiv’s strategy. “With an improving balance sheet, [Ovintiv] remains favorably positioned to allocate more free cash flow towards share repurchases,” wrote Goldman Sachs analysts led by Neil Mehta.

Operationally, Ovintiv continues to make improvements to save costs. Its so-called "cube" development, for instance, unlocks all portions of the Montney at once, often resulting, it says, in impressive flows that are often some of the play's best.

In another innovation, Ovintiv says it will also soon start using a gas-fueled frack spread, the first in Canada, that should reduce fuel costs by 80% and reduce diesel usage by over three million gallons per year.

Ovintiv's Montney Shale Position

Source: Ovintiv

Giant Resource

Ovintiv (formerly Encana) claims to be the basin's largest gas operator at about 907 million cubic feet per day. The company also produces 47,000 b/d of liquids.

Supporting this production is a deep inventory spanning 145,000 net acres. Ovintiv says the position contains enough drilling sites for 30 years of gas production and 10 years for oil at present rates of production.

McCracken told analysts the company expects to direct more capital to drilling the Montney next year.

"Part of that is just because we didn't have a front half program on the [British Columbia] side of the play, while we waited for the permitting to catch up. And so there'll be a bit of a capital catch-up that will happen in '23 there and the returns are very strong."

Further down the line, McCracken said participation in liquefied natural gas exports is "the next logical extension" of market diversification, but the company doesn't plan to take an equity position in any terminals.

"But we do think there's the potential to continue to explore commercial supply deals," he said.

Jeffrey Cavanaugh, New Orleans

US Lawmakers Want Stricter Russian Oil Price Cap

US legislators want a say in the forthcoming price cap on Russian oil.

Senators Pat Toomey (R-Pennsylvania) and Chris Van Hollen (D-Maryland) announced a sanctions bill that has broader powers to enforce the proposed price cap on Russian oil than what the Biden administration is currently advocating.

The senators' proposal threatens to block companies from the US financial system if they buy oil priced above the cap, a structure known as "secondary sanctions" that have been controversial in the past when used in other sanctions programs, such as that on Iran.

The US, Europe and other G7 members are working on a system that would block companies in their jurisdictions from providing insurance or financial services for any transactions where oil is prices above a yet-to-be-determined cap. But so far the price cap isn't designed to go after purchasers in countries that don't voluntarily sign on to the mechanism.

The legislation is meant to act "as a complement to the administration's effort, a backstop," Van Hollen said in a Senate Banking Committee hearing Tuesday. "Because you can easily imagine Vladimir Putin saying that he's not going to comply with this price cap. And that will set off negotiations with those around the world who may be willing to purchase oil for a little bit above the price cap," he added.

But Treasury Department officials have seemed comfortable with the idea that Russia may be able to sell some oil above the cap. They've largely framed the idea that Russia is forced to sell at steep discounts as the price cap looms as a success. After all, their objective is to reduce revenues — and steep discounts do that. And the Biden administration is balancing its concerns over Russia's revenues with those of oil market supply.

No, Thank You

The Treasury Department's Assistant Secretary for Terrorist Financing and Financial Crimes Elizabeth Rosenberg did not seem particularly keen on the proposal. "The US administration and our G7 partners have a good deal of leverage and authorities right now" to enforce the cap, Rosenberg told senators in the hearing.

In its most recent guidance on the oil price cap, the Treasury Department said companies providing insurance or financing for a transaction involving Russian oil will have to attest to the price at which the oil was bought. Enforcement would only come if, for example, a purchaser lies to those service firms about the price they are paying. "At this time, we have sufficient authorities in order to pursue that," Rosenberg said.

That doesn't mean Congress will let it lie. Secondary sanctions measures have generally come from congress, and Russia's continued oil revenues have been a focus for lawmakers on both sides of the aisle.

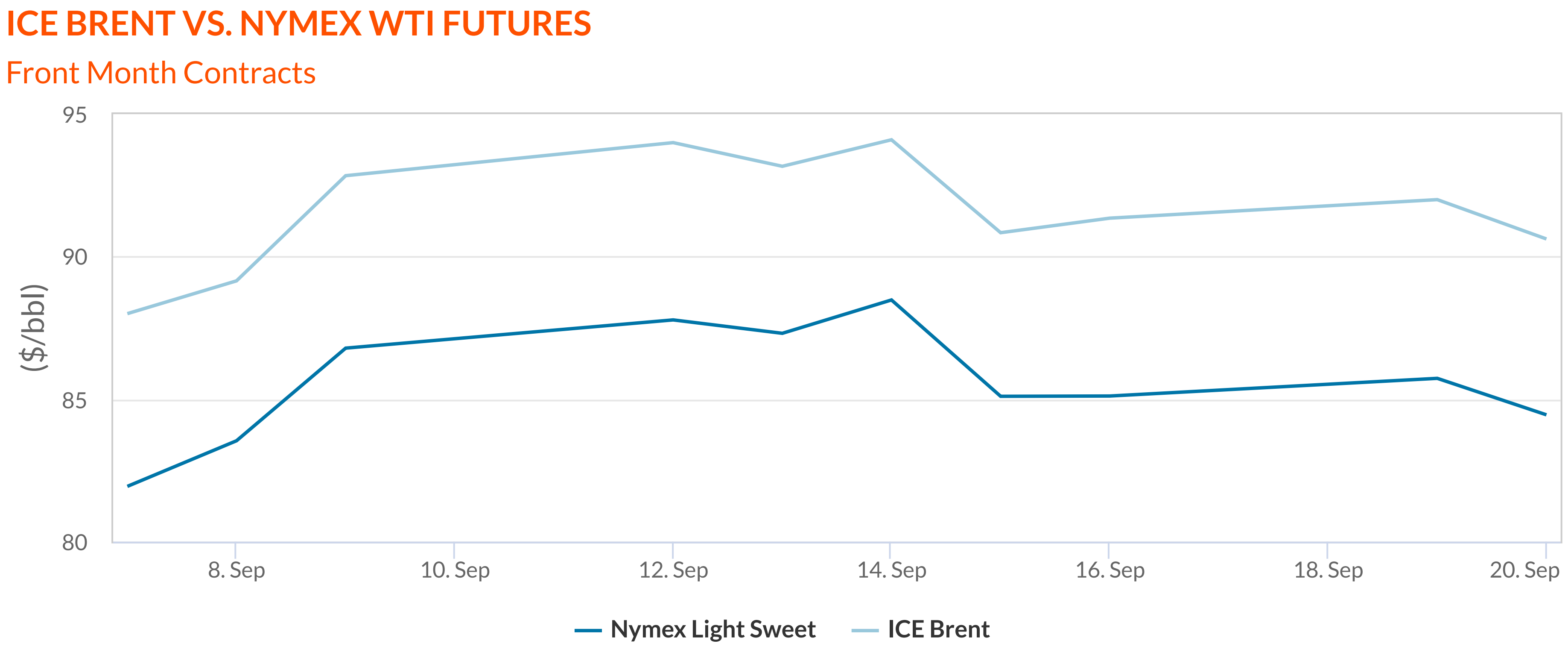
"I intend to work with Senator Van Hollen to get this bill enacted as soon as possible so that Russia can no longer profit from the oil sales funding its war with Ukraine," Toomey said.

Emily Meredith, Washington

Oil Unhinged by Inflation Jitters, Weaker Margins

Oil shed almost $1.50 per barrel on Tuesday, and price action was partly muted by a looming rate hike decision from the US Federal Reserve.

In London, the November Brent contract was down $1.38 and settled at $90.62/bbl, while in New York the front-month Nymex West Texas Intermediate (WTI) October contract lost $1.28 and closed at $84.45/bbl.



Low liquidity, high volatility and price choppiness have become the key tenets of this market, with the pervasive uncertainty helping to keep prices constantly pinballing. “Traders don’t currently know which leg to stand on, a situation made worse by thin liquidity,” Saxo Bank wrote in a note.

Band-Aid Fix

On the one hand, governments are lining up emergency welfare support for households struggling with their rising energy bills. But if anything, the market is dubious about the ability of such strategies to fix longer-term supply issues.

“Freezing or capping energy bills might help consumers in the short-term, but it does not address the real causes and is not the long-term solution,” Saudi Aramco CEO Amin Nasser told an energy forum in Switzerland.

Nasser does not see a windfall tax on oil companies as a good incentive to increase energy supply as particularly useful either.

Meanwhile, the extension to November of the crude releases from the US strategic petroleum reserve amount to political expediency rather than a decisive measure to keep supply and prices under control in the longer term.

“This extension into November keeps prices from rising too much before the [US] mid-term elections,” a source noted, making a sharp price rally less likely until this electoral deadline.

Inflation Therapy

One pending question for the oil market is which of inflation or recession is worse. US consumer prices rose to 8.3% in August, while Euro area inflation has broken through 9%.

Both the US Fed and the European Central Bank are now poised to pound inflation with heavy fire: a rate hike of 0.75%, if not a full 1% rise.

Markets will be closely following the proceedings of the US Fed’s Federal Open Market Committee (FOMC) meeting today and tomorrow.

There is a risk is that overshooting inflation targets may trigger a recession. Yet, the rationale is that short-term economic pain is preferable to a long-drawn phase of inflation.

“If or when peak inflation becomes the popular narrative oil will also get a boost, but only then,” wrote PVM Oil analyst Tamas Varga.

Sweet Spot

For now, the Dated Brent physical price is trading about $1/bbl below the front-month future price. The weekly Brent CFD swaps, which tie the Brent forward and Dated Brent prices together, have flipped into a contango of $1.14/bbl for the first, front-week swap.

This shows that European refining margins for medium and heavy sour crude are significantly better than light, sweet margins, because sour crude yields more middle distillates (diesel, jet fuel, heating oil), which are currently in high demand.

The end of the driving season and the collapse in gasoline crack spreads in Europe, as well as the negative naphtha margins are making it more difficult for simple refineries — those without secondary conversion capacity — to run at a profit. Some may have come off line as a result.

In turn, demand for light crude has dipped and helped to put a ceiling on lighter, Brent-linked barrels, partly accounting for the subdued prompt prices.

Julien Mathonniere, London

IN BRIEF

Driftwood LNG Teeters as Tellurian Pulls Financing Scheme

The Driftwood LNG export project on the US Gulf Coast was pushed further into doubt this week when project developer Tellurian withdrew a $1 billion high-yield bond sale that was designed to kickstart financing for the venture.

The Houston-based company cited uncertainty in the junk-bond market for the move on Monday as the Federal Reserve seems poised to continue raising rates.

However, Tellurian has struggled to attract financing for its liquefied gas complex in Lake Charles, Louisiana, which it began constructing prior to obtaining funding.

Tellurian had offered very enticing terms for the bond including a 12.5% all-in yield and collateral that included shale-gas fields in the integrated project.

Tellurian Co-Founder and Chairman Charif Souki has been attempting to launch the LNG project for about six years. Last week, activist investor Achur Iskounen urged Tellurian's management and its directors to sell the “untenable” project.

Tom Haywood, Houston

DATA SNAPSHOT

Oil and Gas Prices, Sep. 20, 2022

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

CRUDE OIL FUTURES

($/bbl)	Chg.	1st Mth.	2nd Mth.
ICE Brent	-1.38	90.62	89.40
Nymex Light Sweet	-1.28	84.45	83.94
DME Oman	-1.63	90.43	87.83
ICE Murban	-1.41	92.30	90.17

INTERNATIONAL SPOT CRUDES

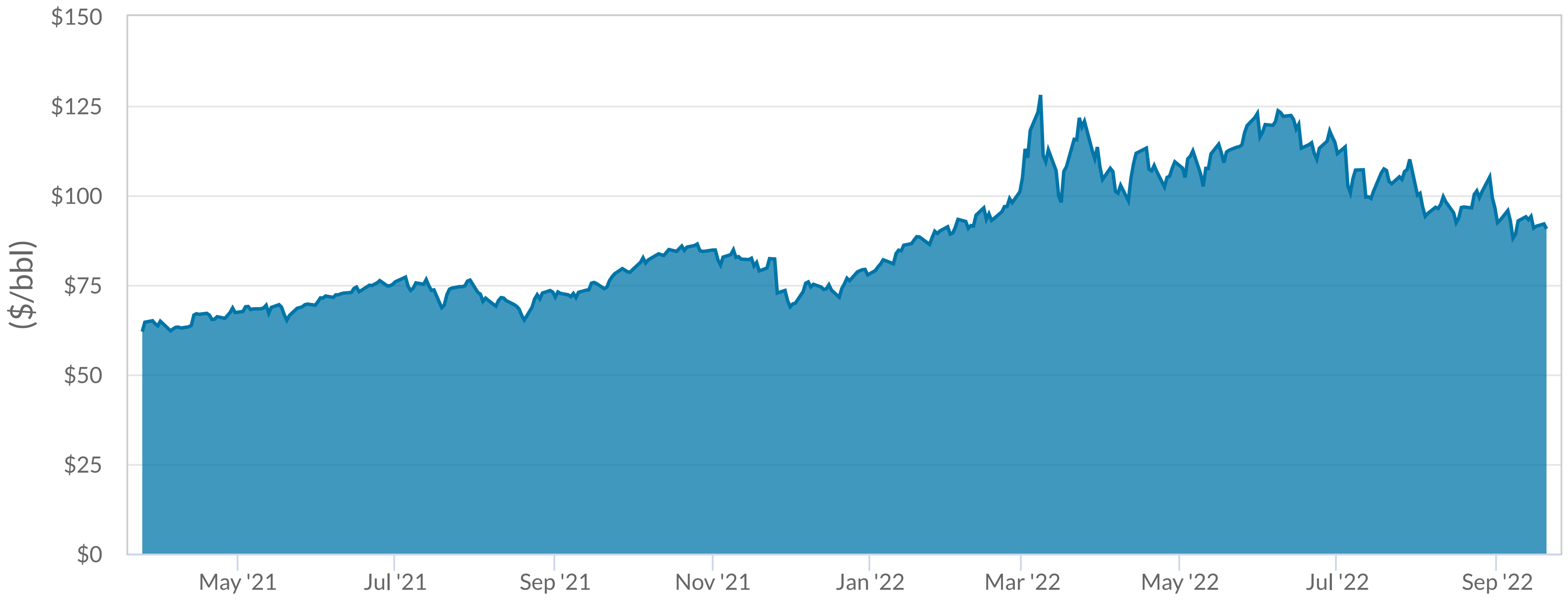
($/bbl)	Chg.	Price	Prior Close
Brent (Dated)	+0.19	89.62	89.43
Dubai	+2.20	92.55	90.35
Forties	-0.44	89.15	89.59
Bonny Light	-1.10	92.01	93.11
Urals	-1.10	70.71	71.81
Opec Basket*			95.20

*Opec price assessed.

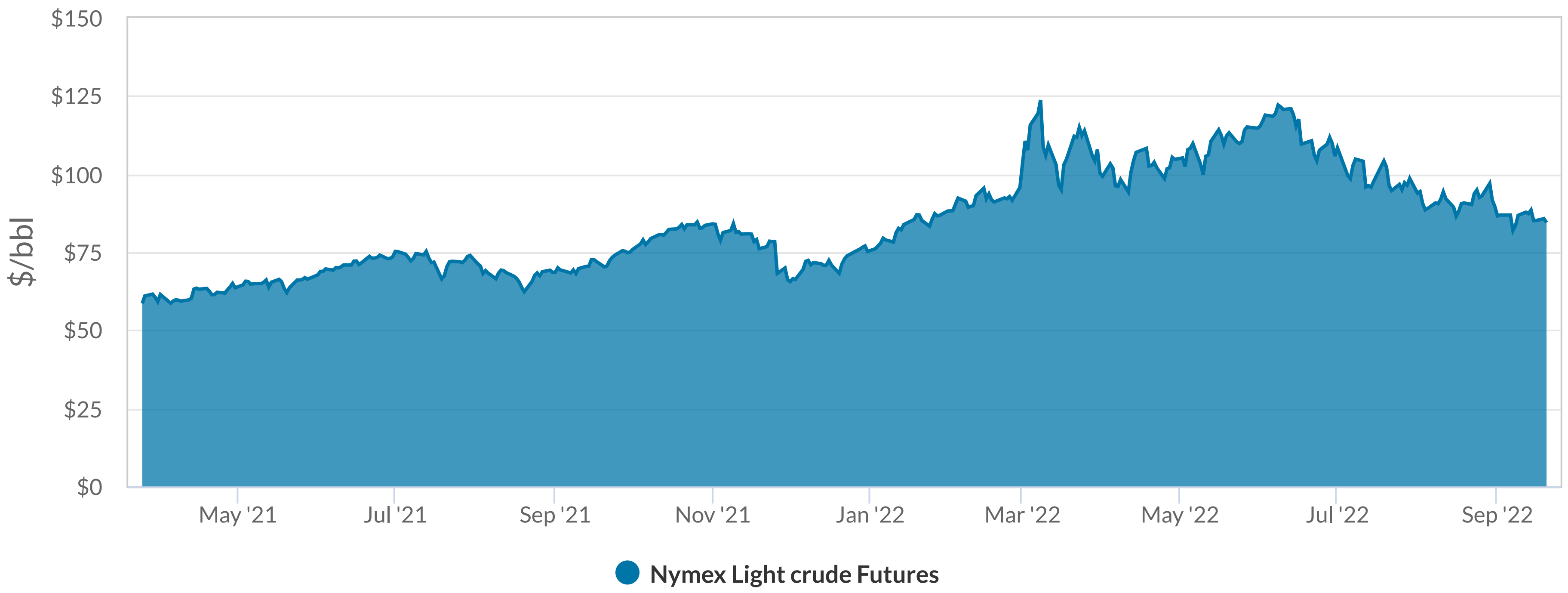
NORTH AMERICAN SPOT CRUDES

($/bbl)	Chg.	Price	Prior Close
WTI (Cushing)	-1.46	84.69	86.15
WTS (Midland)	-1.36	84.94	86.30
LLS	-1.06	87.09	88.15
Mars	-1.76	83.94	85.70
Bakken	-1.46	89.22	90.68

ICE BRENT CRUDE FUTURES



NYMEX LIGHT CRUDE FUTURES

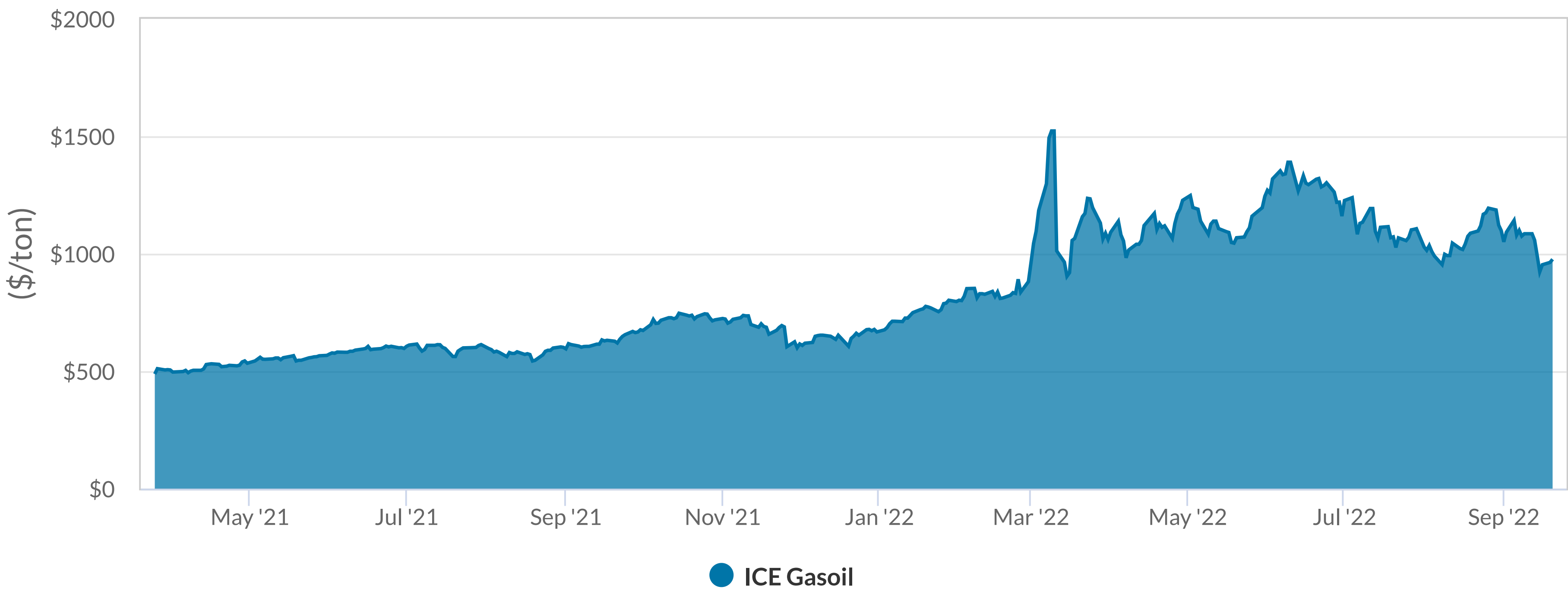


Energy Intelligence

REFINED PRODUCT FUTURES

Nymex	Chg.	1st Mth.	2nd Mth.
Gasoline (¢/gal)	-1.63	244.78	239.25
ULSD Diesel (¢/gal)	+6.14	337.22	330.40
ICE			
Gasoil ($/ton)	+13.25	976.25	947.00
Gasoil (¢/gal)	+4.23	311.58	302.25

ICE GASOIL FUTURES



NYMEX GASOLINE FUTURES

US SPOT REFINED PRODUCTS

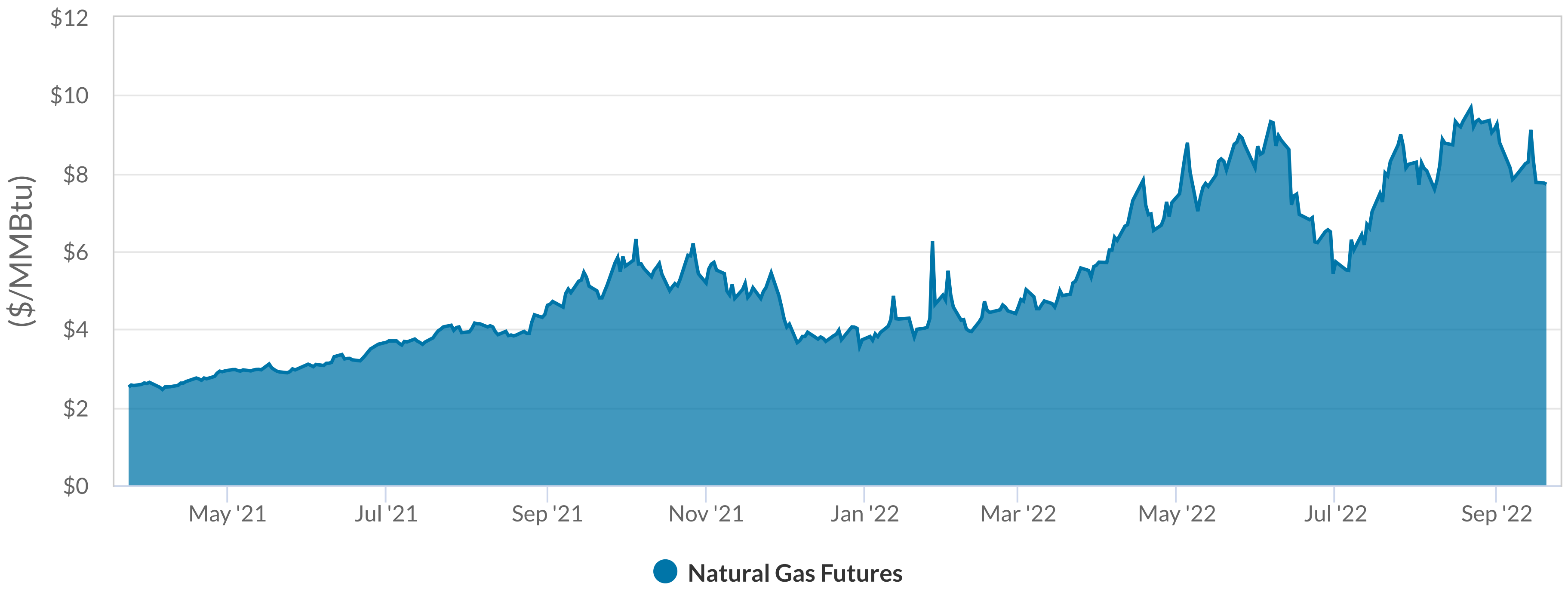
New York (¢/gal)	Chg.	Price	Prior Close
Regular Gasoline	-7.00	259.61	266.61
No.2 Heating Oil	+5.11	318.93	313.82
No.2 ULSD Diesel	+6.11	337.68	331.57
No.6 Oil 0.3% *			91.77
No.6 Oil 1% *			81.85
No.6 Oil 3% *			69.90
Gulf Coast (¢/gal)			
Regular Gasoline	-2.00	255.61	257.61
No.2 ULSD Diesel	+5.61	330.18	324.57
No.6 Oil 0.7% *			81.15
No.6 Oil 1% *			81.15
No.6 Oil 3% *			63.10

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

INTERNATIONAL SPOT REFINED PRODUCTS

Rotterdam ($/ton)	Chg.	Price	Prior Close
Regular Gasoline		817.80	#N/A
ULSD Diesel	+40.25	1006.75	966.50
Singapore ($/bbl)			
Gasoil	+8.10	117.39	109.29
Jet/Kerosene	+7.32	119.07	111.75
VLSFO Fuel Oil ($/ton)	+17.10	667.72	650.62
HSFO Fuel Oil 180 ($/ton)	+10.04	421.16	411.12

NYMEX NATURAL GAS FUTURES



Refinitiv

NATURAL GAS PRICES

($/MMBtu)	Chg.	Price
Henry Hub, Nymex	-0.04	7.72
Henry Hub, Spot	+0.11	7.94
Transco Zone 6 - NY	N/A	N/A
Chicago Citygate	+0.02	7.01
Rockies (Opal)	-0.11	6.90
Southern Calif. Citygate	-0.17	7.30
AECO Hub (Canada)	+0.27	3.35
Dutch TTF (euro/MWh)	+14.00	179.00
UK NBP Spot (p/th)	+4.00	255.00

US/Canada spot prices from Natural Gas Week

Equity Markets, Sep. 20, 2022

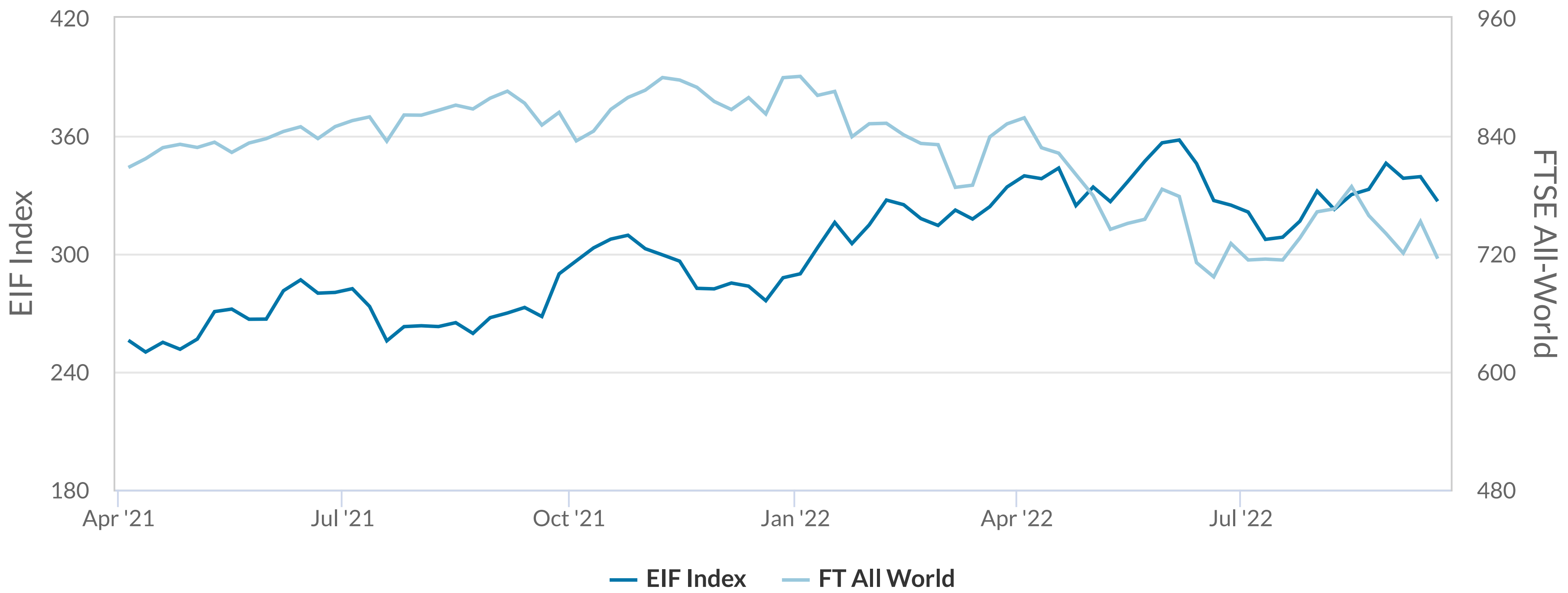
All data are produced by Energy Intelligence in cooperation with Refinitiv.

EQUITY MARKET INDEXES

	Chg.	Index	YTD %Chg.
EIF Global*	-0.08	326.71	+13.93
S&P 500	-43.96	3,855.93	-19.55
FTSE All-World*	+2.63	715.03	-20.66

*Index for previous day

EIF INDEX



EIF Global Oil and Gas Index of 21 traded equities