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ENERGY INTELLIGENCE **FINANCE**®

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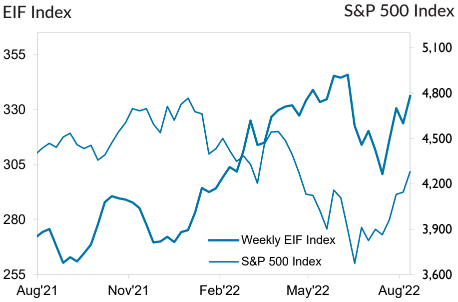
EIF INDEX



EIF Global Oil and Gas Index of 22 traded equities

OUR TAKE

Transition Spending Sets the Pace

Oil and gas companies show no signs of slowing transition spending despite high prices and a growing focus on energy security. Rather they are announcing more and bigger ventures, according to Energy Intelligence's latest Low-Carbon Investment Tracker. Low-carbon power generation continues to make up the majority of announced spending, but hydrogen plans — especially blue — are growing fast.

- At almost $60 billion, announced low-carbon investment in the first half of 2022 was nearly equal to that in all of 2021. Most of the largest investments were in Europe and North America, mainly offshore wind. But companies also expanded investment flows globally and increased outlays on hydrogen, biofuels and synfuels. Companies executed 80 memorandums of understanding (MOUs) from 2021-22, signaling future interest in carbon capture and storage (CCS) and hydrogen.

- European majors continued to ramp up green investment, centered on large renewables projects. Combined first-half spending topped $40 billion, over four times greater than in full-year 2019. Shell was the most active, unveiling big wind projects in the UK, US and Australia. Together, Shell and TotalEnergies invested almost $30 billion. BP, Equinor and Eni also expanded in offshore wind and solar in Europe, the US and Brazil.

- The US majors showed a step change in low-carbon spending after strategic shifts in 2021, with big commitments to hydrogen, CCS and biofuels. Exxon Mobil and Chevron see decarbonization as a priority to ensure fossil fuels' resiliency through the transition. Exxon's potential $5 billion-plus blue hydrogen-CCS project at its Baytown refining-chemicals plant in Texas was the largest project announced. At over $9 billion, the US majors' low-carbon spending still lags their European peers, and they continue to shun most renewable power, but we expect ongoing stakeholder pressure to drive transition investment higher.

- Petrobras was the standout among national oil companies (NOCs), unveiling a major offshore wind project in Brazil. Other NOCs showed only modest spending but were active in signing MOUs, including Southeast Asian firms (Pertamina, PTT and Petronas) and Mideast giants (Adnoc and Aramco). NOCs may use such tie-ups to develop new technology capabilities with a range of global partners, often including major international oil companies (IOCs).

- Independents lagged their bigger peers on low-carbon spending, but activity is picking up. Japanese Inpex's blue hydrogen demonstration plant in Japan and MOUs with Australian entities signal its strategic direction and its expanding net-zero strategy.

- Strong policy globally and strong cash flows could lay the foundations for greater activity in 2023, as cash-rich IOCs expand transition plans. NOCs could respond to domestic political signals, such as the forthcoming G20 meeting in Bali (Pertamina) and COP28 in the United Arab Emirates (Adnoc), as host governments seek to burnish their climate images.

CORPORATE STRATEGY

Q&A: Exxon Builds Heft, Longevity Into LNG Plans

Exxon Mobil may not be building out the geographically diverse LNG footprints of Shell or TotalEnergies, but the US major is firmly fixed to be a significant "portfolio" LNG player this decade and beyond. Fresh off the award of a stake in Qatar's New Field East (NFE) expansion, Exxon Head of Global LNG Peter Clarke sat down with Energy Intelligence to discuss his company's vision. Of note: Exxon expects its LNG supply to double by 2030, and sees decarbonization as key to ensuring that portfolio's resiliency through the energy transition.

Excerpts from our conversation follow:

Q: What is LNG for Exxon? Where will your portfolio be in 2030 relative to today?

A: We've been pretty clear in our discussions of where we're going in the upstream portfolio that the LNG elements are a core part of that. Today we're very pleased with the robustness of our LNG portfolio. It's made up of a group of very advantaged, low-cost opportunities that, taken together, create an extremely good portfolio in terms of their competitiveness — and of course [are] underpinned by long-term contracting, which traditionally we've been leading in.

We've found that portfolio to be ... a great platform as we build onto it, which is what we're planning to do with new equity developments as well as other supply points that we're adding in. We're developing a broad portfolio and taking that portfolio approach to our customers, which enhances the security of supply characteristics as well as our deep, long history as a reliable supplier.

Ultimately, between now and 2030, we actually see ourselves doubling our portfolio. But again, we're very strategic in how we go about that. We're looking for a low-cost, capital-efficient, low-carbon footprint — leading in terms of GHG [greenhouse gas] intensity — [and] enabling us to participate appropriately in the value chain. Those mutually beneficial long-term relationships — we see that continuing.

That of course enables us to continue to build our optimization and trading elements, which captures more value and provides flexibility and value to our customers.

Even longer term, as we think about LNG value chains, we see LNG-into-power with CCS [carbon capture and storage], or LNG-into-hydrogen. So as we work with our customers to address emissions on that end of the value chain, that's also an important part. What we see there is the infrastructure investments that will be needed as we think about the transition also very consistent with long-term contracting.

Q: How are current events influencing your plans? Is there any rethink around flexible volume? Development timelines? Targeted markets?

A: Obviously this current situation is unprecedented, and as we think about Ukraine and Russia, we think first of all of the humanitarian crisis, and then obviously what we can do as an energy company to address the energy needs that are perhaps now clearer to many in terms of the role that gas was playing and needs to play going forward. That is helping to maybe accelerate some of the activities that had been planned.

From our perspective, I go back to thinking through the long term and the fundamentals. We were investing through the downturn. From 2017 to 2021, we invested more in new oil and gas production — about double what we earned in that period. So we were taking that kind of countercyclical approach because we had a view to the fundamentals and the long term. That's now paying off in many respects — but definitely on the LNG side too, because we have [Eni-operated] Coral in Mozambique coming on stream later this year, which is 3.5 million tons [per year] of new LNG. A new supplier, a new entry to the global LNG market, and that will certainly be welcomed. And of course we have Golden Pass that we've been developing [with QatarEnergy] right through that period. That remains on schedule — and in fact, [has] good support from regulators to allow us to continue to build that facility as quickly as possible on schedule to come on stream in 2024. There, up to 18 million tons per annum of new supply out of the Gulf Coast — again in a period where there aren't too many other projects entering.

Clearly there are opportunities to go quicker if we can, so we're looking at what's feasible. We're well positioned in the base case with capacity in Europe, with the flexibility we have in our portfolio to move cargoes if they're needed. But obviously the situation today is unprecedented in terms of demand for LNG, and the realization of this flexibility has grown dramatically. So we're going to see a little bit of a supply crunch here, and it's going to take a bit more time to bring new supplies on.

Q: My understanding is not a lot of your offtake from Golden Pass is committed under long-term contracts. Is this the primary lever you'll pull to meet Europe's rapidly evolving gas needs?

A: There's no question that Golden Pass will be a key supply source. Typically those US supplies are different types of projects than the integrated projects we have. They tend to be quite flexible. There's not much additional volume coming on between now and 2024. So our focus is very much in ensuring that project comes on line on time. We've got over 4,000 people working there now.

We think in general the US as a potential exporter of LNG or as a substantial exporter of LNG has a very important role to play going forward. We've been selective in terms of looking at opportunities beyond Golden Pass in the US. We have supported some trains with Venture Global, at Calcasieu Pass and Plaquemines, and also with NextDecade, we've financed those recently. So with our offtake agreements, we're supporting that liquefaction capacity, which of course allows export of the vast quantities of natural gas that are available competitively in the US. ...

But we still see the vast majority of our portfolio as being underpinned with long-term contracts, and that's probably not going to change. Even as we come through this next wave, we'll be looking for those types of long-term commitments — which I think customers, buyers have recognized the importance of even in Europe, where they're now re-entering, or are looking again at the LNG market perhaps with a slightly different view around securing those.

Q: What balance are you looking for in your portfolio between offtake and equity positions?

A: Every one of those [investments] is very much assessed from our perspective as to what are the characteristics that make it cost competitive. How do they fit into our portfolio strategically, or what's advantaged about those sources? And it's things like the technologies that have been deployed. Where do we stand on their ability to embrace CCS, to reduce the GHG footprint going forward? If you've got [electric-] drive — those types of technologies are interesting and give you some further potential in terms of meeting the needs of customers over the longer term.

We're looking at the supply-side opportunity — whether it's an offtake or an equity investment. ... how it plays to our strengths. What do we bring? How do we add value? And then, what does it do for our customers and our portfolio? You're not going to see a kind of standard. It's going to be a mix as we pick and choose the opportunities that best fit our portfolio, and how we build our portfolio will be different from others.

Q: Qatar NFE was a big win. How important is Qatari LNG to meeting these strategic objectives?

A: We have a long history in Qatar. We're the biggest player in Qatar and have been involved in the enormous success of Qatar LNG in the world market today. It's clearly advantaged, low cost, hugely competitive — probably the world's most competitive LNG supplier. What QatarEnergy has done in developing it is extraordinarily successful, and so being a part of that is really foundational for us. It's a bedrock of capability, a part of our portfolio that's very, very important. NFE is another great example of our relationship continuing.

Q: Are you interested in the North Field South expansion as well?

A: Yes, we're always interested to work with the Qataris and we'll always look at opportunities in Qatar. There are many.

Q: Fast, or modular, LNG developments are gaining momentum post-Russia-Ukraine — including your partner Eni at Coral. Does this type of approach have applications in your operated portfolio? At Rovuma? Elsewhere?

A: Absolutely. As kind of the pioneers of large-scale big trains and big ships, they had an application and a very successful one, as we developed the Qatari resources very quickly, very successfully. As you go around the world, you think about different technologies, different sizes as you develop resources. So in PNG [Papua New Guinea], for example, we have smaller trains there to develop the first phase of PNG — 3.4 million ton [per year] trains. A very, very successful project and production there is way beyond nameplate today, and consistently so.

PNG for us is a fantastic engineering example of how you can take on multiple challenges, use the right technologies, get the right people and maintain an incredibly reliable, very efficient project that's been in operation since 2014 — even through an earthquake in 2018.

As we think about expansion with the Papua project, we're looking at what's the right approach to that about 6 [million ton/yr] expansion. What would we use there in terms of size of train, drives? In Mozambique as well. We have the offshore now, with Coral coming on. That's been very successful — on time, it's going to start up in a few months. The question is, could you do another one of those [floating LNG trains]? And what can we do onshore as well? Obviously we continue to work onshore options to make sure that when we get back on the ground in Mozambique we have the most competitive development concept. We're continuing to review that. What size trains, how much modularization you do, how you do it. We have that capability in the organization to deploy the right technologies in the right locations.

Q: How specifically are you evaluating CCS and electrification technologies at your future LNG developments?

A: We look at that from an LNG perspective all the way along the value chain. ... When we start thinking about the next phase of liquefaction expansion or new liquefaction capacity, how do we make sure that the kit we put there is the most efficient — in terms of its energy consumption, its cost competitiveness, and so on. What does its GHG footprint look like? That's what gets you into this discussion about: What's the drive? Is it a gas drive? Is it a hydrogen drive? Is it an electric drive? As you think through that, how [are] the electrons made? Are they made from a [combined-cycle gas turbine] that might have CCS associated with it so that you have got clean electrons to drive your liquefaction? Or do you have a hydrogen plant there? Is it blue hydrogen or green hydrogen driving your compressors? We're very focused on our GHG commitment — so, net zero by 2050 [and] our 2030 targets.

Then ... We look down the value chain ... what are we doing on the shipping side. And we look at our customers' needs ... The role of gas in providing that very quick reduction in GHG emissions with existing technologies cannot be overstated, and there has to be a pathway, if you like, to greener technologies. They're going to take a bit longer, and I think the critical point here is allowing that transition to happen from coal to gas and then gas onward in your transition. ... That immediate benefit of gas as it displaces coal is incredibly important to get back on that trajectory, and then once you build that gas infrastructure, how do you then further reduce your emissions when you think about the consumption of that gas over the long term? There again CCS comes into play on the consumer end potentially — or hydrogen or ammonia on the customer end where you're seeking to reduce your GHG emissions as well.

Casey Merriman, Phoenix

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PEER STRATEGY

Shifting Rhetoric Reflects Energy Market Upheaval

Discussions on corporate earnings calls can yield key insights into the priorities of companies and the anxieties of investors. Executive rhetoric in the second quarter this year reflected the major changes in the energy landscape as oil and gas prices soared. Emphasis on emissions gave way to more detailed discussion of transition opportunities. Macroeconomic issues replaced the pandemic as the most important external factor impacting companies. Shareholder returns remain a top priority but investors seem to have less doubts about companies' ability to deliver.

Exposure to global gas prices, primarily through flexible LNG supply options is becoming seen as a must-have component in a supermajor portfolio. Gas prices have more than doubled in both the US and Europe over the past year and prices for LNG landed into Asia and Europe are similarly elevated. Executive discussions about both areas followed a similar trajectory, with mentions of LNG jumping 500% on US earnings calls and talk of LNG and gas prices increasing 163% and 240%, respectively, among European companies. Conversations focused not only on the ability to participate in the replacement of Russian gas volumes into Europe — where there looks to be a medium-term opportunity to capture higher prices — but also on flexible volumes that can be redirected elsewhere as Europe's transition away from fossil fuels accelerates.

Focus on the energy transition is shifting away from emissions reduction and toward capturing transition opportunities. Mentions of Scope 1, 2 and 3 emissions fell by more than 50% among the European majors while references to emissions intensity fell 75% among the US majors. Part of the reason that some of the discussion around emissions has tailed off is structural. In 2021, many companies were still trying to explain their newly developed emissions strategies to investors. Now those are better understood and the debate has shifted to how to implement them. Carbon capture is still a big theme among US majors while European majors talked up their grand ambitions for hydrogen and power, where they are redirecting surplus cash.

Inflation and government efforts to respond have supplanted the lingering coronavirus pandemic as a top external pressure on the industry. Discussion around inflation on European earnings calls almost doubled, and rose a whopping sevenfold on US earnings calls as investors tried to digest the impact of rising prices on company strategies. In Europe, windfall profit taxes rocketed up the agenda in 2022 after barely a mention just a year ago. Talk around energy security in Europe saw a similar rise, as analysts sought greater clarity as to how companies balance the opportunities and pitfalls in the continent's shift away from Russian energy. Both topics were almost wholly absent from US-focused discussions.

Shareholder returns are becoming an assumed feature of any investor proposition but interest in growth remains keen. Explicit mentions of "shareholder returns" fell among both the US and European majors but dividends and buybacks remained a central theme during earnings calls and among the most-mentioned terms. By the second quarter, many companies had already signaled significant year-on-year increases in dividends and buybacks, although a couple of operators added to buyback plans at the margin. Companies are likely to see interest in their shareholder distributions rise heading into next year, when analysts will be looking for more upgrades.

Confidence in the industry's financial stability is growing as worries about debt and ability to generate cash flow recede. Remarks around the balance sheet and cash flow fell by more than a half among the US majors and by 47% and 28%, respectively, among their European peers. Last year, investors were keenly focused on whether the majors had the financial muscle to underpin their shareholder returns commitments. With many shaving gearing ratios to historically low levels and record profits attesting to strong cash generation, such worries seem to be fading among analysts. Even discussion of capital discipline declined as analysts became less concerned about overspending and more interested in potential opportunities to capture high oil and gas prices.

Earnings calls laid bare the significant differences in the portfolios and strategies of US majors and their European peers, ranging from their hydrocarbon exposure to their approach to the transition. The Permian Basin dominated conversations among US players as their major source of near-term supply growth. But it barely merited a mention among European majors whose short-cycle opportunities lie offshore in regions such as the North Sea, US Gulf of Mexico and West Africa. In the US, discussion around greenhouse gas emissions continues to focus on emissions intensity as Exxon Mobil and Chevron have minimized use of the specific Scope 1, 2 and 3 emissions that define the goals of the European majors. Talk about opportunities to grow wind power portfolios remained high among the European majors and absent from strategic discussions in the US.

Noah Brenner, London

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CORPORATE STRATEGY

Buffett Move Fuels Oxy Privatization Rumors

- *Billionaire investor Warren Buffett's Berkshire Hathaway has increased its stake in Occidental Petroleum above the 20% threshold, fueling speculation that he is looking to take the large independent firm private.*

- *The move comes as more US public E&Ps weigh the pros and cons of privatization amid investor demands to stem growth and decarbonize activities.*

- *Oxy's Low-Carbon Ventures business could provide a foothold for Berkshire to invest more in the energy transition in the future.*

The Issue

Berkshire Hathaway has steadily increased its holdings in Oxy in recent months, setting the investment world abuzz with speculation and rumors of a play to take the fifth-largest US oil company private. That has raised questions about why Oxy is considered a good candidate for private investment, and what Berkshire's move to consolidate its ownership says about the current market environment? Whatever happens, we think it likely that Oxy's current business strategy of generating cash while keeping reinvestment rates low will continue beyond the current price cycle.

Capital Landscape

Berkshire's stake in Oxy recently crossed the 20% threshold, allowing it to significantly influence the company's operations. That does not include $10 billion in preferred shares and $5 billion in warrants that Berkshire previously acquired in exchange for capital to help fund Oxy's 2019 acquisition of Anadarko Petroleum.

The move comes as the oil industry continues to see itself, and its stock, as undervalued by a market that has seen investors flee the energy space in recent years. Operators plan to return billions of dollars to shareholders this year and next through share buybacks to demonstrate their belief that stock prices will improve.

Buffett and Berkshire Hathaway's recent push to increase its Oxy holdings could reflect that belief, according to Dan Pickering, founder of advisory firm Pickering Energy Partners. "The implication here is ... Berkshire Hathaway has a more constructive five- to 20-year view on oil and gas than the market does. Why would they be buying the stock otherwise?" he suggests.

Others simply believe that the demands of public investors to keep growth in check are too constraining in the current commodity price upcycle. Continental Resources CEO Harold Hamm in June launched an offer to snatch up the company's remaining shares he and his family don't already own. "The opportunity today is with private companies [which] have the freedom to operate and are not limited by public markets," he emphasized. Other public firms are said to be considering the advantages of going private.

Why Oxy?

Truist Securities analyst Neal Dingmann first speculated in June that there was a good chance Oxy could be taken private by Buffett. The company is on a strong path toward achieving an investment grade rating this year as it pays off debt and generates more cash. "Berkshire [Hathaway] Energy currently highlights its significant geographic, regulatory and resource diversity that limits exposure to the impacts of disruptions improving the predictability of financial results and reducing business risk as more than 80% of adjusted earnings is from investment-grade businesses," Dingmann wrote in June.

Pickering noted that the whole sector is quite attractive these days, as commodity prices are high but reinvestment rates are low, allowing operators to throw more cash off to investors. Oxy's Low-Carbon Ventures (OLCV) arm, which is pursuing new technologies such as direct air capture, also offers optionality to invest long-term in the energy transition. And the unit is essentially self-funded by cash from Oxy's oil and gas operations so it's cheaper than investing in venture capital, he added. However, "Low-Carbon Ventures … may be a profitable option, it may expire at zero, we don't know. But it's probably not a make-or-break decision in a take-private sort of discussion," Pickering said.

Seeking Value

If Oxy were to go private, it would be less exposed to the swings and sentiments of a volatile commodity market. That could be advantageous for the OLCV unit, which requires time and capital to develop its emerging technologies. Truist estimates that OLCV generates less than 5% of Oxy's total business but expects it to double to more than 10% over the next couple of years.

But Pickering believes the likeliest scenario should Oxy go private is that its current business strategy of generating cash and keeping growth in check would go from a cyclical strategy to a permanent one. "If Buffett takes this company private, I think that you should expect them, for the next 10 or 15 years, to remain a money machine," he said. "They don't dramatically accelerate activity, even in strong commodity price environments. So the current model would likely stay the model for the foreseeable future."

There would also likely be little departure from the current OCLV plan, he added. "It's a toehold in a secular growth business," he said. "It's certainly a good way to stay smart on what's happening in [the] energy transition if you're Warren Buffett, and then if you wanted to deploy more capital you've got a vehicle to do it."

Being Private — No Panacea

As more public E&Ps explore their options, the window for action is starting to close amid rising interest rates, which would increase the cost of taking a public company private.

Moreover, Amy Myers Jaffe, head of the Climate Policy Lab at Tufts University, warned that while taking a company private might make business sense in the moment, it won't necessarily protect it from wild swings in commodity prices in the future. "Being a private firm is not a panacea," she told Energy Intelligence. "And we know that from the fate of some other large privately held oil and gas companies."

Caroline Evans, Houston

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ENERGY AND EQUITY MARKET DATA

For the week ended Aug 12, 2022

EIF GLOBAL INDEX COMPONENTS*

	Close Aug 12	1-Wk Chg.	% Chg. 1-Wk	% Chg. 52-Wk	% Chg. YTD
Petrobras-3 (spse)	6.87	+0.87	+14.40	+57.22	+80.40
Petrobras-4 (spse)	6.25	+0.75	+13.68	+41.17	+82.58
Ecopetrol (bvc)	0.56	+0.05	+8.86	-16.94	-14.62
Suncor (tse)	32.73	+2.42	+7.97	+67.71	+30.63
Lukoil (mos)	65.13	+4.31	+7.09	-26.39	-26.08
TotalEnergies (par)	53.27	+3.49	+7.02	+18.53	+5.00
Exxon Mobil (nyse)	94.00	+5.55	+6.27	+63.91	+53.62
CNOOC-H (sehk)	1.28	+0.06	+5.34	+20.66	+36.98
BP (lse)	5.22	+0.26	+5.23	+23.26	+16.80
Sinopec-H (sehk)	0.48	+0.02	+4.38	+0.65	+2.23
Rosneft (mos)	5.56	+0.22	+4.18	-27.68	-30.93
Chevron (nyse)	159.85	6.21	+4.04	+55.74	+36.22
Reliance Industries (bse)	33.06	1.13	+3.53	+16.40	+3.95
Shell (lse)	26.87	0.92	+3.53	+32.41	+22.45
Equinor (osl)	37.44	+1.18	+3.24	+78.35	+39.77
Saudi Aramco (sse)	10.87	+0.30	+2.85	+15.79	+25.36
PetroChina-H (sehk)	0.45	+0.01	+2.81	+2.51	+0.92
Eni (mise)	11.93	+0.27	+2.29	-2.91	-14.12
Sinopec-S (sesh)	0.46	+0.01	+1.91	-8.91	-29.96
ONGC (bse)	1.75	+0.03	1.84	+11.86	-8.53
EIF Global Index	**352.43**	**+13.35**	**+3.94**	**+27.82**	**+21.46**

*Converted US$/share.

INDEXES

Equity Indexes	Close Aug 12	1-Wk Chg.	% Chg. 1-Wk	% Chg. 52-Wk	% Chg. YTD
DJIA	33,761.05	+957.58	+2.92	-4.90	-7.09
S&P 500	4,280.15	+134.96	+3.26	-4.05	-10.20
FTSE 100	7,500.89	+61.15	+0.82	+4.28	+1.58
FTSE All-World	786.19	+22.56	+2.95	-9.66	-12.45
EIF Global	352.43	+13.35	+3.94	+27.82	+21.46
S&P Global Oil	1,755.35	+103.31	+6.25	+24.09	+13.08
FT Oil, Gas & Coal	7,662.27	+268.60	+3.63	+46.40	+33.76
TSE Oil & Gas	2,879.47	+122.72	+4.45	+42.55	+26.38
Emerging Markets					
Hang Seng Energy (HK)	21,604.70	+1175.84	+5.76	+36.86	+28.55
BSE Oil & Gas (India)	19,772.86	+436.28	+2.26	+26.14	+12.94
RTS Oil & Gas (Russia)	+190.96	+7.62	+4.16	-16.71	-19.71

COMMODITY PRICES

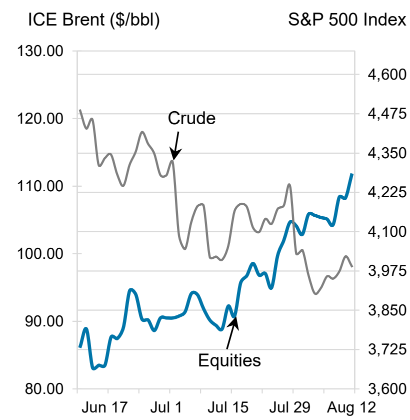
	Close Aug 12	1-Wk Chg.	% Chg. 1-Wk	% Chg. 52-Wk	% Chg. YTD
Dated Brent	103.53	+3.41	+3.41	+44.62	+33.86
Brent 1st ICE	98.15	+3.23	+3.40	+37.64	+26.19
WTI 1st (Nymex)	92.09	+3.08	+3.46	+33.29	+22.44
Oman 1st (DME)	97.58	+3.23	+3.42	+38.81	+27.24
RBOB (Nymex)	3.05	+0.19	+6.67	+33.87	+36.68
Heating Oil (Nymex)	3.52	+0.30	+9.39	+67.20	+50.97
Gas Oil (ICE)	1,045.25	+55.25	+5.58	+81.62	+56.71
Henry Hub (Nymex)	8.77	+0.70	+8.73	+122.93	+135.07
Henry Hub (Cash)	8.73	+0.43	+5.13	+112.83	+128.19
UK NBP (Cash)	360.00	+85.00	+30.91	+232.41	+176.92

SHARE PRICES IN LOCAL CURRENCY†

NOCs	Close Aug 12	1-Wk Chg.	% Chg. 1-Wk	% Chg. 52-Wk	% Chg. YTD
PTTEP (set)	158.00	-3.50	-2.17	+52.66	+33.90
Petrobras-3 (spse)	34.88	+3.84	+12.38	+51.87	+64.31
Petrobras-4 (spse)	31.71	+3.32	+11.68	+36.36	+66.30
CNOOC-S (sesh)	15.06	+0.80	+5.61	NA	NA
CNOOC-H (sehk)	10.00	+0.49	+5.15	+21.51	+37.68
Ecopetrol (bvc)	2,348.00	+98.00	+4.36	-10.45	-12.71
Sinopec-H (sehk)	3.73	+0.15	+4.19	+1.36	+2.75
Rosneft (mos)	336.20	+13.50	+4.18	-40.50	-43.96
PetroChina-S (sesh)	5.24	+0.19	+3.76	+13.91	+6.72
Saudi Aramco (sse)	40.80	+1.10	+2.77	+15.91	+25.36
PetroChina-H (sehk)	3.52	+0.09	+2.62	+3.23	+1.44
Sinopec-S (sesh)	3.10	+0.05	+1.64	-5.20	-25.66
Equinor (osl)	357.70	+3.00	+0.85	+92.31	+51.63
Gazprom (micex)	174.36	-2.22	-1.26	-40.44	-49.21
Majors					
Exxon Mobil (nyse)	94.00	+5.55	+6.27	+63.91	+53.62
TotalEnergies (par)	51.93	+3.04	+6.22	+35.50	+16.36
BP (lse)	430.55	+19.40	+4.72	+40.27	+30.27
Chevron (nyse)	159.85	+6.21	+4.04	+55.74	+36.22
Shell (lse)	2,215.00	+65.00	+3.02	+50.68	+36.58
Regional Integrateds					
Lukoil (mos)	3,940.50	+261.00	+7.09	-39.43	-40.02
Repsol (bme)	12.65	+0.82	+6.89	+29.82	+21.22
OMV (vse)	41.11	+0.99	+2.47	-13.92	-17.70
Eni (mise)	11.63	+0.17	+1.52	+10.99	-4.83
Global Independents					
Occidental (nyse)	65.73	+6.72	+11.39	+144.62	+126.73
ConocoPhillips (nyse)	102.75	+9.90	+10.66	+80.14	+42.35
Hess (nyse)	113.72	+10.83	+10.53	+57.97	+53.61
APA (nyse)	34.70	+2.95	+9.29	+83.40	+29.04
Kosmos Energy (nyse)	6.50	+0.55	+9.24	+194.12	+87.86
EOG Resources (nyse)	114.49	+7.48	+6.99	+69.31	+31.79
Woodside Petroleum (asx)	32.77	+1.66	+5.34	+48.82	+49.43
Refiners					
PBF Energy (nyse)	34.73	+4.67	+15.54	+277.09	+167.77
HollyFrontier (nyse)	51.63	+5.33	+11.51	+71.41	+57.50
Valero (nyse)	115.19	+10.20	+9.72	+71.29	+53.36
Marathon Petroleum (nyse)	97.47	+7.25	+8.04	+63.71	+52.32
Phillips66 (nyse)	90.00	+6.24	+7.45	+20.90	+24.21
Reliance Industries (bse)	2,632.65	+98.70	+3.90	+24.76	+11.17
Eneos (tyo)	507.00	+18.90	+3.87	+6.60	+17.82
Oil-Field Services, EPC					
Fluor (nyse)	26.85	+3.77	+16.33	+49.75	+8.40
TechnipFMC (nyse)	9.08	+0.77	+9.27	+28.43	+53.38
Baker Hughes (nyse)	26.00	+1.94	+8.06	+21.78	+8.11
Schlumberger (nyse)	37.14	+2.48	+7.16	+30.09	+24.01
Halliburton (nyse)	29.55	+1.76	+6.33	+44.57	+29.21
Transocean (nyse)	3.62	+0.18	+5.23	+3.72	+31.16
Saipem (mise)	0.82	+0.02	+2.72	-59.76	-82.26
Petrofac (lse)	118.30	+2.20	+1.89	+19.26	+2.60
Wood Group (lse)	158.75	+2.90	+1.86	-31.43	-16.93
Worley (asx)	14.27	-0.04	-0.28	+26.62	+34.24
Midstream					
Kinder Morgan (nyse)	18.69	+1.22	+6.98	+8.03	+17.84
Williams (nyse)	34.16	+1.94	+6.02	+36.64	+31.18
Enterprise Products (nyse)	27.15	+1.45	+5.64	+19.24	+23.63
Plains All-American (nyse)	11.66	+0.46	+4.11	+16.02	+24.84
TC Energy (tsx)	65.32	+1.77	+2.79	+8.43	+11.03
Enbridge (tsx)	55.55	+0.20	+0.36	+13.21	+12.43

*set=Bangkok; bme=Madrid; sehk=Hong Kong; osl=Oslo; bvc=Bogota; micex=Moscow; bse=Mumbai; par=Paris; nyse=New York; lse=London; mise=Milan; tyo=Tokyo; tsx=Toronto; asx=Sydney; spse=Sao Paulo; sse=Riyadh

CRUDE VS. EQUITIES



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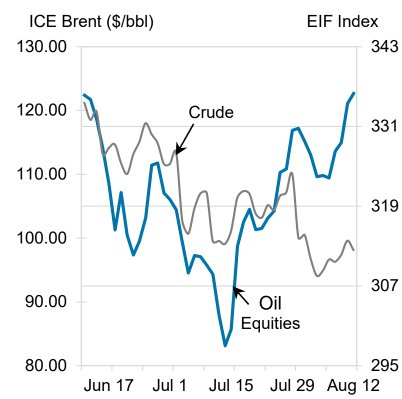
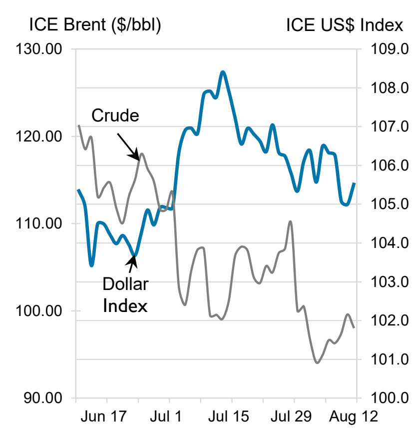


CRUDE VS. CURRENCY



EIF Index based on share prices of the 22 equities listed under EIF components, adjusted for US$ market capitalization. All equities listed are ordered by percentage change over the previous week. Local share prices are shown in local currency. Crude prices in $/bbl; Nymex oil products prices in $/gallon; ICE gas oil in $/ton; Henry Hub natural gas prices in $/MMBtu; UK NBP natural gas prices in pence/therm.