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CONTENTS

OUR TAKE

Exxon Conspicuous by Its Absence

QatarEnergy's decision to award the "third and final" equity stake in its North Field South (NFS) LNG expansion to ConocoPhillips — and not long-time Qatari partner Exxon Mobil as was widely expected — is a reminder that there is little room for sentiment in today's value-focused corporate energy world. Exxon, whose involvement in Qatari LNG dates back to 1984, may hold stakes in nine of 14 liquefaction trains in the Mideast country but that counts for nothing when the host company is a position to secure a more favorable deal with a competitor — or when investors demand strict adherence to capital discipline.

- Exxon is not commenting on its absence from the lineup, which we see as an inflection point for the company in the Mideast. With the US supermajor seeking the highest returns on offer — and with other LNG projects in Mozambique and Papua New Guinea demanding its attention, it may have decided — unlike ConocoPhillips and its smaller LNG portfolio — it could not justify paying top dollar to be part of NFS.

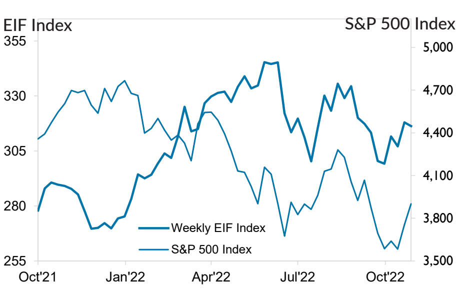
- While the commercial terms of ConocoPhillips' involvement in NFS are likely to be tough, securing a 6.25% stake is undoubtedly a coup for the US independent. It will get another 1 million tons per year of Qatari LNG, on top of roughly 1 million tons/yr from North Field East (NFE) — the first-phase Qatar expansion which is costing ConocoPhillips an extra $900 million in capex — and around 2.3 million tons/yr from Qatargas-3.

- ConocoPhillips has not always been a steady partner elsewhere in the Mideast, having walked away from Abu Dhabi's Shah gas field project in 2010. But CEO Ryan Lance, who has talked about Qatari LNG being "some of the lowest-price gas in the world," is understood to enjoy good personal relations with Qatar's emir. We note that of the other companies to win stakes in both NFE and NFS, TotalEnergies CEO Patrick Pouyanne served as the French major's Qatar representative in the 1990s, while incoming Shell CEO Wael Sawan was based there more recently.

- The selection could also point to QatarEnergy CEO Saad al-Kaabi's determination to secure the best possible deal for his company and for Qatar. "If there is no value, we will take it 100% for QatarEnergy," al-Kaabi, then talking about expiring contracts, warned in a recent interview with Energy Intelligence. Exxon knows from experience that al-Kaabi was not bluffing, having lost its long-standing role in Qatargas-1 in 2021.

- We note the decision comes after an out-of-blue announcement last week that QatarEnergy and Exxon will be marketing LNG from their Golden Pass project in the US separately — and not via a joint venture as previously planned. While Exxon will be involved in NFE, its absence from one of Qatar's landmark LNG projects feels like a long and mutually rewarding relationship is being put to the test.

EIF INDEX



EIF Global Oil and Gas Index of 22 traded equities

PEER STRATEGY

Majors See Scope for More M&A as Windfall Continues

Western majors' third-quarter earnings suffered a slight sequential dip overall but still beat analysts' expectations as the five companies — BP, Chevron, Exxon Mobil, Shell and TotalEnergies — racked up combined adjusted profits of around $57 billion. Earnings calls focused on the majors' priorities for their surplus cash amid energy security concerns, which could include more M&A. Here are Energy Intelligence's main takeaways.

- **Majors could divert more free cash flow to acquisitions.**

Given the current emphasis on near-term oil and gas supplies and low-carbon growth, companies may decide to keep more cash on their balance sheets, which should allow for greater countercyclical M&A activity in time. Total is utilizing strong cash-flow generation to accelerate its transition. The company last month announced an initial $550 million deal to form a joint venture with Brazilian wind farm operator Casa dos Ventos and has closed its $2.4 billion acquisition of 50% of US renewables player Clearway Energy. BP's CFO Murray Auchincloss, meanwhile, said the company would have the capacity to do more M&A next year following its recent $4.1 billion acquisition of US biogas player Archaea Energy.

US majors Exxon and Chevron are both amenable to M&A themselves. Exxon's Woods suggested any such opportunities would be "selective and strategic" and skewed more toward its traditional oil and gas business than green energy. Chevron boss Mike Wirth noted that there's "likely" to be some more consolidation in oil and gas since "fewer and stronger" companies are needed. But he said Chevron would be disciplined: "We don't have an open checkbook even when times are good like this, especially when times are good like this."

- **The case for shareholder distributions is winning out over spending.**

The five firms will reward shareholders with roughly $104 billion in share buybacks and dividends in 2022, according to analyst estimates and company guidance. But they are set to reinvest just $87 billion-$102 billion of their windfalls in their core businesses as combined capex this year, having only loosened purse strings slightly amid calls for more oil and gas to ease energy security concerns. Furthermore, the bumper profits are putting companies in the political crosshairs in Europe and the US as governments seek to direct some of the windfall profits to struggling energy consumers. The limited increases in capex suggest the majors have little confidence in either fiscal regimes or political will across geographies, RBC analysts said.

Exxon CEO Darren Woods, whose company posted record earnings of almost $20 billion in the third quarter, expressed concern around the impact of some of the market interventions being pursued. EU plans for a one-off "solidarity" tax on fossil fuel producers' profits have not yet been finalized. But Woods warned that they would exacerbate the decline in oil and gas output and refining capacity in Europe, "forcing greater reliance on imported energy and fuel products" and harm the continent's prospects of improving energy security.

Windfall taxes have also been a hot topic in the US. The Biden administration was quick to criticize Woods' implied message that returning $15 billion in dividends to shareholders was akin to giving some of its profits "directly to the American people" considering 40% of its stock is held by retail investors.

- **There was a curious contrast in LNG performance.**

One standout from third-quarter earnings was the contrast in performance between top LNG players Shell and Total. The French major's strong earnings were driven by its LNG business, with average LNG selling prices up more than 50% from the previous quarter. Total noted that strong trading and its integrated strategy allowed it to "capture the full benefits of this LNG price," taking advantage of price dislocations and the resulting arbitrage. It achieved these results despite a 10% drop in LNG sales volumes due to outages at Freeport LNG and lower equity liquefaction at Nigeria LNG (NLNG) and Ichthys. CFO Jean-Pierre Sbraire noted the "huge" advantage of Total's access to almost 18 million tons of European regasification capacity — roughly 15% of the region's total. That allowed the company's traders to play the arbitrage between the US and Europe, as the top exporter of US LNG.

By contrast, Shell reported weak LNG trading and marketing results, citing the price dislocations as a disadvantage while regasification constraints reduced "optimization opportunities." The UK supermajor had to contend with outagees at Prelude floating LNG, lower output from NLNG and the loss of Sakhalin-2 volumes, but still managed to deliver twice as many LNG cargoes into Europe as it normally would in the first nine months of the year. CFO Sinead Gorman admitted some of the company's hedges did not work out as intended due to a "significant dislocation in historically correlated gas markers."

There are some "structural" reasons behind the divergence in LNG earnings, according to Kepler Cheuvreux analyst Bertrand Hodee. In a report, he estimated that Total has more long-term LNG offtake than supply commitments. Accordingly, excluding Russia, it is "massively long" on LNG to the tune of 14 million tons, versus Shell's 4.2 million tons, he wrote, describing Total's exposure as "an ideal situation when spot prices are going through the roof, although hedges may be in place." Total has around 9.5 million tons of "advantaged" US LNG offtake compared to Shell's 6.4 million tons and access to nearly four times more European regasification capacity than its UK rival. "Nothing is broken at Shell in the LNG space, but we see TotalEnergies as being better positioned in the current environment," Hodee wrote.

• The outlook is bullish but the watchword remains 'discipline.'

The majors will maintain their discipline this year and next amid significant macro volatility across both oil and gas and product markets. BP expects gas prices to remain "elevated and volatile" in the fourth quarter, with the outlook heavily dependent on Russian pipeline flows and the severity of the Northern Hemisphere winter. It also sees oil prices remaining high against the backdrop of low inventory levels, Optec-plus supply cuts, limited production growth and uncertainty around Russian exports.

BP also sees scope for incremental upstream capex next year, depending on supply-chain bottlenecks, with plans to bring more rigs into the lower 48 between the Haynesville and Permian, the US Gulf of Mexico and the North Sea. "It's really the supply chain that's choking activity right now," CFO Auchincloss said. "We won't ramp up if we don't have a secure supply chain at reasonable prices." Exxon also sees room for incremental Permian capex in 2023. Chevron will go from undershooting its capex this year to the top end of its range next year, marking a 20% increase, Wirth said. Cost inflation will drive some of that, but Chevron also pointed to higher spending in the Permian.

Global refining margins decreased by $10 per barrel from the second quarter to average around $35.50/bbl in July-September, according to BP, and are expected to remain at elevated levels this quarter due to lower oil stocks and EU sanctions on Russian crude and products. Total's CFO Sbraire concurred with this view, while Chevron's Wirth said the relatively strong global product demand seen so far this year did not send a "strong signal that a recession is under way or that the economy is significantly slowing."

Deb Kelly, London

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CORPORATE STRATEGY

Oil Price Jump Buys Time for Sonangol Reforms

- *Sonangol, while cashing in on higher oil prices, is pushing ahead with sales of stakes in blocks and subsidiaries in order to fund upstream operations in Angola.*

- *The southern African country's government wants to privatize parent company Sonangol EP by floating a 30% stake within the next five years.*

- *A planned reorganization of Sonangol will put the group's core activities under a new company and assign noncore assets to its holding firm for divestment.*

The Issue

While it has often appeared more business-like and transparent than many national oil companies (NOCs) south of the Sahara, Angola's Sonangol has a host of legacy problems to address after decades of mismanagement and political interference. Higher oil prices are now providing a cushion and flexibility to carry out much-needed reforms under CEO Sebastiao Gaspar Martins, who has been at the helm at Sonangol since 2019. However, they also put the company at risk of losing the discipline it learned in the lean days that followed the oil price crash of 2015.

Balanced Approach

When the coronavirus pandemic struck in early 2020, sending oil prices plunging, Sonangol was still reeling from the 2015 crash. It had suffered credibility problems with bank creditors and racked up arrears to international oil company (IOC) partners on cash calls for Angolan upstream projects over several years. It posted a $4.1 billion net loss in 2020 but swung back to a profit of $2.1 billion last year. Despite concerns over ongoing Covid-19 lockdowns in China, Angola's main crude oil export market, and the subsequent impact on demand, a spike in prices in the wake of Russia's invasion of Ukraine is still swelling Sonangol coffers. Financial sources put Sonangol's total debt at $3.8 billion at the end of June, down from $4.1 billion at the end of 2021 and $4.2 billion in 2020.

At the same time, the energy security crisis has eased pressure from lenders to present results from the company's slow-moving environmental, social and governance (ESG) strategy. Sonangol's balanced approach to the energy transition calls for continued investment in hydrocarbons, emphasizing gas as a transitional fuel and diversifying gradually into renewables. Sonangol EP's oil production has been steadily declining in recent years and fell by 13% in 2021 to some 206,700 barrels per day. Its output of associated gas dropped to 8.8 billion cubic meters (851 million cubic feet per day) in 2021, according to Opec, down from 11.3 Bcm in 2020. But Sonangol and its IOC co-shareholders will start producing nonassociated gas in 2026 from the Quilumba and Maboqueiro fields to feed into Angola LNG, which is currently operating at just over 70% of its 5.2 million ton per year capacity due to lack of feedstock.

On the transition side, Sonangol, which has not published a net-zero target date, aims to establish 500 megawatts of renewable electricity generation by 2025. It has so far sanctioned two projects geared toward achieving this goal: its Solenova joint venture with Eni is working to install a 50 MW solar plant in Caraculo in Angola's southern Namibe province, near the border with Namibia; and a separate project with TotalEnergies aims to develop a photovoltaic plant with an initial capacity of 35 megawatts peak, also in the south in Huila province, which Total says will come on stream at the end of 2023.

Slimming by Selling

The outlook is now "positive" for Sonangol, according to lenders, enabling it to borrow and refinance debt more easily. The company is tapping the loan market for a $1 billion oil-backed facility, and hopes to close syndication soon. The loan, which is being underwritten by four banks, has a tenor of five years, no grace period and an interest rate of 5% over Libor. This is Sonangol's third sizable loan in the past two years, following a $500 million short-term facility taken out earlier in 2022 and a $1.3 billion five-year loan secured in 2021.

Sonangol is meanwhile finalizing the sales of its equity in six Angolan offshore blocks to raise cash to fund its upstream operations. These include stakes in producing Blocks 3/05 (20%), 15/06 (10%), 18 (8.5%) and 31 (10%), as well as exploration Blocks 23 and 27. It also plans to sell at least 14 subsidiaries, including several oil-field service companies, a bank and a hotel group. Last year, it divested 22 industrial companies in the white elephant Luanda-Bengo special economic zone.

It is not clear how much has been raised so far or whether all the liabilities of the assets being divested have been settled. The sale of services firms Sonadiets and Sonatide raised around $16.4 million, and the recent offloading of an 8.5% stake in Banco Angolano de Investimentos reportedly brought in another $61 million. Sonangol has also disposed of distribution arm Sonangalp, and sold its stake in retail and distribution firm Puma Energy to Trafigura for $600 million last year, while simultaneously acquiring Puma's Angolan business.

Separating From the State

Sonangol is gradually disentangling its finances from the government's. Angola's National Oil, Gas and Biofuels Agency, created in 2019, has taken over the regulatory functions and now administers royalty and tax revenues from state crude. During the presidency of Jose Eduardo dos Santos, who ruled Angola from 1979 to 2017, Sonangol came to act as regulator, banker and investor across many sectors, crowding out ministries and institutions.

This overextended role entangled its finances with the Angolan state, for which Sonangol raised large syndicated loans every year, and with the finances of Angola's political elites who profited from its transactions.

Furthermore, Luanda's current plans call for floating a 30% stake in Sonangol EP within the next five years — a privatization proposal that has been aired and postponed many times before. Sonangol says it needs to do more due diligence, as well as more work fixing and divesting noncore assets before floating equity in the parent. The ongoing reorganization will put the group's core activities — finance, upstream, gas and renewables, downstream, trading and shipping under the so-called New Company, and assign its noncore assets — such as airlines and clinics — to Sonangol Holdings for divestment.

While the restructuring and divestment plans look impressive on paper, doubts remain that the corporate culture in the NOC will change. "Sonangol is shedding some weight ... however, fundamentally it is still a political company subject to discretionary influence from the top," said Ricardo Soares de Oliveira, professor of international politics at the University of Oxford. Day-to-day decision-making is viewed through the lens of political implications rather than technical factors, whether it's a contract award to an oil service company or the sale of a privatized asset. "We need another oil boom to ascertain whether this is a structural reform or contextual shrinkage," Oliveira said.

Christina Katsouris, London

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CORPORATE STRATEGY

Q&A: Total Places Greater Priority on Papua LNG

The ongoing force majeure at Mozambique LNG has seen TotalEnergies intensify efforts to advance its Papua LNG project. In an interview on the sidelines of Singapore International Energy Week, Julien Pouget, the French major's senior vice president for E&P and renewables in Asia, gave an update on the status of the liquefaction scheme in Papua New Guinea and expounded on some of its lesser known features. He also discussed operations in Australia and Malaysia — two other countries that are central to Total's strategy in the region. An edited transcript follows.

Q: How has the Ukraine conflict affected TotalEnergies' views on the role of LNG in Asia?

A: We are convinced that LNG is a key transition fuel because it allows [the world] to displace coal. It also complements the current renewables, which are intermittent, and gas happens to be a very good solution to do that. This is why we consider natural gas and LNG as being a very important part of the energy transition.

Q: Even when LNG and natural gas are not affordable for many emerging countries?

A: It is important that gas, and energy in general, is affordable. In this context, we are developing new capacity such as the 6 million ton per year capacity Papua LNG project, which is ideally positioned geographically to bring more LNG to the Asian market. But we have several other projects. You may have seen that we were the first international partners selected by Qatar for North Field East and North Field South.

Q: How is Papua LNG progressing?

A: We started Feed [front-end engineering and design] studies in July for the upstream part of the project. We are planning to start by the end of this year the downstream Feed studies. We are targeting FID by the end of 2023 and to start operations by the end of 2027. One of the interesting features of this project is that we are implementing first-day reinjection of the native CO_2 [carbon dioxide] in the reservoirs.

Q: What about the downstream side of the project?

A: The plan is to integrate the liquefaction part in the existing PNG LNG plant because there are synergies, and it makes a lot of sense to have this plant extended. Exxon [Mobil] is the delegated operator for the Papua LNG trains. The pre-Feed studies have been completed and we will enter Feed by the end of this year. And then we will say if there is any evolution of the configuration. We are looking at some interesting, modern features.

Q: How are inflation and supply-chain issues going to impact Papua LNG?

A: We have to be very careful with inflation and we are doing our best to keep capex where it should be. We have good interest from the supply chain on the project. On the upstream part, things are moving, and on downstream we have a good interest from industries. We will know next year, before FID, what will be the context. And as you can imagine, a project like this in the current time attracts a lot of interest from potential buyers.

Q: With carbon capture and storage (CCS) integrated into Papua LNG, how keen are customers to pay a premium for cleaner LNG given the current high prices and volatility?

A: There is interest from clients. We all have to go for a more decarbonized world, and we are doing a lot of efforts to decarbonize our own operations. As you may know, for all the decisions we take at TotalEnergies regarding our projects, we consider a $100 per ton of Co2 equivalent price, except if there is a regulation in place which is already setting a high standard. So, we are targeting to reduce the emissions of our projects as much as we can, and this is what we are doing here with this Day 1 reinjection. This is also what we are working on for Ichthys [LNG] in Australia where we, together with our partners, have been awarded a CCS appraisal, a CO_2 storage appraisal license in the Bonaparte Basin. We plan to do the appraisal work and see how we can store the native CO_2 of Ichthys in this reservoir.

Q: What are TotalEnergies' plans for monetizing CO_2 storage capacity through CCS hubs in the region?

A: We have a clear CCS strategy and CCS ambitions on a global basis. We are working on CCS for our assets, with maybe the potential to do more if we are speaking of the Bonaparte Basin but at least to decarbonize our own assets. In Europe, we are working on several projects where we would store CO_2 for other users. In a way, it's the concept of a hub. We are already working on the Northern Lights project [in Norway]. We are also working on several others. We are targeting 10 million tons/yr of storage capacity by 2030.

Q: TotalEnergies has shown strong interest in deepwater assets in Malaysia. How does this fit in with your strategy?

A: We have been exploring for some time in Malaysia because there is potential. We are continuing this exploration effort. We found some interesting things. So, we are interested in these fields. We are pushing in terms of exploration, and we are drilling a well these days, the Tepat-2 well. This is what I will share for now on this topic.

Q: Besides Malaysia, which countries are the most attractive for upstream investments in Asia?

A: We have our current existing large positions in Australia as partners of Ichthys and Gladstone LNG. Regarding where we are pushing our effort, clearly our big topic in the region is to deliver on Papua LNG. We are progressing on that, and this is our big focus area. As you have seen, we are also exploring in Malaysia, and we also have exploration positions in Papua New Guinea.

Marc Roussot, Singapore

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ENERGY AND EQUITY MARKET DATA
For the week ended November 1, 2022

EIF GLOBAL INDEX COMPONENTS*

	Close Oct 28	1-Wk Chg.	1-Wk	% Chg. 52-Wk	YTD
Eni (mise)	13.09	+1.20	+10.08	-7.88	-5.79
Rosneft (mos)	5.56	+0.45	+8.73	-39.00	-30.88
Shell (lse)	28.08	+1.59	+5.99	+18.87	+27.97
Lukoil (mos)	76.61	+3.86	+5.30	-25.80	-13.06
Equinor (osl)	36.52	+1.72	+4.94	+40.02	+36.34
BP (lse)	5.49	+0.24	+4.61	+13.12	+22.80
Exxon Mobil (nyse)	110.70	+4.84	+4.57	+72.13	+80.91
Ecopetrol (bvc)	0.50	+0.02	+4.21	-34.71	-24.47
TotalEnergies (par)	54.39	+2.16	+4.13	+7.56	+7.20
Chevron (nyse)	179.98	+6.79	+3.92	+59.11	+53.37
Reliance Industries (bse)	30.71	+0.75	+2.52	-11.66	-3.44
ONGC (bse)	1.63	+0.03	+2.00	-19.05	-14.98
Suncor (tse)	33.72	+0.36	+1.07	+30.06	+34.61
CNOOC-H (sehk)	1.24	-0.02	-1.81	+26.80	+33.60
Saudi Aramco (sse)	9.23	-0.36	-3.74	+0.92	+6.50
PetroChina-H (sehk)	0.42	-0.02	-3.82	-13.37	-6.40
Sinopec-H (sehk)	0.42	-0.02	-4.62	-13.50	-9.71
Sinopec-S (sesh)	0.42	-0.02	-5.38	-30.42	-35.50
Petrobras-4 (spse)	6.15	-1.16	-15.84	+57.85	+79.69
Petrobras-3 (spse)	6.76	-1.30	-16.09	+72.76	+77.32
EIF Global Index	**332.49**	**-0.77**	**-0.23**	**+15.00**	**+14.59**

*Converted US$/share.

INDEXES

Equity Indexes	Close Oct 28	1-Wk Chg.	1-Wk	% Chg. 52-Wk	YTD
DJIA	32,861.80	+1779.24	+5.72	-8.03	-9.57
S&P 500	3,901.06	+148.31	+3.95	-15.13	-18.15
FTSE 100	7,047.67	+77.94	+1.12	-2.78	-4.56
FTSE All-World	707.59	+25.94	+3.81	-19.95	-21.20
EIF Global	332.49	-0.77	-0.23	+15.00	+14.59
S&P Global Oil	1,862.16	+55.73	+3.09	+13.00	+19.96
FT Oil, Gas & Coal	8,346.45	+221.15	+2.72	+37.72	+45.71
TSE Oil & Gas	2,969.12	+68.65	+2.37	+24.55	+30.31
Emerging Markets					
Hang Seng Energy (HK)	21,216.58	-969.97	-4.37	+24.90	+26.24
BSE Oil & Gas (India)	19,247.05	+607.30	+3.26	+5.53	+9.93
RTS Oil & Gas (Russia)	+186.61	+15.44	+9.02	-29.02	-21.54

COMMODITY PRICES

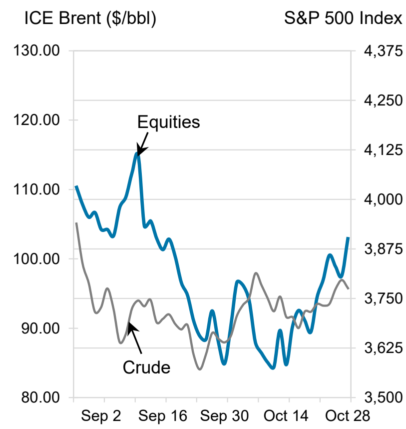
	Close Oct 28	1-Wk Chg.	1-Wk	% Chg. 52-Wk	YTD
Dated Brent	95.18	+3.22	+3.50	+13.87	+23.07
Brent 1st ICE	95.77	+2.27	+2.43	+13.58	+23.13
WTI 1st (Nymex)	87.90	+2.85	+3.35	+6.15	+16.87
Oman 1st (DME)	90.83	-0.27	-0.30	+10.58	+18.44
RBOB (Nymex)	2.91	+0.24	+9.19	+19.37	+30.43
Heating Oil (Nymex)	4.55	+0.72	+18.72	+80.80	+95.26
Gas Oil (ICE)	1,133.50	+83.00	+7.90	+58.70	+69.94
Henry Hub (Nymex)	5.68	+0.73	+14.62	-1.69	+52.39
Henry Hub (Cash)	5.02	+0.57	+12.70	-11.75	+31.15
UK NBP (Cash)	79.00	-6.00	-7.06	-54.07	-39.23

SHARE PRICES IN LOCAL CURRENCY†

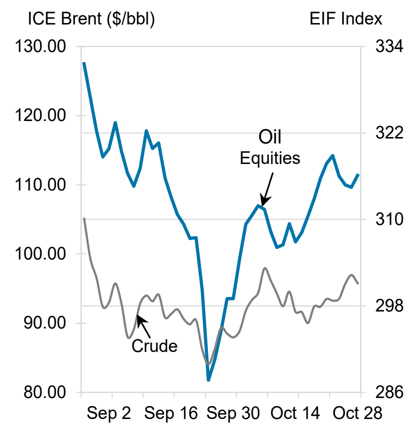
NOCs	Close Oct 28	1-Wk Chg.	1-Wk	% Chg. 52-Wk	YTD
Rosneft (mos)	342.00	+31.80	+10.25	-46.45	-42.99
PTTEP (set)	180.50	+8.00	+4.64	+52.32	+52.97
Gazprom (micex)	170.30	+7.30	+4.48	-51.67	-50.39
Equinor (osl)	377.35	+12.95	+3.55	+73.65	+59.96
Ecopetrol (bvc)	2,410.00	+57.00	+2.42	-16.61	-10.41
CNOOC-H (sehk)	9.77	-0.18	-1.81	+27.98	+34.51
PetroChina-S (sesh)	5.07	-0.12	-2.31	-6.97	+3.26
CNOOC-S (sesh)	15.34	-0.58	-3.64	NA	NA
Saudi Aramco (sse)	34.70	-1.35	-3.74	+1.11	+6.62
PetroChina-H (sehk)	3.27	-0.13	-3.82	-12.57	-5.76
Sinopec-H (sehk)	3.30	-0.16	-4.62	-12.70	-9.09
Sinopec-S (sesh)	3.07	-0.17	-5.25	-21.08	-26.38
Petrobras-4 (spse)	32.57	-5.15	-13.65	+48.02	+70.81
Petrobras-3 (spse)	35.78	-5.78	-13.91	+62.01	+68.55
Majors					
Exxon Mobil (nyse)	110.70	+4.84	+4.57	+72.13	+80.91
Chevron (nyse)	179.98	+6.79	+3.92	+59.11	+53.37
Shell (lse)	2,418.50	+74.50	+3.18	+41.17	+49.12
TotalEnergies (par)	54.59	+1.62	+3.06	+26.09	+22.32
BP (lse)	472.95	+8.50	+1.83	+34.34	+43.10
Regional Integrateds					
OMV (vse)	45.51	+5.22	+12.96	-16.13	-8.89
Eni (mise)	13.14	+1.08	+8.94	+7.99	+7.50
Lukoil (mos)	4,711.50	+299.00	+6.78	-34.87	-28.29
Repsol (bme)	13.78	+0.56	+4.24	+24.55	+32.04
Global Independents					
APA (nyse)	45.44	+2.25	+5.21	+67.80	+68.98
Hess (nyse)	140.47	+4.89	+3.61	+67.95	+89.75
ConocoPhillips (nyse)	127.17	+2.68	+2.15	+69.22	+76.18
Woodside Petroleum (asx)	36.00	+0.53	+1.49	+52.09	+64.16
Occidental (nyse)	71.84	+0.58	+0.81	+112.36	+147.81
EOG Resources (nyse)	133.69	-1.31	-0.97	+49.11	+55.79
Kosmos Energy (nyse)	6.21	-0.27	-4.17	+75.42	+79.48
Refiners					
PBF Energy (nyse)	45.78	+2.33	+5.36	+199.80	+252.97
HollyFrontier (nyse)	61.50	+2.23	+3.76	+80.99	+87.61
Phillips66 (nyse)	104.20	+3.76	+3.74	+35.77	+43.80
Reliance Industries (bse)	2,526.00	+54.05	+2.19	-2.82	+6.67
Marathon Petroleum (nyse)	113.57	+2.19	+1.97	+70.35	+77.48
Eneos (tyo)	489.70	+5.50	+1.14	+6.39	+13.80
Valero (nyse)	125.98	-1.76	-1.38	+60.57	+67.73
Oil-Field Services, EPC					
Saipem (mise)	0.97	+0.23	+31.10	-80.12	-79.08
Petrofac (lse)	114.90	+12.30	+11.99	-11.27	-0.35
Wood Group (lse)	140.00	+12.10	+9.46	-35.63	-26.74
Halliburton (nyse)	35.95	+2.07	+6.11	+40.37	+57.19
Worley (asx)	14.18	+0.76	+5.66	+27.17	+33.40
Fluor (nyse)	29.94	+1.39	+4.87	+51.14	+20.87
Baker Hughes (nyse)	27.25	+0.59	+2.19	+7.41	+13.31
Transocean (nyse)	3.62	+0.03	+0.84	-2.16	+31.16
Schlumberger (nyse)	50.45	+0.04	+0.08	+51.50	+68.45
TechnipFMC (nyse)	10.18	-0.62	-5.74	+34.30	+71.96
Midstream					
Williams (nyse)	32.67	+1.15	+3.65	+14.95	+25.46
Enbridge (tsx)	53.13	+1.46	+2.83	+1.82	+7.53
Kinder Morgan (nyse)	17.77	+0.25	+1.43	+2.42	+12.04
TC Energy (tsx)	59.52	+0.79	+1.35	-11.76	+1.17
Plains All-American (nyse)	11.88	+0.08	+0.68	+16.02	+27.19
Enterprise Products (nyse)	24.84	-0.17	-0.68	+7.35	+13.11

*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

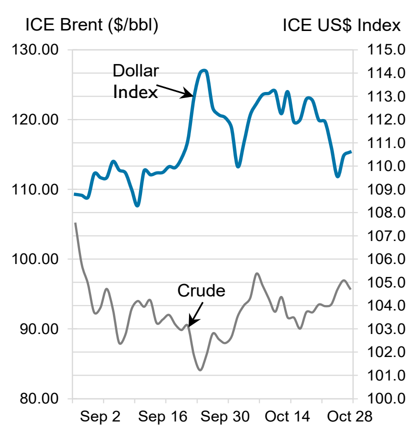
CRUDE VS. EQUITIES



CRUDE VS. OIL EQUITIES



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.