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ENERGY INTELLIGENCE **FINANCE**®

CONTENTS

OUR TAKE

US Political Overtures Frame Investor Sentiment

Limits on US oil production growth are primarily a function of investor demands for capital discipline, not overt political hurdles. But industry insiders say the Biden administration's perceived hostility toward domestic oil presents a meaningful, under-appreciated risk that constrains investor support for more substantial medium-term growth amid rising energy security concerns.

- Reinvestment rates in US oil reflect constrained investor support due largely to the industry's poor returns track record, not direct Washington interference. But the administration's moves to temporarily freeze permitting, snub lease sales, inhibit infrastructure, falsely portray the industry's price control capacity, and seemingly support non-US supplies (Opec, Iran, Venezuela) over US barrels have created, as one executive at a major US producer puts it, a "steady drumbeat" that communicates domestic oil has a perilous future.

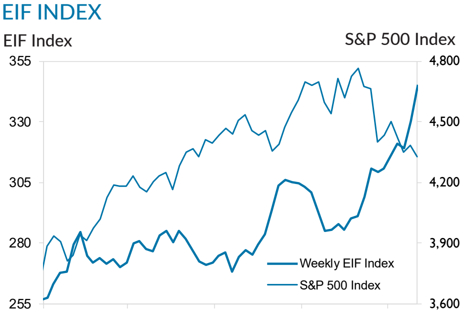
- ESG-minded institutional investors will have to determine whether the current energy crisis allows for greater medium-term investment in oil and gas to meet this-decade demand and diversify global supplies. Some will cut ties with fossil fuels regardless. But Morgan Stanley's Tom Greenberg told CERAWeek that a significant amount of capital sits in the middle, chasing risk-adjusted returns.

- The US producer executive notes that investment in US oil has effectively become "risk-off" cash collection amid a cyclical recovery, not a structural buy-in on the industry's long-term prospects. Getting that buy-in will require oil and gas being concretely embraced as part of the US' energy future, several insiders say — even if that future is time sensitive and comes alongside an accelerated off-ramp from fossil fuels.

- Price spikes to $120 per barrel will not be enough to shake out material additional US growth, insiders say. Mobilizing growth would take nine to 12 months — and introduce capital inefficiencies. Investors would have to commit to a new value proposition that accepts strong, but not maxed out, returns. In exchange, they need renewed confidence in oil's medium-term prospects. European moves to ban Russian oil could give US producers sufficient cover. But executives say growth would come "over time" and could not deliver immediate price relief.

- Absent such drivers, one long-time oil and gas banker said it could take "quarters" for investors to truly feel comfortable encouraging growth. Energy veteran Dan Pickering tells Energy Intelligence that "active support," such as the promise of no windfall taxes, alongside signs of longer-term strength in oil markets are crucial. Otherwise, Pickering says, "once bitten, twice shy." The Biden administration's messaging this week remained that more oil is needed now (somehow), but that long-term climate policy remains steady. Overall, the US industry should face a more supportive, if still messy, environment going forward. Some investors will be more willing to support near-term investment, while others will remain cautious. Markets will give clear signals for growth. The missing piece then: clear support from the Biden administration.

EIF INDEX



EIF Global Oil and Gas Index of 22 traded equities

PEER STRATEGY

US Shale in Tight Spot Over Output Growth

- *US shale producers are facing calls to grow production to help calm turbulent markets following Russia's invasion of Ukraine.*
- *But growing production could irk investors, who have been promised higher cash returns over output increases.*
- *Even if growth were palatable for shareholders, the industry faces challenges, including inflation, supply chain problems and a labor shortage that could keep a lid on growth.*

The Issue

External pressure is growing on the US oil and gas industry to ramp up oil supply to calm market volatility and help ease Europe's energy crisis, inflamed by Russia's invasion of Ukraine. But public E&Ps that account for about half of US output are reluctant to grow production — even in a $120 oil world. That's partly because a ramp-up would mean rowing back on a pledge reaffirmed only recently by US producers to keep output flat in order to boost shareholder returns.

Complex Realities

Industry groups and conservative state regulators have largely attributed the production growth slowdown to the Biden administration and its low-carbon policies. While such arguments ignore investor pressure to hold output steady, some producers believe a dialogue with the White House could go a long way toward making the case for limited growth.

"If we had clarity as an industry that this was not some short-term spike and fear-driven issue, but there was actually a call for more supply that was a multi-year issue, then I think we would have a rational discussion with our shareholders about that," Chesapeake Energy CEO Nick Dell'Osso said. "But we cannot chase price higher for a short-term event," he told Energy Intelligence in an interview. Those arguments also overlook the complex realities of the oil field, such as supply chain bottlenecks, labor shortages and rising cost inflation. Such constraints are likely to keep a lid on growth. And even if investor sentiment were to shift, US output could not be ramped up overnight.

"I think everybody came into this year just wanting to keep production pretty much flat, and nobody really prepared in advance for significant growth coming into this year as part of the recovery," Occidental Petroleum CEO Vicki Hollub said. "Now, with the supply chain challenges, it makes any kind of attempt to grow at a rapid pace very difficult," she told the CERAWeek conference in Houston.

Growth Forecasts

Prior to Russia's invasion of Ukraine, US tight oil output was projected to grow to 8.8 million barrels per day in the fourth quarter of this year compared to 7.7 million b/d during the same period last year, according to Rystad Energy. Natural gas production was seen rising by about 4.5 million cubic feet per day year on year in the fourth quarter. The consultancy reckons output could increase by a further 600,000 b/d and 4.5 MMcf/d in the second half of 2022 if there is a coordinated effort.

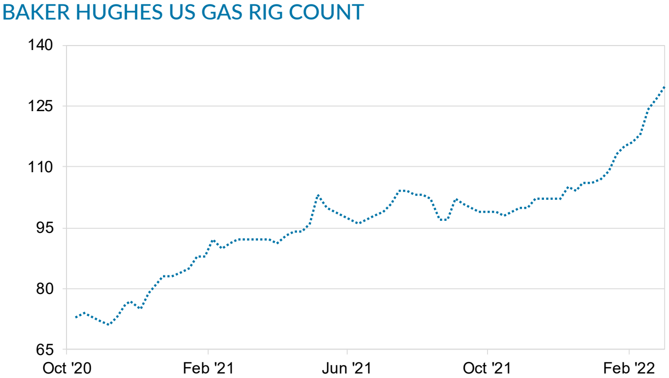
However, that effort would encounter a host of obstacles. It could include even steeper cost inflation and "material deviations" from the original capital spending guidance given by independent producers, Rystad Analyst Artem Abramov said. In addition, since the US is already bumping up against available US LNG and pipeline exports to Mexico, incremental gas production could not physically be exported from the US.

"This will both ruin [the] domestic gas market and result in new takeaway capacity challenges in the Permian as early as [the fourth quarter of 2022]," Abramov told Energy Intelligence. That also means the "ability of the industry to deliver on their ESG [environmental, social and governance] targets will be challenged," he added.

Striking a Balance

For its supporters, the US shale industry has long been portrayed as an important geopolitical tool both to help wean the nation off imports and support its overseas allies through exports.

BAKER HUGHES US GAS RIG COUNT



Source: Baker Hughes

Growth could be achieved without angering investors, as long as it is balanced with cash flow, according to Doug Getten, a corporate finance partner at law firm Baker Botts. "The only way you see production growth is if somehow profitability growth lines up with free cash flow, versus using leverage as a tool to increase production," Getten told Energy Intelligence.

If companies increase production only to offer less robust shareholder returns, "I don't see that being received well," Getten warns. But he believes they can do both, with the aim of boosting output and increasing dividend payouts and stock buybacks.

Maintaining Discipline

Some public E&Ps have hinted that growth may be reconsidered if they can get investor buy-in. Hess CEO John Hess has repeatedly attributed market volatility partly to massive underinvestment in oil projects. "With this crisis, we should be investing more as an industry," he told the Houston conference this week. "Inflation is already up 10%, the supply chains that we all face affect our industry as well. But people are going to have to increase [production] levels because the world needs oil."

In an apparent U-turn from earlier comments, Pioneer Natural Resources CEO Scott Sheffield told S&P Global last week that he may seek investor support to boost production in the short term. Sheffield had suggested during Pioneer's recent fourth quarter earnings call that growth would be limited no matter how high prices climbed.

Meanwhile, Devon Energy CEO Rick Muncrief said last week that the company might consider growing production if the Biden administration were to reach out. Such a dialog could provide some cover from investors demanding discipline, he told Bloomberg. Still, growth would be difficult, as the company is already facing problems getting rigs on site and anticipates costs to jump 15% compared to last year, he added.

Caroline Evans, Houston

CORPORATE STRATEGY

Total Walks Novatek Tightrope

- *TotalEnergies' equity interest in Russia's largest LNG producer, Novatek, will be a key contributor to its low-carbon transition in the coming decade.*
- *Novatek's importance to Total has grown as other sources of future LNG supply have stalled in recent years.*
- *Privately owned Novatek could be seen as less toxic than its state peers. But as the focus grows on Russia's business elite, that distinction may no longer offer safe haven.*

The Issue

Pressure on Western oil and gas firms to exit any dealings with Russia is growing. Exxon Mobil, BP, Shell and Equinor have all decided to withdraw from their Russian joint ventures. But Total has opted to buck the trend. The French major will freeze spending on new projects in Russia, but it will hang onto existing LNG investments with Novatek. Such a move underlines the strategic importance of Russia within Total's portfolio and shows what's at stake for the company if it walks away.

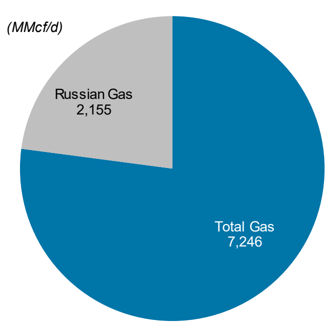
Stay or Go?

Total — and sources within other Western majors — have emphasized the difference between working with Russia's state firms and privately held ones. But observers question how long that argument can hold, as widespread willingness to self-sanction dealings with Russian firms and individuals puts much more pressure on companies to fully disengage their business from the country. Moreover, the focus has grown on the role of Russia's business elite within President Vladimir Putin's government, putting pressure on its private giants, too.

Total's Russian Assets

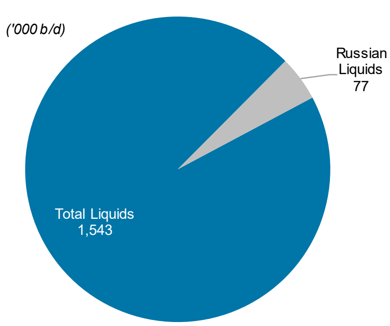
Russia is a core part of Total's portfolio as both a pillar of its LNG strategy and accordingly its low-carbon energy transition planning.

TOTALENERGIES GAS PRODUCTION



Source: Energy Intelligence, company data

TOTALENERGIES LIQUIDS PRODUCTION



Source: Energy Intelligence, company data

TOTALENERGIES RUSSIAN ASSETS

	Interest (%)	Asset Type	Operator (State/Private)
Equity Stakes			
Novatek	19.4%	LNG Liquefaction Plant	Private
Arctic Transshipment (LNG)	10.0	LNG Shipping Company	Private
Project Stakes			
Yamal LNG	20.0	LNG Liquefaction Plant	Novatek (Private)
Arctic LNG 2	10.0	LNG Liquefaction Plant	Novatek (Private)
Termokarstovoye	49.0	Natural Gas Field	Novatek (Private)
Kharyaga	20.0%	Oil Field	Zarubezhneft (State)

Source: Energy Intelligence, Company Data

- **Most of Total's exposure to Russia comes through its ties to privately owned Novatek.** The French major has a 19.4% minority holding in the Russian producer acquired through a series of transactions beginning in 2011, when it first bought a 12% interest for $4 billion.

- **Novatek's vast hydrocarbon reserves underpin the feed gas needed for the existing Yamal LNG project and in-development Arctic LNG 2.** Novatek's fields around the Yamal Peninsula supply feedstock for the 19.6 million ton per year Yamal LNG project. Total holds a 20% stake in the Yamal facility and 49% in the giant Termokarstovoye gas field that feeds it. Total also owns 10% of the Arctic LNG 2 project now being built and due on line in 2024. And it has an option to buy 10%-15% of future Novatek LNG projects. The Russian giant is targeting total LNG capacity of up to 70 million tons/yr by 2030, up from just under 20 million tons now.

- **In addition to its direct stakes, Total has a variety of interests in LNG shipping and trading that help integrate the Novatek equity volumes into its broader LNG portfolio.** Total's only non-LNG related Russian asset is its 20% stake in the Kharyga oil field operated by state-controlled Zarubezhneft.

Strategic Importance

Total depended on Russia for just 5% of its liquids production in 2020 but almost 30% of its gas production came from the country. Russia will also play a central role in Total's future strategy. The company has an ambition to hoist its global LNG portfolio to around 50 million tons/yr by 2025, generated from equity stakes in projects and contracted offtake volumes. That's up from nearly 40 million tons/yr in 2020. The expansion of its LNG portfolio is also key to Total's goal to double its gas sales by 2030 over 2019 figures and take overall gas production to 50% of the company's combined output.

The French major's stake in Yamal LNG alone accounts for more than 22% of its current liquefaction capacity. Depending on the timing of other projects, Russia could account for more than one-third of Total's liquefaction volumes when Arctic LNG 2 comes on line in 2024. These volumes become even more important given the delays seen at the Total's other LNG projects in Mozambique and Papua New Guinea.

But expansion in Russia is not simply about LNG. Total is eyeing investments in less mature transition technologies through its Novatek partnership.

"We are looking at projects of either blue hydrogen and ammonia where you have very cost-competitive gas and huge capacity of CO2 storage," CEO Patrick Pouyanne told analysts during a recent investor day presentation. "One perfect example is clearly Russia where we could be partnering with Novatek."

What Next?

Pouyanne insists that Total has not been pressed by the French government to give up its Novatek assets and that the company will maintain its existing LNG investments. "We need gas," he told the CERAWeek conference in Houston, pointing to Europe's urgent demand for gas supplies. "We are heavily dependent on Russian gas."

The company will, however, stop investing capital in new projects. That likely means it will retain its Arctic LNG 2 interest but not exercise options to take stakes in future Novatek LNG projects. Indeed, Pouyanne argued that Total was already bumping up against a self-imposed cap of not having more than 10% of its capital employed in any one country — and had been considering whether to continue to expand in Russia.

"We are reaching the limit and I think unfortunately Mr. Putin is giving us the answer," Pouyanne told the Houston conference. "So no more new capital will be injected from the company into Russia." While Russian gas is not sanctioned, Novatek and its major shareholders are already subject to certain US sanctions stemming from Russia's 2014 annexation of Crimea and its recent invasion of Ukraine. And with the role of Russia's business elite within Putin's government under growing scrutiny, that will put even more pressure on the private company.

In particular, two of Novatek's board members are on a US Treasury blacklist — Gennady Timchenko and the deputy chairman of Gazprombank, Andrei Akimov.

Noah Brenner, London

PEER STRATEGY

US Majors Plot This-Decade Oil and Gas Growth

- *Exxon Mobil and Chevron's annual strategy updates paved the way for medium-term growth in oil and gas despite upsized low-carbon investments.*

- *Short-cycle US shale is a cornerstone of those plans given greater certainty over near-term oil demand and higher capital flexibility.*

- *"Megaproject" developments are biased toward low-cost, lower-carbon projects with expedited timelines.*

The Issue

Chevron and Exxon's plans for medium-term oil and gas growth are not a response to the unfolding energy crisis — but they are certain to find greater support against the current backdrop. Chevron's stronger financial footing over the past several years has meant that some output growth remained part of its strategy even as it embraced upsized low-carbon investment plans. Exxon had to scrap its material countercyclical growth program due to deteriorating returns and significant outspending. But the company is now on track to right the ship, allowing for some modest growth to return in the back half of its new medium-term guidance.

The Short-Cycle Juggernaut

Short-cycle supplies have the most investor buy-in since they can deliver oil and gas over a timeframe facing less uncertainty around global demand patterns. They also allow for greater capital flexibility should the demand — or price — picture materially change.

It comes as no surprise, then, that Chevron and Exxon will lean heavily on the US Permian Basin over the next several years. Chevron last week affirmed plans to add around 340,000 barrels of oil equivalent per day by 2025, pushing output to at least 1 million boe/d. The major now sees peak plateau output rising to 1.2 million-1.5 million boe/d post-2025 under its $4 billion per year Permian capex program. It anticipates generating over $4 billion of annual free cash flow and returns on capital employed north of 30% in the play by 2026 at $60 (nominal) Brent.

Exxon's capital reset forced it to drop its 1 million boe/d by 2024 expectations in the play. But the company said last week that it still expects peak production to cross that threshold — just later this decade. Exxon plans to raise Permian output from around 460,000 boe/d last year to over 550,000 boe/d this year and more than 800,000 boe/d by 2027 — with management stressing the potential to exceed the latter guidance. Exxon expects even the 800,000 boe/d figure to deliver over $5 billion of free cash flow at $60 (real 2021) Brent.

Both majors emphasize the carbon footprint advantage of their Permian positions. Chevron said its carbon intensity of 15 kilograms of CO_2 equivalent per barrel is about two-thirds lower than the global industry average and around half its global average. Exxon has tipped the Permian as its first major operation to achieve net-zero operational emissions — by 2030.

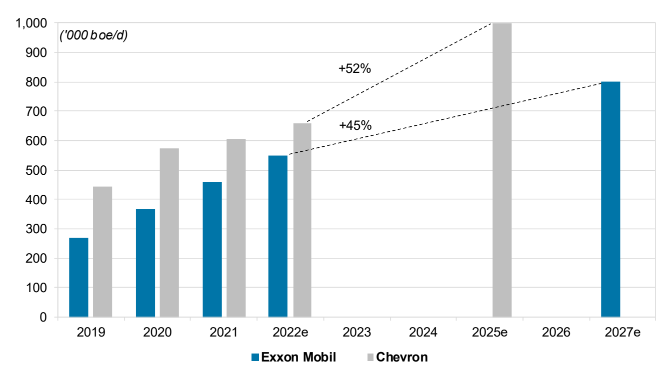
Megaprojects, New and Old

Chunkier production growth will meanwhile come from Kazakhstan (Chevron and Exxon), Guyana (Exxon), Brazil (Exxon) and the US Gulf of Mexico (Chevron). All three deepwater provinces offer advantaged output in terms of both costs and carbon intensity. On the former, Guyana is among the most attractive, thanks to break-even costs of $25-$35 per barrel. On the latter, the US Gulf consistently nears the top of the pack; Chevron's portfolio boasts a carbon footprint of 6kg CO_2e/boe.

The $45 billion Tengiz expansion in Kazakhstan is in many respects an old-guard project. Project sanction was taken in 2016, before the current rigors of capital discipline were enforced. The price tag — which reflects a 22% budget blowout since FID — is a steep one for 260,000 b/d of incremental production. That said, the investment will push plateau output to around 850,000 b/d and underpin significant production for well over a decade. Tengiz is Chevron's most significant growth asset outside the US. It has a 50% interest, with Exxon a 25% stakeholder. Start-up is slated for mid-2024.

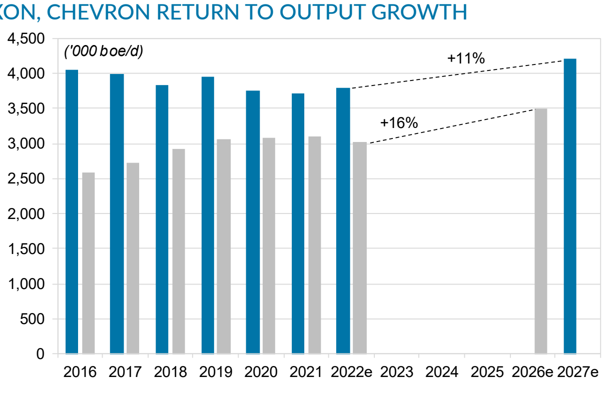
Exxon's ongoing upstream returns reset is more firmly rooted in Guyana. Its prized Stabroek Block is home to an ever-growing queue of greenfield developments in the emerging play. But Exxon and its partners are compressing the development timeline by actively exploring, appraising and developing various prospects simultaneously, as well as progressing several floating production, storage and offloading (FPSO) unit plans in tandem. The combination of Lisa Phase 2's start-up last month and successive FPSOs added annually across 2024-27 will bump gross production capacity well north of 1 million b/d, up from 120,000 b/d from the initial Lisa FPSO. Exxon holds 45% of the 10 billion boe — and growing — block.

US MAJORS DRIVE PERMIAN OUTPUT HIGHER



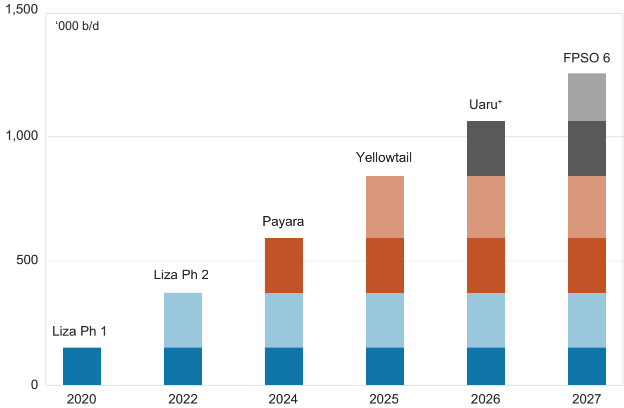
Note: Exxon's 2022 and 2027 estimates and Chevron's 2025 estimate are considered minimums in those respective years. Chevron says Permian output should peak at 1.2 million-1.5 million b/d but did not provide an exact time frame. *Source: Energy Intelligence, Exxon Mobil, Chevron*

EXXON, CHEVRON RETURN TO OUTPUT GROWTH



Note: Chevron says its 2026 output will be "well over" 3.5 million boe/d by 2026. *Source: Energy Intelligence, Evaluate Energy, Chevron, Exxon Mobil*

STABROEK BLOCK PRODUCTION CAPACITY



Source: Exxon Mobil

While Exxon appears to be out the door in the deepwater US Gulf, Chevron has a "steady queue" of developments, including the sanctioned Anchor and Whale projects. The former will be the first scheme to tap an ultra-high-pressure Lower Tertiary/Paleogene find. Chevron insists that Gulf of Mexico developments, beyond offering highly economic infill and tie-back opportunities, are among the most carbon-advantaged in its portfolio.

Exxon meanwhile has a 40% stake in the recently sanctioned 220,000 b/d, Equinor-operated Bacalhau development off Brazil. The US major claims the project carries a 65% lower carbon intensity footprint than its evolving portfolio will in 2027, and breaks even well below $35/bbl. Both Chevron and Exxon have flagged high hopes for their exploration ventures off Brazil but have yet to conjure material finds in the low-cost, highly prolific pre-salt region.

On Watch

Both US majors emphasize that their current growth plans hardly stress their on-hand oil and gas resources. Chevron in particular flagged at last week's annual strategy update that its portfolio could support growth toward 4 million boe/d this decade, excluding asset sales.

Chevron, for instance, intends to export learnings from the Permian Basin to Argentina's Vaca Muerta, Canada's Duvernay Shale and the US DJ Basin plays. And it is progressing plans to monetize its East Mediterranean natural gas portfolio — anchored in the Israeli gas positions acquired via Noble Energy — as export options open politically. Exxon is meanwhile still working to cut costs at its Mozambique LNG scheme, although development will depend on improved security. Backfill of PNG LNG will also add cost-advantaged economic resources.

Key to watch outside these plans is the majors' potential participation in Qatar's prized LNG expansion. Both have tipped it as an advantaged low-cost investment that could easily compete for capital within existing medium-term investment frameworks. Partner selection is potentially on track for June.

Casey Merriman, Phoenix

ENERGY AND EQUITY MARKET DATA
For the week ended Mar 4, 2022

EIF GLOBAL INDEX COMPONENTS*

	Close	1-Wk	% Chg.		
	Mar 4	Chg.	1-Wk	52-Wk	YTD
Chevron (nyse)	158.65	+18.27	+13.01	+51.82	+35.19
Ecopetrol (bvc)	0.87	+0.09	+11.39	+39.55	+31.93
Exxon Mobil (nyse)	84.09	+6.25	+8.03	+43.23	+37.42
Equinor (osl)	33.34	+2.31	+7.43	+71.89	+24.48
Saudi Aramco (sse)	11.81	+0.78	+7.11	+25.83	+23.81
CNOOC (sehk)	1.33	+0.08	+6.25	+13.83	+29.47
Suncor (tse)	31.47	+1.69	+5.66	+48.22	+25.62
PetroChina-H (sehk)	0.55	+0.02	+4.32	+49.65	+23.06
Petrobras-3 (spse)	7.30	+0.26	+3.66	+131.91	+32.52
Petrobras-4 (spse)	6.76	+0.18	+2.67	+104.66	+32.40
ONGC (bse)	2.16	+0.04	+1.78	+39.49	+13.07
PetroChina-S (sesh)	0.92	+0.01	+1.37	+37.38	+18.95
Sinopec-S (sesh)	0.64	0.00	+0.47	+13.92	-2.37
Sinopec-H (sehk)	0.50	0.00	+0.19	-10.56	+7.19
Reliance Industries (bse)	30.43	0.00	+0.01	+1.74	-4.30
BP (lse)	4.60	-0.47	-9.25	+5.84	+2.97
Eni (mise)	14.04	-1.48	-9.54	+18.84	+1.10
Shell (lse)	24.25	-2.57	-9.58	+14.60	+10.51
TotalEnergies (par)	48.62	-5.77	-10.60	+0.18	-4.17
Rosneft (mos)	2.54	-1.13	-30.69	-64.86	-68.37
Lukoil (mos)	40.66	-20.77	-33.81	-47.88	-53.86
EIF Global Index	**344.22**	**+13.35**	**+4.04**	**+23.23**	**+17.87**

*Converted US$/share.

INDEXES

	Close	1-Wk	% Chg.		
Equity Indexes	Mar 4	Chg.	1-Wk	52-Wk	YTD
DJIA	33,614.80	-443.95	-1.30	+8.70	-7.49
S&P 500	4,328.87	-55.78	-1.27	+14.87	-9.18
FTSE 100	6,987.14	-502.32	-6.71	+5.06	-5.38
FTSE All-World	809.14	-22.25	-2.68	+5.97	-9.90
EIF Global	344.22	+13.35	+4.04	+23.23	+17.87
S&P Global Oil	1,673.96	-19.58	-1.16	+19.84	+7.84
FT Oil, Gas & Coal	6,316.90	-554.92	-8.08	+17.56	+10.28
TSE Oil & Gas	2,839.07	+171.47	+6.43	+50.32	+24.61
Emerging Markets					
Hang Seng Energy (HK)	20,612.94	+1284.44	+6.65	+31.05	+22.65
BSE Oil & Gas (India)	17,718.67	+821.46	+4.86	+10.31	+1.20
RTS Oil & Gas (Russia)	151.47	0.00	0.00	-26.94	-36.32

COMMODITY PRICES

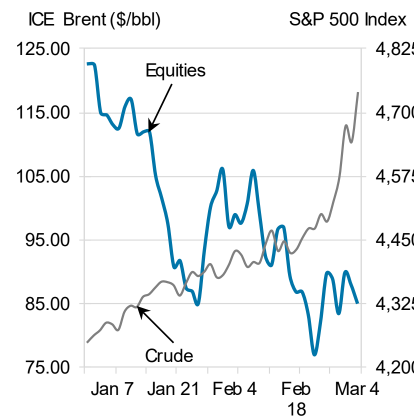
	Close	1-Wk	% Chg.		
	Mar 4	Chg.	1-Wk	52-Wk	YTD
Dated Brent	123.58	+24.80	+25.11	+82.11	+59.79
Brent 1st ICE	118.11	+20.18	+20.61	+76.97	+51.85
WTI 1st (Nymex)	115.68	+24.09	+26.30	+81.23	+53.81
Oman 1st (DME)	116.08	+25.08	+27.56	+78.04	+51.36
RBOB (Nymex)	3.54	+0.82	+29.95	+77.39	+59.03
Heating Oil (Nymex)	3.78	+0.93	+32.53	+99.17	+62.07
Gas Oil (ICE)	1,184.25	+347.75	+41.57	+121.25	+77.55
Henry Hub (Nymex)	5.02	+0.55	+12.21	+82.67	+34.48
Henry Hub (Cash)	4.74	+0.11	+2.38	+69.77	+23.95
UK NBP (Cash)	468.00	+258.00	+122.86	+946.98	+260.00

SHARE PRICES IN LOCAL CURRENCY†

	Close	1-Wk	% Chg.		
NOCs	Mar 4	Chg.	1-Wk	52-Wk	YTD
Gazprom (micex)	238.00	0.00	0.00	+6.52	-30.67
Rosneft (mos)	308.00	0.00	0.00	-42.93	-48.66
PTTEP (set)	150.50	+18.00	+13.58	+32.60	+27.54
Equinor (osl)	298.50	+24.75	+9.04	+79.28	+26.54
Ecopetrol (bvc)	3,340.00	+276.00	+9.01	+46.56	+24.16
Saudi Aramco (sse)	44.30	+2.95	+7.13	+25.85	+23.74
CNOOC (sehk)	10.42	+0.62	+6.33	+14.63	+29.76
PetroChina-H (sehk)	4.28	+0.18	+4.39	+50.70	+23.34
Petrobras-4 (spse)	34.23	+0.23	+0.68	+82.73	+20.32
Sinopec-H (sehk)	3.90	+0.01	+0.26	-9.93	+7.44
Majors					
Chevron (nyse)	158.65	+18.27	+13.01	+51.82	+35.19
Exxon Mobil (nyse)	84.09	+6.25	+8.03	+43.23	+37.42
TotalEnergies (par)	44.50	-3.77	-7.81	+9.71	-0.29
BP (lse)	348.15	-30.35	-8.02	+11.19	+5.34
Shell (lse)	1,833.40	-167.10	-8.35	+20.40	+13.05
Regional Integrateds					
Lukoil (mos)	5,153.50	0.00	0.00	-11.37	-21.56
Repsol (bme)	11.47	-0.13	-1.10	+3.86	+9.87
Eni (mise)	12.85	-0.93	-6.72	+30.15	+5.19
OMV (vse)	40.50	-5.56	-12.07	-5.51	-18.92
Global Independents					
Occidental (nyse)	56.15	+17.41	+44.94	+87.79	+93.69
Kosmos Energy (nyse)	5.63	+1.13	+25.11	+64.14	+62.72
Apache (nyse)	39.48	+5.81	+17.26	+88.18	+46.82
Woodside Petroleum (asx)	31.42	+3.47	+12.42	+27.26	+43.27
BHP (asx)	49.94	+5.25	+11.75	+1.30	+20.34
EOG Resources (nyse)	118.75	+11.47	+10.69	+72.27	+33.68
ConocoPhillips (nyse)	100.27	+9.00	+9.86	+80.28	+38.92
Hess (nyse)	101.17	+3.65	+3.74	+42.92	+36.66
Refiners					
PBF Energy (nyse)	20.21	+3.12	+18.26	+23.91	+55.82
Eneos (tyo)	468.90	+23.40	+5.25	-3.24	+8.97
Reliance Industries (bse)	2,325.35	+41.40	+1.81	+6.88	-1.81
Marathon Petroleum (nyse)	77.73	+1.19	+1.55	+37.55	+21.47
Valero (nyse)	85.98	+1.11	+1.31	+12.58	+14.47
HollyFrontier (nyse)	30.15	+0.33	+1.11	-22.67	-8.02
Phillips66 (nyse)	84.30	-0.39	-0.46	-0.13	+16.34
Oil-Field Services, EPC					
Transocean (nyse)	4.24	+0.91	+27.33	+3.41	+53.62
Baker Hughes (nyse)	33.22	+3.72	+12.61	+38.24	+38.13
TechnipFMC (nyse)	7.45	+0.65	+9.56	-14.27	+25.84
Fluor (nyse)	23.45	+1.55	+7.08	+32.26	-5.33
Halliburton (nyse)	34.13	+1.60	+4.92	+54.57	+49.23
Worley (asx)	12.19	+0.20	+1.67	+15.33	+14.68
Schlumberger (nyse)	38.94	-0.51	-1.29	+36.25	+30.02
Saipem (mise)	0.95	-0.07	-6.47	-58.48	-48.67
Petrofac (lse)	99.75	-7.45	-6.95	-20.93	-13.49
Wood Group (lse)	158.30	-25.00	-13.64	-48.98	-17.16
Midstream					
Kinder Morgan (nyse)	18.84	+1.77	+10.37	+20.08	+18.79
Williams (nyse)	33.47	+2.78	+9.06	+38.82	+28.53
TC Energy (tsx)	71.73	+5.05	+7.57	+27.86	+21.93
Plains All-American (nyse)	10.86	+0.70	+6.89	+11.84	+16.27
Enterprise Products (nyse)	25.43	+1.63	+6.85	+10.95	+15.80
Enbridge (tsx)	56.90	+2.82	+5.21	+27.61	+15.16

*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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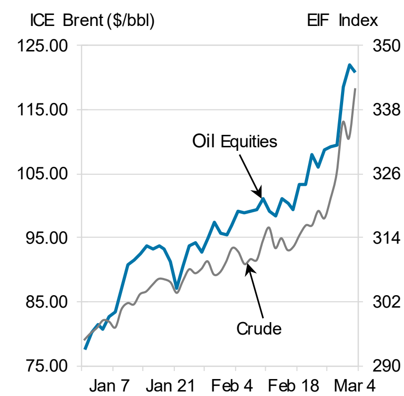
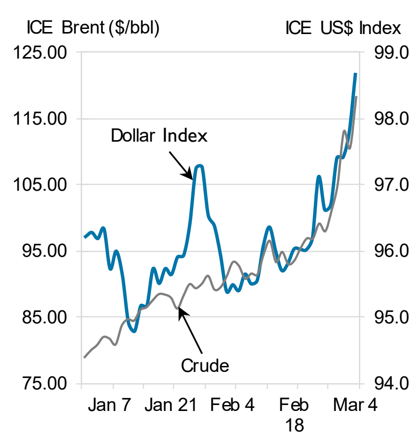


CRUDE VS. CURRENCY



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.