

# ENERGY INTELLIGENCE **FINANCE**<sup>®</sup>

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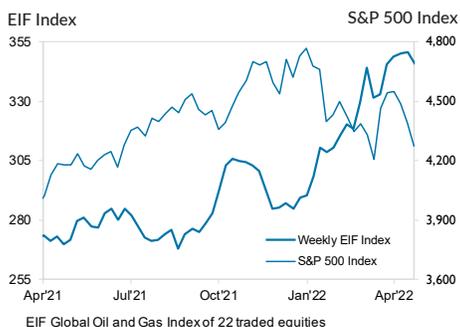
## OUR TAKE

### It's How You Spend It That Counts

*Western majors are sure to post healthy increases in adjusted earnings when TotalEnergies and Spain's Repsol kick off first-quarter results this week. But our attention will be mostly centered on how companies plan to channel their bumper cash flows from high oil and gas prices and eye-popping refining margins. Also on our radar are majors' ongoing responses to the continued challenges wrought by the Russia-Ukraine crisis and persistent cost inflation.*

- Oil prices north of \$100 will inflate upstream profits, but refining is the business to watch. Repsol flagged a 50% quarter-on-quarter jump in refining margins in its pre-earnings trading update, with Total signaling a 175% boost. The bonanza has continued into the current quarter, with Energy Intelligence seeing global refining margins at their highest levels in more than a decade. The strong performance could provide vindication for majors defending the merits — and competitive advantage — of integration. Separately, European majors are likely to face questions about how affected refineries are weaning themselves off Russian crude — and the long-term implications for those plants.
- Billions of dollars in Russia-related write-downs from BP, Shell and Exxon Mobil signal intent to wind down Russian operations, but we'll be looking for tangible timelines and signs of progress. Divestments may remain impossible to navigate for the foreseeable future, but operations are expected to wind down. So, too, the trading of Russian crude and products. We're also keen for updates on efforts to source alternate natural gas for Europe. Total is likely to face continued questions around its decision to stick with Russian LNG.
- Majors' oil and gas budgets are fairly fixed, but we'll be on the lookout for any signs of additional output being wrung from portfolios to counter expected losses in Russian barrels and Btus. Included on our watch list is upward movement to Exxon and Chevron's already-big growth plans in US shale — although both will be mindful of the impact labor and supply-chain constraints could have on operational efficiency and returns. Earnings calls also provide an opportunity to gauge the mood music on pre-FID LNG projects and to get more clarity from Italy's Eni on its incremental North Africa gas pivot and time frame for delivery. The Italian major has been among the most active companies in securing additional gas supplies for Europe but now attention will focus on the ability of its fields to deliver the volumes.
- Shell's results broadly have our attention for providing separate Renewables and Energy Solutions figures for the first time, having previously included those operations within Integrated Gas. More granular reporting has been a key ask from investors looking to better understand the returns potential of transition businesses that will be relied upon for future cash flows. Shell has already advised that the new unit contributed \$100 million–\$600 million to adjusted first-quarter earnings.

## EIF INDEX



## PEER STRATEGY

# Climate to Dominate European Majors' AGMs

- *European majors' annual general meetings (AGMs) will spotlight a raft of shareholder resolutions questioning the pace and adequacy of their energy transition strategies.*
- *Instead of lofty goals for 2050, a growing number of investors support science-based plans including targets to cut greenhouse gas emissions in the next few years.*
- *Shareholders will approach corporate in-house climate resolutions with caution to avoid blindly rubber-stamping complex transition plans with a simple yes/no vote.*

## The Issue

Climate-related shareholder resolutions are coming back for more votes. Last year's round of AGMs saw investors — and influential fund giant BlackRock — voting in higher numbers than ever before to push Europe's energy majors to up their climate ambitions. After the Intergovernmental Panel on Climate Change's (IPCC) recent report calling for absolute reductions in emissions — now — the International Energy Agency's net-zero road map and COP26 climate commitments, the stage is set for more close-run votes this year.

## Doing It In-House

A growing number of companies — including BP, TotalEnergies, Shell and Equinor — will this year put their own in-house climate-related transition plans to shareholders in a so-called “say on climate” advisory vote. Advocates for the relatively new concept believe it will help ensure companies produce robust Paris-aligned plans that allow shareholders to better engage and understand how climate-related issues are being managed, according to proxy advisory firm Glass Lewis.

Most such proposals have so far received high levels of shareholder support. Shell, which put forward its first in-house climate resolution last year, won 89% of votes for its resolution, in line with management guidance. The company will publish an update to its transition strategy every three years to 2050, with the next due before the 2024 AGM. Starting this year, Shell will offer shareholders an annual advisory vote on its progress toward achieving its stated climate plans and targets. BlackRock backed Shell's resolution last year, stating

that regular review and an annual vote may help accelerate progress “particularly as consensus is built amongst governments, companies, climate and energy experts, and society on the necessary transition pathway.”

## Mixed Response

Equinor's recently released energy transition plan, setting out more concrete details on how it will deliver on its ambitions, will also be put to an advisory vote at its AGM on May 11. The Norwegian major responded to calls from investors last year for more ambitious emissions targets and has accelerated low-carbon spending. Equinor's head of climate and sustainability, Hilda Roed, recently noted how the company's share price was near an all-time high. “So we think our investors have a very strong belief in our current strategy.” The focus will be on moving from ambitions to concrete action in the next year, she said.

Some influential investors are more skeptical. The Calpers pension fund in the US, for example, argues it is not the job of shareholders to micromanage businesses. The New York City Pension Funds are concerned about the potential future legal implications of approving climate disclosures that may later turn out to be “fraudulent in some way.” Glass Lewis advises shareholders to approach proposals “with caution,” citing concern that investors lacking the capacity or technical ability to analyze plans may rubber-stamp climate strategies that are misaligned with broader climate goals. Moreover, the link between such plans and companies' bottom lines is not always explicitly provided, it said.

## Activist Thorns

Activist investors have continued to be a thorn in the side of the European majors. All campaigns have been essentially motivated by the push for management to truly align targets with the Paris Agreement and to invest accordingly. Netherlands-based Follow This has filed shareholder resolutions this year at European majors Shell, BP and Equinor as well as at US firms Chevron, Exxon Mobil, Phillips 66, ConocoPhillips and Occidental Petroleum. It insists on absolute emissions reductions of roughly 40% — and falling production — this decade to limit global warming to less than 1.5°C in line with levels set out by the IPCC report. Last year, Follow This won 21% of votes for its resolution at BP, up from 8% last time out in 2019, and is gradually winning more support from Shell shareholders, too. “We think that only engagement combined with voting will send a clear signal to the boards of these oil majors,” founder Mark van Baal told a recent seminar on investor voting behavior.

**FOLLOW THIS CLIMATE RESOLUTIONS, 2022**

| Company        | AGM Date |
|----------------|----------|
| Valero*        | Apr 28   |
| Oxy            | May 6    |
| ConocoPhillips | May 10   |
| Phillips66     | May 11   |
| Equinor        | May 11   |
| BP             | May 12   |
| Shell          | May 24   |
| TotalEnergies† | May 25   |
| Chevron        | May 25   |
| Exxon Mobil    | May 25   |

\*Withdrawn to let institutional investors file. †Filed by institutional investors. Source: Follow This

Still, according to another activist investor source, many “nonprofit” resolutions won’t succeed — partly because “the proposals that they’re bringing are just not realistic for business.” And while there is much more scrutiny over the substance behind the majors’ emissions targets, “a lot of the large asset managers are really struggling to be able to assess that,” the source added.

**Russia-Ukraine Risks**

Ahead of Total’s May 25 AGM, it has fended off a potential joint resolution from activist investor Clearway Capital, which took a position in the company and called for it to exit its Russian operations over the Ukraine crisis. Clearway had cited the financial and longer-term reputational risks of continuing to do business with Russia. Unlike its Western major peers, Total has retained its main asset in Russia, its 19.4% interest in independent gas and LNG producer Novatek.

The company recently satisfied two of Clearway’s three demands, committing to halt all spot market purchases of Russian hydrocarbons and phase out existing term crude purchase contracts by the end of this year. But it won’t divest producing oil and gas assets in Russia, nor its stakes in LNG plants there, arguing that abandoning those interests without consideration would enrich Russian investors, defeating the very purpose of the sanctions. Another problem is that in the absence of sanctions from Europe, or specifically France, Total cannot exercise force majeure on its long-term contracts for the Yamal LNG plant. It is understood Clearway is comfortable with Total’s position and will not pursue a resolution.

What is also worrying investors is the risk related to majors that fail to develop strategies to deal with climate change that could affect shareholder value. Lawyer Roger Cox, who was involved in a Dutch ruling ordering Shell to cut emissions by 45% by 2030, argues that companies could be open to litigation by activists. He

points to a discrepancy between a company claiming to be Paris-aligned and then advising shareholders to vote against a resolution calling for a Paris-aligned strategy. “We expect to win the [Shell] appeal and ... I expect a strong growth in these types of strategic cases ... against oil and gas majors,” Cox told the recent Follow This meeting. Directors and board members could also face litigation risk. “My expectation is that in years to come, these types of climate litigation ... cases will also become successful,” Cox said.

*Deb Kelly, London*

**PEER STRATEGY**

**Services Giants See Seismic Shift in Investment Landscape**

- The West’s efforts to stop buying Russian oil and gas and the upcoming expiry of the Opec-plus deal will have major impacts on global investment trends.
- Activity this year is still dominated by short-cycle projects but some see a potential return of plans for long-cycle investments starting to drive spending into 2023.
- For the first time in decades, a new global investment cycle will not be led by the big Western oil firms as national oil companies (NOCs) and private players ramp up.

**The Issue**

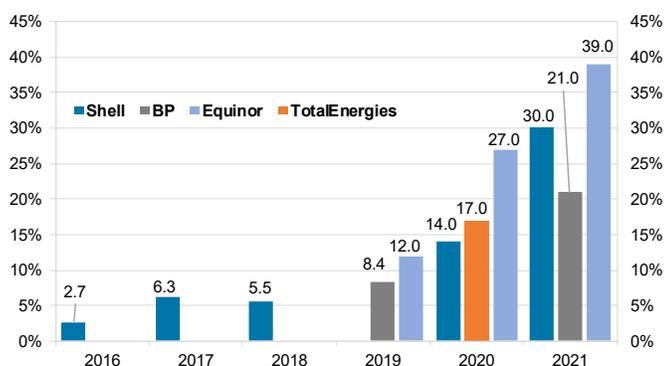
The Big Three oil-field services firms — Baker Hughes, Halliburton and Schlumberger — are always well placed to offer insights into the pace and trajectory of drilling activity around the world.

And they say it is the NOCs in Mideast Opec countries and privately held firms in the US that are currently doing the most. Capital is being spent on short-cycle projects aimed at delivering quick barrels — and payback within five years if not much sooner — as well as longer-term production expansions and LNG facilities.

**Opec-Plus End, Russian Sanctions Reshape Investment**

The impending end of Opec/non-Opec production curtailments in the fall and the quest for the West to minimize its reliance on Russian volumes will be major drivers of global investment trends in the coming years, according to the heads of the services companies. “I’d say we’re arguably in the early stages in what could be a multiyear reorganizing of the global energy system,” Baker Hughes CEO Lorenzo Simonelli said on a recent earnings call.

**VOTES FOR CLIMATE RESOLUTIONS, 2016-21**



Source: Follow This

Core Opec producers like Saudi Aramco and Abu Dhabi National Oil Co. (Adnoc) are accelerating long-term expansion plans and others including Iraq are looking to increase production capacity to take advantage of higher prices and rebuild lost spare capacity. “The Middle East region will benefit from the combination of reinvestment in short-cycle barrels as we approach the end of current Opec-plus agreements and from the commitment to capacity expansion in both oil production and gas development,” Schlumberger CEO Olivier Le Peuch told investors.

Aramco and Adnoc are ramping up capital spending significantly this year, Baker Hughes’ Simonelli concurred. He expects “the strongest increases” in activity to come from Gulf Opec members. “Producers in the region are in the early stages of investing in capacity expansion and should help drive a multiyear increase in activity,” he said.

### Short for Now, Long to Come?

Meanwhile, as Western firms step back from their investments in Russia, they will look for opportunities to replace lost volumes from mature projects there with growth in other areas.

This year, companies are continuing to target short-cycle opportunities as they look to bring volumes to market quickly and maximize capital efficiency. “The pursuit of increased investment flexibility leads operators to prioritize short-cycle projects, development over exploration, tie-backs versus new infrastructure and shale rather than deepwater,” Halliburton CEO Jeff Miller said. Halliburton, which has the largest hydraulic fracturing fleet in the US, is completely booked for the rest of the year and Miller sees total spending by operators in North America rising 35% this year, up from an earlier estimate of 25%.

Some see the potential for significant investments in longer-cycle projects starting next year, noting that planning for such facilities is already under way. “It’s not only short cycle,” Le Peuch said. “It’s short and long cycle as some FIDs have already been signed last year and more are coming.”

But not all companies share the same outlook for a shift back to longer development timelines. “Clearly, there are important exceptions where successful long-term projects will be developed,” Halliburton’s Miller said. “But painting with a broad brush, I believe most investments will be directed primarily towards short-cycle activity in the near and medium term.”

### Privates Lead the Way

In the US, private companies now account for more than 60% of the total working rigs, according to the latest count from Baker Hughes. This year alone, private companies have added 36 rigs, compared to 17 for independents and nine for the global majors. Many of the rigs working onshore the US are targeting oil-rich shales in the Permian Basin but lesser-known

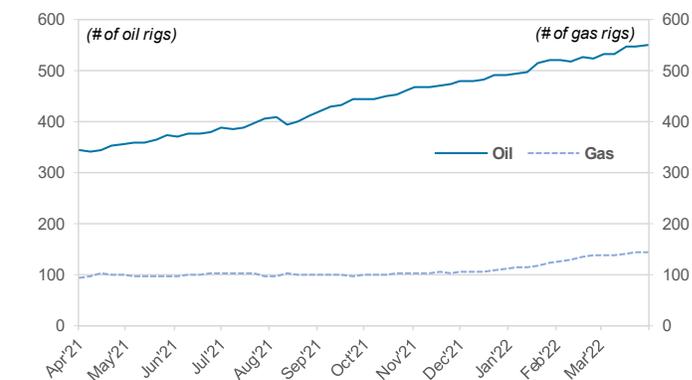
plays are also seeing a boost. “What we’re seeing is public companies ... are sticking with [their] activity outlook,” Miller said. “And then with privates, we continue to see more activity and they keep growing.”

The shift can also be felt in the global gas business. LNG schemes that had been delayed by a lack of long-term commitments from buyers are now fielding calls from countries keen to secure volumes. Simonelli believes his company’s Turbomachinery & Process Solutions business could book as much as \$9 billion in orders this year, up 15% from prior estimates. “It’s clear the unfolding situation in Europe has definitely accelerated the pace of discussions on the next wave of LNG projects aiming to take FID,” Simonelli said.

That LNG expansion is driving activity in natural gas plays. In the US, Aethon Energy’s 14 active rigs in the Haynesville Shale gas play in Louisiana make it the second-most active driller among private companies and put it ahead of better-known public independents. “We are seeing operators preparing, planning and being ready for accelerating their gas supply to the world market internationally and in North America,” Le Peuch said.

Noah Brenner, London

#### BAKER HUGHES RIG COUNT



Source: Baker Hughes

## CORPORATE STRATEGY

### Santos Sets Clearer Path To Net Zero

- Australia’s Santos aims to be carbon neutral by 2040 — one of the earliest targets in the industry and 10 years before most of its peers.
- Natural gas will remain central to its portfolio, with large projects in the pipeline in Australia and Papua New Guinea (PNG).
- Santos sees carbon dioxide as an integral part of its future business, generating new revenues through carbon capture and storage (CCS) and carbon offsets.

## The Issue

Australian independent Santos has firmed up its energy transition strategy with new midterm emissions reduction targets and a clearer plan to adapt to a low-carbon future. The company's 2022 Climate Change Report revealed Santos is now planning a 30% cut in absolute emissions from operations by 2030 versus 2020 levels, compared to a 26%–30% target previously, and a 40% reduction in emissions intensity. The move comes amid growing environmental pressure on Santos, including from some shareholders: its annual general meeting on May 3 will hear a resolution calling on the company to spell out plans to wind down oil and gas operations for the second year in a row.

### Counting on Gas for Cash Flow

Santos, which became one of the world's 20 largest LNG producers — and one of Australia's top 10 direct emitters of greenhouse gases — on completing its acquisition of Oil Search late last year, will focus its exploration efforts on near-by assets. By doing this, it wants to make full use of existing infrastructure in developing new fields for backfill supply that will keep facilities at full capacity. With this strategy, Santos intends to produce gas at low cost past 2040 to serve its Asian clients that have made gas their transition fuel of choice.

In the meantime, Santos will seek to drive down emissions through operational efficiency and electrification using renewable energy. "The world can't simply switch off fossil fuels. So the shift must be decarbonization, not defossilization," Santos CEO Kevin Gallagher said when presenting the company's energy transition strategy in late March. However, activist groups tend to think otherwise, and Santos' strategy will increasingly be challenged, including through climate-related lawsuits.

In the short term, the recently sanctioned US\$3.6 billion Barossa gas project offshore the Northern Territory is slated to backfill Santos' Darwin LNG plant from the first half of 2025. In PNG, the Angore tie-in project will backfill PNG LNG from 2024, while first gas is expected from the 4.36 trillion cubic feet P'nyang gas field at the end of the decade. In turn, the greenfield Papua LNG project is expected to be greenlighted next year for start-up in the late-2020s.

In the longer term, Santos will focus on Australia's Cooper, Bedout, and Carnarvon Basins. In the Cooper Basin, which spans South Australia and Queensland, Santos is looking at resources from the Granite Wash and deep resource plays. In the Bedout Basin in Western Australia, the recent Pavo oil discovery, whose contingent resources are assessed at 43 million barrels, could be tied back to Dorado to backfill the Varanus Island processing facility. Santos is also looking at developing its Narrabri gas project in New South Wales, as well as resources in the Beetaloo subbasin in the Northern Territory.

### SANTOS' STAKES IN LNG PROJECTS

|              | Gladstone LNG | Darwin LNG | PNG LNG     | Papua LNG     |
|--------------|---------------|------------|-------------|---------------|
| Santos stake | 30.0%         | 43.4%      | 42.5%       | 17.7%         |
| Operator     | Santos        | Santos     | Exxon Mobil | TotalEnergies |

*Source: Santos, Oil Search, TotalEnergies*

But both projects are facing intense pushback from environmentalists as they require fracking.

### Carbon Offsets

Adelaide-based Santos plans to build a portfolio of carbon offsets — both nature-based solutions and CCS projects — to decarbonize its activities and generate new revenue by selling CCS as a service to third parties. This is ambitious as many analysts argue CCS is an expensive technology — particularly offshore — that remains difficult to deploy at scale. But Santos believes it can make it work at low cost by repurposing existing infrastructure. The challenge, Gallagher says, is to find enough CO<sub>2</sub>. Much will also depend on how fast carbon prices increase, with Santos expecting them to reach US\$300 per ton in 2040 under a 1.5°C scenario — far higher than the current global average price of US\$3/ton. Last year, Australia's carbon price averaged at A\$25/ton (US\$17.9/ton).

Santos intends to establish three CCS hubs with estimated combined storage capacity of more than 32 million tons per year eventually, with 10 million tons to come on line by 2030. The total breaks down into 10 million tons/yr in northern Australia, 20 million tons/yr in eastern Australia and more than 2 million tons/yr in Western Australia. These hubs are essentially based on Santos' depleted reservoirs, but the company is also looking to acquire storage acreage not too far from its legacy assets. It also said an independent assessment put its CO<sub>2</sub> storage capacity in the Cooper Basin in South Australia at 100 million tons.

In eastern Australia, Santos has already sanctioned the first phase of the Moomba CCS project, which it is touting as one of the lowest-cost and largest in the world. The US\$165 million scheme will be capable of storing 1.7 million tons/yr of CO<sub>2</sub> in depleted gas reservoirs, or a cumulative total of around 44 million tons by 2050, according to Santos. The company says it will capture and store CO<sub>2</sub> at less than US\$24/ton, including cash costs in operation of US\$6–\$8/ton. It expects to start CO<sub>2</sub> injection in 2024 to decarbonize its activities in the Cooper Basin.

Meanwhile, Santos is exploring opportunities in northern Australia in the Petrel Sub-basin and started front-end engineering and design (Feed) work for its Bayu Undan CCS project in March, with a view to taking a final investment decision in 2025. All reservoir emissions from Barossa, whose gas has a CO<sub>2</sub> content of 19%, could be stored in Bayu Undan.

Santos, which has flagged "significant interest in CO<sub>2</sub> import from Asia," is also exploring opportunities in Western Australia,

one of the country’s largest CO<sub>2</sub>-emitting states. It could offer its maturing Reindeer gas field as a CCS reservoir for third parties as its emissions in the region are relatively low.

As for nature-based solutions, Santos owns more than 1 million acres of land in Australia. It also maintains relationships with more than 2,500 landholders in Australia and PNG.

### LNG Today, Hydrogen Tomorrow?

Santos will leverage its CCS hubs as part of its shift toward hydrogen and ammonia, a transition that will depend on the pace at which demand increases. “We can’t make it before people want to use it. That’s a quick way to go out of business,” Gallagher said, adding that “Santos will be proactive in those technology developments, and we can be ready to take first-mover advantage when those opportunities exist.”

The company is agnostic about clean fuels. It is looking at both blue hydrogen, produced from the reforming of natural

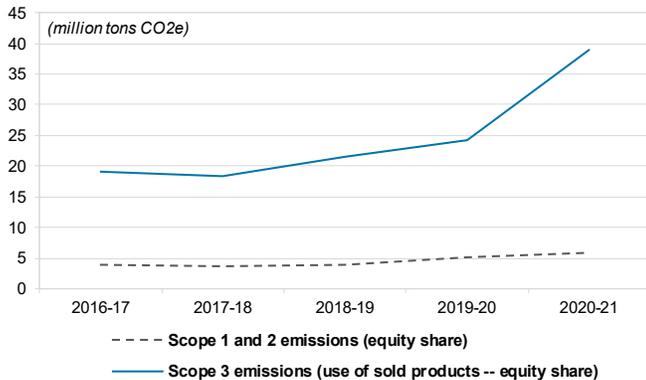
gas, and green hydrogen, produced from electrolysis of water using wind or solar power.

For instance, the company is looking at the Cooper Basin, where Moomba is located and where strong wind and solar resources are offering low-cost renewables opportunities. The basin is also home to abundant water with very low mineralogy. This would allow Santos to produce blue or green hydrogen from Cooper for around A\$2/kg, in line with the price the Australian government is targeting. The company is looking to start Feed work for its green hydrogen project by the end of the year.

Santos plans to start offering hydrogen in the early to mid-2030s, with demand expected to be 1 million-4 million tons/yr by 2040 in Australia, driven by the conversion of hard-to-electrify sectors. It also believes its LNG clients are the hydrogen buyers of tomorrow. Japan, South Korea and China have all set firm targets for hydrogen usage by 2030 or 2040.

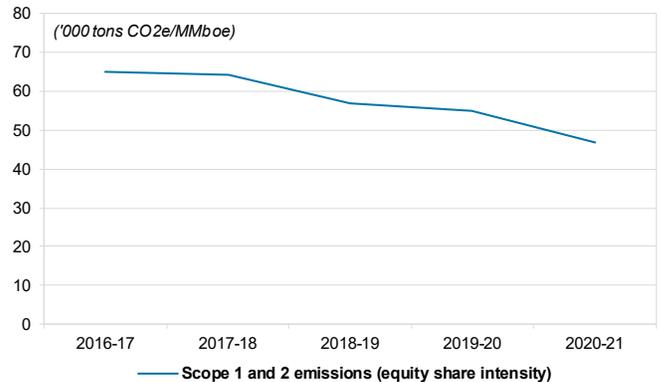
Marc Roussot, Singapore

SANTOS' SCOPE 1, 2 AND 3 EMISSIONS



Source: Santos

SANTOS' SCOPE 1 AND 2 EMISSIONS INTENSITY



Source: Santos

# ENERGY AND EQUITY MARKET DATA

For the week ended Apr 22, 2022

## EIF GLOBAL INDEX COMPONENTS\*

|                           | Close<br>Apr 22 | 1-Wk<br>Chg. | 1-Wk         | % Chg.<br>52-Wk | YTD           |
|---------------------------|-----------------|--------------|--------------|-----------------|---------------|
| Reliance Industries (bse) | 36.08           | +2.63        | +7.85        | +42.17          | +13.45        |
| Rosneft (mos)             | 5.31            | +0.32        | +6.34        | -26.53          | -34.04        |
| Saudi Aramco (sse)        | 11.47           | -0.00        | -0.01        | +21.46          | +20.22        |
| Sinopec-H (sehk)          | 0.51            | -0.00        | -0.28        | -1.35           | +9.21         |
| ONGC (bse)                | 2.28            | -0.01        | -0.32        | +65.71          | +19.05        |
| TotalEnergies (par)       | 49.51           | -0.94        | -1.87        | +11.69          | -2.41         |
| Shell (lse)               | 28.09           | -0.54        | -1.87        | +48.92          | +28.01        |
| Exxon Mobil (nyse)        | 85.13           | -2.70        | -3.07        | +54.03          | +39.12        |
| Ecopetrol (bvc)           | 0.87            | -0.03        | -3.19        | +40.67          | +31.63        |
| BP (lse)                  | 5.05            | -0.17        | -3.24        | +23.65          | +12.87        |
| Sinopec-S (sehk)          | 0.51            | -0.02        | -4.05        | -8.50           | -22.91        |
| PetroChina-H (sehk)       | 0.50            | -0.02        | -4.19        | +42.17          | +11.96        |
| Suncor (tse)              | 32.34           | -1.42        | -4.21        | +60.77          | +29.08        |
| Petrobras-4 (spse)        | 6.38            | -0.28        | -4.25        | +68.04          | +36.08        |
| Eni (mise)                | 14.66           | -0.69        | -4.47        | +19.98          | +5.52         |
| CNOOC (sehk)              | 1.40            | -0.07        | -4.87        | +32.83          | +36.11        |
| Petrobras-3 (spse)        | 6.96            | -0.44        | -5.92        | +93.50          | +36.73        |
| Chevron (nyse)            | 160.95          | -10.64       | -6.20        | +59.44          | +37.15        |
| Equinor (osl)             | 36.55           | -2.43        | -6.24        | +86.10          | +36.44        |
| PetroChina-S (sehk)       | 0.81            | -0.06        | -6.61        | +26.42          | +5.07         |
| Lukoil (mos)              | 51.13           | -11.41       | -18.24       | -36.18          | -41.98        |
| <b>EIF Global Index</b>   | <b>348.04</b>   | <b>-4.86</b> | <b>-1.38</b> | <b>+28.87</b>   | <b>+19.35</b> |

\*Converted US\$/share.

## INDEXES

| Equity Indexes          | Close<br>Apr 22 | 1-Wk<br>Chg. | 1-Wk  | % Chg.<br>52-Wk | YTD    |
|-------------------------|-----------------|--------------|-------|-----------------|--------|
| DJIA                    | 33,811.40       | -639.83      | -1.86 | -0.01           | -6.95  |
| S&P 500                 | 4,271.78        | -120.81      | -2.75 | +3.31           | -10.37 |
| FTSE 100                | 7,521.68        | -94.70       | -1.24 | +8.41           | +1.86  |
| FTSE All-World          | 803.29          | -20.84       | -2.53 | -2.27           | -10.55 |
| EIF Global              | 348.04          | -4.86        | -1.38 | +28.87          | +19.35 |
| S&P Global Oil          | 1,747.97        | -61.33       | -3.39 | +32.24          | +12.61 |
| FT Oil, Gas & Coal      | 7,405.48        | -49.42       | -0.66 | +51.71          | +29.28 |
| TSE Oil & Gas           | 2,964.87        | -81.81       | -2.69 | +56.84          | +30.13 |
| <b>Emerging Markets</b> |                 |              |       |                 |        |
| Hang Seng Energy (HK)   | 21,148.71       | -1072.10     | -4.82 | +40.74          | +25.84 |
| BSE Oil & Gas (India)   | 20,207.02       | +297.37      | +1.49 | +39.26          | +15.42 |
| RTS Oil & Gas (Russia)  | +149.77         | -2.12        | -1.40 | -28.95          | -37.03 |

## COMMODITY PRICES

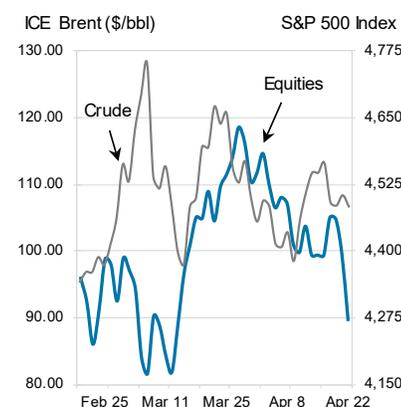
|                     | Close<br>Apr 22 | 1-Wk<br>Chg. | 1-Wk   | % Chg.<br>52-Wk | YTD    |
|---------------------|-----------------|--------------|--------|-----------------|--------|
| Dated Brent         | 104.84          | -5.99        | -5.40  | +60.31          | +35.56 |
| Brent 1st ICE       | 106.65          | -5.05        | -4.52  | +63.07          | +37.12 |
| WTI 1st (Nymex)     | 102.07          | -4.88        | -4.56  | +66.16          | +35.71 |
| Oman 1st (DME)      | 104.79          | -3.83        | -3.53  | +65.81          | +36.64 |
| RBOB (Nymex)        | 3.31            | -0.08        | -2.26  | +67.37          | +48.31 |
| Heating Oil (Nymex) | 3.94            | +0.08        | +2.17  | +111.66         | +69.03 |
| Gas Oil (ICE)       | 1,118.75        | -1.00        | -0.09  | +114.63         | +67.73 |
| Henry Hub (Nymex)   | 6.53            | -0.77        | -10.49 | +137.69         | +75.17 |
| Henry Hub (Cash)    | 6.59            | -0.35        | -5.05  | +142.27         | +72.20 |
| UK NBP (Cash)       | 135.03          | +25.03       | +22.75 | +138.99         | +3.87  |

## SHARE PRICES IN LOCAL CURRENCY†

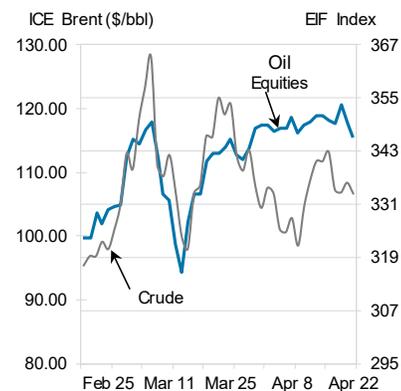
|                                | Close<br>Apr 22 | 1-Wk<br>Chg. | 1-Wk   | % Chg.<br>52-Wk | YTD     |
|--------------------------------|-----------------|--------------|--------|-----------------|---------|
| <b>NOCs</b>                    |                 |              |        |                 |         |
| CNOOC (sehk)                   | 11.00           | -0.56        | -4.84  | +34.31          | +36.99  |
| Petrobras-4 (spse)             | 30.56           | -0.71        | -2.27  | +47.94          | +17.11  |
| PetroChina-H (sehk)            | 3.91            | -0.17        | -4.17  | +43.75          | +12.68  |
| Equinor (osl)                  | 327.50          | -15.40       | -4.49  | +100.77         | +38.83  |
| Ecopetrol (bvc)                | 3,355.00        | +9.00        | +0.27  | +48.32          | +24.72  |
| Sinopec-H (sehk)               | 3.99            | -0.01        | -0.25  | -0.25           | +9.92   |
| PTTEP (set)                    | 146.00          | +2.50        | +1.74  | +27.51          | +23.73  |
| Rosneft (mos)                  | 397.35          | +6.85        | +1.75  | -26.86          | -33.76  |
| Saudi Aramco (sse)             | 43.00           | 0.00         | 0.00   | +21.47          | +20.11  |
| Gazprom (micex)                | 208.00          | -16.00       | -7.14  | -10.20          | -39.41  |
| <b>Majors</b>                  |                 |              |        |                 |         |
| Exxon Mobil (nyse)             | 85.13           | -2.70        | -3.07  | +54.03          | +39.12  |
| Chevron (nyse)                 | 160.95          | -10.64       | -6.20  | +59.44          | +37.15  |
| BP (lse)                       | 393.15          | -6.30        | -1.58  | +33.27          | +18.96  |
| Shell (lse)                    | 2,188.00        | -4.00        | -0.18  | +60.50          | +34.91  |
| TotalEnergies (par)            | 45.87           | -0.82        | -1.76  | +24.33          | +2.78   |
| <b>Regional Integrated</b>     |                 |              |        |                 |         |
| Repsol (bme)                   | 13.20           | -0.57        | -4.18  | +30.85          | +26.44  |
| Eni (mise)                     | 13.58           | -0.62        | -4.37  | +33.56          | +11.13  |
| OMV (vse)                      | 46.10           | +1.24        | +2.76  | +9.53           | -7.71   |
| Lukoil (mos)                   | 3,828.00        | -1065.00     | -21.77 | -36.46          | -41.74  |
| <b>Global Independents</b>     |                 |              |        |                 |         |
| Occidental (nyse)              | 56.62           | -2.72        | -4.58  | +134.94         | +95.31  |
| EOG Resources (nyse)           | 116.12          | -6.82        | -5.55  | +76.05          | +31.85  |
| Hess (nyse)                    | 106.45          | -8.27        | -7.21  | +58.83          | +43.79  |
| ConocoPhillips (nyse)          | 96.01           | -5.36        | -5.29  | +94.12          | +33.01  |
| Apache (nyse)                  | 40.71           | -2.97        | -6.80  | +131.18         | +51.39  |
| Woodside Petroleum (asx)       | 32.07           | -0.32        | -0.99  | +40.29          | +46.24  |
| BHP (asx)                      | 48.49           | -4.01        | -7.64  | +1.76           | +16.84  |
| Kosmos Energy (nyse)           | 6.64            | -0.99        | -12.98 | +157.36         | +91.91  |
| <b>Refiners</b>                |                 |              |        |                 |         |
| PBF Energy (nyse)              | 26.64           | -0.68        | -2.49  | +111.60         | +105.40 |
| Marathon Petroleum (nyse)      | 87.08           | -0.12        | -0.14  | +67.27          | +36.08  |
| Valero (nyse)                  | 103.05          | -1.81        | -1.73  | +50.48          | +37.20  |
| Reliance Industries (bse)      | 2,758.45        | +206.00      | +8.07  | +44.72          | +16.48  |
| Phillips66 (nyse)              | 83.62           | +0.77        | +0.93  | +11.57          | +15.40  |
| HollyFrontier (nyse)           | 37.93           | -0.22        | -0.58  | +13.97          | +15.71  |
| Eneos (tyo)                    | 455.20          | +0.50        | +0.11  | -2.19           | +5.79   |
| <b>Oil-Field Services, EPC</b> |                 |              |        |                 |         |
| Petrofac (lse)                 | 131.20          | +9.20        | +7.54  | +15.19          | +13.79  |
| Worley (asx)                   | 14.33           | +0.39        | +2.80  | +39.80          | +34.81  |
| Halliburton (nyse)             | 37.69           | -3.07        | -7.53  | +96.10          | +64.80  |
| Baker Hughes (nyse)            | 32.23           | -5.06        | -13.57 | +62.61          | +34.01  |
| Schlumberger (nyse)            | 41.65           | -1.60        | -3.70  | +64.95          | +39.07  |
| TechnipFMC (nyse)              | 8.19            | +0.19        | +2.37  | +18.18          | +38.34  |
| Fluor (nyse)                   | 26.75           | -3.25        | -10.83 | +24.53          | +7.99   |
| Transocean (nyse)              | 4.00            | -0.58        | -12.66 | +24.61          | +44.93  |
| Wood Group (lse)               | 192.25          | +7.30        | +3.95  | -27.07          | +0.60   |
| Saipem (mise)                  | 1.17            | +0.08        | +6.88  | -47.76          | -36.86  |
| <b>Midstream</b>               |                 |              |        |                 |         |
| TC Energy (tsx)                | 72.50           | +0.05        | +0.07  | +22.59          | +23.24  |
| Plains All-American (nyse)     | 11.10           | -0.06        | -0.54  | +22.52          | +18.84  |
| Enterprise Products (nyse)     | 26.67           | -0.07        | -0.26  | +15.91          | +21.45  |
| Williams (nyse)                | 35.10           | -0.42        | -1.18  | +51.03          | +34.79  |
| Kinder Morgan (nyse)           | 19.15           | -0.22        | -1.14  | +17.05          | +20.74  |
| Enbridge (tsx)                 | 57.07           | -1.20        | -2.06  | +23.26          | +15.50  |

\*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

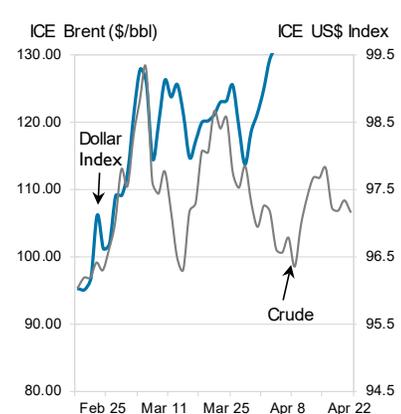
## CRUDE VS. EQUITIES



## 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.