RYSTAD ENERGY

UPSTREAM REPORT

MAY 2022

OIL & GAS INVESTMENTS AND KEY CAPITAL ALLOCATION STRATEGIES IN THE E&P SECTOR

Contents

Rystad Energy

We are a global independent energy research and business intelligence company, providing data, analytics and advisory services to clients exposed to the energy industry.

Shifting capital allocation strategies in E&P sector amid oil price upcycle

Russia's invasion of Ukraine and the recent spike in oil prices has focused global attention on oil and gas supplies and investments from industry players in fossil fuels.

As many oil and gas companies have started to reshape their portfolios and shift priorities to diversification, resilience and decarbonization, only a few are positioned to react swiftly to the recent oil price surge to provide much-needed additional production. Even shale producers may not be able to produce a short-cycle response due to potential supply chain bottlenecks.

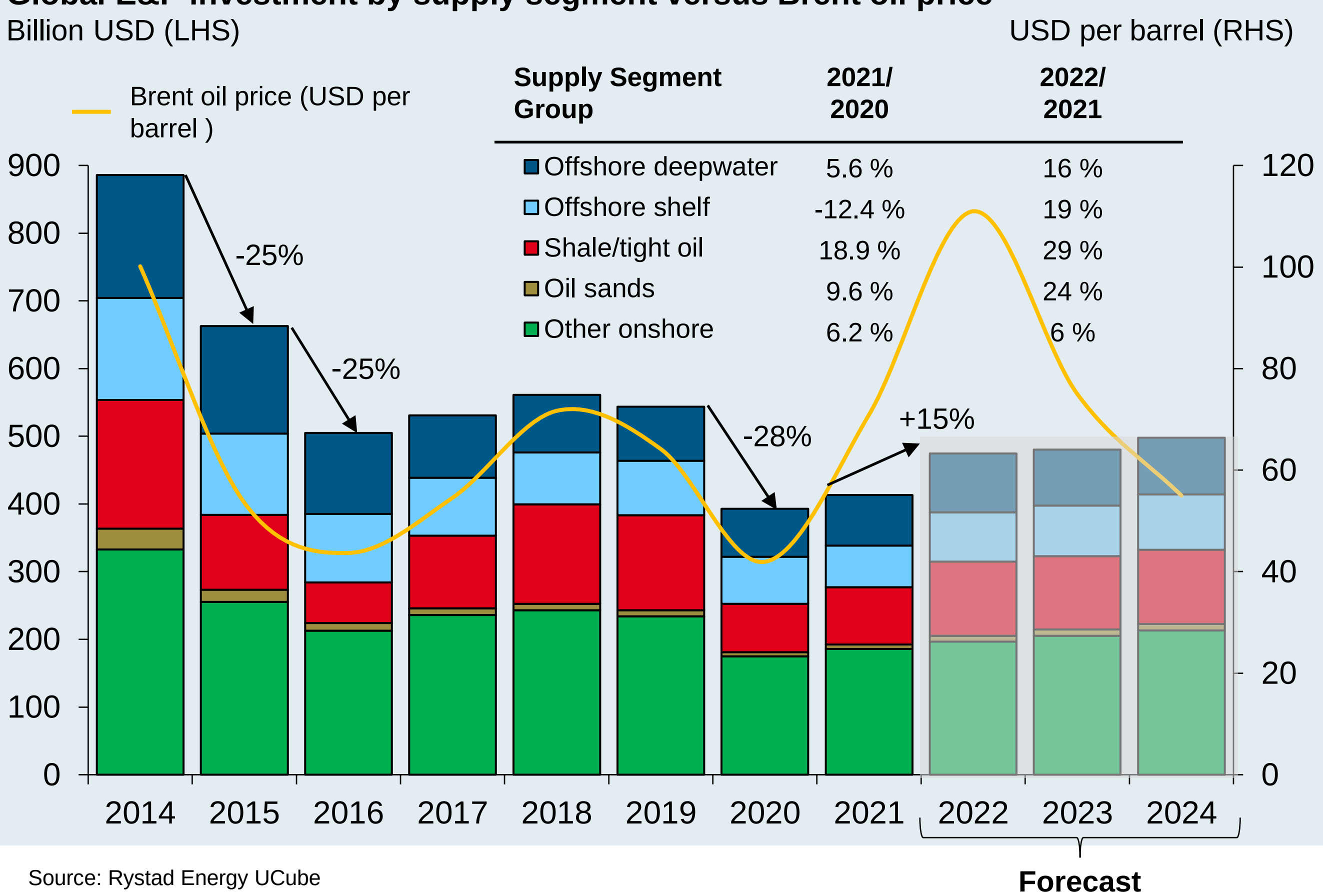
New oil price cycles historically affect investment levels, with oil and gas companies also forced to adopt new strategies and reset priorities to remain competitive and attractive for investment.

The current upcycle – which has seen Brent crude surge past $100 per barrel following Russia's invasion of Ukraine in late February – is remarkable in that, despite the oil price surge and robust cash flow generation, exploration and production (E&P) investment is only showing a modest uptick, with little sign of a recovery to levels seen before the Covid-19 pandemic kicked off in early 2020.

This indicates that there has been a fundamental change in how oil and gas companies are approaching the investment allocation process.

In this whitepaper, we look at how industry players are positioned to react to the current oil price upcycle by unpacking substantial additional investments in the upstream sector.

Global E&P investment by supply segment versus Brent oil price



Source: Rystad Energy UCube

E&P companies become increasingly focused on shareholder returns

One of the key reasons for the reduced investment sensitivity to oil price movements is a shift in cash flow distribution among industry players. Amid the downturn caused by the drop in demand due to the Covid-19 pandemic, returning cash to shareholders became a top priority and companies reshaped their business models accordingly.

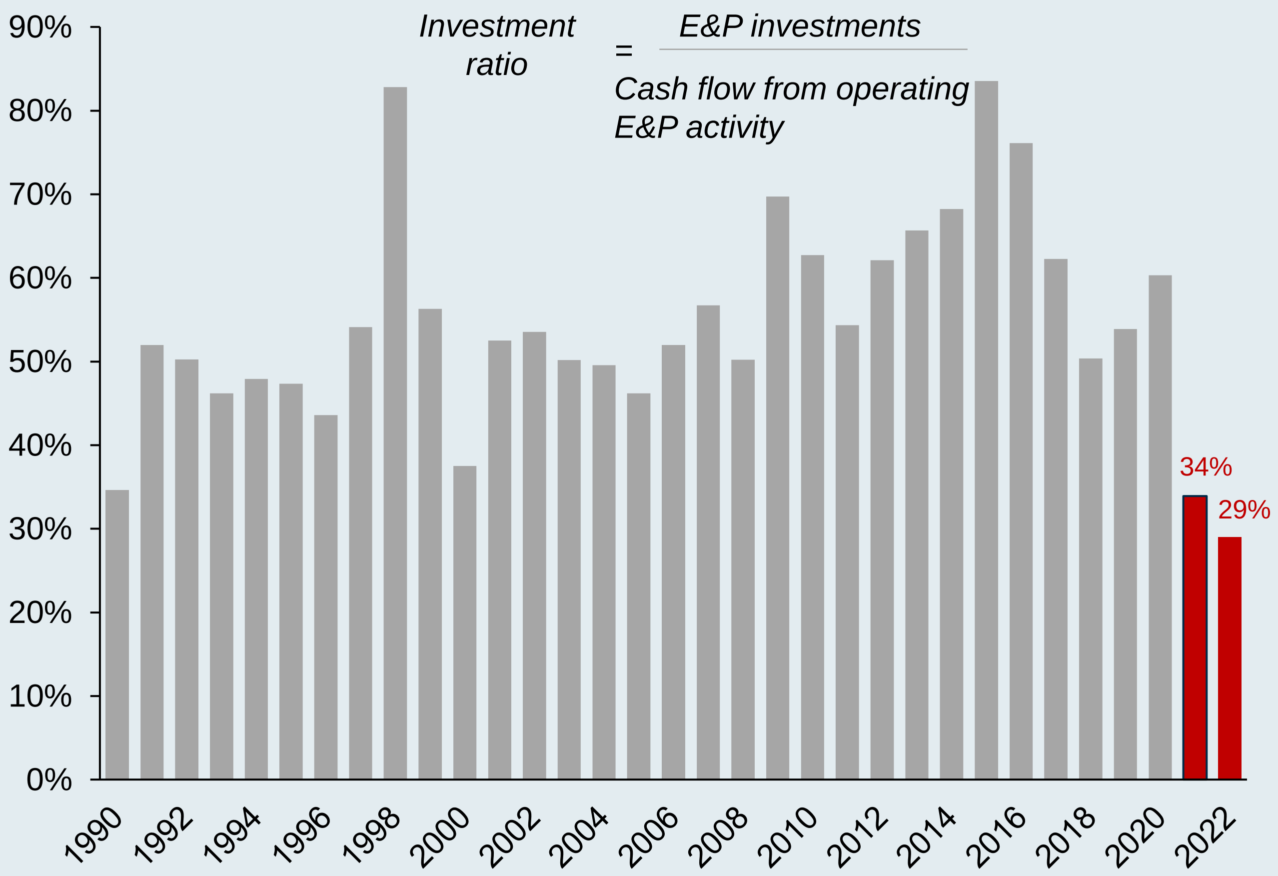
Therefore, despite the oil price recovery last year and record high cash flows, the investment ratio dropped from 60% in 2020 to around 34% last year.

It means that only 34% of total cash flow from upstream operations was reinvested to maintain or boost upstream operations, which is the lowest level since 1990.

Some companies, such as US tight oil producers, that in the past have not been the best in returning money to shareholders, became more focused on generating profit, paying out dividends and reducing debt.

For this year, based on Rystad Energy UCube projections, we may see an even lower investment ratio of as low as 29%.

Investment ratio in E&P sector



*Excluding cash from financing activity
Source: Rystad Energy UCube

Majors lead by example in shifting operational strategies

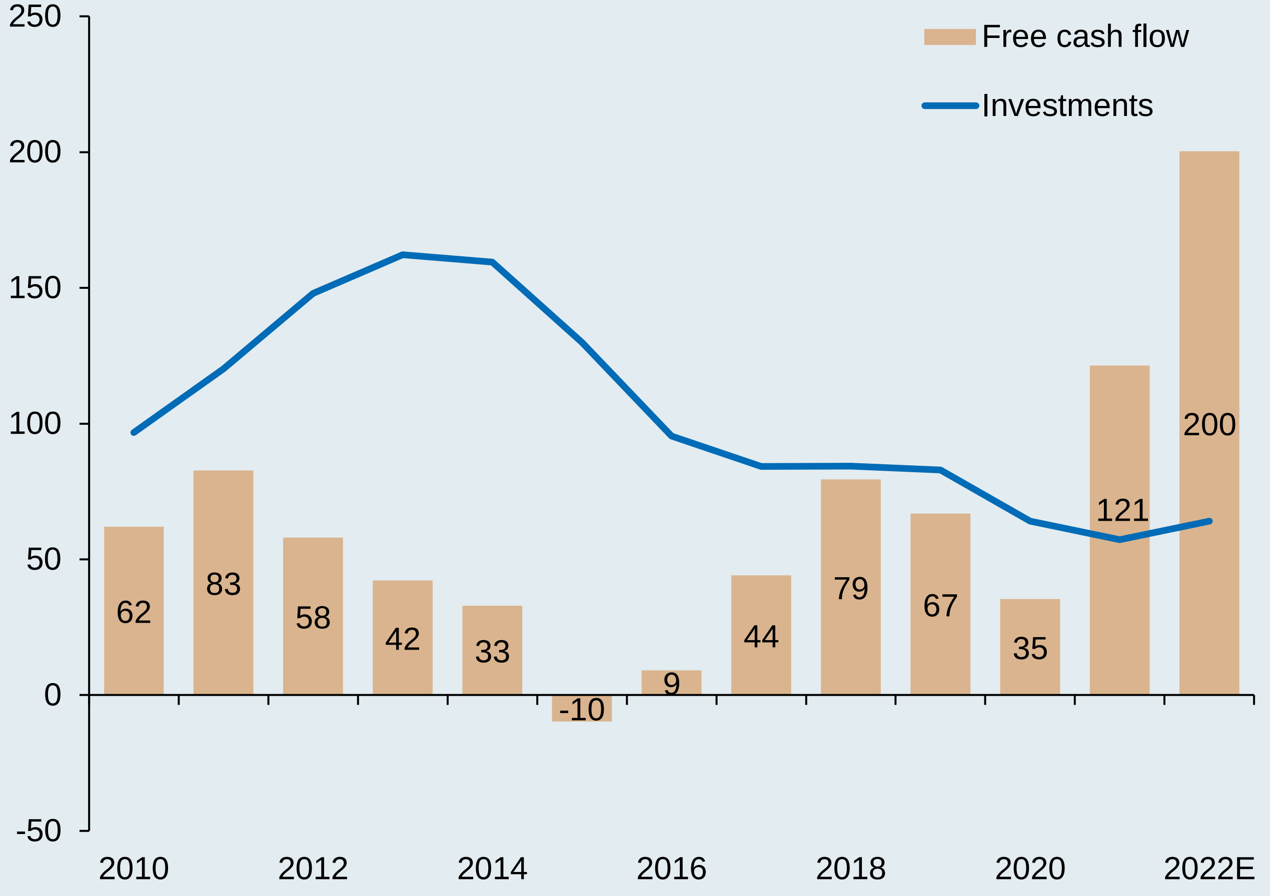
Even majors that historically have been known as lavish spenders have reined in their appetites of late. Free cash flow from upstream operations among the majors increased to $121 billion last year, a vast rise from the $35 billion recorded in 2020. Increased oil and gas prices were among the main drivers of this surge.

All of the majors experienced a substantial recovery in upstream profitability last year, with US giant ExxonMobil and Anglo-Dutch major Shell seeing the largest increase in absolute terms, at $20 billion and $18 billion, respectively.

US player Chevron was not far behind, with estimated growth of $16 billion, followed by UK major BP and Norwegian state-controlled player Equinor, up by $11 billion and $8 billion, respectively.

Upstream investment among the majors has remained conservative over the past two years and huge levels of profit did not translate into any increased investment. In total, the peer group invested $57 billion last year in the upstream sector, $7 billion below 2020.

Historical investments and free cash flow from upstream activity for the majors
Billion USD



*Includes: BP, Chevron, Equinor, ExxonMobil, Shell and TotalEnergies FCF includes all cash flows from upstream activity. Does not include cash related to financing.
Source: Rystad Energy UCube

$120 billion was spent last year on debt reduction and returns to investors

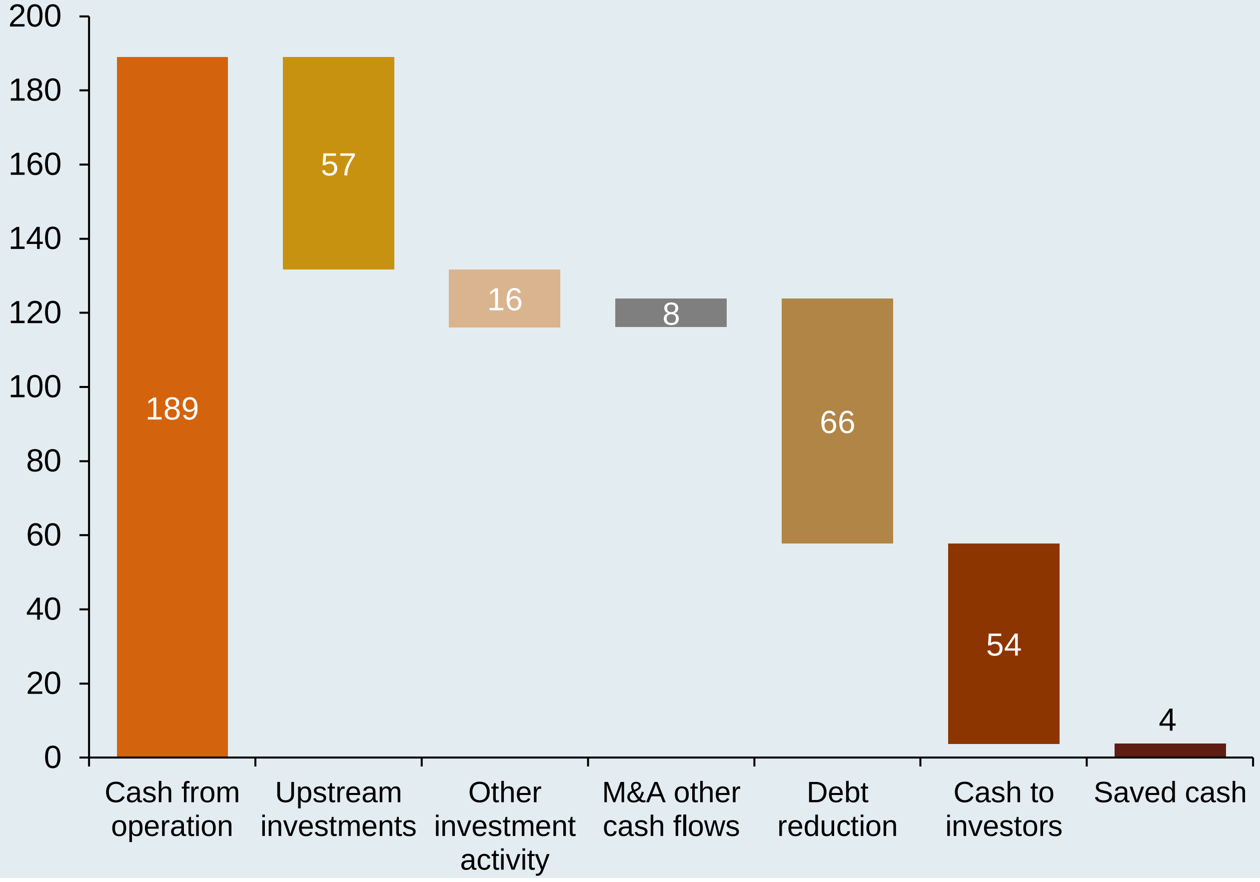
For all business segments, total cash from operations among the majors was $189 billion last year, judging by cash flow statements from the peers. Total investments were $73 billion, of which Rystad Energy estimates $57 billion was related to upstream.

The majors also raised cash last year through the sale of assets. The cash raised, combined with other cash from investment activities, amounted to $8 billion for the peer group.

As a result, the majors were left with positive cash flow of almost $125 billion last year before financing. For context, this is almost quadruple the $34 billion in positive cash flow recorded by the majors in 2020.

So how did the majors use their cash surplus last year? They spent $66 billion on reducing debt, while $54 billion was paid out to investors either through dividends or stock buybacks. This left $4 billion in their bank accounts, increasing the companies' collective cash balance.

Breakdown of the majors' 2021 cash flow
Billion USD



*Includes: BP, Chevron, Equinor, ExxonMobil, Shell and TotalEnergies
Source: Company reported values, Rystad Energy UCube

Majors moved from borrowing to paying back

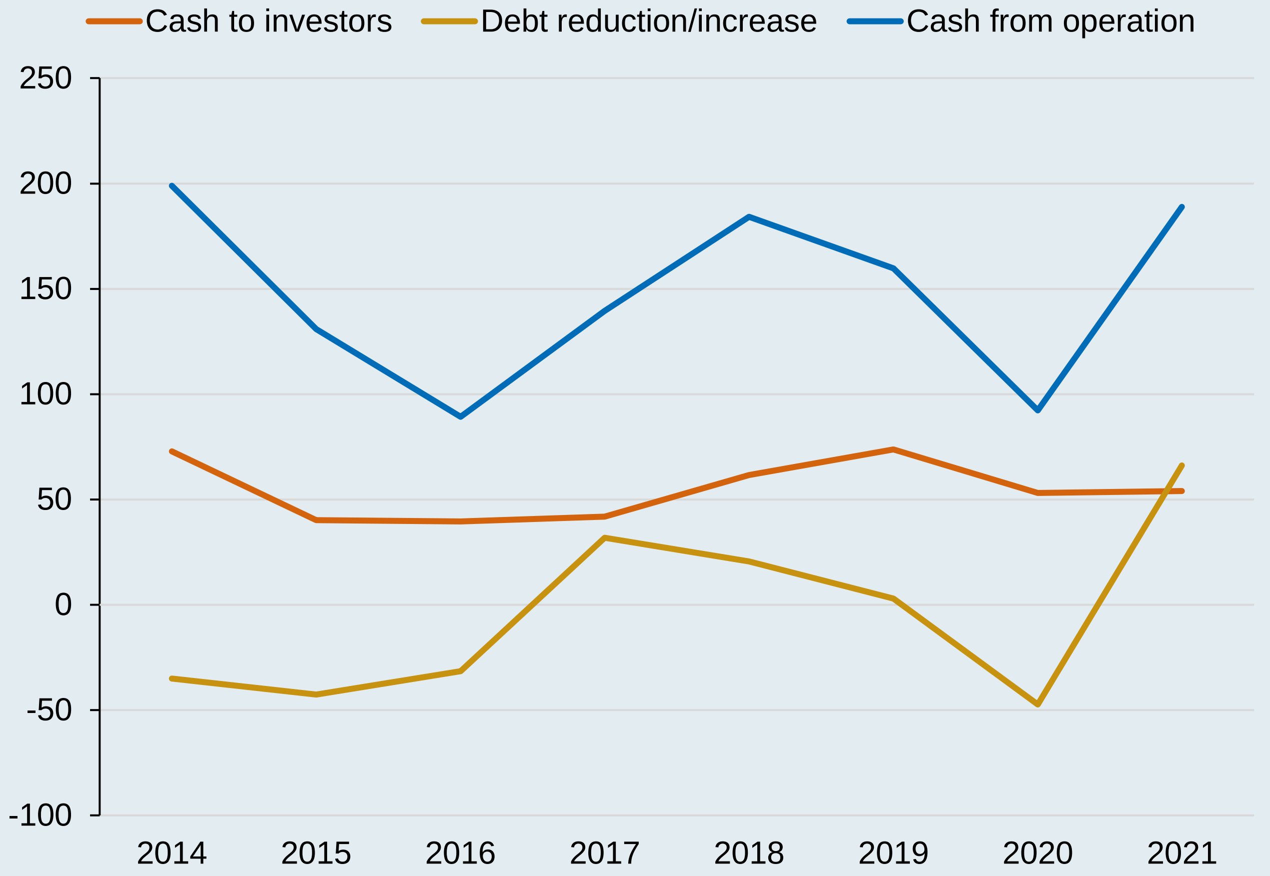
Development in reported cash flow items for the majors indicates $66 billion spent on reducing debt in 2021, which stands out as one of the largest levels of debt reduction ever seen across this peer group.

A shift in the companies' operational environment can be seen from 2020 to 2021, when they moved from borrowing $45 billion to paying back $66 billion.

The return of cash to investors also improved only marginally last year, rising to $54 billion from $53 billion in 2020, which indicates that the majors prioritized paying down debt.

With strong balance sheets, modest investment levels and continued strong commodity prices, 2022 could be a year during which investors harvest more of the majors' significant profits.

Development of reported key cash flow items for the majors
Billion USD



*Includes: BP, Chevron, Equinor, ExxonMobil, Shell and TotalEnergies
Source: Company reported values

While strategies vary, some aim to spend more on low-carbon solutions

Another two structural changes in how oil and gas companies currently approach investment allocation are related to the stricter requirements for project sanctioning and investment relocation to low-carbon areas.

Even though these observations are based on the market situation before the Russia-Ukraine war began, we argue that these structural changes will remain at forefront of company decision making.

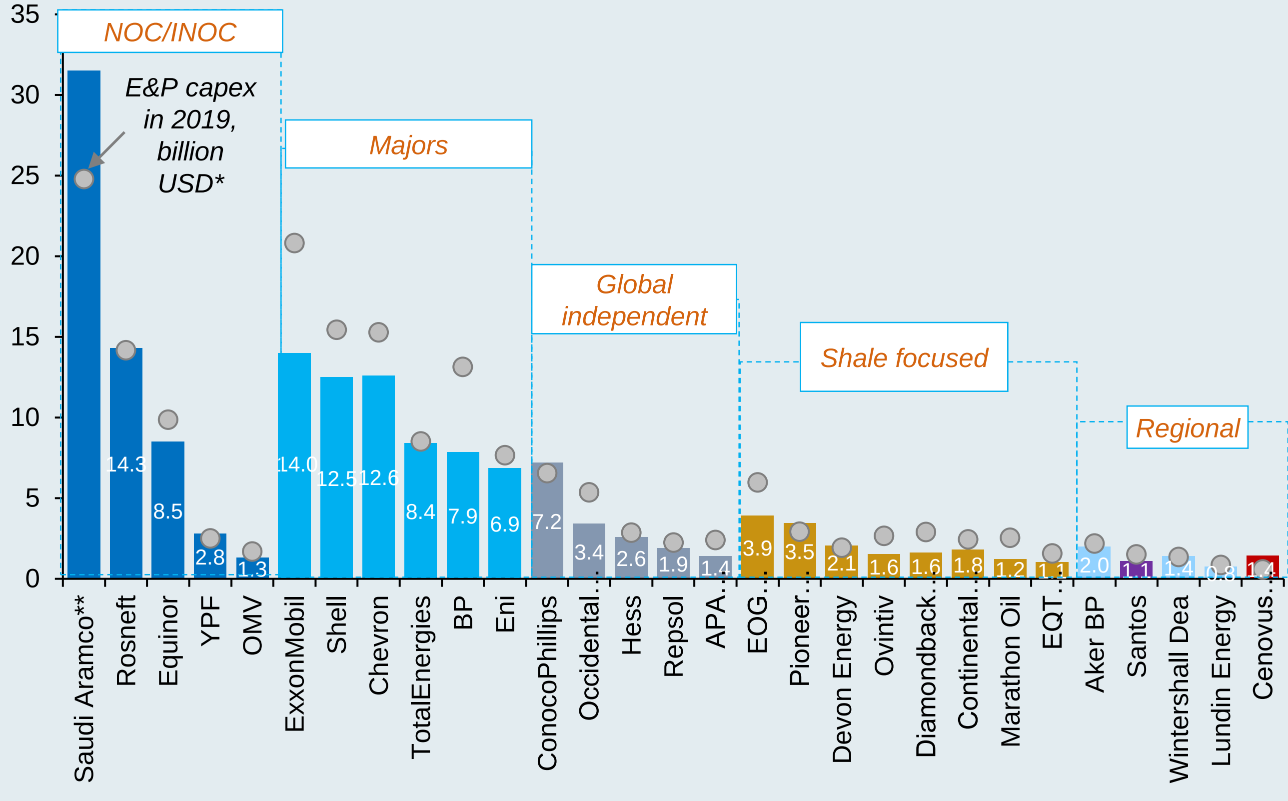
Some producers remain quite conservative in terms of their upstream investment guidance for 2022.

Meanwhile, others are ready to raise investments to pre-Covid levels or even higher.

Saudi Aramco has pledged to ramp-up capital allocation in 2022 as the company aims to increase crude production capacity and to pursue a gas expansion program.

Equinor, meanwhile, remains committed to its investments in renewable energy sources. From its total guided investments of $10 billion for this year, 15% will be allocated to renewable energy and low-carbon solutions.

Selected companies' 2022 reported E&P capex guidance vs 2019
USD billion



*Capex guidance is based on reported historical company. Values represent what has been reported and not adjusted for M&A. E&P share of investments was estimated where split was not provided. 2019 capex is based on company's portfolio at that time.
Source: Company reported values; Rystad Energy UCube

NOCs and INOCs remain the only segment to notably increase E&P capex

Comparing 2022 investment forecasts and 2019 investment levels for different company segments, we see that majors, shale players and global independent players have reduced their combined capital expenditure, while combined investments for other segments is set to increase this year compared to pre-Covid levels.

This a reflection of the differences that exist with regard to how companies within various segments and markets approach investment allocation and the energy transition to cleaner fuel sources.

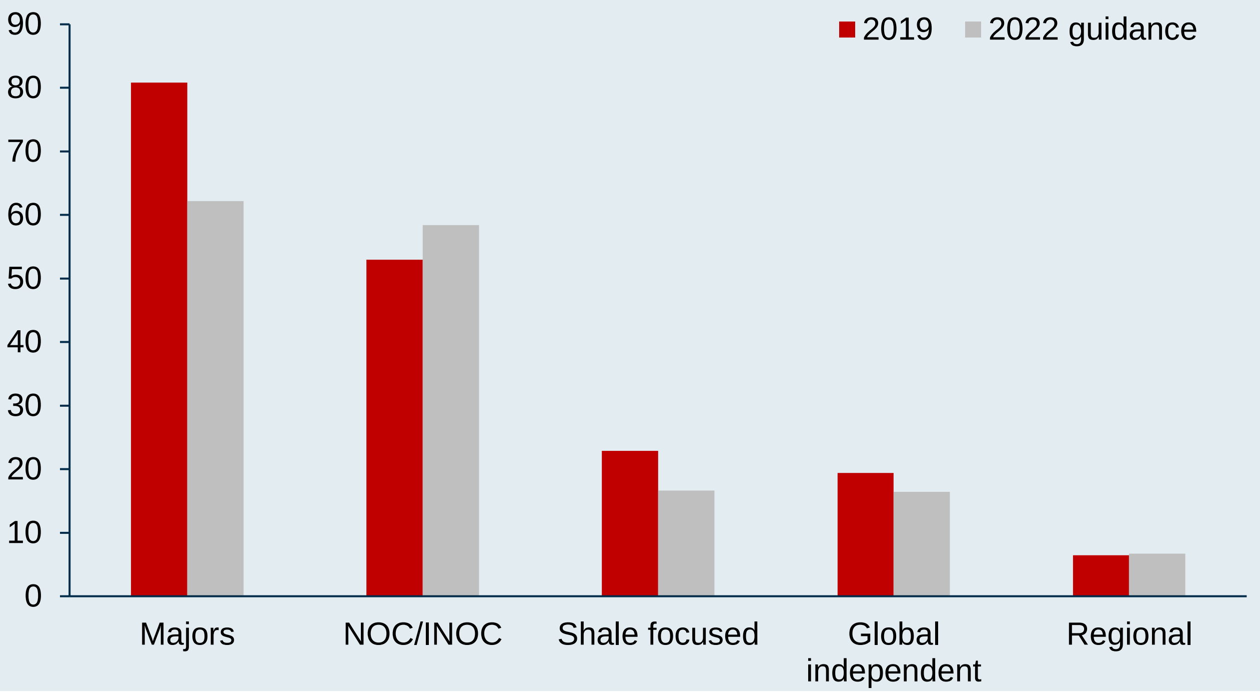
Over the past two years, oil majors have completely revised their strategies and started to focus more on value over volume. European majors shifted their strategies toward renewable energy and low-carbon sources as they looked to transform into energy companies.

US majors remain more loyal to their core oil and gas businesses and see their way forward weighted against resilient and low-carbon portfolios, with subsequent allocation of budgets to adjacent areas that will be beneficial for decarbonization purposes. These factors collectively explain why majors are not going to raise upstream investments to 2019 level.

Shale players became more focused on returning money to shareholders and became more disciplined with their capital allocation.

The growth in investments for NOCs and INOCs is driven by a huge surge in investment guidance provided by Saudi Aramco, which could see upstream investments increase by close to 50% in in 2022 compared to 2021.

Upstream capex reduction by company category
Billion USD



*Selection of companies included in every category corresponds with the previous chart
Source: Company reported values; Rystad Energy UCube

ExxonMobil to see among the largest increase in capex in 2022 vs 2021

When comparing capex guidance for 2022 with actual spending in 2021, we see which companies may face the largest year-on-year growth.

Saudi Aramco, ExxonMobil and Chevron have guided the largest absolute increase in investments.

For ExxonMobil, the core US shale patch of the Permian Basin is one of the core areas for investment growth. The pace of the development in this area remains flexible, due to the short-cycle nature of shale assets – it can be rapidly ramped up or down depending on market conditions.

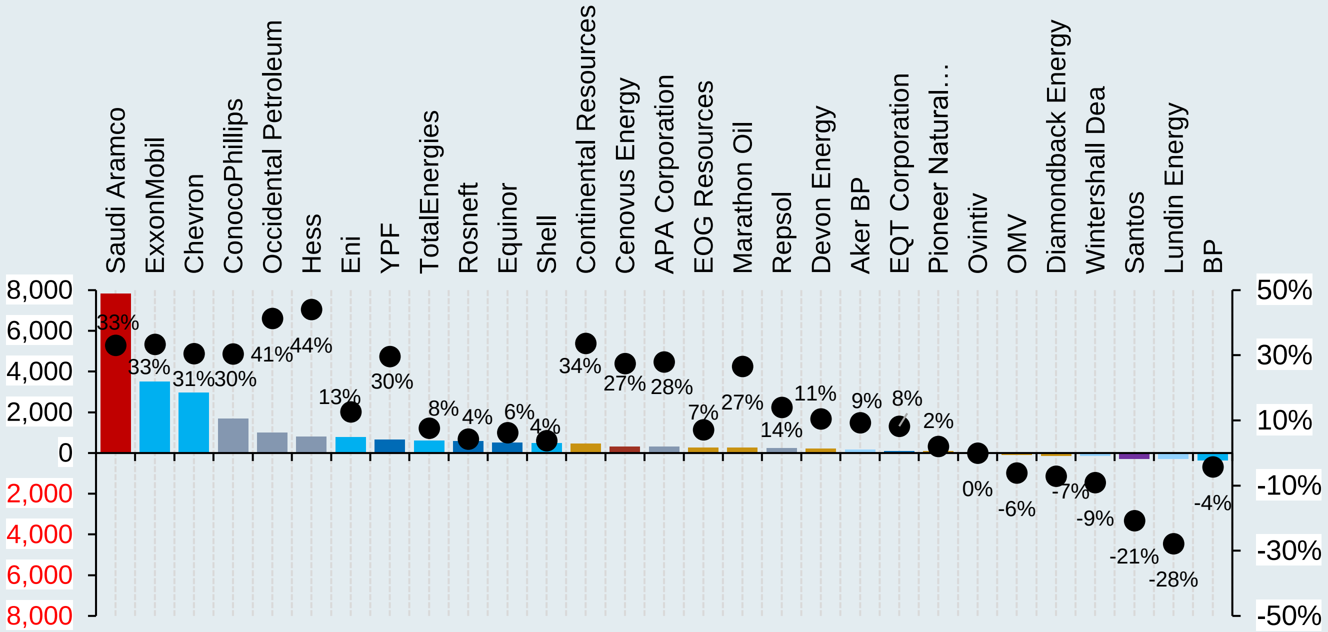
ExxonMobil estimates that average capex over the next six years will be about 50% above 2021, which is still significantly below the levels of 2019.

In relative terms, US independents Occidental Petroleum and Hess have guided the largest increase in capital expenditure of 41% and 44%, respectively.

For 2022, Hess has set an E&P budget of $2.6 billion, of which approximately 80% will be allocated to Guyana and the Bakken shale play in the US.

Selected companies' E&P capex year-on-year change*, 2021/2022

Billion USD (LHS) Percentage (RHS)



*Capex guidance is based on reported historical company. Values represent what has been reported and not adjusted for M&A. E&P share of investments was estimated where split was not provided.
Source: Company reported values; Rystad Energy UCube

Contact:

Tom Haanen
Commercial Lead Upstream Solutions
Phone: +44 (0) 7565 896 962
Email: tom.haanen@rystadenergy.com

AUTHOR

Espen Ellingsen
Partner and Head of Upstream Research

RYSTAD ENERGY

Rystad Energy is an independent energy consulting services and business intelligence data firm offering global databases, strategy advisory and research products for energy companies and suppliers, investors, investment banks, organizations, and governments. Rystad Energy's headquarters are located in Oslo, Norway.

Headquarters
Rystad Energy
Fjordalléen 16, 0250 Oslo, Norway

Americas +1 (281)-231-2600
EMEA +47 908 87 700
Asia Pacific +65 690 93 715

Email: support@rystadenergy.com