The Power of the Stakeholder: Oil Majors and Climate Transition Planning

As global investors increasingly align their investments with environmental, social, and governance (ESG) considerations, oil and gas majors are facing increasing pressure to demonstrate the ability to pivot their business models toward a low carbon future. Globally, oil and gas operations account for about 9% of greenhouse gas (GHG) emissions and the fuel the industry produces accounts for another 33%.[1] Importantly, although renewable energy is quickly scaling up and prices continue to drop, the fossil fuel industry will be a key component of the global low carbon transition as clean energy technology continues to develop. Key stakeholders including global investors, regulators, and consumers, are pressing major oil and gas companies to disclose relevant metrics and set emissions reduction goals, invest in low carbon technologies, and make net-zero emissions pledges, among other sustainable initiatives.

In this report, Kroll Bond Rating Agency (KBRA) examines and contrasts sustainability moves by Royal Dutch Shell and BP, two of the largest European oil companies, against two of the largest in the U.S., Exxon Mobil and Chevron. Please refer to Appendix A for key definitions used throughout this report.

Trends in Environmental Regulation

Regulatory efforts to curb the effects of climate change have been highly divergent in the U.S. and the European Union (EU) over the past few years. While the new Biden administration has vowed to tackle climate change in the U.S., this pivot comes after the federal government rolled back key environmental regulations over the past four years. In contrast, the EU has been steadfast in its focus on climate change mitigation and has made achieving the goals of the Paris Agreement a cornerstone of regional economic policy. These divergent policy stances have also sent different signals to the market, including the oil and gas sector.

However, as noted in our recent research piece, Carbon Pricing and Its Potential Credit Impact, KBRA believes the Biden administration is likely to adopt certain climate mitigation regulations that may impact credit analysis of issuers across many sectors. President Biden has already signed several executive orders and set ambitious goals to reach a net-zero emissions economy by 2050. U.S. Secretary of the Treasury Janet Yellen has been outspoken in her support of carbon pricing as a tool to combat climate change.[2] One of President Biden's first executive orders updated the previous administration's carbon price estimate and set a social cost of carbon at $51 per tonne, a move that will have consequential effects since it will be used as an input in cost-benefit analyses to examine the potential impacts of new regulations and could inform a future carbon price.[3]

Climate Transition Planning

As the impacts of climate change grow more severe, initiatives aimed at reducing the emissions from GHGs have been increasingly embraced by countries around the world. The burning of fossil fuels releases carbon dioxide (CO_2) and other GHGs, like methane, into the atmosphere, which is causing the global temperature to rise and is driving changes in the earth's climate. CO_2 emissions make up the bulk of total GHG emissions—in the U.S., CO_2 emissions account for about 75% of total anthropogenic GHG emissions—and thus have been the focus of public efforts to combat climate change. Reducing methane emissions, which account for about 9.5% of total GHGs in the U.S., has also been a priority in climate mitigation as it has a larger negative effect on the atmosphere than CO_2—it is about 84x more potent. As global stakeholders engage companies in the oil and gas sector, reductions in CO_2 and methane have been the focus of discussion.

Although there are uncertainties around the likelihood and timing of environmental regulation in the U.S., KBRA believes it can be a credit positive when global issuers demonstrate awareness of, and planning for, potential regulatory actions like a carbon tax that may impact operations. In the oil and gas sector, preparing for regulatory changes as well as potential shifts in supply and demand are critical for companies, particularly oil majors, whose core product offering is, by nature, carbon-intensive. Issuers with robust strategies in place, based on different scenarios of climate-focused regulation and changes in demand, will likely be better positioned to insulate or protect their revenue generation streams from a changing policy environment.

[1] https://www.mckinsey.com/industries/oil-and-gas/our-insights/the-future-is-now-how-oil-and-gas-companies-can-decarbonize
[2] https://www.finance.senate.gov/imo/media/doc/Dr%20Janet%20Yellen%20Senate%20Finance%20Committee%20QFRs%2001%2021%202021.pdf
[3] https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf

Figure 1 and the following sections describe in greater detail the climate transition approach of the four selected oil majors.

Figure 1: Summary of Oil Majors' Climate Transition Planning				
Goal	**BP**	**Shell**	**Exxon**	**Chevron**
Net-Zero Ambition	Yes	Yes	No	No
Scope 3 Emission Targets	Yes[4]	No[5]	No	No
Production Decline Targets	Yes	Yes[6]	No	No
Exploration Phase Out	Yes[7]	No	No	No
Short-/Medium-/Long-Term Carbon Intensity Goals	Yes	Yes	Short-/Medium-Term Only[8]	Short-/Medium-Term Only[9]
Short-/Medium-/Long-Term Methane Intensity Goals	Yes	Yes	Short-/Medium-Term Only	Short-/Medium-Term Only
Climate Goals Linked to Pay	Yes	Yes	No[10]	Yes

Sources: BP, Shell, Exxon, Chevron

BP

In early 2020, BP announced plans to reach net-zero emissions by 2050. Later that year, the company presented a plan that includes reduction initiatives aimed at Scope 1, 2, and 3 emissions. To achieve its goal, the U.K.-based company has pledged a 30%-35% emissions reduction from its operations by 2030, a target that includes Scope 3 emissions. It also plans to reduce the carbon intensity of its product offerings by 15% by 2030 and 50% by 2050 or sooner.[11] The oil giant also plans to install methane measurement systems at all of its processing sites by 2023, with the goal of publishing better quality methane intensity data with a target of under 0.2% by 2025 and a 50% reduction over the longer term.[12] In a show of its commitment to the plan, BP has linked the compensation plans of about 37,000 employees to its reduction targets.[13]

Another focus area for the company is to increase its investments in low carbon technologies including renewable energy, bioenergy, hydrogen fuel, and electric vehicle (EV) infrastructure. BP has pledged to increase its investments in clean technology from its current level, approximately $500 million per year, to between $3 billion and $4 billion by 2025 and then up to $5 billion annually after 2025. BP will focus on what it calls "resilient hydrocarbons," while steadily decreasing oil production with a 40% reduction goal by 2030. The company has also vowed to stop exploration efforts in new countries, and slowly phase out existing exploration plans—at its peak a few years ago, BP had an exploration team of about 700 employees, which now is under 100.[14]

But while the company aims to have net-zero emissions by 2050, BP has notably excluded Rosneft, the Russian oil company in which BP owns a 19.75% stake, from its climate transition plans. Raising the concerns of environmentalists, the state-backed Russian oil company has vast exploration and development plans for the Arctic region, not only for oil production, but also for the needed infrastructure like airports, highways, and ports to distribute oil. Although Rosneft and BP signed a strategic commitment agreement focused on climate change mitigation in February 2021, the move to exclude Rosneft from some of its climate transition planning may call BP's focus on sustainability into question.

To finance its energy transition, BP plans to sell $25 billion in assets. For example, in 2019 BP sold its interests in Alaskan upstream assets to Hillcorp, a privately held U.S. oil exploration and production company. These assets represented less than 10% of its oil production but produced 6.6 million tonnes of CO_2 equivalent (t/CO_2e) in 2019. While this was a critical

[4] BP's plan to reduce absolute GHG emissions includes Scope 3 emissions. However, Russian oil company Rosneft, in which BP owns a 19.75% stake, is notably absent from this goal.
[5] Shell has committed to becoming a net-zero company by 2050, which includes Scope 3 emissions. But the company does not have specific targets for absolute reduction and instead relies on reductions in intensity.
[6] Shell "expects" its production to decline between 1% and 2% annually until 2030 but has not committed to a concrete target.
[7] BP will only stop exploration in new countries.
[8] Exxon has committed to reducing the GHG intensity of its upstream activities by 15%-20% by 2025.
[9] Chevron has committed to reducing upstream GHG intensity by 35% by 2028.
[10] Exxon integrates effective risk management into executive compensation plans, which includes reducing climate risk exposure, but the company has not explicitly linked specific reduction goals to pay.
[11] https://www.bp.com/en/global/corporate/news-and-insights/press-releases/from-international-oil-company-to-integrated-energy-company-bp-sets-out-strategy-for-decade-of-delivery-towards-net-zero-ambition.html
[12] https://www.bp.com/en/global/corporate/sustainability/getting-to-net-zero/ghg-emissions/methane-measurement.html
[13] https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/investors/bp-annual-report-and-form-20f-2019.pdf
[14] https://www.reuters.com/article/us-oil-exploration-bp-insight/bps-oil-exploration-team-swept-aside-in-climate-revolution-idUSKBN29U00C

step for BP to meet its long-term carbon emissions target, there is debate around the ethics of selling off oil assets. And while BP has reduced its own carbon footprint, it has not actually reduced or removed these emissions from the global carbon footprint. This dynamic is a catch 22—BP needs to sell assets in order to become more sustainable and finance its climate transition. But those assets can then move into the hands of private companies that may have less incentive to disclose and reduce emissions and plan for the climate transition.

Notably, this is not the first time that BP has attempted to pivot toward lower carbon operations. In the early 2000s, BP rebranded itself as a green company, shifting from "British Petroleum" to "Beyond Petroleum." However, under increasing financial pressure after a large oil spill in Alaska in 2006 and the infamous Deepwater Horizon spill in 2010 (one of the largest oil spills in history), BP sold off much of its renewable assets to pay for fines and cleanup efforts, largely abandoning its original low carbon rebrand.

Royal Dutch Shell

In mid-2020, Shell announced plans to become a net-zero emissions company by 2050, including Scope 1, 2, and 3 emissions. The company, based in the Netherlands, said that its oil production peaked in 2019 and it expects to see a decline in production of between 1% and 2% annually until 2030. Shell also expects that its natural gas production will rise over the next few years, reaching 55% of the company's portfolio by 2030 or sooner.

To achieve net-zero operations, Shell plans to invest in carbon capture and storage (CCS) technologies to offset about 25 million t/CO_2e by 2035. Further, the company aims to offset about 120 million t/CO_2e by 2030 with investments in nature-based solutions and other measures. Shell will continue investing in clean energy technology, particularly in renewables, bio and hydrogen fuels, and EV infrastructure, with plans to invest up to $2 billion annually. Shell will also cut its methane intensity to under 0.2% by 2025. The company has also detailed short- and long-term reduction targets in its carbon intensity: 2%-3% by 2021, before rising to 3%-4% (2022), 6%-8% (2023), 20% (2030), 45% (2035), and 100% by 2050.[15]

Like BP, Shell has linked its carbon intensity targets to employee pay, with about 16,500 employee compensation plans tied to the goals.

Exxon Mobil

Compared to their European peers, major U.S. oil companies have been much slower to adopt climate transition planning into their business models. Even as late as October 2020, Exxon CEO Darren Woods was downplaying the notion that climate change could have a serious impact on the company.[16] However, with the Biden administration's renewed focus on climate mitigation policies and increased pressure from stakeholders, Exxon announced a more comprehensive emissions reduction plan in December 2020. The company stopped short of declaring a goal of net-zero emissions by 2050 but noted that Exxon "support[s] society's ambition to achieve net-zero emissions."[17]

The company aims to reduce its GHG intensity by 15%-20% by 2025 in upstream operations and, for the first time in early 2021, began disclosing Scope 3 emissions data. Exxon expects to achieve this goal through decreasing its methane intensity by 40%-50% and cutting its flaring intensity by 35%-40%. The company highlighted its investment in researching, developing, and deploying clean energy technology, which totals about $10 billion since 2000. It also plans to invest an additional $3 billion in low carbon solutions through 2025.[18] Exxon is currently a leader in the CCS space with a total capacity of about 9 million tonnes per year (the equivalent of about 150 million trees) and plans to expand its storage capacity.[19]

Chevron

In March 2021, Chevron announced it would push its operations to be less carbon-intensive. Chevron committed to new targets including a 35% reduction in GHG intensity and 50% reduction in methane intensity by 2028. It also expects to invest up to $3 billion to advance the energy transition, including $2 billion in carbon reduction projects and $750 million

[15] https://www.shell.com/energy-and-innovation/the-energy-future/our-climate-target.html#iframe=L3dlYmFwcHMvY2xpbWF0ZV9hbWJpdGlvbi8
[16] https://www.reuters.com/article/events-exxon-idUSMTZSPDEH3NFKFEUF
[17] https://corporate.exxonmobil.com/News/Newsroom/News-releases/2020/1214_ExxonMobil-announces-2025-emissions-reductions_expects-to-meet-2020-plan
[18] https://corporate.exxonmobil.com/News/Newsroom/News-releases/2020/1214_ExxonMobil-announces-2025-emissions-reductions_expects-to-meet-2020-plan
[19] https://corporate.exxonmobil.com/News/Newsroom/News-releases/2021/0201_ExxonMobil-Low-Carbon-Solutions-to-commercialize-emission-reduction-technology

in renewables and offsets by 2028.[20] In a show of commitment to these climate goals, the company has linked them to the compensation plans of about 45,000 employees. Chevron also announced an expansion of a 2018 initiative, launching its second "Future Energy Fund" with an investment of $300 million. The fund will mainly focus on industrial decarbonization, emerging mobility, and energy decentralization.[21]

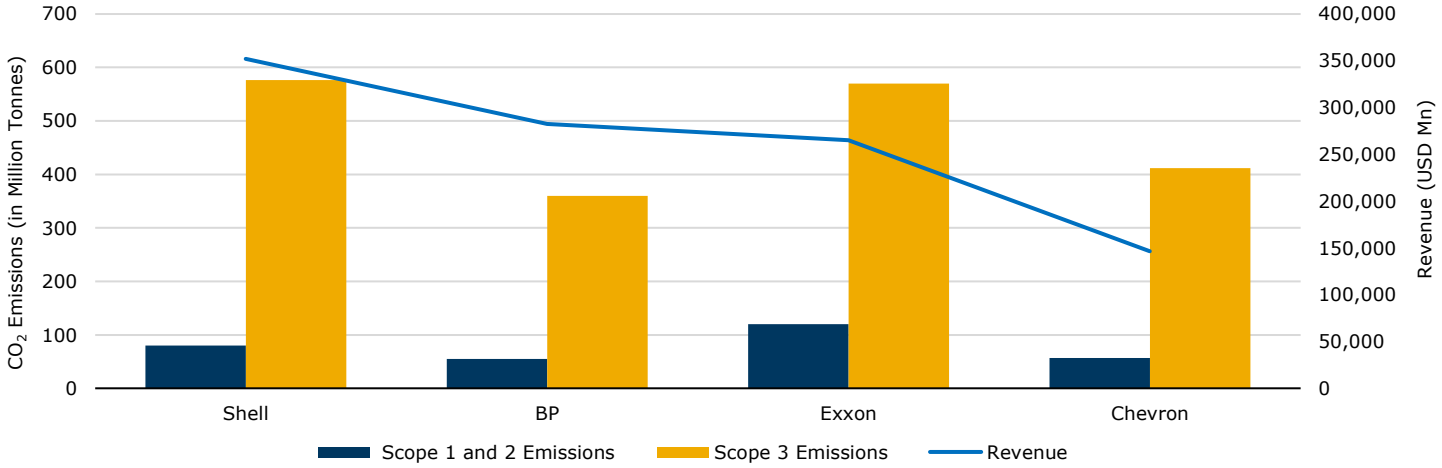
Managing ESG Exposure

Broadly speaking, KBRA believes energy companies that are actively planning for the low carbon transition, with clear targets and metrics in place, may be better prepared for potential climate-related policy changes as well as shifts in consumer demand.

European companies have been pressured by their key stakeholder groups (including regulators, investors, and customers) to focus on tangible ways to become more sustainable and to prepare for the low carbon transition. According to research from news agency Bloomberg, five European oil and gas companies own 78% of the total renewable energy assets owned by the 39 most publicly traded oil and gas companies.[22] The five companies, BP, Shell, Total, Galp, and Equinor, are also ranked as the top five in terms of the most advanced climate transition plans.

While Shell and BP are larger companies by revenue, they both have smaller carbon footprints compared with Exxon (see Figure 2).[23] Similarly, although Chevron's revenue was about half the size of BP's in 2019 ($146.5 billion compared with $282.6 billion), BP had lower total emissions. However, the combination of President Biden's election and investor and consumer sentiment in the U.S. seem to be pushing U.S.-based companies, like Exxon and Chevron, in a similar direction as their European peers.

Figure 2: Oil Majors' 2019 Carbon Emissions and Revenue



Sources: Reuters, Bloomberg, Shell, BP, Exxon, Chevron

Conclusion

KBRA believes the credit risk profile of companies that actively invest in reducing their exposure to climate change risk will strengthen over time. Those without capable management teams that are not planning for future ESG risks will likely face decreases in productivity, reductions in operations, increased capital costs, and in some severe cases, the complete loss of assets. Transitioning is a complex and dynamic process and will be heavily dependent on thoughtful planning and execution. KBRA will continue to monitor and report on the oil majors' climate transition metrics to provide insight into their progress and the impact these actions may have on their credit quality.

[20] https://chevroncorp.gcs-web.com/news-releases/news-release-details/chevron-reinforces-plan-deliver-higher-returns-lower-carbon
[21] https://www.chevron.com/technology/technology-ventures
[22] https://about.bnef.com/blog/integrated-european-majors-lead-on-preparedness-for-a-low-carbon-world-among-39-global-og-companies/
[23] Comparison of total carbon emissions (Scope 1, 2, and 3). Notably, Exxon had slightly lower Scope 3 emissions than Shell in 2019 (570 million t/CO_2e versus 576 million t/CO_2e) but higher Scope 1 and 2 emissions (120 million t/CO_2e versus 80 million t/CO_2e).

Appendix A: Key Definitions

GHG Intensity Units: Measuring the intensity of products refers to the average GHG (such as CO_2 or methane) emissions produced by each unit of energy sold and used by customers.

Scope 1 Emissions: GHG emissions that are within the operational control of an entity.

Scope 2 Emissions: A result of an entity's purchased energy such as electricity, heating, and cooling.

Scope 3 Emissions: Refer to emissions that are outside an entity's direct control. For oil and gas companies, Scope 3 emissions refer to the GHG emissions from the end users of fossil fuel products and are indirect emissions for the company, making them more difficult to reduce.

Routine Flaring: The process of disposing of large amounts of unwanted gas during the oil production process. Currently, flaring releases about 300 million t/CO_2e into the atmosphere each year.[24]

[24] https://www.worldbank.org/en/programs/zero-routine-flaring-by-2030

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