

Key Elements for a Net Zero Transition at Oil and Gas Exploration & Production Companies

Preamble

A group of companies, banks, and investors identified key actions that exploration and production companies (E&Ps) could most effectively take to further a net zero energy future while recognizing the multi-dimensional and evolving nature of the climate change challenge. Understanding that companies are in varied stages of preparedness to address the energy transition, this document lays out high-level principles supported by key elements that serve as steps companies can adopt over time to move this industry forward in the transition.

While the intent is to provide a framework that will be relevant over the medium to longer term, recent geopolitical events underscore the importance of considering our collective energy future in the context of the interconnected impacts to the climate, energy access and security, the economy, and the social well-being of the global community. Energy companies may invest in and responsibly develop hydrocarbons to provide affordable and reliable energy while demonstrating to financial partners that investments are made within a credible net zero transition pathway. E&Ps play a critical role in providing energy security and those that can do so along a net zero pathway will be rewarded with a broader investor base and better access to finance.

For the E&P industry, the move towards low-cost, lower-carbon barrels will be a differentiator. The ability of companies to communicate their commitment and execute supporting strategies will influence future revenue opportunities, capital outlays, and asset retirement obligations, as well as the extent to which capital is attracted to fund those efforts. That commitment should be evident from the board of directors through oversight mechanisms and compensation, to reporting that is comprehensive and verified, to communication with stakeholders that explains the company vision for a net zero future. There is work to be done to develop the methodologies for tracking carbon through the energy value chain, and for companies to explain how their capital expenditure supports an orderly, timely and just transition to a lower-carbon economy.

Many in the financial community have formally committed to address climate change and are incorporating processes to evaluate, monitor, and manage climate risk in their investment portfolios. These firms have made a clear call for better data, and recognize that for E&Ps, there are differences in capability and capacity to transition to a low-carbon economy across geographic basins and asset types. Financial institutions understand that quantitative data alone will not present a complete picture. Transition plans, scenario analysis and ongoing dialogues are needed to understand the complexities and challenges companies face. The Task Force on Climate-related Financial Disclosures (TCFD) includes guidance on transition plans, metrics, targets, and implementation, which provides a consistent foundation for reporting.

The key elements described here outline a progression for companies to work through on their net zero paths and to complement existing frameworks with E&P-specific nuance. Leading E&P companies will help their financial partners achieve their own climate targets and position themselves to take advantage of the opportunities in the energy transition. Financial firms too may have common goals with varied approaches, based on the nature and depth of their relationships with E&Ps (e.g., shareholder vs. debt holder). Strategic flexibility of these elements encourages companies to do what they can, where they can, according to common actions that will drive a net zero transition. In doing so, they may influence investment decisions and retain a broad base of investors and capital providers.



Key Elements of an E&P Net Zero Transition Path

Five categories were identified as key elements: three categories relate to operational emissions and two additional categories outline actions that will have an impact beyond operations by addressing scope 3 emissions and climate-aligned lobbying.

- 1) Targets
- 2) Operational net zero transition plans
- 3) Offsets
- 4) Scope 3 emissions; and
- 5) Climate-aligned lobbying

Within each of these categories are elements that companies can adopt as they devise and articulate their strategies. Transition plans, targets, and treatment of offsets are pillars that will tell the story of how each company is charting its operational net zero path. Beyond operational emissions, E&Ps recognize that emissions associated with the downstream use of hydrocarbons must also be understood in order to achieve global decarbonization. For an industry that produces hydrocarbons, constructive policy advocacy to address end-use emissions and support clean energy solutions represents the most impactful action to advance a smooth climate transition.

Leading companies understand that clear communication of progress is critical, and companies that embrace evolving practices related to reporting, regulation, methodology, accounting, and attestation in reporting on these key elements will set themselves apart. Companies can consider updating their strategies to incorporate changes in the full suite of TCFD recommendations, the International Sustainability Standards Board (ISSB) protocols; the Science Based Targets initiative; and guidance on attestation over emissions and other key metrics as that practice matures.

TARGETS

The adage 'what gets measured gets managed' cannot be overstated when it comes to progress on reducing emissions. A commitment to net zero ambition where each entity has the most influence is fundamental to achieving global climate goals. The financial community understands there are many pathways to net zero and each firm will chart its own journey. At a minimum, a long-term operational net zero goal, accompanied by detailed transition plans, sends a message that the industry understands the action that is needed. Back-ing that long-term goal with clearly defined short- and medium-term targets demonstrates actionable ambition. Scope 1 and 2 targets in the near term, supported by robust disclosure of methodology and progress, gives investors confidence in transition momentum. While all assets that contribute to a company's financial success should be included, achievement of targets on non-operated assets will be a slower path. Robust methane and flaring targets that promise swift action provide credibility that E&Ps have the will and ability to make use of the near-term solutions that position them as part of the low carbon transition.



ELEMENT 1

Companies will set targets that demonstrate action towards climate goals that include short-, medium- and long-term targets aligned with operational net zero goals. Target strategies, methodologies, and milestones will be clearly communicated to investors.

Foundational elements:

- Establish an ambition for net zero emissions for scopes 1 and 2 on operated assets by 2050 or sooner that include near- and mid-term targets:
 - Interim targets may be on an intensity basis, but progress against the targets should be reported on an intensity basis and also in the context of absolute contributions.
 - Targets should be specific, measurable, and communicated with sufficient detail to enable stakeholders to evaluate their credibility.
- Set methane targets that:
 - Clearly define the scope, definitions, and methodologies used.
 - Aim to reach a methane intensity of ≤ 0.25% by 2030 (volume methane/volume gas produced). Report progress against a baseline.
- Set flaring targets that:
 - Clearly define the scope, definitions, and methodologies used.
 - At the minimum, eliminate routine flaring by 2030.
 - Achieve ≤ 1.0% flaring intensity by 2030 (volume gas flared/volume gas produced). Report progress against a baseline.
- Provide an external audit with limited third-party assurance for GHG emissions and other metrics as relevant.

Advanced elements:

- Set a common baseline year for relative emissions targets: 2019.
- Provide an external audit with reasonable third-party assurance for GHG emissions and other relevant metrics.
- Report emissions for non-operated assets and efforts to influence reductions in such emissions over time.
- Join the Oil and Gas Methane Partnership 2.0.
- Include the following flaring targets:
 - Commit to eliminate routine flaring by 2025.
 - Achieve ≤ 0.5% flaring intensity by 2025 (volume gas flared/volume gas produced).



OPERATIONAL NET ZERO TRANSITION PLANS

For companies committed to operational net zero emissions, transition plans provide E&Ps a vehicle to communicate a complex strategy to investors, and scenario analyses fortifies those plans by probing the boundaries of assumptions about the future. Plans will, by their nature, change but do give insights into the breadth of considerations and key assumptions that companies are considering in setting their strategies. As banks, asset managers, and asset owners have committed to net zero goals, detailed transition plans from E&Ps will allow the financial community to evaluate how individual recipients of capital are supporting or detracting from their own firms' goals. Early net zero efforts likely will mitigate the costs associated with climate risks in the long term

An E&P transition strategy should be informed by a range of climate scenarios that reference assumptions used in recognized external models¹ for comparability. E&Ps should demonstrate the resiliency of their strategic planning under multi-decade transition pathways that align with a low-carbon future. These pathways should have quantitative and qualitative detail explaining the company's view of the energy transition and the role/strategy they intend to take to manage the risks and opportunities that the energy transition brings. Transition plans are most credible when informed by stress testing that has explored the boundaries for when a company is no longer resilient. Paired with disclosure of climate-related data, external validation of that data, as is expected generally with financial reporting, provides credibility. Lastly, a clear link between metrics and compensation that allows for an appropriate time horizon promotes the greater likelihood of execution of corporate climate goals.

ELEMENT 2

Companies will disclose transition plans that inform stakeholders of the strategy towards an operational net zero state, including the potential climate-related financial impacts. Both management and the board should be able to demonstrate that they have considered the strategy in the context of various energy transition scenarios. Transition plans and stress testing disclosures should explicitly include the climate-related financial assumptions and impacts in those scenarios.

Foundational elements:

- Express an ambition for achieving net zero emissions for scopes 1 and 2 for operated assets by 2050 or earlier.
- Revisit scenario analysis periodically, referencing one or more third-party models or providing detail on proprietary models:
 - Include and identify assumptions that test the boundaries of company resilience (e.g., cost of supply, commodity prices, carbon prices, demand scenarios, and time horizons).
 - Explain actions the company might consider if markets are not as predicted.
- Adopt one or more widely recognized (e.g., TCFD, ISSB) reporting and expectations frameworks and disclose methodology and alignment.

¹ Resources for the Future (RFF) publishes a report annually examining a range of projections for the global energy system, including key implications for global energy consumption, emissions, and geopolitics as a useful resource for models.



- Explain capital expenditure strategy with near-term detail on transition-related capex.
- Discuss strategies and time horizons related to new businesses (e.g., carbon capture and storage, hydrogen) as well as existing businesses (e.g., natural gas).

Advanced elements:

- Include quantitative and qualitative details and assumptions that support company strategy, such as:
 - Explain how capital expenditure supports emissions reduction targets using models such as marginal cost abatement curves, including various capital scenarios based on commodity prices.
 - Provide the full-cycle breakeven price at the asset level and payback period hurdles that include a time and commodity price threshold.
 - Disclose commodity price and carbon price assumptions used in investment/capex decisions, impairment testing and assumptions used to calculate asset retirement obligations.
- Demonstrate that climate commitments have been considered in the approval of acquisitions, new projects, and infrastructure, for example by disclosing relevant economic assumptions for nearer term actions, and directional longer term thinking that gives quantifiable insights to investors for the cost of reaching net zero. Provide justification for any projects that are not in alignment with the company's transition plan, and how capital expenditure fits into the overall climate goals.
- Explicitly link executive compensation to the company's stated goals on a timeline consistent with progress milestones, for example the achievement of interim GHG reduction targets.
- Identify key metrics the company will monitor for transition progress (e.g., processes, governance, and management systems).

OFFSETS

The role of offsets in the energy transition is a matter of debate as there are varied views on their viability and efficacy in addressing emissions reductions. The goal of offsets is to achieve measurable and validated reductions of carbon sequestration to ensure legitimacy of those reductions. There are limits to the natural, physical, and financial capacity to offset emissions, and offsetting should play a limited role in achieving net zero goals. Some believe that only residual emissions that are unfeasible for the company to abate in their own operations should be neutralized with carbon dioxide removals, and some financial institutions may align financing expectations with this general principle. Companies will be expected to reduce emissions through other means (e.g., efficiency, electrification, and renewables) where economic alternatives are available and reserve the use of credible offsets for emissions where there are no technically or financially viable alternatives. Offsetting should be used in addition to—not as a replacement for—emission reduction measures to meet established targets. Reporting that is explicit, understandable, and contextualized, including boundaries, methodologies, underlying data, and clear assumptions will aid development of offsets as a credible mechanism as this market matures.



ELEMENT 3

Companies report the use of offsets that align with emerging credible frameworks to communicate the current and long-term expectations for them as part of climate strategy.

Foundational elements:

- Explain offset strategy in relation to a long-term operational net zero target, including percentage and type of offsets expected in the short-, mid-, and long-term plans.
- Disclose the volume of carbon credits purchased to counterbalance emissions and support climate change mitigation outside of the companies' value chains.
- Identify the portion of the business not subject to offsets, and how that will meet the expected targets noted above.
- Disclose the percentage of offsets attributable to emissions removals versus avoided emissions.
- Disclose the GHG crediting programs, suppliers, and registries from which carbon credits are sourced.
- Monitor guidance by NGOs and international bodies such as the United Nations Global Compact for guidance on offsets as markets evolve.

Advanced elements:

- Disclose the anticipated residual emissions percentage that will be neutralized with carbon dioxide removal.
- Disclose whether the companies' carbon credits have additional certification from a social and environmental standard.

SCOPE 3 EMISSIONS

While global climate goals will not be achieved without real reductions in oil and gas demand, there is a robust debate on whether E&P scope 3 targets are an effective means of achieving those reductions.

For E&P companies, the value of reporting scope 3 emissions is in understanding transition risk and its impact on demand and commodity prices. E&Ps have limited control over, or visibility into, end-use emissions as the business model is at the upstream edge of the value chain. While there was discussion and debate about setting scope 3 targets, for some companies a scope 3 target would not address end-use emissions but instead represent a prescribed curtailment of hydrocarbon production and would not be economically rational or supported by investors. Placing a requirement on leading E&P companies to meet a scope 3 target could have the effect of shifting capital away from responsible operators towards less-a ccountable producers and jurisdictions, and ultimately not effectively address end-use emissions.

For banks and investors, scope 3 emissions reporting helps inform their portfolio decisions in line with the commitments they have made. While one company's scope 3 emissions in isolation may not appear meaningful, financial institutions are looking at broad swaths of data to understand emissions from companies, industries, and sectors in their portfolios and rely on this data for their decision-making processes by identifying those companies with value chains most closely aligned with ambitious climate goals.



Expectations for disclosure of credible scope 3 emissions is intensifying from regulators and investors.² This clarity for scope 3 reporting will benefit both companies and investors by making expectations clear and consistent. Good data is key. Credible data, with an understanding of a complex downstream value chain, improvement in GHG estimation and accounting practices and supported by assurance from a third-party, provides investor confidence as climate-related compensation and sustainability-linked financial instruments become more prevalent.

ELEMENT 4

Companies will report scope 3 emissions consistent with guidance from global and industry standards.

Foundational elements:

• Report end-use emissions (use of sold products and services) consistent with guidance from global, industry and evolving regulatory standards.

Advanced elements:

- Report end-use emissions from operated assets on an intensity basis.
- Report full value chain emissions on an intensity and an absolute basis.
- Provide a narrative on efforts to engage upstream supply chain partners on scope 3 emissions and include those in reporting over time.

POLICY POSITIONS AND CLIMATE-ALIGNED LOBBYING

Net zero will not be achieved without a reinforcing policy base. Accelerated action on GHG emissions reduction that is consistent with the goals of the Paris Agreement will require concerted policy action by companies across all sectors. Policy engagement by the E&P industry can play a vital role in shaping the societal actions needed to meet climate goals and foster much needed credibility that companies are acting in good faith towards climate ambitions. E&Ps recognize that at a firm level there is limited ability to influence the large shifts in demand needed to reduce emissions. They can, however, help shape the policies that will spur the broader changes needed. Trade associations can be an important lever that companies can use to catalyze positive actions. Policy activity should align with the company's operational net zero commitment and the industry can advocate for the infrastructure needed for a smooth transition.

While the feasibility of a carbon tax or cap and trade policy in the U.S. is still under debate, E&P companies can support market-based policies that drive the innovation required to reduce emissions. Policies that facilitate meaningful GHG reductions, balance economic, environmental, and energy security needs, and promote economy-wide innovation and the development of cost-effective solutions are in the interests of E&P companies and the financial community. This is a shared challenge and one where multi-stakeholder alignment over policy principles can improve the chances of sound, long-lasting policy being enacted.

² The Securities and Exchange Commission's draft Enhancement and Standardization of Climate-Related Disclosures for Investors includes required scope 3 emissions disclosure for issuers if material, or if the issuer has set a GHG emissions target or goal that includes scope 3 emissions on a phased-in basis.



ELEMENT 5

Companies' political lobbying activity will align with their operational net zero transition commitment, and they will report on actions taken consistent with that commitment. E&Ps desiring to be part of the global energy transition engage proactively and constructively in relevant policy discussions.

Foundational elements:

- Work cooperatively and engage to develop climate policies that meet the following criteria:
 - Have a meaningful impact on reducing GHG emissions.
 - Balance climate imperatives with cost effectiveness and energy security needs.
 - Promote innovation to accelerate emissions reductions.
 - Are relevant to activities in which the industry operates. For example:
 - Cross-sector collaborations to address end-use emissions.
 - Regulation on methane and flaring activity.
 - Frameworks that promote hydrogen and/or carbon sequestration technologies that are feasible in the global net zero context.
 - Electrification and renewables infrastructure adjacent to operations.
 - Utilize a price on carbon for capital allocation decisions.
 - Demonstrate a consistent approach with the company emissions management policies.
 - Promote global competitiveness for responsible producers that strive to meet low carbon demands.
- Refrain from lobbying activities that oppose the company's net zero goals.
- Disclose trade association memberships and lobbying efforts with rationale for those activities.
- Explain how the board oversees company policy advocacy and that of trade associations.

Advanced elements:

- Advocate for a price on carbon or other market-based policy solutions.
- Evaluate the alignment of company policy with trade association actions on key climate-related public policies and explain what efforts are made to abate discrepancies in public stance.



Ceres appreciates the time and expertise of the energy companies, asset managers, and banks who participated in the series of roundtable discussions to identify the meaningful actions that exploration and production companies can take in the near term to advance a net zero transition. These key elements do not fully represent what any one entity would outline for a transition path but rather the result of thoughtful and productive dialogue for what are effective actions that exploration and production companies could take. The discussions were robust and included diverse points of view for how this industry can evolve in the energy transition. The resulting product, the **Key Elements for a Net Zero Transition for Operations at Oil and Gas Exploration & Production Companies**, is a basis for engagement and direction as net zero pathways are traveled.

Ceres invites new participants from both the E&P sector and the financial sector to engage with these principles and incorporate them into their work. Interested companies should reach out to Ceres for more details.

This report was made possible with the generous support from the Cynthia and George Mitchell Foundation. The opinions and views of the authors do not necessarily state or reflect those of the Foundation.