



Building a Resilient Strategy for the **Energy Transition**

Managing Climate-Related Risks 2022

Contents

Building a Resilient Strategy for the Energy Transition	2	Performance Metrics and Targets	40
Governance Framework	3	Emissions Reduction Targets and Performance	42
Board Oversight	3	Scope 1 and 2 Emissions Reduction Activities	48
Executive Management	4	Addressing Scope 3 Emissions	57
Organizational Management	6	Additional Climate-Linked Performance Areas	59
Climate-Linked Compensation	8	External Collaboration and Engagement	62
Key Processes	9	Public Policy Engagement	65
Strategy	10	History of Engagement	70
Plan for the Net-Zero Energy Transition	10	Association Engagement	72
Scenario Analysis	14		
Near-, Medium- and Long-Term Risks	20		
Risk Response	22		
Addressing Climate-Related Risks and Opportunities	22		
Contributing to the Energy Transition	32		
Risk Management	36		
Assessing Climate-Related Risks	36		
Managing Climate-Related Risks	38		
Integrating Climate-Related Risks into ERM	39		
SD Risk Management Process	39		

Building a Resilient Strategy for the Energy Transition

Managing Climate-Related Risks

In a world aiming for net-zero emissions, we have a framework that consists of the governance, strategic capability, risk management processes and disclosure to demonstrate resilience across a range of transition scenarios. Our current Climate Risk Strategy and actions for our oil and gas operations are aligned with the aims of the Paris Agreement while being responsive to shareholder interests for long-term value and competitive returns.

2022 PERFORMANCE HIGHLIGHTS

- Published a progress report on our Plan for the Net-Zero Energy Transition to describe key milestones achieved throughout 2022 as we advance our efforts to manage through the energy transition and address the associated risks and opportunities.
- Developed a new net-zero scenario modeling the collective global government and societal actions that would be required to align with limiting warming to 1.5 degrees.
- Improved our Paris-aligned target framework with progress against our targets, including:
 - Strengthening our previously announced operational GHG emissions intensity reduction target to 50-60% by 2030 on both a gross operated and net equity basis from a 2016 baseline.
 - Achieving near-zero methane emissions intensity by 2030. This goal was set in response to meeting our 10% methane emissions intensity reduction target four years early, from a 2019 baseline.
 - Achieving a target of zero routine flaring by 2025, five years sooner than the World Bank Initiative's goal of 2030.
- Spent approximately \$150 million on Scope 1 and 2 emissions reductions and low-carbon opportunities.
- Joined the Oil and Gas Methane Partnership (OGMP) 2.0 Initiative, a globally recognized initiative for methane emissions measurement and reporting.
- Compared to 2021, reduced our operational GHG emissions on both an intensity and absolute basis by 14%.
- Reduced both our methane intensity and flaring intensity (4% and 12% respectively) and decreased total flaring volumes by 13% compared to 2021. Routine flaring decreased 90% from 2021.
- Developed an implementation plan for our Scope 3 Supplier Emissions Strategy to address climate-related risks in our supply chain.
- Demonstrated active advocacy for an economy-wide U.S. carbon price that would directly address consumer demand for energy and end-use (Scope 3) emissions. Supported policy advocacy beyond carbon pricing to include other end-use emissions policy and regulatory action.
- Advanced several energy transition and low-carbon technologies efforts, including LNG and potential CCS and hydrogen projects.

Governance Framework

Our comprehensive climate-related risk governance framework extends from the Board of Directors through executive and senior management to the working levels in each of our business units (BUs).

Board Oversight

The ConocoPhillips **Board of Directors** oversees our position on climate change and related strategic planning and risk management policies and procedures, including those for managing climate-related risks and opportunities. In particular, the board reviews:

- Sustainable development risk management processes.
- Enterprise risk management policy and output.
- Corporate strategy and Climate Risk Strategy.
- Energy transition scenarios and planning.
- GHG emissions intensity target and progress.
- Low Carbon Technologies plans.

The board delegates certain elements of climate oversight functions to one or more of the five standing **committees**:

- Executive
- Audit and Finance
- Human Resources and Compensation
- Directors' Affairs
- Public Policy and Sustainability

Each committee, other than the Executive Committee, is made up of independent directors and convenes at least quarterly. Issues considered by the committees are, as appropriate, regularly reported to the full board.



New electric compression packages were recently added to the Delaware West Central Facility 3 in the Permian Basin.

The [Audit and Finance Committee](#) (AFC) oversees enterprise risk management (ERM). The AFC facilitates appropriate coordination among the committees to ensure that our risk management processes, including those related to climate change, are functioning properly with necessary steps taken to foster a culture of prudent decision making throughout the company. The AFC receives annual updates on how, through the ERM system, we address, mitigate and manage enterprise risk, including climate-related considerations that influence market, reputational, operational and political risks.

The [Public Policy and Sustainability Committee](#) (PPSC) is responsible for identifying, evaluating and monitoring climate-related trends and risks that could affect business activities and performance. In 2022, the PPSC met five times, received in-depth briefings and engaged in discussions on the following climate-related topics:

- Development and implementation of strategies for climate risk, the energy transition, supplier emissions, financial sector engagement and low-carbon technologies.
- Improvement to target-setting with addition of near-zero methane intensity goal and commitments under OGMP 2.0.
- Reporting and disclosure efforts including SD report issue prioritization, framework mapping, integrated reporting, low-carbon technology communications and elevated assurance process updates.
- Review of our feedback to the E&P Net-Zero Principles created by the Ceres Investor Network-led Roundtable.
- Review of ESG trends in the financial sector and climate-related shareholder resolutions.
- Review of SD achievements in 2022 and priorities for 2023.

Actions from the PPSC are reported to the full board at the next board meeting on a quarterly basis.

Other board committees also address climate-related issues. The [Human Resources and Compensation Committee](#) reviews executive compensation and performance-based components, including sustainability performance. Annual incentive programs promote responsibility for sustainability progress throughout all levels of the organization as well as achievement of strategic milestones and objectives that address stakeholder issues essential to sustaining excellence in environmental and social performance.

[Read more](#) about the skills and qualifications of our board members.

Executive Management

The Executive Leadership Team (ELT) manages climate-related risks and opportunities and drives the business in implementing climate-related plans, including:

- Reviewing and approving GHG pricing forecasts for inclusion in our Long-Range Planning and project authorization reviews.
- Supporting climate-related Variable Compensation Incentive Plan milestones.
- Reviewing the GHG emissions Long-Range Plan and peer analysis.
- Approving plans for advancing low-carbon technologies and transition opportunities.

The Executive Vice President (EVP), Strategy, Sustainability and Technology, who reports to the chief executive officer, has overall accountability for corporate planning and development, including corporate strategy and Long-Range Planning. The EVP, Strategy, Sustainability and Technology, has ultimate responsibility for climate risk management

and the implementation of our net-zero ambition. The SVP, Government Affairs is responsible for government engagement and advocacy on climate-related public policy. In addition, the Sustainability and Public Policy Executive Council (SPEC), a subcommittee of the Executive Leadership Team, leads global oversight of existing and emerging sustainable development and public policy risks including climate change.

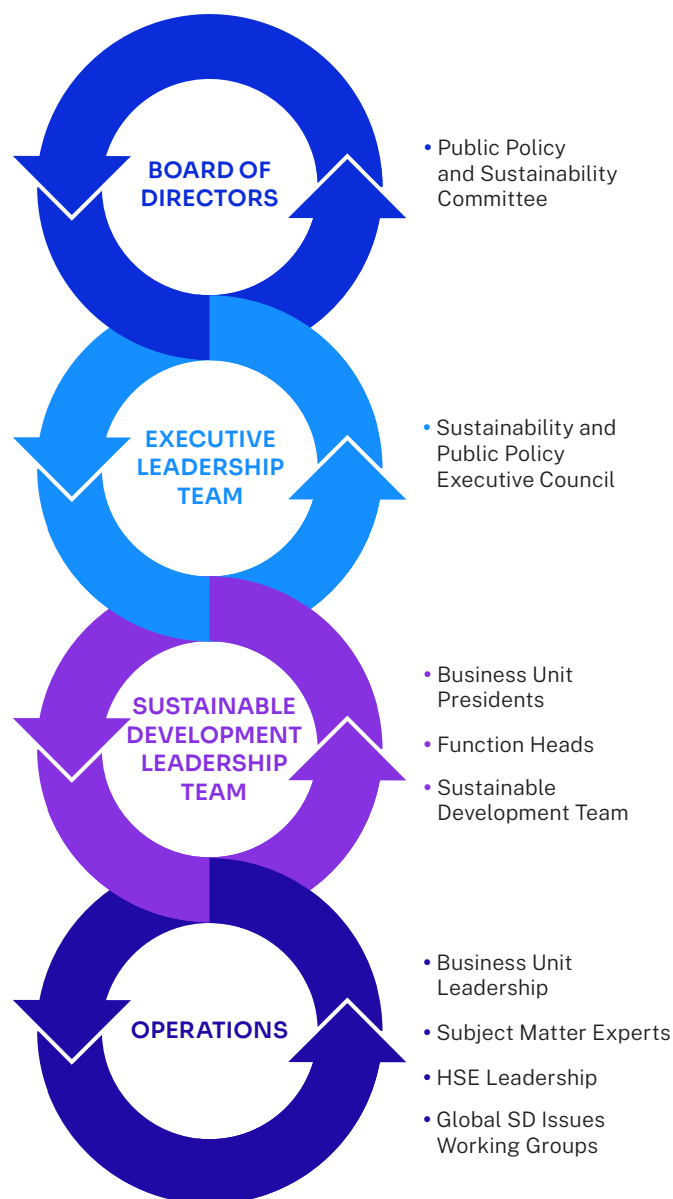
Members of SPEC met five times during the year for detailed briefing and discussion on emerging climate-related issues, strategic priorities and the Climate Risk Strategy. Examples of climate-related issues reviewed by SPEC during 2022 include:

- SD report highlights, reporting landscape overview and assurance process updates.
- Our external collaboration with the Ceres Investor Network-led E&P Net-Zero Principles Roundtable and our financial sector engagement strategy.
- Review of climate-related shareholder resolutions and proposed revisions to ESG milestones within the Variable Cash Incentive Program.
- Net-zero governance process and review of SD priorities for 2023.

Climate-related risks are communicated and integrated into strategy through the SD risk management process and ERM system. Climate-related risks from the corporate SD Risk Register are mapped to relevant enterprise risks. Owners of these enterprise risks, who are ELT members or senior managers, are briefed on the risks and our mitigation activities. Enterprise risks are then presented to the Audit and Finance Committee of the board. The climate-related risk category is managed by the SD team; the EVP, Strategy, Sustainability and Technology and SVP, Government Affairs are jointly accountable for this risk.

GOVERNANCE FRAMEWORK

Feedback and communication at all levels of the chain is an important feature of our governance structure.



Note: Each layer represents a governance level and the corresponding membership entity/support.

Organizational Management

Sustainable Development Leadership Team

The Sustainable Development Leadership Team (SDLT) is comprised of global business unit presidents and functional department heads supported by the SD team. Chaired by the vice president, Sustainable Development, the SDLT consults on and facilitates alignment on SD strategic priorities, goals, action plans and results throughout the company.

Sustainable Development Team

The SD team is responsible for advising the ELT and board on long-term climate-related risks and opportunities for our business and ensuring that these issues are integrated appropriately into strategic decisions. The SD team reports to the executive vice president, Strategy, Sustainability and Technology, who reports to the chief executive officer. The vice president, Sustainable Development, leads the standing SD agenda item for the PPSC.

The SD team works closely with the Environmental Assurance group within the Health, Safety and Environment (HSE) function to provide and validate environmental metrics for public disclosure and track our performance against those metrics, aiming for completeness, accuracy and consistency. The groups collaborate to ensure that the requisite climate risk tools, processes and procedures are developed and integrated into our activities. The SD team also works with the Low Carbon Technologies (LCT) organization on cross-functional efforts to achieve our

net-zero operational emissions ambition. The individual SD and LCT governance processes are each fit-for-business governance structures established to drive oversight and accountability.

Governance of Net-Zero Operational Emissions Ambition

In 2022, we established a governance structure and decision framework to operationalize and achieve our net-zero operational emissions ambition through business planning, collaboration, project execution, technology advancement and innovation that complements our Sustainable Development governance structure and decision framework. The Net-Zero Executive Council (NSEC) and Net-Zero Leadership Team (NZLT) will provide the direction and decision making necessary to properly resource and execute actions to achieve our net-zero ambition. Our executives' engagement and ownership of these efforts will drive accountability and action across the company.

NSEC provides oversight and direction on enterprise-wide strategies, policies and progress toward achieving our net-zero operational emissions ambition and interim emissions reduction targets. With coordinated membership and timing, NSEC and SPEC meet regularly to align net-zero objectives with our Climate Risk Strategy and external commitments. Responsibilities include:

- Setting strategic priorities relating to emissions reductions efforts, including goal setting, pace of execution and progress.
- Approving annual marginal abatement cost curve (MACC) budget, informed by the Net-Zero Operational Emissions Roadmap.

NZLT, whose membership includes BU presidents and leaders within LCT, HSE, Global Technical Functions, SD, IT, Planning and Development, Legal and Public Policy, provides oversight on operationalizing the net-zero operational emissions ambition in our BUs and provides functional support and subject matter expertise. The NZLT addresses tactical implementation issues and decisions relating to BU-level target setting, ensuring alignment with corporate targets. Responsibilities include:

- Establish goals aligned with BU emissions reduction programs, corporate targets and strategy.
- Drive accountability, alignment, focus and action for execution.
- Champion BU strategy and endorse potential BU roadmaps. [Read more](#) about our Operational Net-Zero Roadmap.
- Drive alignment and set consistent messaging across the organization.

NZEC and NZLT are also supported and advised by the cross-functional Net-Zero Advisory Council (NZAC). NZAC are partners for collaboration alongside Low Carbon Technologies to:

- Provide input to MACC process for clarity and observability to potential pathways to net-zero by 2050.
- Work with internal teams to address and articulate potential capital and resource requirements for meeting our operational net-zero ambition.
- Engage with internal stakeholders to ensure emissions reduction strategies are embedded into our core ConocoPhillips culture.
- Ensure we have the right tools and process to plan, execute and track our emissions reductions efforts within a flexible framework responsive to shifts in regulations and technology.

GOVERNANCE ALIGNMENT

Sustainable Development SPEC & SDLT

Setting strategy through external targets

Climate risk strategy focus

External communication and disclosure

Setting emissions target metrics

Corporate strategy integration

SD function principally accountable



Net-Zero NZEC & NZLT

Enabling strategy through BU execution

Net-Zero “operationalization” focus

Internal communication and planning

Translating targets into BU goals

BU operational strategy integration

LCT function principally accountable

Operations

Each ConocoPhillips business unit is responsible for identifying and monitoring near-and medium-term climate-related risks and opportunities and integrating sustainability issues, as appropriate, into day-to-day operations, project development and decision making. BUs participate in our internal HSE auditing program as well as an annual goal-setting process that includes the Climate Change Action Plan to mitigate risks and a [GHG emissions intensity target](#); they report progress to the ELT.

The SD team leads the Climate Change Issues Working Group (CCIWG), an internal, global, cross-functional group for knowledge sharing among business units and functions. Subject matter experts from the business units are members of the CCIWG, which meets quarterly to discuss climate-related risk, including:

- Internal activities to address climate-related risks and opportunities, including energy efficiency and operational emissions reduction projects.
- Developments in operational emissions reduction technology.
- The outlook for GHG prices that might impact our operations.
- Climate-related Long-Range Planning issues.
- Legislative and regulatory actions and related activities and positions of trade associations.
- Emerging climate-related risks.

The objective of the CCIWG is to share key climate-related risk learnings across the company, identify issues and work to resolve them as they arise. The CCIWG also provides input from subject matter experts on climate-related processes, procedures and issues prior to review by the SDLT.

Climate-Linked Compensation

Climate-related performance is considered in our annual short-term Variable Cash Incentive Program (VCIP) that applies to all employees. In 2022, this performance was considered within our Strategic and ESG Milestones where we demonstrated progress toward our Paris-aligned climate risk framework by establishing new methane and flaring targets, executing more than 90 operational emissions reduction projects and advancing business development opportunities for low-carbon investments.

The company is also closely engaged with the Human Resources and Compensation Committee to ensure our emissions reduction and climate-related goals continue to be reflected in our employee and executive compensation programs. To add additional accountability to reducing our GHG emissions intensity, the 2023 VCIP will include a stand-alone measure requiring that we achieve an annual GHG emissions intensity aligned with our 2030 target trajectory range.

[Read more](#) about how sustainability performance is a component of executive compensation.

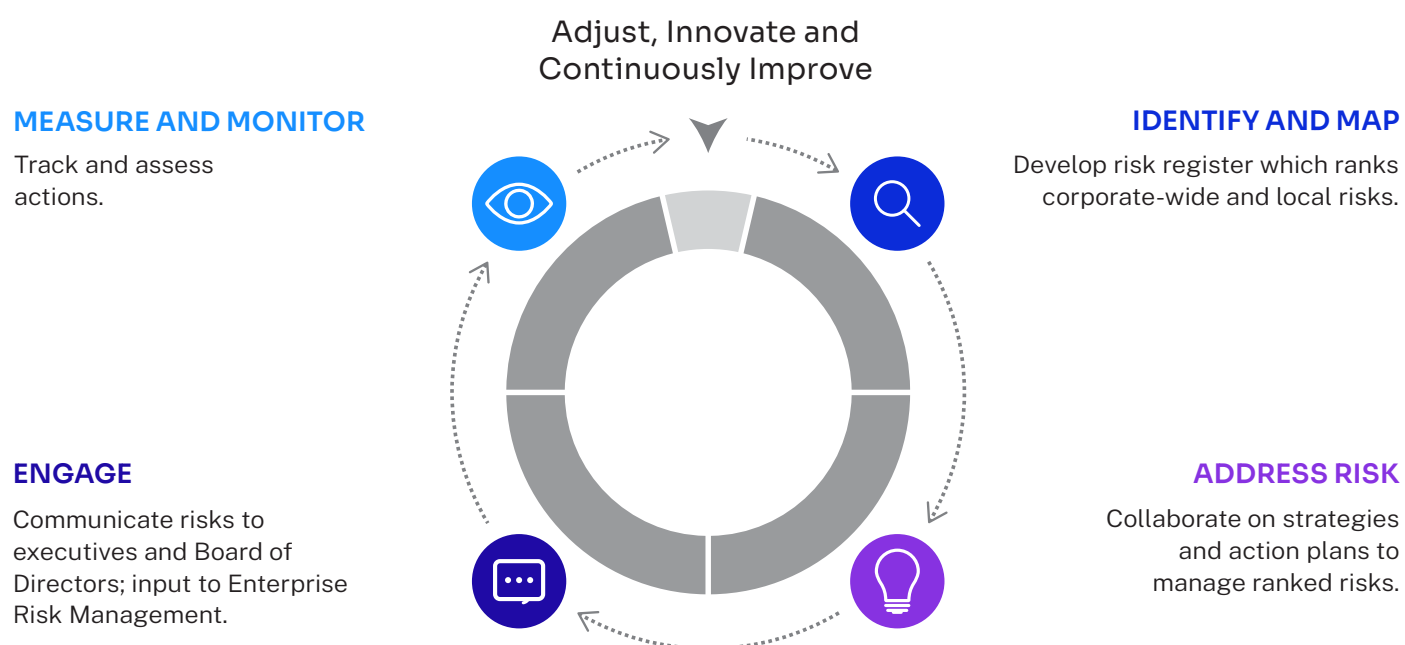
Key Processes

Climate-related considerations are integrated into the following key business planning processes for the company:

- Scenario planning.
- Corporate strategy.
- Long-Range Plan.
- SD risk management process.
- Enterprise Risk Management.

Our SD risk management process, risk register and Climate Change Action Plan are used to identify risks, guide goal setting and track performance. Line-of-sight goals for business units and key functions are shown as specific action items within the action plan. Progress against the plan is reported through our governance structure to the ELT and Board of Directors.

MANAGEMENT SYSTEM APPROACH TO SUSTAINABLE DEVELOPMENT RISK



Strategy

Our objective is to manage climate-related risk, optimize opportunities and better equip the company to respond to evolving investor sentiment, technologies for emissions reduction, alternative energy technologies and uncertainties such as government policies.

The continually evolving energy landscape requires a strategy that will remain robust across a range of potential future outcomes. Our strategy is comprised of four pillars:

- **Targets:** Our framework consists of a hierarchy of targets — a long-term ambition that sets the direction and aim of the strategy, medium-term performance targets for operational GHG emissions and methane intensity, and near-term targets for flaring and methane intensity reductions that guide implementation of our strategy.
- **Technology choices:** We continue to enhance our emissions reduction programs in our current operations, while also evaluating new opportunities and technologies that can closely integrate with our global operations, markets and competencies.
- **Portfolio choices:** We have integrated climate-related risk into our portfolio decision making through consideration of carbon pricing and focusing on low cost-of-supply, low GHG intensity resources.
- **External engagement:** Our stakeholders' points of view inform the evolution of our climate-related frameworks, actions and public policy.

Progress in these four pillars is demonstrated throughout the following sections. Across the pillars, our strategy takes into consideration transition demand, results from scenario planning, near-, medium-, and long-term risks and ways to address impacts from those risks.

Plan for the Net-Zero Energy Transition

Overview

An important component of our Climate Risk Strategy is the [Plan for the Net-Zero Energy Transition](#), first published in our Proxy Statement in 2022. The plan shows how we intend to play a valued role in the energy transition by executing on our Triple Mandate: reliably and responsibly meeting energy transition pathway demand, delivering competitive returns on and of capital and achieving our net-zero operational emissions ambition.

First, meeting transition pathway energy demand requires a focus on delivering production that will best compete in any transition scenario. This production will be delivered from resources with a competitive cost of supply and low GHG intensity, as well as diversity by market and asset type. Next, in delivering competitive returns, ConocoPhillips has been a leader in shifting the exploration and production sector's value proposition away from one focused on



¹ Scope 1 and 2 emissions on a net equity and gross operated basis.

production toward one focused on returns. Finally, to drive accountability for the emissions that are within our control, we are progressing toward achieving our net-zero Scope 1 and 2 emissions ambition.

In service of these three objectives, our plan describes how the company will:

Maintain strategic flexibility:

- Build a resilient asset portfolio with a focus on low cost of supply and low GHG intensity to meet transition pathway energy demand.
- Commit to capital discipline through use of a fully burdened cost of supply, including cost of carbon, as the primary basis for capital allocation.
- Track the energy transition through a comprehensive scenario planning process to calibrate and understand alternative energy transition pathways and test the resilience of our corporate strategy to climate risk.

Reduce Scope 1 and 2 emissions:

- Set targets for emissions over which we have ownership and control, with an ambition to become a net-zero company for Scope 1 and 2 emissions by 2050.

Address Scope 3 emissions:

- Advocate for a well-designed, economy-wide price on carbon and engage in development of other policy and legislation to address end-use emissions.
- Work with our suppliers for alignment on GHG emissions reductions.

Contribute to an orderly energy transition:

- Build an attractive LNG portfolio.
- Evaluate potential investments in emerging energy transition and low-carbon technologies.

The Energy Transition Challenge

Meeting the central aim of the Paris Agreement to strengthen the response to climate change is a worldwide imperative for which governments and companies alike have adopted net-zero ambitions. The resulting energy transition will be complex, with many possible pathways and uncertainties — more likely an evolution than a near-term step-change. We acknowledge the urgency and

importance of limiting global average temperature increases. ConocoPhillips is applying its strategic capabilities and resources to meet this challenge in an economically viable, accountable and actionable way that balances the interests of our stakeholders. Our goal is to support an orderly transition that matches supply to demand and focuses on returns on and of capital while safely and responsibly delivering affordable energy.

Our plan does not include a Scope 3 (end-use) emissions target. We recognize that end-use emissions must be reduced to meet global climate objectives. However, it is our view that supply-side constraints through Scope 3 targets for North American and European upstream oil and gas producers would be counterproductive to climate goals. In the absence of policy measures that address global demand and with the shape and pace of technology and policy yet to be determined, Scope 3 targets would shift production to other global operators, potentially eroding energy security and affordability.

The plan was endorsed by the board's PPSC and was designed to help investors and other stakeholders gain an understanding of the valued role ConocoPhillips intends to play in an orderly energy transition.

Since first publishing the plan, we have continued to focus on implementing our Climate Risk Strategy and advancing the plan's objectives. Our commitment to these efforts is demonstrated by our achievements made to date — many of which have been completed ahead of schedule. As we achieve our goals, we fine-tune our strategy and refine our commitments in ongoing alignment with the aims of the Paris Agreement.

Through our ongoing consideration of transition scenarios, the strategic planning process and stakeholder engagement, we expect the plan to continue evolving as the energy transition progresses over time. The following table shows our progress on key milestones since the plan's first publication. Updates represent progress through the end of 2022 and include our 2023 plans to continue advancing our strategy to remain resilient under any scenario. Reflecting the recommended TCFD report structure, the following components of the plan are linked and detailed elsewhere in this report.

2022-2023 PROGRESS REPORT

REDUCING SCOPE 1 AND 2 EMISSIONS	STRATEGIC FLEXIBILITY Resilient Portfolio and Scenario Analysis	<ul style="list-style-type: none"> Continued focus on low cost of supply and low GHG intensity resources that meet transition pathway energy demand. Developed a new net-zero scenario modeling the collective global government and societal actions that would be required to align with limiting warming to 1.5 degrees. Assets with less than 10 kg CO₂e/BOE are projected to represent a larger portion of our portfolio by 2030.
	Methane	<ul style="list-style-type: none"> Achieved near-term 10% methane intensity reduction target four years early. Reduced methane intensity by ~70% since 2015. Set new target to achieve near-zero methane intensity by 2030 (1.5 kg CO₂e/BOE or approximately 0.15% of natural gas produced). Joined OGMP 2.0 and Veritas initiatives to improve methane measurement and reporting transparency.
	Flaring	<ul style="list-style-type: none"> On schedule to meet the World Bank Zero Routine Flaring goal by 2025. In 2022, routine flaring decreased nearly 90% from 2021.
	Overall GHG	<ul style="list-style-type: none"> Strengthened GHG intensity reduction target to 50-60% by 2030 from a 2016 baseline for both gross operated and net equity emissions. Achieved 41% gross operated and 36% net equity GHG intensity reductions by year-end 2022 from 2016. Spent approximately \$150 million on Scope 1 and 2 emissions reductions and low-carbon opportunities in 2022. Participated in a Ceres-led Roundtable to discuss solutions for reaching net-zero emissions with cross-sector participation from the financial sector and exploration and production (E&P) oil and gas companies. Tasked each global business unit with developing potential options to achieve our operational net-zero ambition. Expanded third-party limited assurance to all sustainability disclosures in this Sustainability Report. Began chairing a National Petroleum Council study on GHG emissions reduction across the U.S. natural gas value chain.
	Offsets	<ul style="list-style-type: none"> Began evaluating diversified investments in offset projects and funds, such as Climate Asset Management's Nature-Based Carbon fund which has supported the Restore Africa Programme. Supporting offset projects in Mexico aimed at improved forest management for future offset issuance.
ADDRESSING END-USE (SCOPE 3) EMISSIONS AND CONTRIBUTING TO THE ENERGY TRANSITION	Advocacy and Public Policy	<ul style="list-style-type: none"> Expanded policy advocacy beyond carbon pricing to include end-use emissions policy and regulatory action such as direct federal regulation of methane, supporting alternative transportation and power generation, and national policy recommendations on natural gas across the value chain. Continued support of the Climate Leadership Council (CLC) and Americans for Carbon Dividends (AFCD) to advance carbon pricing in the U.S. as the most effective and predictable policy action to reduce GHG emissions across the economy. Worked closely with members of the Business Roundtable (BRT) and the American Petroleum Institute (API) to engage with the Voluntary Carbon Markets Initiative. Working with World Bank's Carbon Pricing Leadership Coalition (CPLC) as a private sector partner to share and expand the evidence base for effective carbon pricing.
	Supply Chain Engagement	<ul style="list-style-type: none"> Incorporated Scope 3 supplier emissions into targeted supplier evaluations. Held annual ConocoPhillips Supplier Sustainability Forum to share key sustainability messages and best practices. Began building a governance framework for supplier sustainability. Collaborating with industry groups and third-party partners to align on collection, reporting and supplier engagement for supplier emissions.
	LNG	<ul style="list-style-type: none"> Purchased an additional 10% shareholding interest in Australia Pacific LNG (APLNG) in 2022 and in 2023 announced plans to acquire up to an additional 2.49% shareholding interest. In the first quarter of 2023, purchased an equity interest in new large-scale LNG facility with Sempra Infrastructure and secured 5 MTPA of offtake. Signed agreements to supply long-term LNG to Germany in partnership with QatarEnergy.
	CCS	<ul style="list-style-type: none"> Continued evaluation of potential opportunities to develop carbon capture and storage (CCS) hubs along the U.S. Gulf Coast. Joined Canada's Oil Sands Pathways Alliance working toward net-zero by 2050 through CCS. Established strategic technology partnership with a chemistry innovator to advance CCS process capability for deployment in company projects.
	Hydrogen	<ul style="list-style-type: none"> Evaluating the development of blue and green ammonia as a low-carbon power generation fuel from the U.S. Gulf Coast with Japanese energy company JERA. Invested in a venture with Canadian energy technology company Ekona Power to develop hydrogen production technology through methane pyrolysis.

Managing Our Energy Transition Plan

As we navigate an uncharted energy transition in coming years and decades, the plan will evolve in the same way it has developed: through experienced professionals, well-practiced processes, meaningful action, ongoing engagement and learnings from best practices. Our subject matter experts will closely monitor transition drivers including technology, policy and market sentiment. We will continue to actively collaborate with peers, industry experts and financial sector stakeholders to better understand these drivers and learn from best practices. We are also actively engaged throughout the entire organization — including our Board of Directors, Executive Leadership Team and operations teams — for successful strategy alignment and implementation.

Our Triple Mandate will drive continued focus and accountability for both returns and resilience, allowing us to play a valued, meaningful role in a managed and orderly energy transition. The updates in this report reflect our commitment to reducing Scope 1 and 2 emissions, addressing end-use emissions (Scope 3) in our supply chain and through policy advocacy, and developing business opportunities in LNG, CCS and hydrogen. We are well positioned to continue to execute this plan and participate

in energy transition opportunities, while also fulfilling our commitment to create long-term value for our stakeholders.

We intend to report on continued implementation of our plan and provide periodic updates on our website.

ENERGY TRANSITION ACTIVITIES

Planning for the energy transition requires a variety of sectors to collaborate and work together to drive change. Our emphasis on these activities is influenced by ongoing engagement with our stakeholders.

Portfolio High-Grading



Methane and Flaring Reductions



Offsets



Production Efficiency



Carbon Capture and Storage



Supply Chain Engagement



Electrification



Hydrogen



Advocacy



We acknowledge the findings of the Intergovernmental Panel on Climate Change that GHG emissions from the use of fossil fuels contribute to increases in global temperatures. We also recognize the importance that current science places on limiting global average temperature increases to below 2-degrees Celsius compared to pre-industrial times, and to achieve that, current science shows that global GHG emissions need to reach net-zero in the

second half of this century. We support the Paris Agreement as a welcomed global policy response to that challenge.

We have had a public global climate change position since 2003. The position is reviewed periodically, agreed to by the Executive Leadership Team and then recommended to the board. **Read more** about our Climate Change Position.

Scenario Analysis

IEA Energy Outlook

We reference two energy scenarios from the [International Energy Agency](#) (IEA) 2022 World Energy Outlook that illustrate future demand and track the Paris Agreement goal of reducing global GHG emissions to limit the global temperature increase to 2 degrees Celsius while pursuing efforts to limit warming to 1.5 degrees. These scenarios reflect changes in total energy demand in 2050 as compared to 2021:

- **Announced Pledges:** Total energy demand increases by just over 1%.
- **Net Zero Emissions:** Total energy demand declines by more than 14%.

Total demand stays flat compared to 2021 in the Announced Pledges scenario but declines in the Net Zero Emissions scenario. Demand for natural gas and oil has different outcomes across the IEA scenarios.

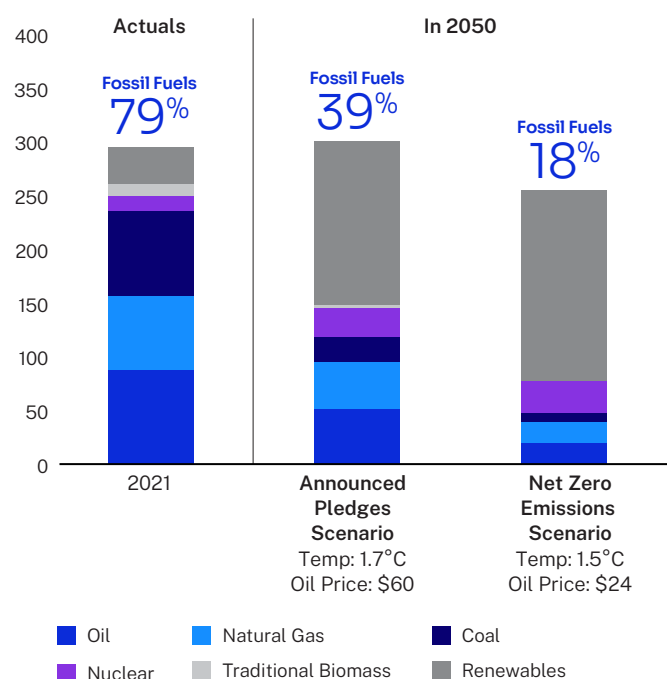
Even in the Net Zero Emissions scenario, 2050 oil demand remains at 19 MMBOD and natural gas at 20 MMBOED and, despite a reallocation of capital to renewables, significant investment in upstream natural gas and oil is still required. IEA estimates this to average \$394 billion each year from 2022 to 2050 globally in the Announced Pledges Scenario (APS) and \$255 billion per year from 2022 to 2050 in the Net Zero Emissions scenario, a total of approximately \$11.4 trillion globally and \$7.4 trillion respectively for the period 2022 to 2050.

Achieving the IEA APS (limiting temperature to 1.7 degrees Celsius) requires significant progress on several fronts:¹

- Improving energy efficiency of power generation, transportation and industrial processes.
- Reducing emissions from fossil fuels or capturing and storing or utilizing those emissions.
- Increasing clean energy electricity, innovation and investment.

IEA WORLD ENERGY OUTLOOK SCENARIOS – 2050

MMBOED



Source: © OECD/IEA 2022 World Energy Outlook, IEA Publishing. License: www.iea.org
Note: EJ converted to MMBOE at 173.727 per EJ.

The APS requires achieving all major national emissions reduction targets made by governments around the world, as well as meeting all country-level targets in full for access to energy/electricity. This includes supporting policies that could reduce the need for coal-fired capacity or even halt new coal investment through cost-effective, low-emissions electricity deployment. Even with these changes and requirements, APS will still require flexibility to use existing infrastructure while new options are being developed to replicate natural gas services. Such flexibility requirements in the power sector may be met with low-carbon hydrogen and hydrogen-based fuels. Oil and gas resources will still be needed in the APS but will be consolidated to include a smaller number of low-cost, responsible producers. Changes in the energy system will take time, as energy infrastructure components have long asset lives and require cross-sector, system-wide changes and retrofits to meet new specifications.

¹ The Sustainable Development Scenario (SDS), a component of previous IEA scenarios, is not featured in the most recent edition of the World Energy Outlook, as temperature outcomes and sustainable development goals in the SDS are similar to those in the APS.

The Net Zero Emissions scenario provides useful hypothetical data to inform the decisions to be made by policymakers, who have the greatest scope to move the world closer to its climate goals. The assumptions used in the scenario are challenging. For example:

- Reducing energy demand by almost 14% from 2021 levels would require reverting energy demand back to 2010 levels, while supporting 3 billion more people with three times the economic activity.
- Increasing the share of renewable electricity supply to the level assumed in 2050 would require annual capacity additions four times the record capacity achieved in 2020. The electricity market in 2050 is assumed to be 150% greater than the market in 2021, the equivalent of adding an electricity market the size of India every year between now and then.
- Of 400 milestones needed to achieve net-zero emissions described in the Net Zero Emissions scenario, 85% are demand-side actions that would require government intervention. It will continue to be important for policymakers to address the imperatives of energy security and affordability alongside climate risk.

These widely varying factors are the reason scenario planning is important. There is not just one pathway to a low-carbon future; there are numerous ways in which government action and technology development could interact with consumer behavior to bring about a low-carbon future. Performance on climate-related risk and opportunity is driven by planning across a range of widely varying scenarios and having the financial strength and asset flexibility to adapt to different outcomes.

Scenario Planning at ConocoPhillips

The scenarios we have developed describe possible pathways leading to a particular outcome. Scenarios are hypothetical constructs and are not predictions or forecasts of what we think is going to happen; they are used to illustrate which factors drive future developments. We use scenarios in our strategic planning process to:

- Gain better understanding of external factors that impact our business to assist in the identification of major risks and opportunities and inform mitigating actions.

- Identify leading indicators and trends.
- Test the robustness of our strategy across different business environments.
- Communicate risks appropriately.
- Inform how we position our business, as technologies and markets evolve, to capitalize on opportunities that meet risk and return criteria.

Using scenarios enables us to understand a range of risks around potential commodity market prices associated with various GHG emissions reduction scenarios. To assist our capital allocation decisions, we can test our current portfolio of assets and investment opportunities against these future possibilities and identify where strengths and weaknesses may exist.

We use a range of analyses, input and information when developing our strategy. The detail of our scenarios gives insight into the analysis we use to inform our strategic decision making and reinforces to stakeholders and shareholders that we are both preparing for reductions in GHG emissions consistent with the Paris Climate Agreement and developing resilient strategies that reflect the complex and uncertain range of energy futures.

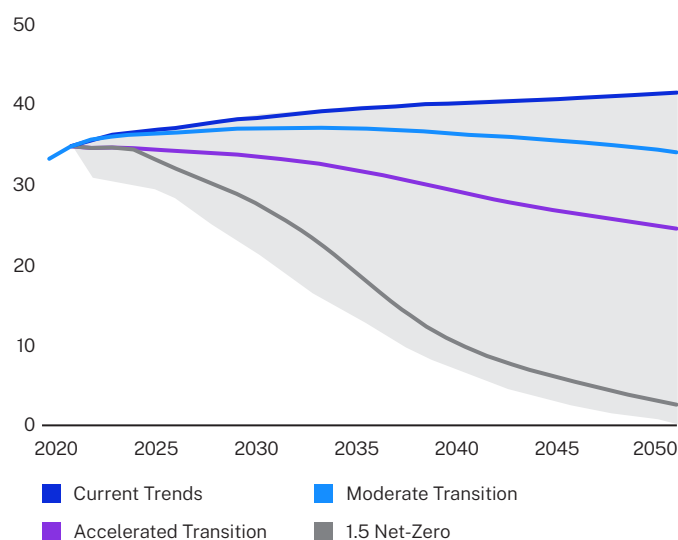
We use four main energy transition scenarios in our global energy model: Pre-Pandemic Trend, Moderate Transition, Accelerated Transition and 1.5 Net-Zero. The four scenarios incorporate a wide range of possible outcomes for energy and carbon emissions.

While these scenarios extend to 2050, well beyond our near-term operational planning period, they give insights on trends that could have an implication for near- and medium-term decisions and enable choices on the creation or preservation of future options.

Each scenario models the full energy system including coal, oil, natural gas, solar, wind and nuclear, as well as their related GHG emissions and pricing policies. Each of these plausible pathways is designed to stretch our thinking about potential rates of new technology adoption, policy development and consumer behavior.

GLOBAL ENERGY-RELATED CO₂ EMISSIONS

Gigatonnes per year



The scenarios describe four pathways out of the myriad that are possible, given the uncertainty surrounding the development of future energy markets out to 2050. They do not describe all possible future outcomes and are not used as a reliable indicator of the actual impact of climate change on ConocoPhillips' portfolio or business.

In addition to using the four scenarios to analyze potential outcomes, we regularly monitor key signposts as we work to track the pace and direction of the energy transition and identify potential leading indicators of change in the demand for hydrocarbons. In this way we aim to establish not just which scenario we are moving toward, but also to identify emerging disruptive scenarios. This analysis is presented to executive management and the Board of Directors to assist in strategic decision making.

The thoughtful application of scenarios in strategic planning is core to our ability to navigate future uncertainty and is a practical way of conveying this information in a decision-useful manner. The key to scenario planning is the use of a wide-enough range to characterize uncertainty, rather than trying to correctly guess specific future variables or parameters.

Scenario Descriptions

The scenarios reflect differing economic activity, technology developments, public policy developments and consumer choices. A common thread across all four scenarios is that GDP becomes less energy intense as the global economy requires less incremental energy-intensive manufacturing and industrial activity relative to service-oriented activity. The outcome for global energy-related CO₂ emissions from our four scenarios is shown in the "Global Energy-Related CO₂ Emissions by Scenario" chart.

Pre-Pandemic Trend Scenario

This scenario is built on the assumption that trends established from 2010 to 2019 in energy production and consumption continue. Government policies for carbon emissions remain globally uncoordinated. Technologies evolve at a gradual pace and current modes of transportation and power generation remain the lowest cost, most efficient avenues for energy consumption and generation. Carbon taxes are introduced at a moderate rate in Organisation for Economic Co-operation and Development (OECD) countries, rising to only \$30/tonne of CO₂ equivalent (TeCO₂e) in 2050. It is assumed that non-OECD countries have not implemented carbon pricing by 2050 in this scenario. Consequently, fossil fuels continue to deliver roughly 80% of global energy needs in 2050, and energy-related carbon emissions continue to increase.

The global oil market grows by 20% over 2019's 100 MMBOD level, driven by solid economic growth and a lack of competitive alternatives. Transportation's share of total oil demand expands from ~60% today to 65% in 2050. The automotive sector continues to evolve gradually, and the global share of electric vehicle sales increases from 1-2% today to 20% in 2050. The global average internal combustion engine efficiency modestly improves by around 15%, and petroleum remains the most prevalent fuel for all modes of transportation. Production from all regions and resource types is developed.

The natural gas market expands at a faster rate than oil over the long term. By 2050, natural gas demand is ~75% larger than 2021, reaching just under 700 billion cubic feet per day (BCFD) as growing economies utilize more natural gas.

The volume of natural gas consumed in power demand more than doubles by 2050. The focal point of global demand shifts away from North America and Europe to Asia and the Middle East.

Moderate Transition Scenario

This scenario assumes moderate advances in national level carbon pricing policies and alternative energy technologies, with incremental shifts in consumer preferences for low-carbon products. Fossil fuels remain at roughly 81% of the primary energy mix in 2050. Carbon taxes go into effect across OECD countries during the mid-2020s and are \$25/teCO₂e in 2030, rising to \$60 in 2050. It is assumed that China implements its proposed national carbon pricing policy at 50% of the OECD carbon fee and that no other non-OECD country implements a carbon pricing policy prior to 2050. Global energy-related carbon emissions stabilize by 2050.

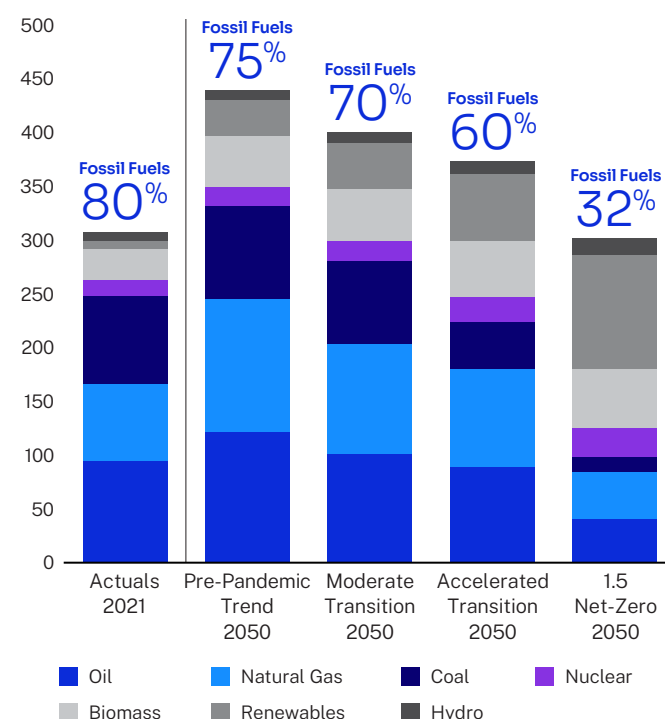
Global oil demand plateaus in the late 2030's at around 110 MMBOD and then declines very slowly. Average internal combustion engine efficiency improves by one-third. Electric vehicle penetration is slow in the early years but accelerates in the 2030s and 2040s, reaching 30% of the passenger auto fleet in 2050 (compared to 1% in 2021). Regional policies also influence the outcome for electrification in transportation. Global oil production benefits from technology advances which improve productivity and enable global demand to be satisfied. U.S. crude oil production grows through 2030 then falls as incremental productivity improvements slow and high-quality acreage is exhausted. Russia and OPEC grow to take a larger share of global supply which increases geopolitical risk to supply.

By 2050, the global gas market expands by 40% from 2021 levels. The primary driver for natural gas demand growth is power generation. Natural gas consumed in power generation increases from 155 BCFD in 2021 to 240 in 2050. Improvements in energy storage enable wind and solar to be available throughout the day, increasing their contribution to power generation. As in the Pre-Pandemic Trend scenario, global demand shifts east to Asia and the Middle East. Global supplies remain heavily weighted to North America. U.S. shale gas and Permian associated gas drive North American growth until the 2030s, after which Canada leads North America's production growth.

In this scenario, hydrogen and Carbon Capture Utilization and Storage (CCUS) move to become viable, standalone business lines. Moderate progression toward national net-zero targets increases availability of capital funding which paves the way for these technologies to take hold. CCUS grows to 2.1 gigatonnes captured in 2050, while the total hydrogen market expands to 250 million metric tons in 2050.

CONOCOPHILLIPS GLOBAL ENERGY MODEL SCENARIOS

MMBOED



Accelerated Transition Scenario

This is a scenario with more aggressive changes in technologies, consumer preferences and government policies relative to Moderate Transition. Technology is vital to limiting growth in energy demand as the global population and economy expand. Social trends that are prevalent today in specific regions or municipalities spread because technological advances make these choices universally economic. For example, individual auto ownership gives way to shared mobility. Mass transit and ridesharing are accessible and cost effective for more people in more regions.

Consumers shift purchases toward products and services with lower carbon footprints, and society demands more transparent environmental stewardship from businesses they patronize. Governments target aggressive policies toward GHG emissions, fossil fuel production and consumption. Economy-wide carbon pricing goes into effect across OECD countries during the mid-2020s and is \$30 per TeCO₂e in 2030, rising to \$80 in 2050. Again, China implements an economy-wide carbon pricing policy at 50% of the OECD price. Other non-OECD countries impose a very low \$5 per TeCO₂e price by 2030.

The global oil market peaks in size by 2028 and remains near that level until tapering more quickly after 2035. The combination of internal combustion engine efficiencies and faster adoption of electric vehicles, which reach a 40% share of the passenger vehicle fleet by 2050, reduces oil demand in the transportation sector. Oil demand from the industrial sector grows for plastics and chemicals.

The global natural gas market grows at an average annual rate of 0.6% into the 2040s, peaking near 450 BCFD in 2045 and slowly declining thereafter. Natural gas remains a prominent fuel in electricity generation but starts to yield market share to wind and solar as energy storage technology allows renewables to contribute a larger share of power generation. North America's gas production increases 15% over today's level, plateauing in about 2040 before declining.

Faster progression toward net-zero targets and higher carbon prices increase capital available to new technologies, with hydrogen and CCUS remaining the frontrunners. Captured carbon increases to 3.4 gigatonnes by 2050, and advances in renewables-powered hydrogen technology expand the hydrogen market to around 300 million metric tons.

1.5 Net-Zero Scenario

This scenario assumes technology breakthroughs, rapid global policy coordination to price GHG emissions at a level that materially reduces fossil fuel use and emissions and shifts in consumer preferences towards lower GHG products and services. In this pathway, OECD countries and China implement a transparent economy-wide carbon price² mechanism by 2025 which rises from \$50/TeCO₂e in 2030 to \$190 by 2050. Other non-OECD nations follow

by imposing economy-wide carbon prices of \$10/TeCO₂e in 2030 rising to \$50 by 2050. The scenario assumes significant technological advances which reduce battery, wind and solar generation costs, improve fuel efficiencies for internal combustion engines (80% more fuel efficient by 2050), improve energy efficiency in buildings and lighting, and impact energy production, delivery and consumption. Technology and efficiencies allow total energy demand in 2050 to be only about 2% below 2021's level with about 70% of energy provided by non-fossil fuels.

Global oil demand peaks in 2023 and declines to 40 MMBOD in 2050. Energy storage improvements lead to EVs achieving parity with internal combustion engine vehicles by the mid-2020s, thus incentivizing consumers to purchase EVs. Consequently, 70% of the passenger automobile fleet is electric in 2050, and transportation sector demand falls to 25% of total oil demand. Oil supply dynamics evolve as most production occurs in OPEC countries and Russia, and geopolitics play an even larger role in oil prices and the supply of oil.

The natural gas market is much more resilient in this scenario in comparison to oil as natural gas is needed as a lower-carbon fuel for reliable, dispatchable electricity generation. Global natural gas demand peaks in 2030. Natural gas generates only 4% of global electricity in 2050, while wind and solar grow to produce 73% of electricity in 2050. Global gas demand shifts to emerging markets in Asia, the Middle East, Commonwealth of Independent States (CIS) and Africa. Only 26% of global gas demand remains in North America and Europe.

In this scenario, countries and companies push for accelerated progression along net-zero pathways and implement supportive policies along with capital funding to progress new technologies. Hydrogen remains a front-runner, with blue (using CCS) and green hydrogen supporting increased petrochemical and industrial activities. Over time, electrolysis costs fall sharply. Green hydrogen accelerates along with other new technologies, pushing out blue and grey (Steam Methane Reforming) hydrogen production. The hydrogen market grows to around 400 million metric tons in 2050. CCS plays a critical role in emissions reduction, expanding to 7.0 gigatonnes by 2050.

² All carbon taxes are in 2022 dollars.

Our scenarios have a wide range of assumptions regarding technological advances, government policies (e.g., carbon prices) and consumer behaviors leading to a range of oil and natural gas prices. We take this future price uncertainty into account in our strategy by using a fully burdened cost of supply as our primary criteria for capital allocation. Of the ~20 billion barrels of resources with a cost of supply at \$40 per barrel and below held in our portfolio, resources at the average cost of supply can be produced at \$32 per barrel.³ This compares favorably to the expected commodity prices detailed in our own scenarios as well as external scenarios such as the IEA's Net Zero Emissions scenario.

The scenarios are designed to address transitional risks. A separate scenario process addresses physical climate-related risk using consultant scenarios based on the Intergovernmental Panel on Climate Change (IPCC) modeling.

Key Strategic Linkages to Our Scenario Planning

Our corporate strategy reflects several findings from our scenario analysis process. We have acted to:

- Use a fully burdened cost of supply, including cost of carbon aligned with our current probability-weighted energy scenario, as an important metric in our project authorization process. In 2023, we had a resource base of ~20 billion barrels of oil equivalent (BOE) with \$40 per barrel (or lower) cost of supply and an average cost of supply of \$32 per barrel.³ Our strategic objective is to provide resilience in lower price environments, with any oil price above our cost of supply generating an after-tax fully burdened rate of return greater than 10%.
- Prepare for diverse policy environments by maintaining a less than \$40 per BOE sustaining price to generate the cash to fund capital expenditure to keep production flat over time and generate competitive returns to shareholders.
- Maintain diversification in our portfolio to balance our production and capital expenditures as commodity prices become more volatile.
- Provide competitive distributions from cash flows to investors.
- Identify and fund emissions reduction projects to reduce the impact of any future regulations, carbon prices or taxes, and to help maintain a low life-cycle cost of supply. We have upgraded the use of a marginal abatement cost curve (MACC) in Long-Range Planning to identify emissions reduction opportunities available to the company globally. These process upgrades have resulted in more efficient collection, recording, sharing and funding of emissions reduction projects.
- Task each business unit with developing potential options to achieve our operational net-zero emissions ambition.
- Introduce a proxy cost of carbon into qualifying project economics to help us be more resilient to climate-related risk in the short- to medium-term and provide the flexibility to remain resilient in the long-term.
- Focus near-term technology investments on reducing both our costs and our emissions where economically feasible.
- Monitor for potential disruptive technologies that might impact the market for natural gas or oil, enabling us to take advantage of our capital flexibility and reduce our exposure to lower commodity prices at an early point in time.
- Focus on the carbon and cost competitive supply of natural gas and oil while continuing to utilize our scenario planning system to monitor and assess additional business opportunities within the evolving energy transition.
- Pursue hydrogen production and carbon sequestration as potentially attractive investments in meeting transition demand for low carbon energy.
- Monitor global regulatory and legislative developments and engage in development of pragmatic policies aligned with the climate policy principles outlined in our [Global Climate Change Position](#).

³ Costs assume a mid-cycle price environment of \$60/BBL WTI.

Near-, Medium- and Long-Term Risks

As described in the Risk Management section, we evaluate and track our climate-related risk through our SD Risk Register and Climate Change Action Plan. Those risks broadly fall into four categories:

- GHG-related policy.
- Emissions reductions and emissions management.
- Physical climate-related impacts.
- Climate-related disclosure and reporting.

The time horizons we use for climate-related issues are based on the time we expect it will take for the risks to manifest, our planning time horizons and the time required to realize the majority of the net present value of our projects.

Near-Term Risks

Our near-term time horizon is one to five years, during which we can complete short-cycle drilling campaigns and small projects. Our GHG forecasting and financial planning processes are used to determine risks and opportunities that could have a material financial impact for that period. Our near-term climate-related risks are generally government policy related and managed at the business unit level through policy advocacy and technology to reduce emissions.

Regulations to address climate-related risk, including GHG emissions, are a near-term risk for several of our businesses. For example, regulations issued by the Alberta government under the Emissions Management and Climate Resilience Act require any facility existing in 2016, with emissions equal to or greater than 100,000 metric tons of carbon dioxide or equivalent per year, to reduce its net emissions intensity, with reduction increases over time. The cost of compliance and investment in emissions intensity reduction technologies influence investment decisions for the Canada business unit, where we are purchasing carbon offsets while evaluating and developing technology opportunities such as CCS and subsurface technology to reduce emissions for existing and new facilities. Good examples of technology developments that decrease GHG emissions intensity are our commercialization of non-condensable gas co-injection

at our oil sands operations which improves our steam-to-oil ratios by 20-30%, the deployment of wellbore technology such as flow control devices and multilateral wells which improve steam-to-oil ratios by 10-20%, and the piloting of steam additives which has the potential for a 20% improvement to our steam-to-oil ratio.

GHG emissions costs, or carbon costs, are another near-term risk in some jurisdictions where we operate. For example, in Norway, we are managing carbon cost risk with specific actions to study both operational emissions reduction opportunities as well as technical modification opportunities and evaluate project economics that include the Norwegian carbon fee and European Union CO₂ emissions costs (EU ETS).

While a price on carbon in the U.S. will increase our costs and decrease demand for our product, we support a well-designed pricing regime on carbon emissions as the most effective and predictable policy action to reduce GHG emissions across the economy. By enacting a legislative requirement for a price on carbon, we believe the U.S. would maintain the energy advantage it currently has while at the same time incentivizing other countries to also adopt a price on carbon. We are members of the Carbon Pricing Leadership Coalition (CPLC), a voluntary initiative working to catalyze action towards the successful implementation of carbon pricing around the world. We are a Founding Member of the Climate Leadership Council (CLC), a collaboration of business and environmental interests working to develop a carbon dividend plan for the U.S. The plan has four key pillars: a gradually increasing price on carbon, a carbon dividend, border carbon adjustments and regulatory simplification. [Read more](#) about the carbon dividend plan. To supplement our work on carbon price advocacy, we also advocate for effective and efficient regulations and legislation to advance economic incentives and reduce GHG emissions through regulatory approaches.

Another policy area we monitor is related to border carbon adjustments (BCAs). For example, the EU Carbon Border Adjustment Mechanism (CBAM) seeks to put a price on carbon for carbon-intensive traded goods. The transition phase for the CBAM will begin in October 2023, during which importers will begin reporting emissions data to the EU. While oil and gas production is currently outside the

scope of CBAM, a review of industries to consider including in the future is due at the end of the transition phase in 2025. We continue to monitor the applicability of CBAM and other border carbon adjustment proposals to our oil and gas operations. We are engaged in discussions around additional policy options, such as a standalone World Trade Organization-compliant Border Carbon Adjustment (BCA) mechanism. We will continue working with the CLC and our trade associations to identify opportunities to support and shape policies in alignment with our carbon pricing principles.

Medium-Term Risks

Our medium-term time horizon is six to 10 years, during which we can complete most major projects and revise our portfolio if required. Our GHG forecasting and financial planning processes are used to determine the risks and opportunities that could have a material financial impact for that period. Medium-term risks take longer to impact our business and may include emerging policy that is not yet fully defined. These risks are managed by business unit planning but, if significant, may also be managed by corporate strategies and company-wide risk assessments.

Offset requirements have been identified as both a medium-term risk and as an opportunity for some business units where carbon offsets can be used for compliance with an emissions reduction program.

Climate-related physical changes are a medium-term risk for some of our operations. In Alaska, mitigation measures include pre-packing snow to accelerate the start of the ice road season and engineering and maintaining gravel roads and pads to be protective of underlying permafrost.

Another medium-term risk is access to capital markets. Increasing attention to global climate change has resulted in pressure from and on stockholders, financial institutions and other market participants to modify their relationships with oil and gas companies and to limit or discontinue investments, insurance and funding to such companies. For example, a significant number of financial institutions are now members of the Glasgow Financial Alliance for Net-Zero (GFANZ), thereby voluntarily pledging to achieve net-zero emissions by 2050 on Scope 1, 2 and 3 emissions, as well as setting interim targets for 2030 or earlier.

While GFANZ members are not prohibited from having relationships with oil and gas companies, the nature of their target commitments may imply that greater restrictions will be placed on GFANZ members in the future. Conversely, we also face pressure from some in the investment community and certain public interest groups to limit the focus on ESG in our decision-making. If public pressure continues to mount, our access to capital on terms we find favorable may be limited, and our costs may increase. Additionally, our reputation could be damaged, and our business and results of operations may be otherwise adversely affected.

Long-Term Risks

Our long-term time horizon is 11 years and beyond. Generally, long-term risks are managed by our scenario analysis and Climate Risk Strategy, as they include long-term government policy, technology trends and consumer preferences that affect supply and demand. They may also include risks that align with long-term physical climate scenarios.

We recognize that our GHG intensity will be compared against peers, so we track this as a competitive risk at the corporate level. Investors, the financial sector and other stakeholders compare companies based on climate-related performance, and GHG intensity is a key indicator. For this reason, our GHG intensity target aligns with the long-term time horizon to ensure we manage the risk appropriately. It also demonstrates our goal to be a leader in managing climate-related risk.

Both chronic and acute physical climate risks are a long-term risk for our business. In some parts of the U.S., we have identified potential storm severity as a risk for future operations, based on previous storms and flooding. Consensus science suggests that future extreme weather events may become more intense and/or more frequent, thus potentially adding incremental risk to our operations in coastal regions and areas susceptible to typhoons or hurricanes. We have a crisis management system in place to manage that risk before, during and after a storm event.

[Read more](#) about our Risk Register and Climate Change Action Plan.

Risk Response

Our Climate Change Action Plan described on the following page, addresses the significant/ high risks from our SD Risk Register and includes milestones over several years. Actions within the plan address individual risks identified by our business units or global/regional risks identified by our central corporate staff. For example, both chronic and physical climate-related impacts are more likely to apply to a single business unit, given the specific local nature of the risk and geographical location of our assets. Actions relate to specific business units unless indicated as “global.”

Addressing Climate-Related Risks and Opportunities

Climate-related risks and opportunities that have the potential to impact our company are addressed through business and operational planning, strategic planning and financial planning. Our SD risk management processes identify those risks and assess the potential size, scope and prioritization of each. We have aligned a description of these impacts with the recommendations of the Task Force on Climate-related Financial Disclosures ([TCFD](#)).

Business Planning

Climate-related risks and opportunities may affect our business planning through impacts to demand for our product, product costs, supply chain, daily operating and mitigation activities, project design and emissions reduction projects, among others.

Products and Services

Compliance with policy changes that create a GHG tax, fee, emissions trading scheme or GHG reductions could significantly increase product costs for consumers and reduce demand for natural gas-and oil-derived products. Demand could also be eroded by conservation plans and

efforts undertaken in response to global climate-related risk, including plans developed in connection with the Paris Agreement. Many governments also provide, or may in the future provide, tax advantages and other subsidies to support the use and development of alternative energy technologies that could impact demand for our products. However, there are also opportunities associated with increased demand for lower-carbon energy sources such as natural gas to displace coal in power generation and in combination with carbon capture and storage in the production of hydrogen for industrial use. More information about these opportunities is included in the Liquefied Natural Gas and Low Carbon Opportunities sections.

Supply Chain and/or Value Chain

We [engage with suppliers](#) on the environmental and social aspects of their operations throughout the procurement process. This includes communicating our expectations and priorities and identifying opportunities for improvement and collaboration related to climate issues, including energy use, GHG management and environmental supply chain risks.

We engage through membership in several trade associations, such as Ipieca, that address climate-related issues through working groups and task forces that include downstream businesses as well as suppliers. We continue to monitor climate-related risks and opportunities related to our supply chain and value chain and believe that maintaining a global network of businesses and suppliers will mitigate physical climate-related risks.

We also recognize the importance of Scope 3 emissions generated by our suppliers in the upstream value chain. Therefore, we have ongoing engagements with major suppliers for alignment of their GHG emissions goals with our plans for the energy transition, and we have incorporated an assessment of their emissions into targeted supplier evaluations. We utilize a sustainability questionnaire in key bids that includes questions on supplier GHG emissions and their own Scope 1 and 2 emissions reduction targets.

CLIMATE CHANGE ACTION PLAN

RISKS	2022 MITIGATION ACTIONS AND MILESTONES
GHG Policy	
Climate change policy, including carbon taxes	<ul style="list-style-type: none"> Review global emerging issues with Sustainability and Public Policy Executive Council on a regular basis. Work with Climate Leadership Council and API Climate Working Group to develop U.S. carbon tax framework; advocate for a carbon price through the Climate Leadership Council/Americans for Carbon Dividends as well as the Carbon Pricing Leadership Coalition. Directly engage governments on evolving climate policy and monitor policy developments. Engage in industry working groups to provide input to federal consultation on border carbon adjustment policies. Use carbon price in base case Long-Range Planning and forecasting; elevate GHG forecasting guidelines to a company practice. Support effective incentives for emissions reductions, including tax and production credits and protocols for use of carbon credits and offsets.
Low carbon technologies activities	<ul style="list-style-type: none"> Implement global corporate position and strategy on carbon offsets purchases. Assess opportunities to reduce Scope 2 emissions with low carbon technologies and electricity grid connection opportunities. Explore novel technology and investments through Low Carbon Technologies organization. Explore implementing CCS technology in project design. Consider partnering with future renewable energy project developers to power our operations where operationally and economically feasible and monitor new opportunities.
Emissions and Emissions Management	
GHG emissions regulations	<ul style="list-style-type: none"> Support enactment of cost-effective federal methane regulations on new and existing sources that would preserve a state's ability to adapt implementation to local conditions. Explore new technology solutions and facility improvements to meet methane and flaring reduction targets. Continue regulatory advocacy efforts around methane and flaring. Work with industry trade groups and task forces to respond to proposed GHG regulations.
GHG emissions reductions	<ul style="list-style-type: none"> Design and develop new facilities with lower emission footprints. Focus on operational efficiency globally to reduce GHG intensity. Execute U.S. flare reduction plans including revising commercial agreements to incorporate flare reduction incentives. Consider developing additional flaring reduction targets. Continue implementation of corporate Climate Risk Strategy including energy transition plan with updated targets. Continue integration of BU Climate Risk Strategy and development. Improve GHG data collection efforts and advance MACC emissions reduction projects, plans and low-carbon ideas. Continue to assess transformational technology pilots. Continue to grow emissions monitoring program. Advance methane mitigation measures through leak detection surveys, source testing and tank monitoring.
Physical Climate-Related Impacts	
Acute and chronic physical risks	<p>Assessment</p> <ul style="list-style-type: none"> Continue to include physical climate risk in SD risk management process. Develop global physical risk assessment guidelines for business units and continue with ongoing review cycle. Initiate asset-specific climate risk assessments. <p>Fresh water constraints</p> <ul style="list-style-type: none"> Increase application of mitigation measures (fresh water use minimization) in project design phase and adjust project execution timing based on water availability. Investigate alternative sources for water (e.g. pipelines, desalination, etc.). Monitor stream flow and use forecast exercises to identify potential water availability concerns in upcoming development. Alter well completion schedule as required or needed. <p>Permafrost thaw</p> <ul style="list-style-type: none"> Continue assessment of risk of permafrost thaw for construction of new infrastructure and implementation of mitigation measures. Use remote sensing to detect landscape change patterns. Investigate effective approaches for monitoring permafrost thaw and thaw degree days. Continually review and update engineering and design specifications, including equipment and site maintenance. <p>Wildfire</p> <ul style="list-style-type: none"> Participate in desktop regional wildfire annual risk assessment and mitigation planning efforts. Execute emergency response plan exercises, drills and training for wildfire threats. Integrate development of planning with regional forest company's harvest timeline to enable landscape-scale resource management which could reduce forest fuel near the asset. Implement and execute safety barriers and controls to enable facility and personnel protection in the case of fire and advance warning of potential wildfire threats.

We plan to make additional inroads in reducing Scope 3 emissions from those sources that we may be able to influence within our supply chain through continued supplier engagement as part of our Scope 3 Supplier Emissions Strategy.⁴ In 2022, we developed a plan for implementation in 2023 to ensure that key elements of our supply chain are evaluated for climate risk, including:

- Identifying suppliers with high relative impact on Scope 3 upstream supplier emissions.
- Promoting alignment of suppliers' GHG targets with our net-zero ambition.
- Building a governance framework for supplier sustainability to include Scope 3 supplier emissions.
- Updating our Supplier Expectations to highlight climate, biodiversity, responsible use of natural resources and human rights. We will revise and implement this documentation through a structured plan to systematically engage with suppliers on sustainability issues throughout the year.
- Collaborating with suppliers in conjunction with industry partners like API and Ipeca to align on disclosure frameworks and systems for collecting and reporting supplier emissions.

We plan to provide guidance to key internal stakeholders on how and when to include emissions impact in supplier bids. During regular engagements between our executive team and those of our major suppliers, we intend to include a standing climate agenda item to discuss GHG targets, performance, opportunities and actions to be taken.

Finally, we continue to highlight climate and sustainability expectations for suppliers through our annual Supplier Sustainability Forum. In November 2022, we hosted our 10th annual Supplier Sustainability Forum which brought together over 150 participants, including suppliers from more than 40 companies and ConocoPhillips representatives from across the globe. The agenda was designed to share information for sustainability best practices that are transferable throughout our diverse supply chains. A key panel discussion was "Changing Landscapes and Net-Zero Alignment" with ConocoPhillips leaders from our Lower 48 organization, the Low Carbon Technologies team, the

Supply Chain team and industry association representatives from the National Association of Manufacturers and the Energy Workforce & Technology Council. They discussed meaningful measures to show alignment in a world aiming for net-zero, opportunities and challenges on the road to net-zero, and the importance of integrating risk management into supply chain, business planning and decision making.

Operations

While our business operations are designed and operated to accommodate a range of potential climate conditions, significant changes, such as more frequent severe weather in the markets we serve or the areas where our assets are located, could cause increased expenses and impact to our operations. The costs associated with interrupted operations will depend on the duration and severity of any physical event and the damage and remedial work to be carried out. Financial implications could include business interruption, damage or loss of production uptime and delayed access to resources and markets. For example, a three-day shutdown of all U.S. Gulf Coast production would result in approximately 660 MBOE of lost production. It is unlikely all our Gulf Coast area production would be affected, as our operations are located across a wide span of the coast including inland and offshore assets.

Adaptation and Mitigation

Business-resiliency planning is a process that helps us prepare to mitigate potential physical risks of a changing climate in a cost-effective manner.

Canada

For example, in 2021, British Columbia, Canada experienced one of its worst fire seasons on record. The Montney development team has made a concerted effort to situate pads within existing cut blocks where timber has been cleared to minimize the risk from increased wildfire activity. Similarly, in response to previous years' increased wildfire activity in Alberta, our Surmont team undertook reactive forest fuel reductions near critical infrastructure and completed a Fire Smart hazard assessment where we are working on an integrated land management plan with a local forest company to strategically reduce forest fuel loading in areas of future infrastructure development. We have

⁴ Upstream Scope 3 emissions covered under the strategy include Category 1, purchased goods and services and Category 2, capital goods.

also developed an in-house automated active wildfire early warning system around both assets to identify risks and keep people and infrastructure safe.

In addition to mitigating fire risk, the Canada BU has addressed increased surface water flow from high-frequency and short-duration storm events in Surmont with increased on-site training for managing the movement of water from well pads and central processing facilities. We have also implemented recommendations from an industry study on bioengineering techniques, such as live willow silt fences to mitigate erosion and sedimentation issues during intense rainfall events. This proactive surface water management is critical in preventing on-site erosion from damaging critical infrastructure. In the Montney region, in the fall we monitor streamflow at the Halfway River, which acts as a signal for potential upcoming low-flow conditions in winter so appropriate mitigation measures can be enacted. Seasonal learnings like this inform streamflow prediction exercises and future development. We have also proactively assessed infrastructure design risks to account for a potential increase in high-frequency, short-duration storm events and are piloting the same bioengineering sediment control techniques as Surmont.

Australia

In 2021, our Australia BU conducted climate water catchment-level modeling to inform a drought risk assessment to determine future impacts to water supply. Results showed that long-term evaporation and long-term and severe drought duration are projected to increase over the next 30 years in the local area. To mitigate this potential risk, both ConocoPhillips and the local water authority are investigating supplementary water supplies from alternate sources. We will use results from this, and future updates to the risk assessment, to plan for water availability in future operations as we adapt our practices to a changing climate.

Alaska

Climate change is also considered during new project design. In 2020 in our Alaska BU, we updated our Foundational Design Specification to increase the embedment depths for vertical support members and piles to align with predicted soil temperature trends. This revision

updated the specification based on permafrost temperature trends and geothermal modeling predictions from 2020 through 2070. Use of the Foundational Design Specification continues to date and will be revised as needed in the future. Additionally, permafrost thermistors will be installed in the Willow project area. Data will be used to evaluate permafrost temperatures near the surface, and data will be incorporated into engineering models and construction best practices.

We have also acted to mitigate our Scope 1 and 2 GHG emissions for many years. Our first Climate Change Action Plan was introduced in 2008. In 2017, we introduced a GHG emissions intensity target to incentivize GHG reductions in our production operations in connection with project design, exploration and portfolio decisions. To date, this has resulted in a reduction of both our emissions intensity and our absolute emissions. Approximately half of our GHG reduction projects carried out since 2008 relate to the reduced emissions of methane from reducing venting, updating plunger lifts or replacing pneumatic controllers. Most of these projects have paid for themselves through increased sales of natural gas. Following the success of our overall GHG intensity target, in 2022 we set a near-zero methane intensity target to further drive methane emissions reductions.

To continue reducing emissions, we have set up regional teams in North America, Australia, Southeast Asia and Europe to use the MACC process to identify energy efficiency projects for consideration in the Long-Range Plan. By evaluating our day-to-day decisions regarding flaring, drilling, completions and equipment use we have gained a sharper focus on energy consumption, along with increased revenue, reduced energy costs, reduced emissions and an improved overall cost of supply.

Read more about our [MACC process](#) and the [Operational Net-Zero Roadmap](#).

Strategic Planning

A robust and flexible corporate strategy is key to addressing climate-related risks and navigating the energy transition. Some key climate-related components of an exploration and production company’s strategy are portfolio management, including portfolio resilience and diversification, focus on low cost of supply and capital allocation, carbon pricing, and investment in new technology through research and development.

Acquisitions and Divestments

Business development decisions consider possible financial, operational and sustainability impacts to our portfolio. In our Long-Range Planning process, we run sensitivities on our GHG emissions intensity based on possible acquisitions, divestments and project decisions. We focus on cost of supply to account for lower and more volatile product prices and possible introduction of carbon taxes. In recent years, we have divested higher emissions intensity gas fields.

Resilient Portfolio

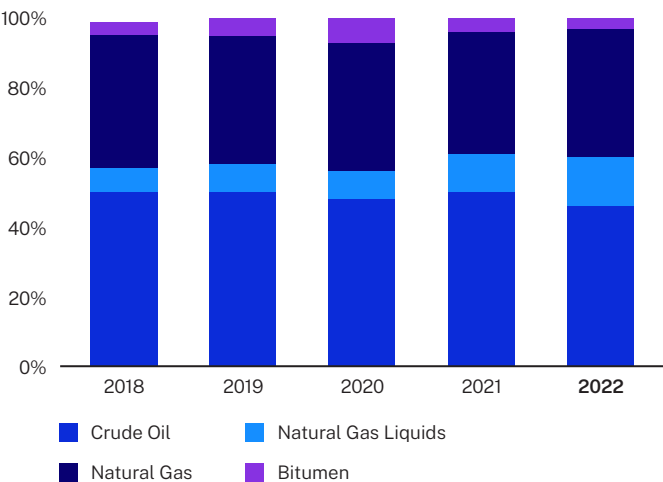
Our ability to address climate-related risks and meet transition pathway demand will depend on our ability to deliver competitive returns on and of capital. We work to

continually improve the underlying cost of supply of our portfolio, with a commitment to return more than 30% of cash from operations to stockholders through the cycles. Our sector-leading approach focuses on the cost of supply of our portfolio, committing to balance sheet strength and moderating growth by holding to disciplined reinvestment rates.

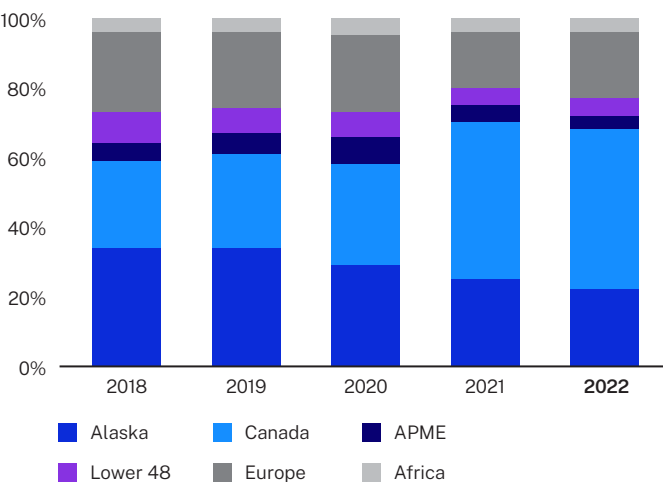
We have communicated to stakeholders a 10-year strategic plan intended to generate double-digit returns on capital employed that are competitive with the top quartile of the S&P 500. We returned \$15 billion of capital for 2022, which represented over 50% of our cash from operations, well in excess of our greater than 30% annual commitment.

Oil and natural gas are projected to remain essential parts of the energy supply mix in coming decades across a broad range of transition scenarios. ConocoPhillips intends to maintain its key market role through competitive returns that are resilient to transition-related risks. We focus on remaining resilient and competitive in any scenario by providing low-cost, low-GHG intensity barrels by asset type with continuously improving sustainability performance.

PERCENT OF PROVED RESERVES BY HYDROCARBON TYPE



PERCENT OF PROVED RESERVES BY REGION



Portfolio Diversification

The mix and location of the resources in our portfolio provide flexibility and adaptability as we monitor scenarios and global trends. Our short-cycle project times and capital flexibility enable us to redirect capital to the most competitive basins. Our extensive low cost of supply resource base allows us to divest higher cost assets to high-grade our portfolio as our strategy evolves. This applies to both hydrocarbon mix and geographic region. If policy in a country or region significantly impacts cost of supply, we can shift capital to other opportunities.

One example of portfolio diversification is the significant expansion of our LNG portfolio in recent years through our increased interest in APLNG and participation in joint ventures with QatarEnergy, as described in the Liquefied Natural Gas section. These projects have a low cost of supply and low GHG emissions intensity on a life cycle basis and align with our view that LNG is expected to play an increasingly important role in helping meet energy transition pathway demand, with its lower GHG intensity compared to burning coal for power generation.

ConocoPhillips has long been a participant in the LNG business, utilizing our commercial capabilities to develop and supply markets. We believe that U.S. LNG is well placed to provide lower emissions intensity, reliable energy to European and Asian markets. Our U.S. Gulf LNG partnerships also allow for optionality for future offtake from expansion trains and access to excess cargos from equity investments. Find more details about these projects in the Liquefied Natural Gas section.

Cost of Supply and Capital Allocation

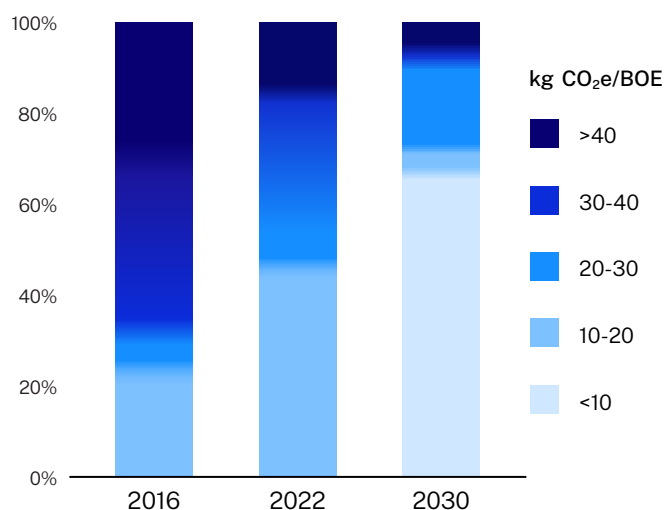
Cost of supply is the West Texas Intermediate (WTI) equivalent price that generates 10% after-tax return on a point-forward and fully burdened basis. In our definition, cost of supply is fully burdened with capital infrastructure, foreign exchange, price-related inflation, G&A and carbon tax (if currently assessed). If no carbon tax exists for the asset, carbon pricing aligned with internal energy scenarios is applied. Cost of supply is the primary metric that we use

for capital allocation, and it has the advantage of being independent of price forecasts. Any oil price above the cost of supply will generate an after-tax fully burdened return that is greater than 10%. Providing low cost of supply also addresses a key component of a just transition — reliable and affordable energy supply.

The cost of supply of our resource base supports our assertion that resources with the lowest cost of supply are most likely to be developed in scenarios with lower demand, such as the IEA's Net Zero Emissions Scenario. In 2023, we have a resource base of ~20 billion barrels of oil equivalent with \$40 per barrel (or lower) cost of supply and an average cost of supply of \$32 per barrel.

To assist our capital allocation decisions, we test our current portfolio of assets and investment opportunities against future possibilities and identify strengths and weaknesses that may exist. As a result of our strategy and scenario work, we have focused capital on resources with low cost of supply, exiting deep water and high emissions intensity gas fields while increasing our investments in unconventional oil projects.

GHG EMISSIONS INTENSITY OF GROSS OPERATED PRODUCTION¹



¹ Chart shows gross operated production as a percentage of the company portfolio arranged by GHG intensity. 2030 data is estimated from forecasts current as of August 2022 and subject to change.

In recent years we have dramatically high-graded our portfolio and applied stringent capital allocation criteria that direct investments to resources that will best match transition demand. We are equally focused on developing assets that have a low cost of supply and low GHG intensity, as these are most likely to compete in any future energy transition pathway with each asset type contributing to its unique market (e.g., unconventionals, LNG, oil sands). Based on our current forecasts, our GHG intensity will improve over time and assets with less than 10 kg CO₂e/BOE are projected to represent a larger portion of our portfolio by 2030.

OIL PRICES BY IEA SCENARIO¹

\$/BBL

	STATED POLICIES ²	ANNOUNCED PLEDGES ³	NET ZERO EMISSIONS ⁴
Temperature Outcome	2.5°C	1.7°C	1.5°C
USD⁵ 2022 Real Terms in 2022	72	72	72
USD 2022 Real Terms in 2030	86	67	37
USD 2022 Real Terms in 2050	99	63	25

¹ 2021 IEA prices inflated to 2022 dollars to enable direct comparison with Cost of Supply figures.

² Stated Policies Scenario: No new policies.

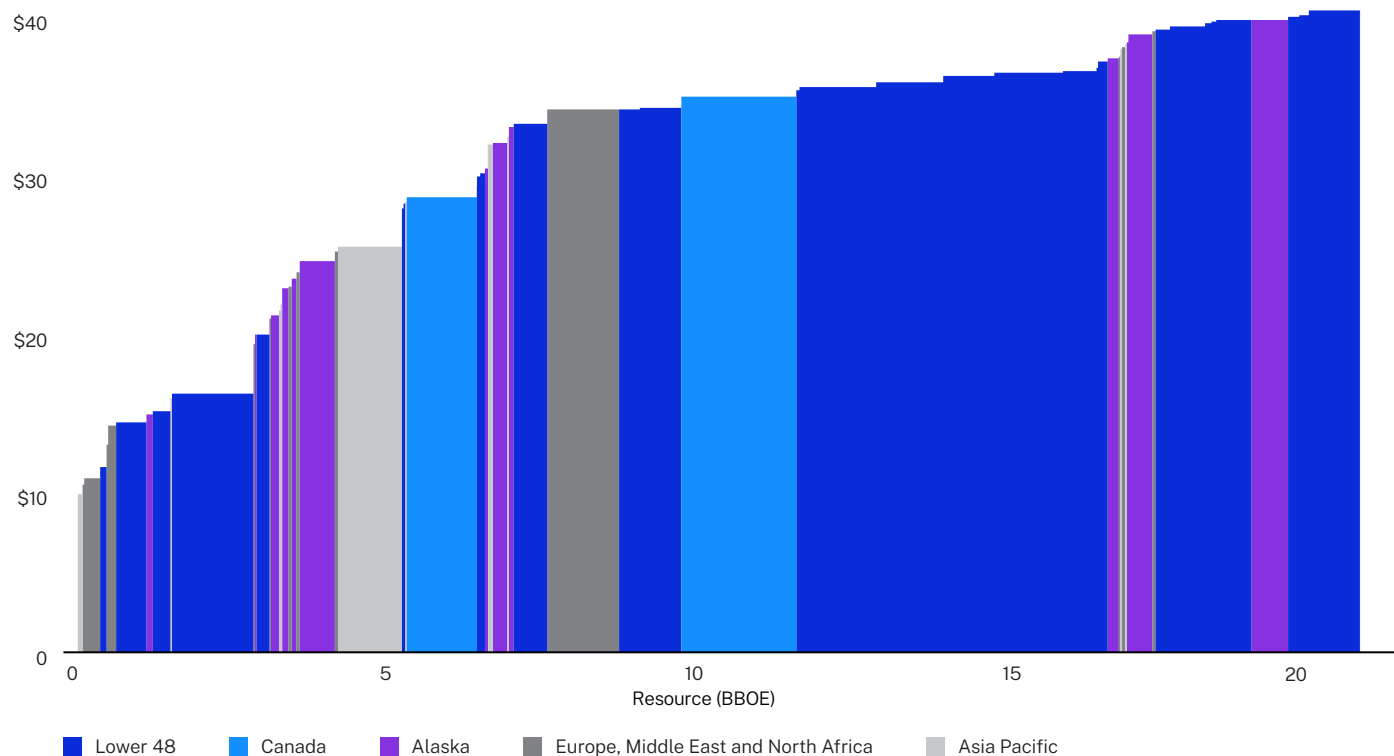
³ Announced Pledges Scenario: Net-Zero pledges.

⁴ Net Zero Emissions by 2050 Scenario.

⁵ U.S. Dollars (USD)

WTI COST OF SUPPLY

\$/BBL



Carbon Asset Risk

Scenario analysis and our Climate Risk Strategy help build optionality into our strategic plans to reduce the risk of stranded assets. Key elements of our climate-related risk management process include:

- Considering a range of possible future carbon-constraint scenarios.
- Developing strategic alternatives to manage shareholder value in a future with uncertain carbon constraints.
- Testing strategies and asset portfolios in various scenarios.
- Incorporating risk mitigation actions into the Long-Range Plan and Climate Change Action Plan.

We have taken action to reduce our cost of supply and are one of only a few oil and natural gas companies to transparently disclose the full cost of supply of our resource base. Combined with our belief that we have the lowest sustaining capital required to maintain flat production among our peers, this demonstrates a competitive advantage in reducing carbon asset risk. The **cost of supply** of our resource base supports our assertion that resources with the lowest cost of supply are most likely to be developed in scenarios with lower demand, such as the IEA's Net Zero Emissions Scenario.

All U.S. publicly traded companies must adhere to a consistent set of regulations that enable investors to

evaluate and compare investment choices. We fully comply with rules and regulations, including for reporting natural gas and oil reserves. In order to meet the Securities and Exchange Commission requirement that reserve estimates be based on current economic conditions, our reported reserves are determined by applying a carbon tax only in jurisdictions with existing carbon tax requirements. We have also increased our disclosure over the years to offer investors and stakeholders additional insights into the processes and procedures we use to manage climate-related risks, including carbon asset risk.

Carbon Price

We use assumptions of GHG pricing to navigate GHG regulations, drive culture shift, encourage energy efficiency and low-carbon investment, and stress test investments. In 2022, the company used a range of estimated future costs of GHG emissions for internal planning purposes, including an estimate of \$60 per tonne CO₂e as a sensitivity to evaluate certain future projects and opportunities. We have further developed the methodology by which qualifying projects will include assumed or actual GHG pricing in their project approval economics and long-term planning. The base case for project approval economics and planning will now include either the forecast of existing GHG pricing regulations or our current probability-weighted energy transition scenario for that jurisdiction, depending on which is higher. Where there is no GHG price regulation,

COST OF COMPLIANCE WITH CARBON LEGISLATION

CLIMATE LEGISLATION	2022 COST OF COMPLIANCE, NET SHARE BEFORE TAX (\$USD APPROX)	OPERATIONS SUBJECT TO LEGISLATION	PERCENT OF 2022 PRODUCTION ¹
European Emissions Trading Scheme (EUETS)	\$22 million	Norway	7
U.K. Emissions Trading Scheme (U.K. ETS)	\$0.6 million	U.K.	0
Norwegian Carbon Fee	\$36 million	Norway	7
Alberta Technology Innovation and Emissions Reduction (TIER)	No costs incurred	Canada	4
British Columbia and Alberta Carbon Tax	\$6 million	Canada	5

¹ 2022 country production over total production; cost of GHG emissions may only apply to some of our assets or to a portion of our emissions over a set baseline.

we use the current transition scenario for that jurisdiction. We also run two sensitivities:

- With only existing carbon pricing regulations, to reflect near-term cash more accurately.
- With a sensitivity of \$60 per tonne CO₂e to act as a stress test to reduce the risk of stranded assets should climate regulation accelerate.

This ensures that both existing and emerging regulatory requirements are considered in our planning and decision making.

In addition to the use of carbon pricing in planning and project economics, we use it in impairment testing, cost of supply calculations, and reserve calculations.

- **Impairment testing:** BU Long-Range Plan submissions are the basis for the assumptions used in our impairment testing model for both operated and non-operated assets aligned with the higher of existing regulations or the carbon pricing assumptions used in the current energy scenario.
- **Cost of supply:** On appraised resource volumes in our cost of supply model and Long-Range Plan, we assume the higher of the carbon prices from existing regulations or those implied by the current scenario where applicable.
- **Reserve calculations:** In accordance with SEC guidelines, the company does not use an estimated market cost of GHG emissions when assessing reserves in jurisdictions without existing GHG regulations. In jurisdictions where GHG regulations exist we base carbon prices on market actuals. In cases where existing carbon prices are not based on the market but are pre-set by a regulatory body, we use the pre-published prices (e.g. Alberta).

Research and Development

Technology will play a major role in addressing GHG emissions, whether through reducing emissions or lowering the energy intensity of our operations or value chain. As discussed in our External Collaboration and Engagement and Public Policy sections, we participate in a number of research and industry initiatives, two of which are the

Natural Gas Initiative and Oil Sands Pathways to Net-Zero Alliance. The Natural Gas Initiative is a program led by Stanford University researchers with participation from industry, government, inter-governmental organizations and foundations. The initiative aims to increase public access to information about the accuracy of methane detection and quantification technologies.

In 2022, ConocoPhillips joined the Oil Sands Pathways to Net-Zero Alliance, which includes Canadian Natural Resources, Cenovus Energy, Imperial, MEG Energy and Suncor Energy. Together this group represents the companies operating approximately 95% of Canada's oil sands production. The goal of the alliance is to achieve net-zero GHG emissions from oil sands operations by 2050 to help Canada meet its climate goals, including the country's Paris Agreement commitments and 2050 net-zero aspirations, with the help of CCS. ConocoPhillips is partnering with governments and the founding members of the Alliance to accelerate emissions reduction efforts.

Another way we support technology development is through our annual marginal abatement cost curve (MACC) process. The MACC process identifies and prioritizes our emissions reduction opportunities from operations based on the project's breakeven cost. This data helps identify projects that might become viable in the future through further research, development and deployment. As a result of this work, we have focused our near-term technology investments on reducing both costs and emissions where feasible, such as improving the steam-to-oil ratio in the oil sands. Part of a new research and development effort is a multilateral well technology pilot, which enables the drilling of multiple lateral sections without the need for additional aboveground capital or additional steam injection, thereby reducing emissions intensity and operating costs.

Over the past five years we have spent more than \$550 million on research and development, equipment, products and services which have reduced our GHG emissions. [Read more](#) about MACC.

Financial Planning

We take climate-related issues into account in our financial planning in several ways. We focus on the fundamental characteristics that drive competitive advantage in a commodity business — a low sustaining price, low cost of supply, low decline rates and low capital intensity that drive free cash flow, capital flexibility and a strong balance sheet. We have aligned a description of the potential impacts on financial planning with the recommendations of the TCFD and included additional descriptions of strategic measures we take to mitigate impacts.

Commodity Prices

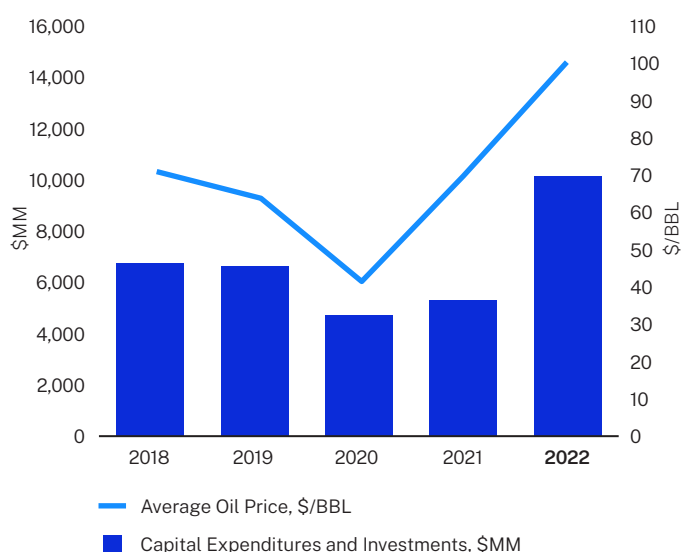
In the short-to-medium term, we use a range of commodity prices derived from our scenario work. In the longer term our scenarios provide insight into the possibilities for future supply, demand and price of key commodities. This helps us understand a range of risk around commodity prices, and the potential price risk associated with various GHG reduction scenarios. History has shown an interdependency between commodity prices and operating and capital costs. In the past, lower commodity prices have driven down operating and capital costs, whereas the opposite has been true when commodity prices have risen.

Capital Expenditures and Operating Costs

New or changing climate-related policy can impact our costs, demand for fossil fuels, the cost and availability of capital and exposure to litigation. The long-term impact on our financial performance, either positive or negative, will depend on several factors, including:

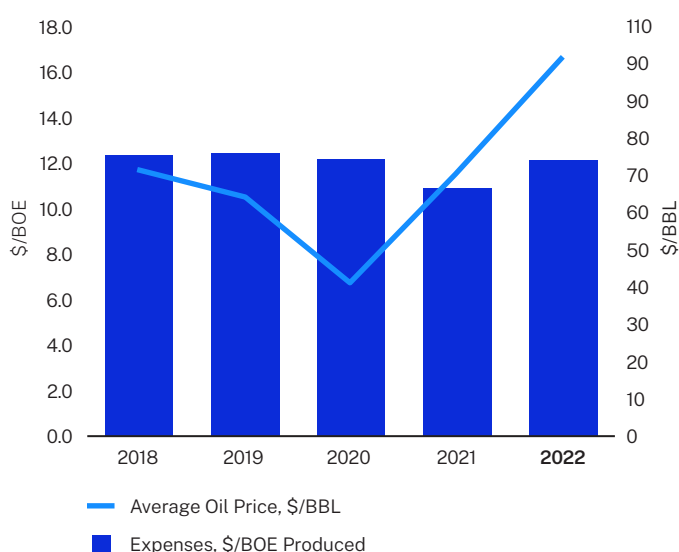
- Extent and timing of policy.
- Implementation details such as cap-and-trade or an emissions tax or fee system.
- Supply- and demand-side renewable fuels or energy efficiency mandates.
- GHG reductions required.
- Level of carbon price.
- Price, availability and allowability of offsets.
- Amount and allocation of allowances.
- Technological and scientific developments leading to new products or services.
- Potential physical climate effects, such as increased severe weather events, changes in sea levels and changes in temperature.
- Extent to which increased compliance costs are reflected in the prices of our products and services.

CAPITAL EXPENDITURES



Data include acquisition and other capital. 2022 Capital of \$10.2B includes base capital of \$8.1B and \$2.1B of acquisition and other capital.

EXPENSES



Data include acquisition and other capital. 2022 Capital of \$10.2B includes base capital of \$8.1B and \$2.1B of acquisition and other capital.

The long-term financial impact from GHG regulations is impossible to predict accurately, but we expect the geographical reach of regulations and their associated costs to increase over time. We model such increases and test our portfolio in our long-term transition scenarios.

Our strategy is also made more robust by discipline in capital and operating costs. When oil prices started dropping in 2014, we were able to respond with changes to short- and long-term planning, as well as more cost-effective and efficient operations.

Reputation and Access to Capital

In addition to considering cost of supply, portfolio resilience and cost of carbon, we also strive to compete more effectively by earning the confidence and trust of the communities in which we operate, as well as our equity and debt holders. We consider how our relative environmental, social and governance performance could affect our standing with investors and the financial sector, including banks and credit-rating agencies. An important priority in our corporate strategy has been to pay down debt and target an “A” credit rating to maintain, facilitate and ensure access to capital through commodity price cycles.

Financial Position

Material information related to our financial position, including material climate-related matters, is disclosed in our most recently filed [periodic report on Form 10-K](#) and subsequent filings on Form 10-Q. Discussion of material climate-related factors includes, but is not limited to, disclosures under the heading “Risk Factors” and within the section “Contingencies — Company Response to Climate-Related Risks.”

Contributing to the Energy Transition

ConocoPhillips is also focused on participating in and contributing to an orderly energy transition and creating business value through differentiated products, business adjacencies, low-carbon opportunities and mitigation measures. Below we describe our efforts to develop our liquefied natural gas portfolio and low-carbon opportunities like CCS and hydrogen.

Liquefied Natural Gas (LNG)

ConocoPhillips has a 60-year history of leadership in LNG and LNG technology. While LNG is still considered part of our traditional oil and gas business, its prominence is increasing in global energy markets. We view LNG as an important component of responsibly meeting energy transition demand in the coming decades.

The use of natural gas in place of coal and refined products represents a specific opportunity for significant reductions in end-use GHG emissions across the globe and it is a key contribution to the energy transition. We expect LNG to play an increasingly important role in the global energy mix, as it has lower GHG emissions than traditional hydrocarbon resources like coal used for electricity generation. ConocoPhillips will leverage its existing strengths in natural gas marketing and trading in support of its growing global LNG portfolio to meet transition demand and energy security needs.

In 2022, we grew our LNG portfolio in several key areas. In February 2022, we completed the purchase of an additional 10% shareholding interest in APLNG from Origin Energy,

expanding our total equity share to 47.5%. This additional stake demonstrates our commitment to provide a reliable and efficient supply of natural gas to the growing Asia Pacific market and to Australia's east coast gas market. In early 2023, we entered into an agreement to purchase up to an additional 2.49% shareholding interest for a total interest of up to 49.99%.⁵

In July 2022, we invested in a new large-scale LNG facility under development by Sempra Infrastructure, a subsidiary of Sempra Energy, in Jefferson County, Texas. We entered into an agreement to acquire a 30% direct equity holding in Port Arthur Liquefaction Holdings, LLC, as well as 5 MTPA LNG offtake from the Port Arthur LNG project. The first phase of the project is expected to include two liquefaction trains, LNG storage tanks and associated facilities. Our position as one of the largest natural gas marketers in North America enables us to provide feedstock supply. Entering this agreement with Sempra provides us with a ground-floor opportunity to participate in a premier LNG development, reinforcing our commitment to help solve the world's energy supply needs and seeking to strengthen U.S. and global energy security as we transition to a lower carbon future. Further, equity ownership in the Port Arthur LNG project provides options for ConocoPhillips to participate in future expansions and lower carbon activities, including CCS, in line with our own strategic initiatives as we continue to monitor the energy transition pathway. The project reached final investment decision in early 2023, and we finalized our equity investment in the project.

In the second half of 2022, ConocoPhillips signed agreements forming two new joint ventures with QatarEnergy that will participate in the North Field East

(NFE) and the North Field South (NFS) LNG projects. As of December 2022, following the satisfaction of the conditions precedent, we have a 25% shareholding interest in Qatar Liquefied Gas Company Limited (8) (QG8), which has a 12.5% interest in the NFE project. In early 2023, subject to regulatory approvals, we expect to complete the acquisition of a 25% interest in Qatar Liquefied Gas Company Limited (12) (QG12), which has a 25% interest in the NFS project. In November 2022, ConocoPhillips and QatarEnergy announced an agreement to responsibly and reliably supply secure, long-term LNG to Germany. First delivery from NFE is expected in 2026 to the recently announced German LNG Terminal at Brunsbüttel.

In addition to these specific projects, we are one of the largest natural gas producers and marketers in North America, and we have licensed our liquefaction Optimized Cascade® Process in 27 trains around the world. This liquefaction process simplifies modularization and reduces liquefaction equipment counts, resulting in a smaller facility footprint and lower GHG emissions.

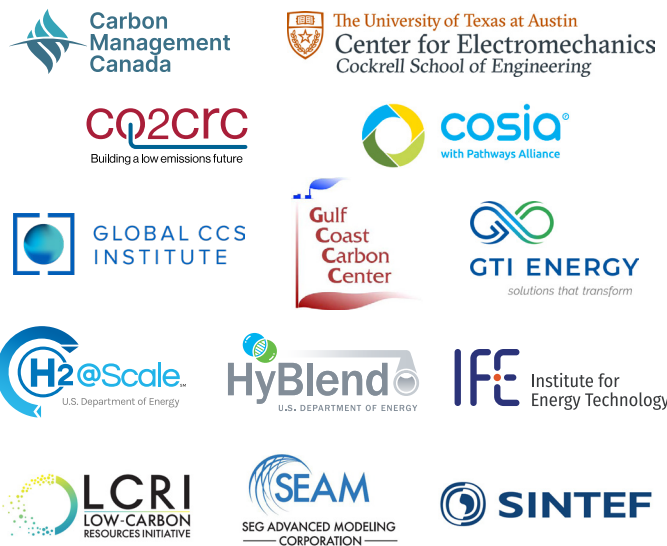
In 2022, we supplied Asian markets with approximately 0.36 trillion cubic feet (or nearly 1 billion cubic feet per day) of natural gas and LNG. To put this in perspective, if all the natural gas and LNG we sold to Asia in 2022 had been used to replace coal for electricity generation, GHG emissions would have been reduced by approximately 22 million metric tonnes, almost 1.5 times more than the company's combined Scope 1 and Scope 2 emissions for the year, based on EPA GHG emissions factors.

⁵ Subject to regulatory approvals and customary closing conditions.

Low Carbon Opportunities

In early 2021, we established a multi-disciplinary Low Carbon Technologies organization. The organization's remit is to support our net-zero ambition on Scope 1 and 2 emissions, understand the low-carbon energy landscape and prioritize opportunities for future competitive investment. We are approaching this effort with the same discipline we follow in our traditional business investment and capital allocation process. This includes keeping costs low, leveraging competencies, identifying viable economic opportunities and anticipating and managing risk while focusing on projects with competitive returns potential.

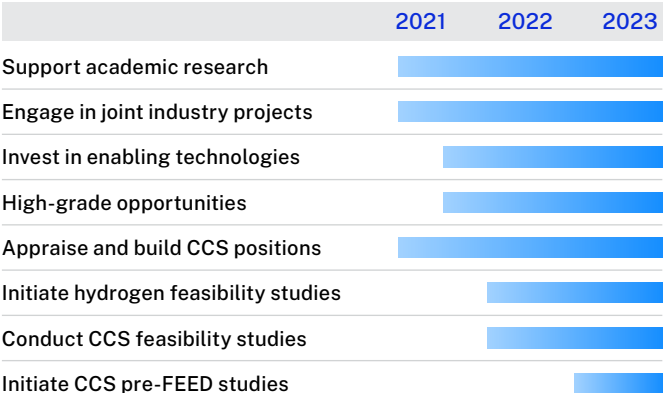
We are working with organizations in R&D and academia and industry collaborations focused on CCS, renewables, energy efficiency, electrification and hydrogen generation, deployment and transportation to advance low carbon opportunities around the globe.



We recognize the important role that carbon capture and storage (CCS) and hydrogen could play in decarbonizing the global economy. We intend to apply our disciplined approach to development of these new opportunities through clear investment criteria and a focused strategy. We have prioritized opportunities in these technologies as they offer potential for competitive returns and align closely with our technical competencies and global reach. Since 2021, we have advanced our positions in both technologies, including offering support to drive innovation, described in more detail in the following sections.

LOW CARBON OPPORTUNITIES¹

The company has advanced its low carbon positions through a variety of research and development activities.



¹ Shading indicates increasing planned intensity and maturity of our actions over time. 2023 activities are planned.

Carbon Capture and Storage

Carbon capture and storage involves capturing CO₂ from concentrated sources — such as power plants or industrial sources — preprocessing, compressing, transporting and injecting the CO₂ into geologic formations underground and monitoring the storage site. This process helps reduce the amount of CO₂ released into the atmosphere.

ConocoPhillips is leveraging our unique land position, technical expertise, project development skills and safety commitment to evaluate future cost-effective and permanent carbon storage services. We have assembled an internal team of subsurface and surface experts, with support from our Land, Regulatory, Legal, Government Affairs, Commercial, Environmental and Sustainable Development and Stakeholder Relations teams, and are actively engaged in subsurface characterization, business development, appraisal planning and land acquisition.

CCS hubs should enable access to a diverse source of industrial customers, reducing both the reliance on a single source of CO₂ supply and the risk of asset stranding. We are evaluating an opportunity to participate in the creation of a CCS hub for industrial sites along the U.S. Gulf Coast. This hub could offer cost advantages and risk mitigations and can be modified to meet increasing demand. The Gulf Coast's large, concentrated industrial emissions sources, coupled with significant subsurface storage capacity in Texas and Louisiana, could make it an ideal location for a hub structure.

Long-term off-take agreements would need to be signed with industrial emitters who are looking to address their emissions to meet long-term GHG reduction targets, current carbon credits and future possible credits or taxes.

As part of this work, we identified a 25,000-acre portion of our more than 600,000-acre position in southeast Louisiana as a potential hub for CCS services. The area may be well-suited to serve industrial sites located along the Mississippi River corridor. Additionally, ConocoPhillips is in negotiations with landowners along the Texas and Louisiana Gulf Coast for additional rights to sequester CO₂. The team is also negotiating with large industrial customers near the proposed land positions to provide baseload CO₂ streams to each of the hubs.

ConocoPhillips will continue to evaluate development of low-carbon projects, including a CCS project as part of the previously described LNG work with Sempra Infrastructure.

At ConocoPhillips (U.K.) Teesside Operator Limited, we are collaborating with industry partners and the government to study ongoing joint regional environmental initiatives, including evaluating the ConocoPhillips-operated Teesside Oil Terminal as a site for industrial carbon capture. An engineering study was completed in early 2023, and we remain open to any future opportunities regarding expansion of carbon capture and storage clusters in the area.

Finally, we are a member of the Pathways Alliance, a group of Canada's largest oil sands producers working together to address climate change by achieving net-zero operational emissions by 2050. One of the key pathways to achieving net-zero operational emissions is through the proposed foundational project, which includes a carbon capture and storage network to transport captured CO₂ from oil sands facilities and sequester it deep underground at a storage hub.

Hydrogen

ConocoPhillips is also evaluating technologies that will enable the cost-effective production of hydrogen. We have identified two types of hydrogen manufacturing for bulk fuel supplies in both hydrogen and ammonia form that have technical and commercial adjacencies with the company's core competencies and the potential to grow into a scalable

business — hydrogen from natural gas with associated CCS ("blue hydrogen") and hydrogen from the electrolysis of water using electricity from renewables ("green hydrogen").

We are evaluating optimum locations for low-cost hydrogen manufacturing as well as the best means to deliver it to market. Success factors for blue hydrogen are a reliable supply of low-cost natural gas and proximity to subsurface sites suitable for CCS. For green hydrogen, the success factors are low-cost supplies of renewable electricity, water and large-scale electrolysis.

Technologies for manufacturing both blue and green hydrogen are rapidly evolving, and, as with CCS, we are pursuing various ways to access these technologies and qualify them for use. Over the last year, we have made early investments in enabling hydrogen technologies. Leveraging our global reach and our technical expertise, we are evaluating and high-grading hydrogen production and marketing opportunities, including ammonia as a hydrogen carrier, both domestically and globally.

In early 2022, we made an investment to support the development of a novel turquoise hydrogen production technology from Ekona Power Inc., a Vancouver-based hydrogen technology venture. Ekona's new methane pyrolysis technology platform is expected to produce low-cost hydrogen from methane. The technology converts existing methane streams into hydrogen and solid carbon to reduce CO₂ emissions when applied. This investment represents an opportunity to leverage our existing infrastructure and create optionality at the front end of new technologies that will be important to the future of energy.

In September 2022, Japanese energy company JERA announced a collaboration with ConocoPhillips to evaluate the development of green and blue ammonia from the U.S. Gulf Coast. We are working to facilitate the development of low-carbon ammonia production to accelerate the availability and supply of low-carbon fuels from the U.S. for use in the U.S., Europe, Japan and greater Asia. A project engineering study is underway to evaluate this landmark opportunity.

Risk Management

We utilize an integrated management system approach to identify, assess, characterize and manage climate-related risks. This system links directly to the enterprise risk management (ERM) process, which includes an annual risk review by the Executive Leadership Team and the Board of Directors.

Assessing Climate-Related Risks

The diagram below illustrates how we assess climate-related physical and transition risks for operations, developments and new major projects.

To understand long-term risk and mitigation options, we utilize four scenarios as described in the [Scenario Planning at ConocoPhillips section](#). This scenario approach helps us evaluate distinct outcomes related to the potential timing and intensity of government climate change policy development, the pace of alternative energy technology development and trends in consumer behavior. This information is then used to shape our analysis and consideration of various outcomes for policy, technology and market risk.

We periodically review emerging climate-related risks with our Executive Leadership Team as part of our scenario monitoring system, managed by our Chief Economist’s Office. A cross-functional team enters events into a centralized database that is reviewed regularly for indications that risks are changing or developing. We use

this “early warning” system to inform our strategies in a timely manner so that we can identify and implement effective mitigation measures. The scenario monitoring system helps us understand the pace and direction of the energy transition. For example, if regulations and technology were moving more quickly than in our scenarios, this would indicate that we might be moving to a 1.5-degree scenario similar to the range identified in the IPCC “1.5 degree” report, and we would evaluate appropriate pathways. In our resiliency workshops, we use externally produced scenarios that describe the range of possible future physical risk.

SD Risk Management Standard Annual Assessment

As part of the annual risk management process mandated by our SD Risk Management Standard, we examine operated assets and major projects against the physical, social and political settings of our operations. Subject matter experts in each business unit (BU) and project identify and describe climate-related risks.

Each risk is then assessed using a matrix that evaluates both its likelihood and consequence. Risks rated significant or high are included in the corporate SD Risk Register. In evaluating the consequence level, we consider potential impacts on employee and public safety, sociocultural and economic impacts to stakeholders, environmental impact, and reputational and financial implications.

As part of the process, we examine the interdependence of risks and work to identify emerging risks such as new regulatory requirements and emerging greenhouse gas (GHG) pricing regimes.



Resiliency Planning Workshops

We facilitate resiliency planning workshops within business units to identify and assess the risks and opportunities associated with the physical impacts of changing climate and the potential technology and solutions to mitigate risks and leverage opportunities. These workshops are conducted on a periodic basis aligned with our Capital Projects Management System stage gate approval process to ensure that our operations have access to up-to-date science provided by qualified consultants to inform their engineering and infrastructure decisions.

Climate-Related Risk Assessment

A climate-related risk assessment is conducted on any future project development that costs more than \$50 million net and is expected to emit more than 25,000 metric tons CO₂ equivalent (TeCO₂e) net to ConocoPhillips during any year of its operational lifespan. This assessment is mandatory for investment approval in our project authorization process. Project teams for qualifying projects are required to assess the potential risks and opportunities associated with GHG emissions, GHG regulation and a physically changing climate based on local jurisdictions and geographies as opposed to relying solely on our corporate scenarios. The climate risk assessment guidelines provide a framework for project teams to:

- Forecast operational GHG emissions for the life of the project.
- Evaluate climate-related risks and opportunities, including physical and transition risks that apply to the project.
- Make decisions on GHG emissions control in project design, including energy efficiency solutions, power source selection, emissions management, carbon capture and storage/utilization, and external compliance options such as the purchase or origination of GHG offsets.
- Evaluate the potential cost of GHG emissions in project economics.

We assess climate-related risks early in the project engineering stage to better inform our investment decisions and facility design. The ConocoPhillips Health, Safety and Environment (HSE) and Social Issues Due Diligence Standard also provides further guidance on accounting for sustainable development issues for new acquisitions, new business ventures, joint ventures and property transactions.

Project Authorization

Our corporate authorization process requires all qualifying projects to include GHG pricing in their project approval economics. The base case for project approval economics now includes the higher of the forecast of existing regulations and the current transition scenario for that jurisdiction. Where there is no GHG price regulation, we use the current transition scenario for that jurisdiction. We also run two sensitivities:

- With existing carbon pricing regulations, to reflect near-term cash more accurately.
- With a sensitivity of \$60 per tonne CO₂e to act as a stress test to reduce the risk of stranded assets should climate regulation accelerate.

This ensures that both existing and emerging regulatory requirements are considered in our planning and decision making.

Managing Climate-Related Risks

Our climate-related risk management process is designed to drive appropriate action for adapting to a range of possible future scenarios. Through integrated planning and decision making, we develop mitigation plans for climate-related risk, track performance against our goals and adjust our plans as we learn and conditions evolve.

Local risks and opportunities related to our operations and projects are assessed and managed at the BU level, enabling tailored business goals to address the challenges and opportunities unique to each region's operations. Reporting and overarching climate-related risks, such as GHG target-setting and prioritization of global emissions-abatement projects, are managed at the corporate level.

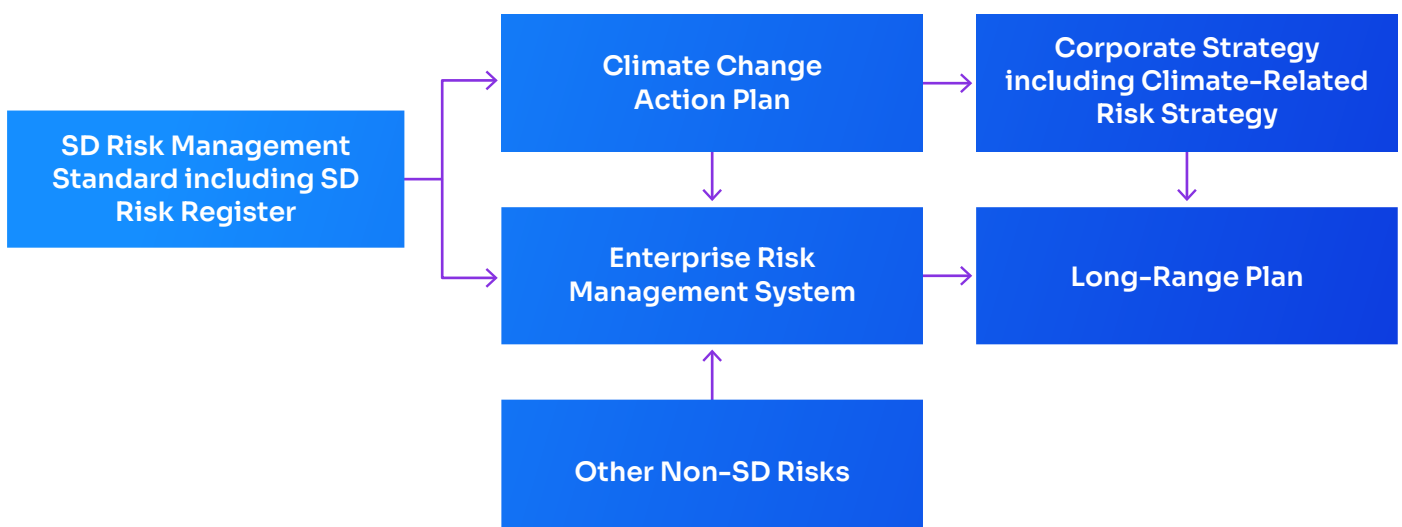
The diagram below shows a simplified process flow of our climate-related risk management process.

The objective of our Climate Risk Strategy is to manage climate-related risk, optimize opportunities and equip the company to respond to changes in key uncertainties, including government policies around the world, emissions reduction technologies, alternative energy technologies and changes in consumer trends. The strategy sets out our choices around portfolio composition, emissions reductions, targets and incentives, emissions-related technology development, and our climate-related policy and finance sector engagement.

Finally, the ConocoPhillips Long-Range Plan provides the data that underlies our corporate strategy and enables us to test our portfolio of projects against our climate-related risk scenarios, and thus make better-informed strategic decisions.

Integrating climate-related risk into our corporate strategy and Long-Range Plan results in outcomes and activities such as:

- Reducing the sustaining price of the company — the equivalent WTI price at which cash provided by operating activities covers capital expenditures that sustain our production at current levels and the ordinary dividend.
- Lowering the cost of supply to manage market risk and improve returns.
- Maintaining a diversified portfolio of projects and opportunities to mitigate geographical and geological risks.
- Diversifying our portfolio to include assets with lower decline rates and low capital intensity to drive higher free cash flow yields.
- Developing technologies that reduce both costs and emissions.
- Pursuing competitive opportunities in LNG, CCS and hydrogen.
- Monitoring alternative energy technologies.



Integrating Climate-Related Risks into ERM

Climate-related risks from the corporate SD Risk Register are mapped to key categories in the enterprise risk management process (ERM).

Descriptions of these risks and mitigation measures from the [Climate Change Action Plan](#) are shared with ERM risk owners to inform their assessments of risk ranking, corporate actions and mitigations. Each risk owner evaluates and prioritizes risks in their area based on likelihood and consequences, thereby determining the relative significance of climate-related risks in relation to other enterprise risks.

The ERM process is a direct input into our strategic planning process. By identifying major cross-cutting risks and trends, we closely link action plan efforts to key performance issues and address and mitigate identified risks. The board regularly reviews the ERM system and mitigation actions.

Required regulatory disclosures on financial reporting and information deemed material and useful for investor decision making is presented in our filings with the [Securities and Exchange Commission \(SEC\)](#).

SD Risk Management Process

The SD risk management process ensures that a Climate Change Action Plan is developed to track mitigation activities for each climate-related risk included in the corporate SD Risk Register. This plan includes details about our commitments, related responsibilities, resources and milestones.

As part of annual updates to the register, we evaluate the Action Plan and its effectiveness and make decisions to continue mitigation measures, add new measures or simply monitor the risk for further developments. The table below lists our key SD risk management streams, their scope and purpose.

[Read more](#) about our SD Risk Register and Climate Change Action Plan.

SD RISK MANAGEMENT STREAMS	SCOPE	DESCRIPTION
Corporate strategy	Corporate/portfolio	Defines the company's direction for exploration and development, including portfolio, capital allocation and cost structure.
Climate Risk Strategy	Corporate/portfolio	Identifies options to reduce and mitigate climate-related risks as policies, markets and technologies develop over time.
GHG emissions intensity target	Business units and qualifying projects	Drives actions, reviews and management of future policy and market risk.
Long-Range Plan	Corporate/portfolio	Forecasts key data for our corporate strategy covering our proposed portfolio development and performance, including production, costs, cash flows and emissions.
Marginal abatement cost curve (MACC)	Business units	Prioritizes and funds GHG emissions reduction projects across our business units based on cost and emissions abated.
SD risk management process	Corporate, business units and qualifying projects	Records all SD-related risks that are prioritized as significant and high in the SD Risk Register to ensure that the mitigation progress is reported and issues are managed effectively.
Climate Change Action Plan	Corporate, business units and qualifying projects	Records mitigation actions, milestones and progress in managing climate-related risks from the SD Risk Register.

Performance Metrics and Targets

In 2020, we adopted a Paris-aligned climate-related risk framework with an ambition to reduce our operational greenhouse gas (GHG) emissions to net-zero by 2050. To that end, we calculate key metrics and use targets to measure and monitor our performance and progress in managing climate-related risks and opportunities in line with our strategy and risk management process. These include:

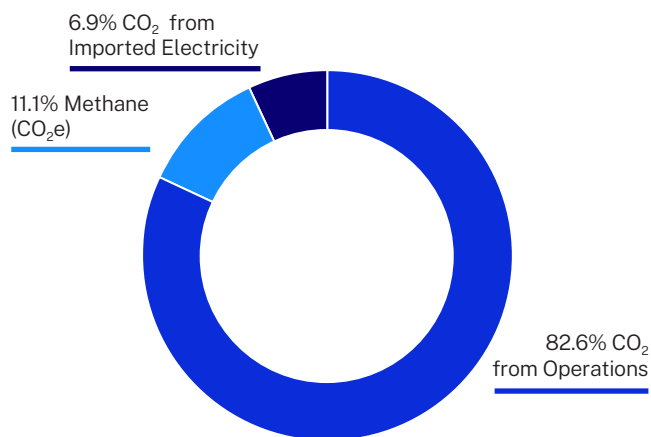
- GHG emissions intensity target.
- Scope 1 and Scope 2 emissions.
- Metrics for methane, flaring and water.

We believe these metrics and targets are the most useful in managing climate-related risks and opportunities and monitoring performance. Highlights of our 2022 performance compared to 2021 (on a gross operated basis) include:

- Scope 1 and 2 GHG emissions intensity declined 14% to 23.3kg CO₂e/BOE.
- Methane intensity declined 4% to 2.5kg CO₂e/BOE.
- Flaring intensity decreased 12% to 25.9 MMCF/MMBOE (total flaring volume per total production).

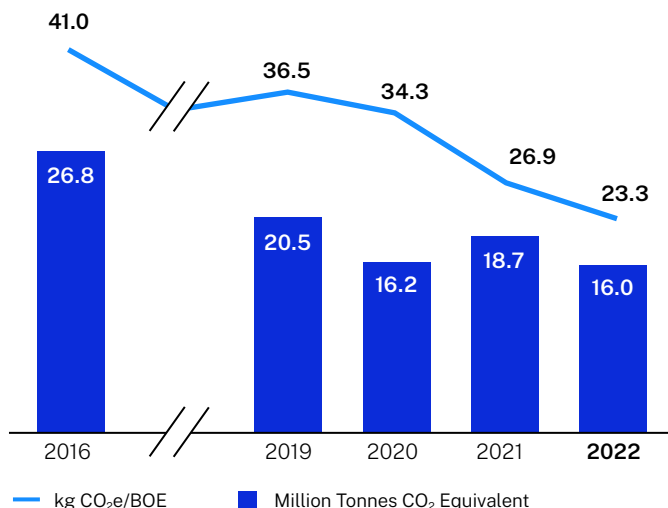
TOTAL GROSS OPERATED GHG EMISSIONS

Percent of Total Company



N₂O represents only about 0.1% of our gross operated emissions and is not represented here.

TOTAL GROSS OPERATED GHG EMISSIONS AND INTENSITY



2020 GHG emissions were lower as a result of COVID-impacted production curtailment.

Our total GHG intensity metrics generally show an improvement over time. The decrease in absolute emissions compared to 2021 was primarily driven by the divestment of our Indonesia asset.

We have also committed to near-, medium- and long-term targets for reducing operational (Scope 1 and 2) emissions over which the company has ownership and control. These targets include:

- Achieving our stated ambition to reach net-zero emissions for Scope 1 and 2 emissions by 2050.
- Strengthening our previously announced operational GHG emissions intensity reduction target to 50-60% by 2030 on both a gross operated and net equity basis.
- Achieving near-zero methane emissions intensity by 2030. This goal was set in response to meeting our 10% methane emissions intensity target four years early.
- Achieving a target of zero routine flaring by 2025, five years sooner than the World Bank Initiative's goal of 2030.

Our ambition to achieve net-zero operational emissions by 2050 is set on an absolute emissions basis, while the rest of our target framework for near- and medium-term targets is set on an intensity basis. Intensity targets better apply to the E&P sector's dynamic business environment where plans, technology, prices, industry structure and costs all change rapidly. Intensity targets are more durable and allow a company to change its plans to maintain a competitive portfolio without also having to repeatedly reset targets.

Beyond 2030, many uncertainties influence our ability to set specific future commitments and achieve our net-zero operational emissions ambition. Examples include:

- Pace of development of currently undeveloped technologies.
- Country-driven climate policy.
- Permitting and regulatory changes that may impair ability to execute current or future plans.
- Pricing, verifiability and availability of offsets; offset market developments.
- Potential revisions to emissions estimates and reduction goals as measurement technologies advance.
- Success and rate of return of nascent low carbon investments, technologies and markets.

Scenario modeling and analysis helps to identify key uncertainties to be managed. We also recognize that future policy and regulatory efforts may supersede company net-zero targets as governments set and refine their own Nationally Determined Contributions. As such, we recognize that our pathway and targets may not be the same as other companies due to differences in asset mix, geographies, risks and opportunities.

[Read more](#) about the principles surrounding our approach to target setting.

KEY CONTENT LINKS

Our **Performance Metrics** section provides the metrics included in this section in tabular format.

Our metrics are also linked to key frameworks such as **SASB**, **GRI/Ipieca/UNGP** and **TCFD**.

SCOPE 1 – Direct GHG emissions from sources owned or controlled by ConocoPhillips.

SCOPE 2 – GHG emissions from the generation of purchased electricity consumed by ConocoPhillips.

SCOPE 3 – All other indirect GHG emissions as a result of ConocoPhillips' activities, from sources not owned or controlled by the company, including emissions from the end use of oil and gas products by consumers.

Emissions Reduction Targets and Performance

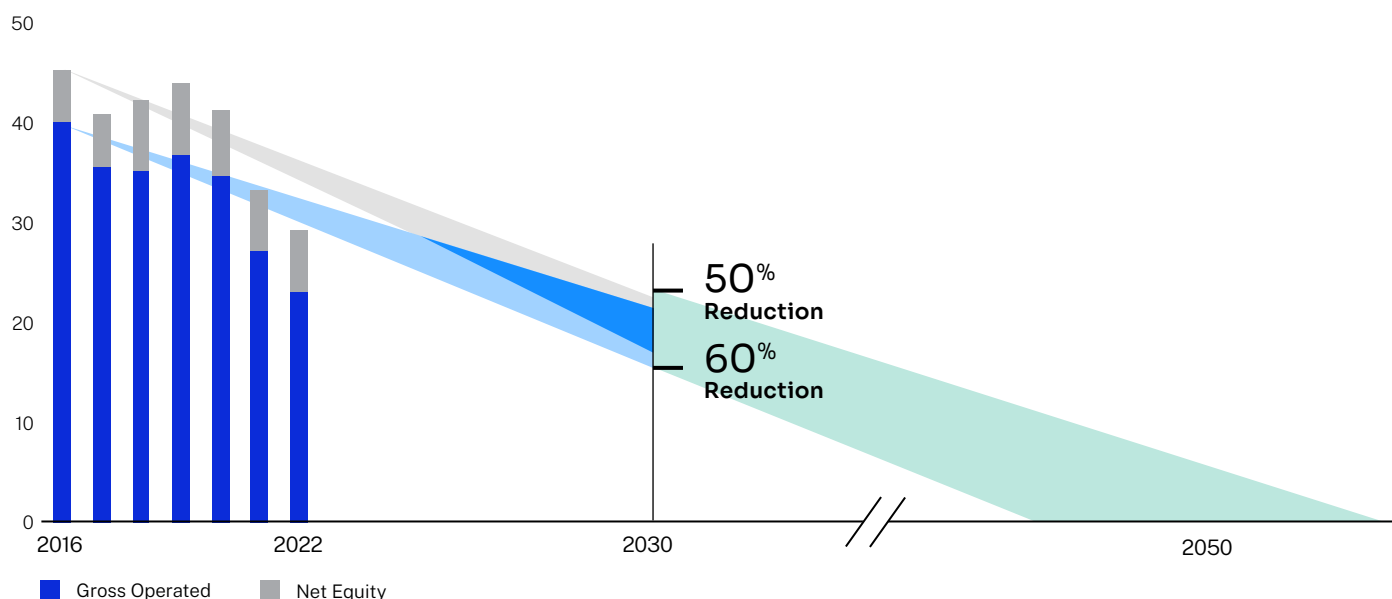
GHG emissions management is an expected core competency for our business units (BUs) managing oil and gas production. Those BUs are required to review their GHG emissions profile and identify opportunities to make design and operating improvements that can reduce emissions. Potential GHG emissions reduction projects are reviewed within our annual budget planning process and assessed against pre-determined selection criteria, including cost per tonne of CO₂e abated. We call this annual exercise our marginal abatement cost curve (MACC) process, described in more detail within this section of the report.

All data presented herein is from January 1 to December 31, 2022. Footnotes to our performance metrics outline the scope and methodologies of our data reporting. The minimum boundary for reporting on environmental priorities is the assets we operate. Current and updated targets and ambitions are outlined in near-, medium- and long-term timeframes, followed by examples of emissions reduction projects in our business units.

These targets inform internal emissions reduction goals at the business unit level and support innovation on efficiency, emissions reduction, GHG regulatory risk mitigation and climate-related risk management throughout the life cycle of our assets.

PATHWAY TO NET-ZERO¹

Emissions Intensity (kg CO₂e/BOE)



Near-Term (2025)

- Zero routine flaring by 2025²

Medium-Term (2030)

- **NEW: Reduce GHG intensity 50-60%** (from 40-50%)³
- Near-zero methane intensity target <1.5 kg CO₂e/BOE

Long-Term (2050)

- Net-zero emissions ambition¹

¹ Scope 1 and 2 emissions on a gross operated and net equity basis.

² Achieving a target of zero routine flaring by 2025, five years sooner than the World Bank initiative's goal of 2030.

³ Reduction from a 2016 baseline.

Near-Term Emissions Reductions (By 2025)

Our near-term targets have a priority focus on flaring and methane emissions.

Our 2025 targets are as follows:

- **ACHIEVED IN 2021:** Meet a 10% methane emissions intensity reduction target by 2025 from a 2019 baseline.
- Achieve a target of zero routine flaring by 2025, five years sooner than the World Bank Initiative's goal of 2030.

Methane

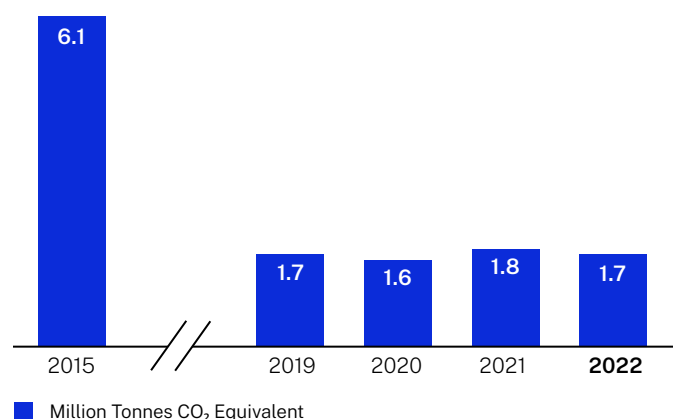
Our methane emissions reductions come from voluntary reduction activities and from portfolio changes. Our absolute methane emissions decreased in 2022 due to the disposition of our Indonesian and non-core Lower 48 assets, reduced flare volumes, improved detection of fugitive emissions and data quality improvements.

In 2022, methane emissions totaled 1.7 million tonnes of CO₂e and constituted approximately 11% of our total GHG emissions.

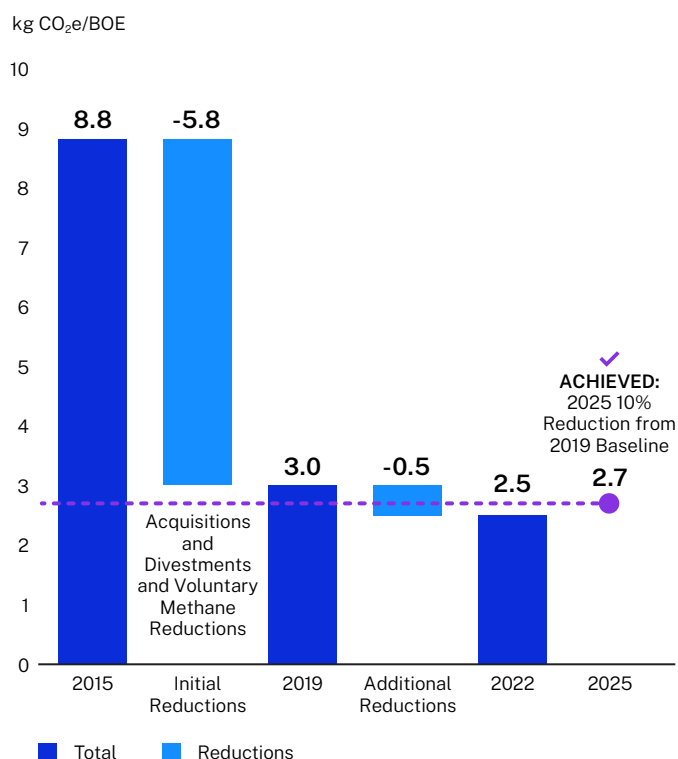
By year-end 2021, we achieved a 13% reduction of intensity from 2019, surpassing our 2025 target four years early with an intensity of 2.6 kg CO₂e/BOE. As of year-end 2022, we have achieved an approximate 70% methane emissions intensity reduction from 2015 with an intensity of 2.5 kg CO₂e/BOE.⁶

TOTAL GROSS OPERATED METHANE EMISSIONS

Global Warming Potential = 25



GROSS OPERATED METHANE EMISSIONS INTENSITY PROGRESS



Reducing methane emissions, even the small equipment leaks known as fugitive emissions, is a key part of our operations. Leak detection and repair (LDAR) is a work practice used to identify and repair leaking components, including valves, compressors, pumps, tanks and connectors, in order to reduce GHG emissions and increase efficiency. We fix leaks as soon as feasible, with many leaks repaired either the same day or within a few days of being detected. We have been voluntarily conducting pilots of new technologies at numerous facilities to determine effectiveness and scalability of next-generation detection technologies. This has included a wide range of ground-based and aerial technologies, each providing different strengths for different monitoring applications. The main objective with these technology pilots is to expeditiously identify, investigate and repair leaks associated with malfunctions and abnormal operating conditions, resulting in faster emissions mitigation. We continue to work with technology providers to develop and test technologies, and we expect improvements over time.

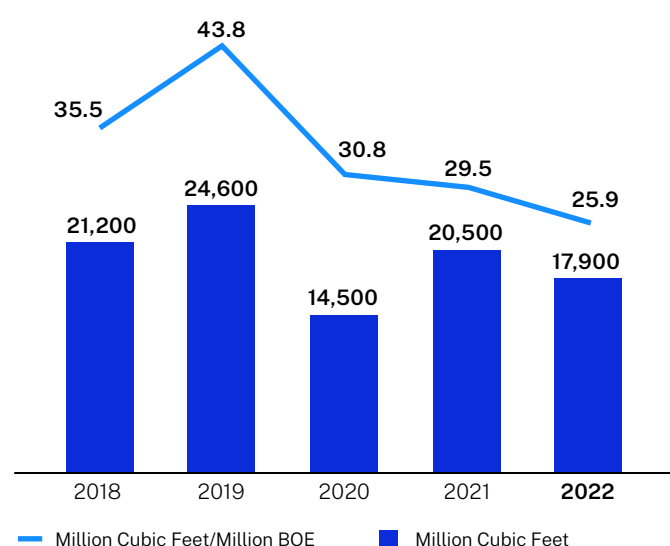
⁶ While 2019 is the formal baseline for our methane emissions intensity target, we also compare performance to 2015 to show longer-term progress. 2015 is an important milestone year for international organizations like the UN-led [Oil and Gas Methane Partnership 2.0](#) that aim to achieve a 45% methane emissions reduction by 2025 from 2015 levels.

Flaring

Flaring is a regulated process for the controlled release and burning of natural gas during oil and gas exploration, production and processing operations. Flaring is required to safely dispose of flammable gas released during process upsets or other unplanned events and to safely relieve pressure before performing equipment maintenance. Flaring is also used to control and reduce emissions of volatile organic compounds from oil and condensate storage tanks, and to manage emissions at well sites that lack sufficient pipeline infrastructure to capture gas for sale.

ConocoPhillips is committed to the World Bank Zero Routine Flaring by 2030 Initiative, a program that aims to create consistency among governments, the oil and gas sector and development institutions to address flaring.⁷ In 2022, based on our flaring reductions to date, we committed to achieving zero routine flaring by 2025, five years in advance of the World Bank goal, and we continue to make strong progress. In 2022, routine flaring decreased nearly 90% compared to 2021 through active well management to shut in wells during capacity constraint events. Other projects focus on treatment of sour gas, flare capture and de-bottlenecking. Achieving this target is a key near-term action to achieving our World Bank goal as well as our net-zero operational emissions ambition.

TOTAL GROSS OPERATED FLARING VOLUME



While flaring emissions make up only about 10% of our total Scope 1 and 2 GHG emissions, the target will drive continued near-term focus on routine flaring reductions across our assets.

In 2022, the total volume of flared gas was 17.9 BCF, a decrease of 13% from 2021. The decrease was a result of decreased flaring in Eagle Ford, Norway and Alaska as well as the disposition of our Indonesia asset. In Eagle Ford, decreased flaring was attributable to flare decommissioning, better accounting of flare outage periods, and use of wellsite fuel meters. In addition to reduced flare volumes, flaring intensity also decreased 12%.

Having made significant progress in addressing routine flaring, our future focus will shift to non-routine and safety flaring. These sources of flaring present economic challenges due to the dispersed nature of the assets. We will continue to review viable options to reduce these sources.

Medium-Term Emissions Reductions (By 2030)

Methane

In July 2022, ConocoPhillips joined the Oil and Gas Methane Partnership (OGMP) 2.0 Initiative, a voluntary, public-private partnership between the United Nations Environment Programme, the European Commission, the Environmental Defense Fund and over 80 oil and gas companies. OGMP 2.0 has emerged as a global standard for methane emissions measurement and reporting and is aimed at minimizing methane emissions from global oil and gas operations. Our membership demonstrates our commitment to deliver on our methane reduction targets through active collaboration to accelerate industry best practices in our operations.

As part of OGMP 2.0, we plan to report methane emissions for all material sources from both operated and non-operated assets according to our reporting boundaries. In line with the Initiative's guidance, we plan to incorporate source-level and site-level measurements when estimating methane emissions from our operations. In conjunction with these commitments and in response to achieving our near-term methane target four years early, we have set a new medium-term target to achieve a near-zero methane emissions intensity by 2030. This near-zero target is defined

⁷ Routine flaring is defined as flaring of associated gas that occurs during the normal production of oil in the absence of sufficient facilities to utilize the gas onsite, dispatch it to a market or re-inject it. Flaring for safety reasons, non-routine flaring or flaring gas other than associated gas is not included as part of the World Bank Zero Routine Flaring Initiative.

as 1.5kg CO₂e/BOE or approximately 0.15% of natural gas produced. The target includes emissions that are related to production and excludes emissions from our aviation and polar tankers fleets.

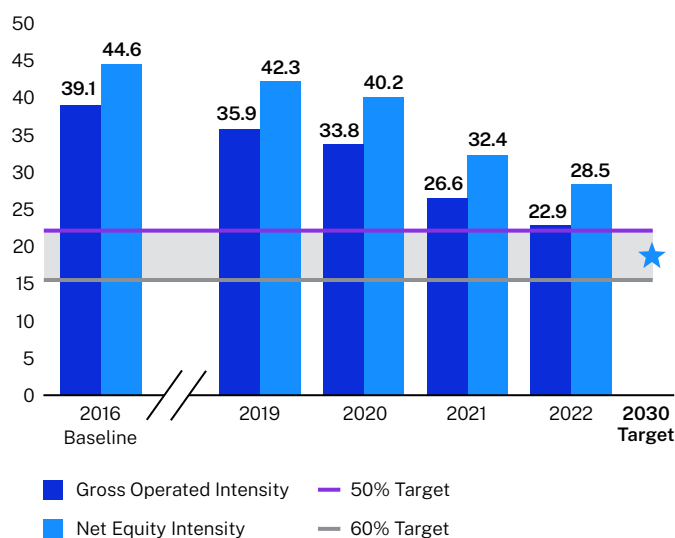
We are one of more than 100 companies participating in **The Environmental Partnership**, a coalition of natural gas and oil companies focused on accelerating environmental performance improvements from operations across the United States. The partnership prioritizes managing methane emissions and aligns with our focus on emissions reductions and high environmental standards.

GHG Emissions

In April 2023, we strengthened our target to 50-60% reduction by 2030 from a 2016 baseline. The target covers Scope 1 and Scope 2 gross operated and net equity emissions. Our Scope 1 and Scope 2 GHG emissions and emissions intensity calculations directly measure our performance and help us understand climate-related risk. Lower intensity assets are more resilient to policy, legal, technology and market risk.

2022 GHG EMISSIONS INTENSITY TARGET PROGRESS

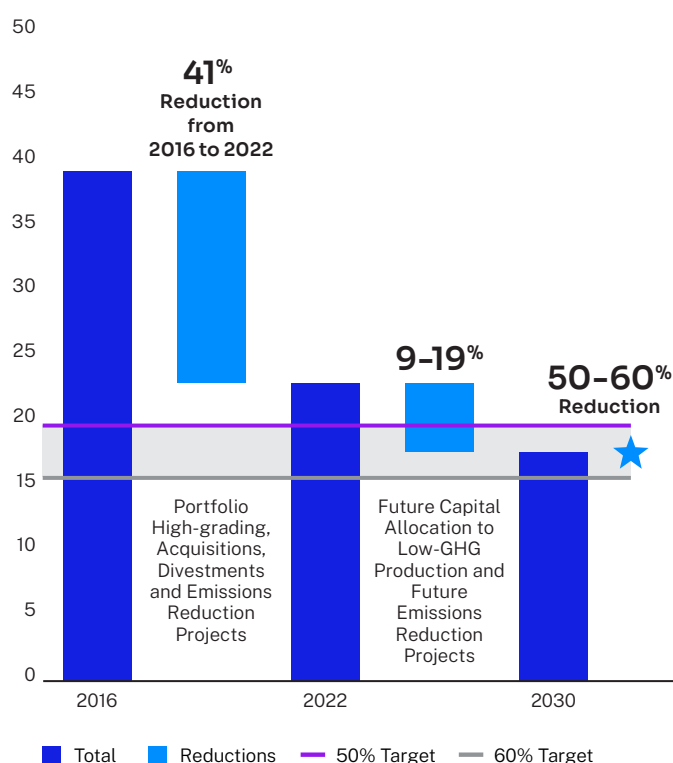
kg CO₂e/BOE



The company has already progressed toward meeting this target over the past several years. Between 2016 and 2022, we achieved a 41% intensity reduction on a target-related, gross operated basis through a combination of specific emissions reduction projects and portfolio changes. Continued capital allocation actions are expected to have a combined impact of lowering GHG emissions intensity by roughly 9-19% as we increase production from assets with low intensity, such as those in the Permian Basin, and achieve reductions from near-term projects.

GROSS OPERATED PATHWAY TO 50-60% INTENSITY REDUCTION TARGET

kg CO₂e/BOE

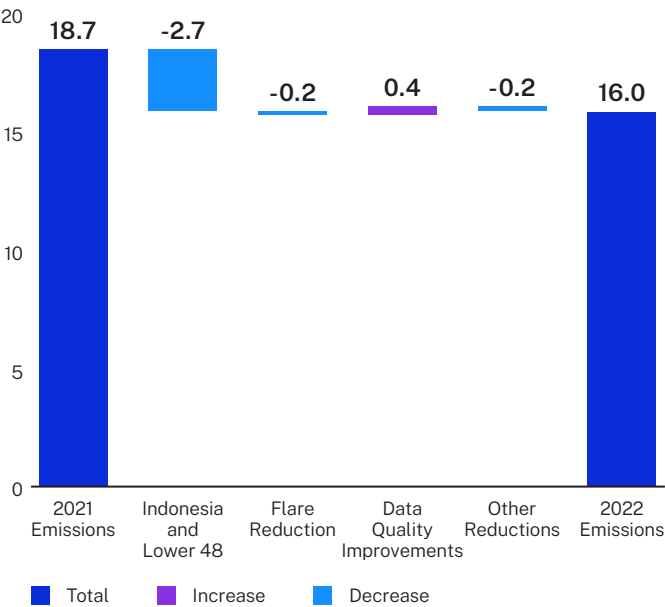


The target includes emissions that are related to production and excludes emissions from our aviation and polar tankers fleets. This may give rise to small differences between the intensity we report for our GHG target purposes and the intensity we report for our annual metrics. Over the past five years, this difference has been less than 2%, or 1 kg CO₂e/BOE.

In 2022, our total gross operated GHG emissions were approximately 16.0 million tonnes, a 14% reduction compared to 2021. The disposition of our Indonesia asset and some smaller Permian dispositions contributed to a decrease in absolute emissions in 2022. In addition, we implemented various emissions reduction measures across our assets during 2022, including reductions in flaring and installation of drill site fuel meters.

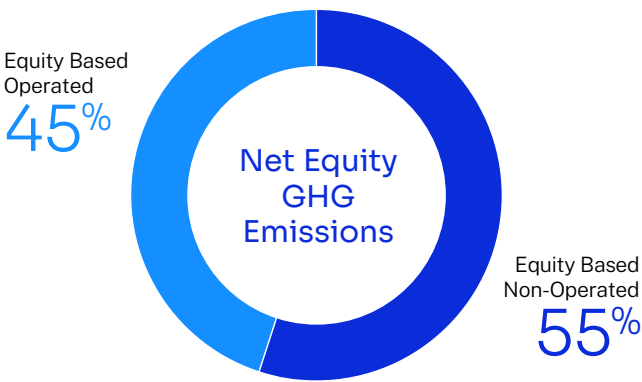
GROSS OPERATED GHG EMISSIONS CHANGES

Million Tonnes CO₂e



Net Equity and Non-Operated Emissions

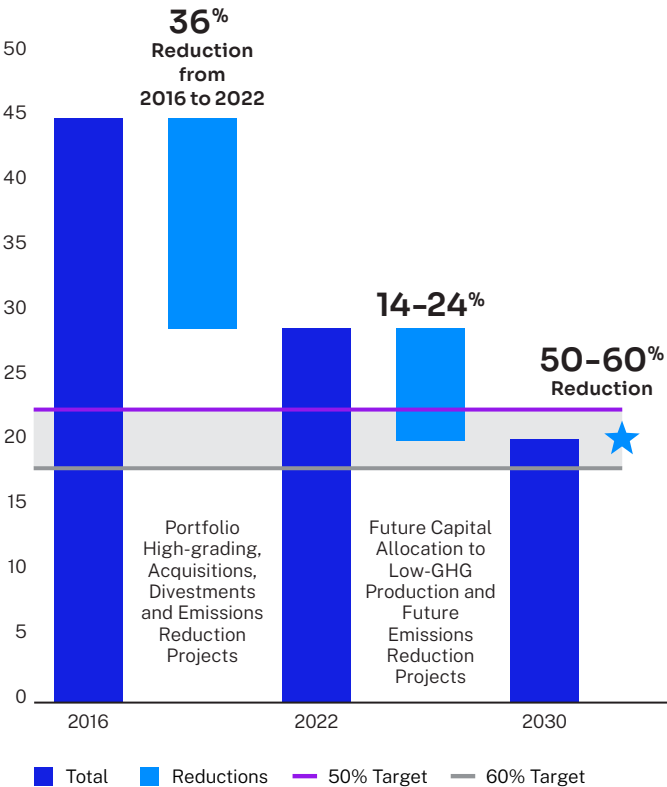
In addition to progress against our operational GHG emissions intensity target, we are also working toward reducing our net equity GHG emissions intensity. Our target-related net equity emissions were about the same in 2022 compared to 2021, at 18.1 million tonnes CO₂e. This corresponds to a lower target-related net equity intensity of 28.5 kg CO₂e/BOE compared to 2021. About 55% of our net equity emissions are from non-operated assets.



Because we approach net-zero as a shared challenge, we look to influence our joint operating partners' climate risk strategies and GHG targets and align our emissions reduction activity. We engage with our major operating partners to align on approaches to managing climate-related risk. This includes discussions with QatarEnergy and its operating company Qatargas for our LNG partnership in Qatar as well as Origin Energy for our APLNG business.

NET EQUITY PATHWAY TO 50-60% INTENSITY REDUCTION TARGET

kg CO₂e/BOE



ACHIEVING OUR NET-ZERO OPERATIONAL EMISSIONS AMBITION BY 2050¹

	INTERIM TARGETS	PROGRESS: YEAR-END 2022
METHANE	Reduce methane intensity 10% by 2025	✓ 17% GOAL MET reduction from 2019 baseline
	Methane intensity ² Near-zero by 2030 ▶▶▶	2.5 kg CO ₂ e/BOE ²
FLARING	Routine flaring ³ Zero by 2025 ▶▶▶	90% reduction from 2021
GHG EMISSIONS	Reduce gross operated GHG emissions intensity 50–60% by 2030 ▶▶▶	41% reduction from 2016 baseline
	Reduce net equity GHG emissions intensity 50–60% by 2030 ▶▶▶	36% reduction from 2016 baseline

¹ Scope 1 and 2 emissions on a gross operated and net equity basis.

² Defined as less than 1.5 kg CO₂e/BOE or ~0.15% of natural gas production.

³ In line with the World Bank Zero Routine Flaring initiative.

Scope 1 and 2 Emissions Reduction Activities

Marginal Abatement Cost Curve Process

During our annual budget planning process, we use the MACC process to collect potential GHG emissions reduction projects from our business units, prioritize them based on their cost and reduction volume, and implement the most cost-effective projects. The MACC plots the breakeven cost of carbon dioxide equivalent (CO₂e) reduction, considering capital and operating cost, and the potential increased revenue for each project against the cumulative GHG emissions that can be reduced.

Project funding may be based on criteria including:

- **Cost:** Cost per metric ton of CO₂e abated.
- **Sustainable reduction:** Reduces emissions permanently.
- **Scalability:** Can be scaled up to provide additional emissions reductions.
- **Technology readiness:** Systems and processes proven to reduce emissions by the forecasted amount.
- **Repeatability:** Can be replicated in other business units.

We typically consider projects that are expected to provide the greatest overall contribution in reducing our GHG emissions with a low breakeven cost of up to \$60/tonne CO₂e, as well as projects that anticipate forthcoming regulatory changes. By prioritizing and confirming projects

through the MACC process with Low Carbon Technologies team colleagues, BUs were able to embed emissions reduction efforts within their budgets and long-range plans (LRPs). Our goal is to allow innovation, flexibility and accountability at the local level while providing support, guidance and oversight from corporate peers. This approach allows BUs to reprioritize and adjust within their budgets to account for regulatory and/or technology changes while maintaining consistency in process. This enhances our company's competitive advantage in playing a vital role through the energy transition.

In 2022, ConocoPhillips spent about \$150 million to support low carbon opportunities and more than 90 emissions reduction projects across our global operations through the MACC. These projects address improvements relating to venting and flaring, electrification, process optimization, efficiency, and include strategic pilots and studies. In 2022 we prioritized methane and flaring projects in support of our near-term methane and flaring initiatives.

- **Methane venting:** Eliminate gas-driven pneumatics and modify facilities to reduce gas venting.
- **Flaring:** Incorporate vapor recovery units at facilities; recover waste gas for sales.
- **Electrification:** Reduce combustion needs on drilling and completions; electrify operations and pursue renewable energy sources; conduct basin-wide electrification study in the Permian.

INVESTMENTS WHICH REDUCED GHG EMISSIONS

TECHNOLOGY AREA	STAGE OF DEVELOPMENT	2018-2022 INVESTMENTS
Energy efficiency	Applied research and development	\$5 million
	Pilot demonstration	\$63 million
	Small-scale commercial deployment	\$6 million
	Large-scale commercial deployment	\$207 million
Methane detection and reduction	Applied research and development	\$4 million
	Pilot demonstration	\$2 million
	Small-scale commercial deployment	\$20 million
	Large-scale commercial deployment	\$54 million
Other emissions reductions	Applied research and development	\$8 million
	Pilot demonstration	\$9 million
	Small-scale commercial deployment	\$23 million
	Large-scale commercial deployment	\$163 million

- **Optimization and efficiency:** Streamline facilities, tanks and equipment; improve waste heat utilization, insulation and power distribution. Consolidate older tank battery facilities to modern facilities to take advantage of existing emissions control equipment while improving operating efficiency.

To progress projects and achieve reductions in these areas, we have set up regional teams in North America, Australia, China and Europe to use the MACC process. Output from the MACC informs our annual budget, LRP and technology strategy.

Projects below the line are economic and have a negative breakeven cost of carbon.⁸ Projects above the line are not economic without considering cost of carbon — the taller

the bar, the higher the breakeven cost of carbon. When considering the cost of carbon, projects below the \$60/tonne breakeven point will generally be considered for funding. The width of the bar indicates the annual emissions savings that would occur should the project be undertaken — the wider the bar, the greater the emissions savings.

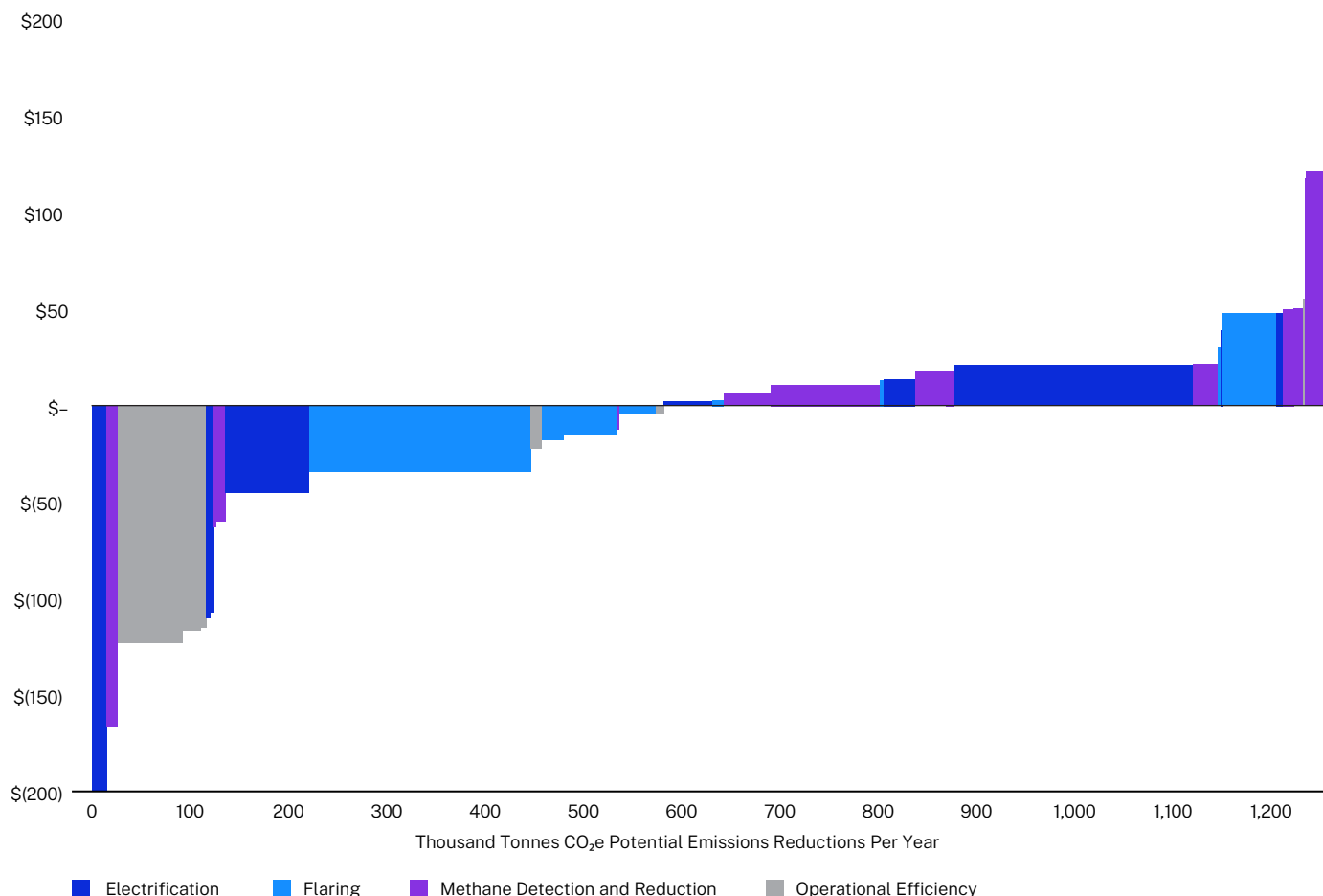
We have allocated nearly \$300 million in the 2023 capital and operating budgets to energy transition activities, a majority of which will address Scope 1 and 2 emissions reduction projects across our global operations selected through this program.

Scope 1 and 2 reduction activities and MACC projects are described in the following section. [Read more](#) about our MACC process and the Net-Zero Roadmap.

MARGINAL ABATEMENT COST CURVE

Breakeven \$/T CO₂e

The marginal abatement cost curve below shows current estimates of emissions reductions and breakeven cost of carbon of projects sanctioned for 2022 on a gross operated basis.



⁸ New projects with a negative breakeven cost of carbon may continue to be brought forward for consideration each year as we advance our technology and identify possible new angles for emissions reductions.

METHANE DETECTION IN U.S. OPERATIONS

ConocoPhillips utilizes a variety of leak detection and repair (LDAR) tools to identify and repair methane leaks. First, we conduct LDAR surveys as required by NSPS Subpart OOOOa and other state regulatory frameworks. Second, we utilize various innovative technologies that go above and beyond those required by regulations. These innovative technologies are deployed at selected assets with the intent of evaluating and understanding their limitations and advantages. In addition, ConocoPhillips participates in a variety of voluntary LDAR programs offered through industry organizations, trade associations and joint partnerships. Examples of technologies currently in use are summarized below.

Informal Inspections

ConocoPhillips personnel visit sites as part of their routine duties or in response to operational issues at the sites. They identify anomalous operating conditions that may contribute to audio, visual or olfactory (AVO) indications of potential leaks. We conduct formal AVO inspections to identify potential leaks at sites where regulatorily required. On most other sites where not regulatorily required, we perform these inspections periodically on a voluntary basis.

Instrument-based Method 21 Inspections

Where required by regulatory programs, we conduct LDAR inspections pursuant to requirements of U.S. EPA Reference Method 21, using an organic vapor analyzer.

Optical Gas Imaging (OGI) Camera Inspections

We perform periodic inspections at sites using OGI cameras where required by NSPS OOOOa regulations. In addition, at sites not subject to NSPS OOOOa regulations, we conduct periodic OGI inspections on a voluntary basis. In addition to the above LDAR methods either required by or based on regulatory requirements, ConocoPhillips continues to pilot and utilize innovative methods of monitoring, including some airborne and ground-based systems. The pilot programs and deployments of innovative technologies discussed below are not used for regulatory purposes.

Airborne Systems

We have piloted several aerial technologies that enable routine monitoring over a larger area and allow for inspection of multiple facilities at a time. Airborne systems are an established way of screening emissions from an entire facility, a group of facilities or a wider geographic area.

Drone-mounted technology has proven effective in detecting and locating the source of leaks due to their low-altitude capabilities. We have also utilized airplanes and helicopters with mounted sensors to fly over facilities to detect leaks. If leaks are suspected, operations personnel follow up to verify and repair. Airplane sensors can detect smaller leaks, but our experience indicates that their effectiveness at pinpointing exact locations can be diminished in areas where other facilities are in close proximity. ConocoPhillips has worked with Scientific Aviation and Bridger Photonics to fly fixed-wing aircraft carrying detection technology over our Lower 48 assets. We have also contracted with LeakScout to periodically fly helicopters equipped with OGI cameras around select sites. This program has also proven effective in identifying leaks.

While many of these airborne technologies are good at detecting leaks, they do require personnel following up with hand-held OGI cameras to identify the exact location of the leaks and the equipment involved, after which we conduct repairs and ensure mitigation was successful.

Satellite-based detection technology is another large-scale leak detection option. However, it has limitations in areas where facilities are located within close to proximity to one another. An additional drawback has been the inability to identify small to medium leaks. Recently launched satellites are showing promise to provide better imaging and allowing more frequent monitoring of specific facilities. ConocoPhillips continues to evaluate how satellite detection may factor into our programs moving forward. For example, we are joining a beta testing program for Environmental Defense Fund's MethaneAir, a precursor to MethaneSat, their satellite to be launched next year using the same detection technology.

Continuous Monitoring Systems: Metal Oxide-based SOOFIE Sensors

ConocoPhillips has implemented systems to monitor for leaks on a continuous basis. We have worked with Scientific Aviation and Qube Technologies, and other vendors, to test continuous methane monitoring devices at select Lower 48 facilities to further enhance early detection and response capabilities. Metal oxide-based sensors are a relatively simple and cost-effective technology that incorporates three to six sensors strategically placed around locations to maximize effectiveness during varying wind conditions. Elevated methane concentrations detected by the sensors are analyzed by an automated system that considers details such as equipment location, distance, wind speed and direction to identify the most probable emissions source.

Methane

Lower 48

Setting a methane emissions intensity target ensures continued focus on methane emissions reductions, including designing new facilities to avoid methane emissions as much as practical. We have evaluated ways to improve well pad and central facility design to reduce GHG emissions, including emissions capture and suppression and installing vapor recovery units. For example, in 2022 we completed dozens of projects in Permian and Bakken to retrofit vapor recovery units on existing brownfield sites to capture tank emissions and reduce flaring.

We participate in The Environmental Partnership, a coalition of about 100 oil and natural gas API member companies working to improve methane emissions management. The program has utilized Bridger Photonics to fly aircraft at a program-determined frequency over industry assets, including those of ConocoPhillips. In 2022, through our work in the partnership, we conducted flyovers of our Permian and Eagle Ford assets to survey approximately 450 sites from the air. Further, as part of our commitment, we have focused on two key areas:

- LDAR programs: In 2022, we conducted approximately 9,200 handheld OGI surveys and 3,400 aerial surveys across our Lower 48 assets to detect leaks and quickly repair them. While this is a regulatory requirement in many areas, over 75% of the surveys were done on a voluntary basis. These surveys continue to provide a better understanding of where leaks occur and how we can minimize fugitive emissions. See more about detection and monitoring technology in the following section.
- Eliminating gas-driven pneumatic devices: Many of our greenfield designs at new facilities include devices to use supplied air instead of site gas to reduce natural gas emissions from pneumatics. We currently have a multi-year pneumatics replacement program that will retrofit up to 46,000 pneumatic devices at existing sites across Lower 48, estimated for completion by 2031.

Pneumatic device replacements are among the highest priority emissions reduction projects across the Lower 48, as they account for some of the more significant methane emissions sources and have a competitive cost of abatement. With thousands of gas-driven pneumatic devices in service, our operations and engineering teams have begun to execute our first large-scale retrofit campaign in New Mexico with plans to continue to ramp up programs in other states. Each conversion increases revenue by keeping gas in the sales line while allowing us to maintain regulatory compliance with new legislation or anticipated federal guidelines.

Canada

Our development in Montney was designed to eliminate the majority of methane emissions by utilizing self-generated electricity and electric equipment rather than traditional natural gas-driven equipment.

Detection and Monitoring

Lower 48

In addition to our reduction efforts, we have been conducting pilots of new technologies across our operations to determine effectiveness and scalability of next-generation detection technologies. For example, we have installed nearly 2,000 fixed methane monitoring devices at nearly 400 sites throughout our Permian, Eagle Ford and Bakken assets.

While continuous monitoring technology has worked well to expeditiously identify and mitigate leaks, that technology is not used for regulatory measurement purposes at this time. Our reported 2022 emissions for the U.S. are based on EPA-mandated methodologies for estimating and reporting GHG emissions. A desired outcome of OGMP 2.0 is that in the future, measurement-based information can be incorporated into methane emissions calculations.

ConocoPhillips submitted our OGMP 2.0 Implementation Plan in May 2023. Most of our assets are already reporting at Level 3 with line of sight to Level 4.⁹ Reporting through OGMP 2.0 will help us make better informed decisions about where to prioritize our efforts to have the maximum impact on reducing our emissions footprint. We have also been actively engaged with other OGMP 2.0 members to ensure that the previously EU-focused guidance could be translated and applicable to a U.S. context. Key differences between EU-based operators and U.S.-based operators generally include:

- EU energy companies tend to have more concentrated facilities, while U.S. companies operate thousands of wells over large geographic areas, often with operators interspersed.
- EU joint ventures are typically associated with a single large asset involving wells and associated infrastructure, typically including only a few large shareholders. In contrast, U.S. development typically occurs at a single well level and can involve many partners, some with small interest.

Alaska

We continue to test and deploy new GHG emissions detection technologies in Alaska, including continuous monitoring. For example, in Alaska we began a project in 2021 to install fuel flow meters on existing Kuparuk drill site heaters to more accurately calculate emissions from pre-combustion fuel gas. The project will continue through 2023.

Canada

In Canada, we installed emissions monitors on a drilling rig to actively monitor diesel fuel consumption, natural gas consumption and engine loads, increasing accuracy of emissions measurement on the rig. The rig was then outfitted with a battery and natural gas generators to reduce GHG emissions and operate the rig at reduced fuel costs. Battery backup can also double as temporary engine replacement, necessitating one less engine to be online.

Flaring

Lower 48

We continue to progress toward our target of zero routine flaring by 2025. We have reduced flaring by utilizing closed-loop completions, central gas gathering systems and vapor recovery units. We direct condensate to sales pipelines and improve uptime through operational excellence (a major focus for all our operating facilities). We do not routinely flare due to pipeline constraints in the Lower 48 or anywhere else in the portfolio.

Project examples include:

- In 2022, the Bakken operations team focused on MACC projects to reduce routine flaring. Projects focused on treatment of sour gas, flare capture, de-bottlenecking and auto-curtailment when offtake is restricted. The execution of these projects resulted in a year-over-year reduction of associated gas flaring by more than 60%.
- In the Bakken, sour gas treatment projects had the largest impact on flare reduction. Sour gas that does not meet pipeline sales specifications will typically be flared or curtailed. Successful treatment has allowed gas to be marketed. We have also implemented production deferral practices when offtake is constrained, and we are progressing field-wide deployment of gas capture technologies. As of year-end 2022, these projects allowed treatment and sales of 5 million cubic feet of gas per day, reducing flared gas volumes.
- Many of the initiatives developed in the Bakken are being replicated in Eagle Ford and Permian fields. A 2022 meeting of asset managers and operational leaders established alignment on standards for routine and safety flaring.

⁹ OGMP 2.0 "levels" refer to increasing reporting requirements and additional granularity. Level 3 includes reporting of emissions by detailed source type; Level 4 layers company-specific emissions factors; Level 5, the gold standard, includes measurement at the site or facility level and reconciliation with Level 4 estimates.

- In the Eagle Ford, we began a project in 2021 that uses an optical gas imaging (OGI) camera transmitter to send a feedback signal to the flare blower's speed controller. This improves combustion of flare gases by allowing for continual air adjustment, ultimately resulting in CO₂ abatement.
- Our Eagle Ford team is working to convert some gas assisted flares to air assist where economically feasible at large central facilities and individual well sites. Decommissioning tanks and flares is another approach being taken to reduce overall field flaring.
- In parts of the Delaware Basin, we have built and operate our own gathering system, which enables more flexibility and connections to multiple third-party processors. We have also developed and implemented facility design changes to reduce flaring from tanks.
- We use Andium cameras to monitor flares at some sites. These cameras provide visual observation of flares that can be monitored at centralized locations, providing quick notice of any anomalous flaring events.

Norway

In the North Sea, we are working on multiple measures to reduce greenhouse gas emissions in the Greater Ekofisk Area. In 2022, we reduced our emissions from safety flaring by 26,000 tonnes per year using a new flare gas re-compressor installed at Ekofisk 2/4 J. Instead of gas being flared, it will now be sold to the European market. Another measure initiated in 2022 was the Rotating Equipment Opportunity Project (REOP), reducing CO₂ emissions from the pipeline compressor by 24,000 tonnes per year.

Operational Efficiency

Canada

Reducing the GHG emissions intensity of our oil sands operations continues to be a priority for our Canada operations. We co-inject non-condensable gas (NCG) with steam to reduce steam requirements and improve thermal efficiency, reduce GHG emissions intensity and enhance incremental oil production at Surmont. This allows for a reduction in the steam-to-oil ratio (SOR) and consequent reduction in GHG emissions intensity. The technology can be applied to almost any steam-assisted gravity drainage (SAGD) operation, resulting in GHG intensity reductions of approximately 20-30%. Further, we have installed flow control devices on SAGD producer and injector wells with steam block capabilities to further reduce SOR and reduce shut-in occurrences.

Early project results have been shared with [Canada's Oil Sands Innovation Alliance](#) (COSIA) Innovation Plus consortia to encourage widespread deployment of the technology throughout Canada's oil sands. In response to lower oil prices from the COVID-19 pandemic, in 2020 and 2021, the BU developed a new co-injection alternative, "NCG Lite," to allow for the continued injection of NCG during curtailment without the need to install additional infrastructure.

We are also piloting multilateral well technology including innovative drilling and completion methods and thermal junction technology in existing vertical wellbores to increase production from a single surface location. This approach reduces surface footprint and provides increased bitumen production without additional steam injection, thereby reducing GHG emissions intensity and operating costs.

These projects have benefited from financial support provided through [Emissions Reduction Alberta](#) (ERA). ERA invests the proceeds from its carbon pricing scheme to reduce GHGs and strengthen the competitiveness of new and incumbent industries and accelerate Alberta's transformation to a low-carbon economy.

Lower 48

At rigs in Eagle Ford and Permian, we have implemented solutions using batteries and load matching to reduce diesel usage and the associated emissions. These battery systems allow the rigs to run the diesel-driven power generators 50% less while also reducing trucking in the area.

Australia

An early feasibility assessment is proposed to install a two-phase flashing liquid expander within the liquefaction section of a single train at APLNG. This will enable more efficient cooling and generation of excess electricity. It will also improve the energy efficiency of the liquefaction process, producing more LNG for the same compression power.

Norway

At the Teesside Oil Terminal, we are working on various emissions saving projects such as stabilization train convection bank cleaning, steam boilers burner management system rationalization, crude oil charge pump electrical drive change-out, in addition to a number of different energy-saving ideas. Crude oil charge pump electrical drive change-out, in addition to a number of different energy-saving ideas.

Electrification and Alternative Power

Lower 48

We are evaluating a focused range of renewable energy projects, concentrating on projects that can provide power directly to our facilities to reduce Scope 1 and 2 emissions. We are evaluating opportunities to use power from the grid, waste gas generators or alternative energy. We expect that dual fuel capabilities and electric power solutions for drilling and hydraulic fracturing will be viable technologies to lower operational emissions by replacing diesel usage with field gas or compressed natural gas (CNG) while improving productive time by reducing maintenance and generating more usable horsepower.

After a successful pilot in 2020, we initiated a project in 2021 to utilize lower-carbon alternative fuel sources in the Permian. Rather than relying solely on diesel fuel to power hydraulic fracturing operations, the project aims to use compressed natural gas and liquefied natural gas to power electric hydraulic fracturing (e-frac) fleets.

In 2022, in Eagle Ford, we successfully converted a hydraulic fracturing fleet to use field gas, reducing diesel consumption and lowering our emissions footprint. Natural gas reciprocating engines power the e-frac fleet, leading to emissions reductions of more than 30% compared to a conventional diesel fleet.

We conducted pre-development work in 2021 and 2022 to evaluate the potential for wind and solar electric power generation for our operations in the Permian Basin. We led a large, multi-stakeholder study that aims to better understand the long-term load demand for the Permian Basin as well as impacts to the grid and upgrades that may be required if the basin was to fully electrify. As part of this project, we have engaged on infrastructure and electrification solutions with several other Permian operators representing about 40% of Permian Basin production.

We also seek emissions reduction opportunities with our supply chain partners. In the Permian, for example, our completions group partnered with a sand supplier to change the proppant delivery and logistics business in the

Delaware Basin, with a project currently under construction. The project includes a miles-long electrified conveyor belt with the potential to reduce emissions, truck count and traffic incidents. The four-year contract will ensure supply of the highest quality product in the market and yield logistics savings by 2026.

China

Our operations in Bohai Bay, China are powered by fuel gas from associated natural gas production from developed fields. The asset will increasingly face a fuel gas shortage by the mid-2020s, increasing operating costs due to the need to purchase natural gas at local market rates. To bridge this fuel gap, we are jointly developing an offshore wind farm with CNOOC Renewables to supply power to the Penglai oilfield and support the fulfillment of the BU's net-zero operational emissions reductions.

The China BU is also reviewing other opportunities, including:

- Building localized offshore wind turbines specific to the asset.
- Developing shallow gas fields to increase supply to power operations.
- Installing a transformer station and subsea cables tying into CNOOC's regional offshore power grid that connects to onshore power facilities.

Australia

The Australia Pacific LNG (APLNG) facility on Curtis Island, Queensland, Australia is progressing a Battery Energy Storage System (BESS) to function as power backup in case of electricity generator failure. Currently APLNG is powered by gas turbine generators (GTGs) with one spare GTG running in reserve in the event another fails. A BESS would replace the spare GTG and act as the reserve electricity generator.

In 2022, the Australia BU began working on a hydrogen pilot to connect an electrolyzer to a fuel gas inlet pipe to generate and supply hydrogen to mix with fuel gas. Different electrolyzer technologies may be trialed throughout the pilot program.

Voluntary Carbon Offsets

While operational emissions reductions will drive our progress toward our net-zero emissions ambition, ultimately offsets are likely to be required to mitigate residual, hard-to-abate emissions. Leveraging know-how from our experience in the compliance offset market, we have designed a flexible strategy to develop and purchase voluntary offsets, beginning in 2022. This strategy includes developing a diversified portfolio of offsets from third-party projects and funds, as well as considering our own offset projects. Our preference will be projects in countries and regions in which we operate or have land holdings. While we do not anticipate the need to utilize offsets to achieve our medium-term targets and did not retire any voluntary offsets in 2022, we are investing now to build a bank of offsets for potential use and retirement in the future.

In early 2022, ConocoPhillips sent invitations to prospective offset developers to propose investment opportunities for ConocoPhillips participation. The invitations sought a variety of project types that could start issuing offsets by 2025, including those that are:

- Nature-based: relating to forestry and land use, wetlands, agricultural improvements and grasslands or soil enrichment.
- Technology-based: relating to energy efficiency, fuel switching, abandoned well management, waste disposal and fugitive emissions reductions.

The evaluation criteria for these projects emphasize the need for durability of the reductions or removals and leakage minimization, as well as community, conservation and biodiversity co-benefits to create and increase commercial value for the projects beyond our net-zero operational emissions ambition.

We have initiated investments which will bank credits for future use in our offsets registry accounts, such as Verra's Verified Carbon Standard and the American Carbon Registry.

These include carbon credit funds such as Climate Asset Management's Nature Based Carbon Fund (NBCF). Taking a landscape approach, the NBCF looks to invest in nature-based solutions projects that restore and conserve nature in developing economies. This provides long-lasting and verified positive impacts for biodiversity and communities and offers investors the carbon credits it procures.

The NBCF's initial project investment is in the Global EverGreening Alliance's Restore Africa Programme, which aims to restore 1.9 million hectares of land, directly supporting 1.5 million smallholder farming families in six African countries — Kenya, Ethiopia, Malawi, Tanzania, Uganda and Zambia. As of December 2022, implementation had already begun in three of the six countries.

In addition to our investment in NBCF, we are separately supporting offset projects in Mexico aimed at improved forest management for future offset issuance.

Operational Net-Zero Roadmap

The company's net-zero roadmap details near- and medium-term Scope 1 and 2 emissions reduction efforts by identifying and prioritizing viable abatement options. It also conceptualizes how we intend to fulfill our longer-term targets through planning, fostering technological advancements and partnering with peers and external stakeholders to explore pilot projects that could abate challenging operational emissions.

The company's net-zero roadmap, like our scenario planning, is a tool that describes a possible pathway leading to a particular outcome. It is intended to be an illustrative example of how we intend to reach our net-zero operational emissions ambition. It is an evergreen construct that will necessarily adjust over time in connection with various factors (including ongoing efforts and results, regulatory and/or technology changes, and future long-term plans that are subject to adjustment).

To drive accountability for the emissions that are within our control, each of our operating business units (BUs) is developing a roadmap to describe its strategies and plans to help drive the company toward realizing our net-zero ambition for Scope 1 and Scope 2 emissions. BUs will also identify technology solutions for hard-to-abate emissions and pilot new methods to reduce and accelerate emissions reductions. When rolled up, these BU roadmaps will inform our technology development, operations and engineering teams, along with our development staff, where to direct efforts today, while allowing us to forecast and prioritize needs of the future.

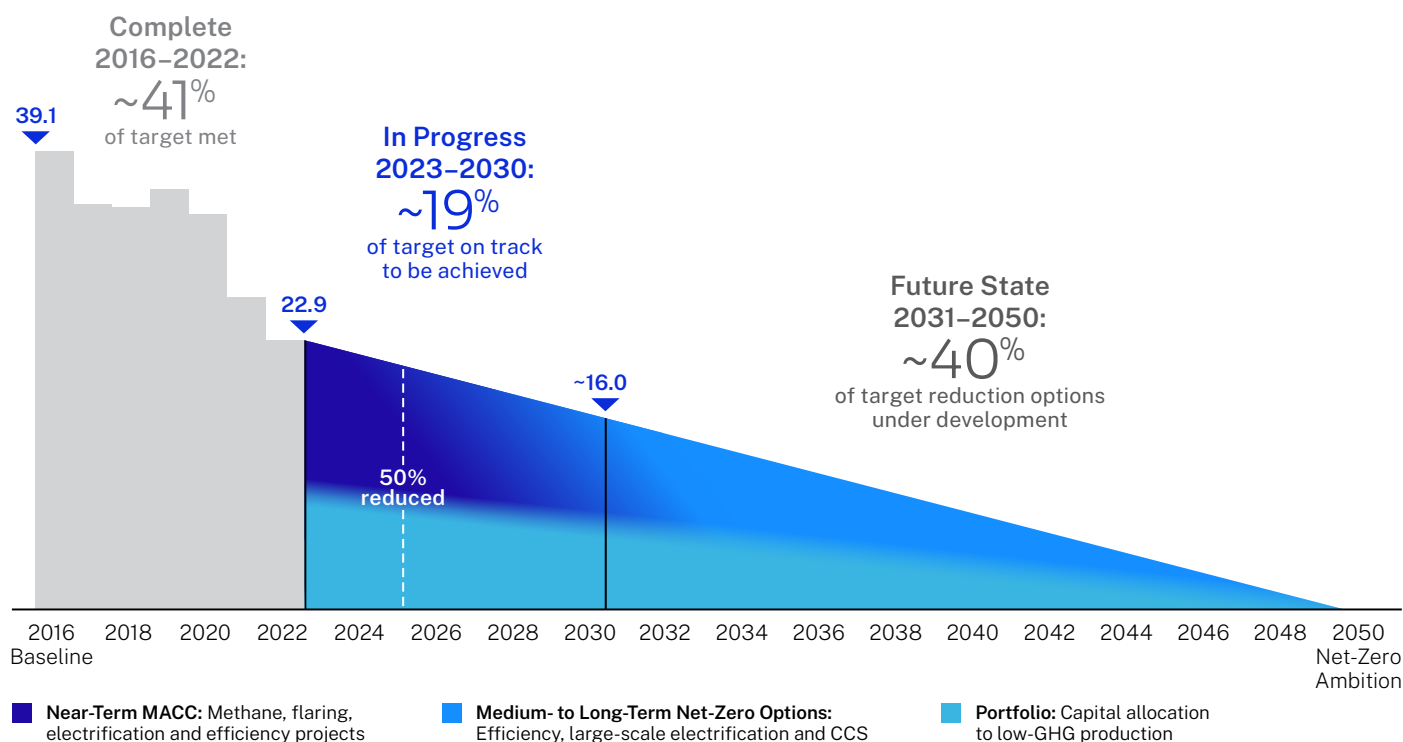
The company-wide net-zero roadmap will also:

- Empower each BU to progress initiatives specific to its needs.
- Leverage the marginal abatement cost curve (MACC) process to assess viability and prioritize projects.
- Promote collaboration between BUs on projects which are scalable or transferable.
- Create new lower-emissions facility designs.
- Prioritize pilot projects and tests of emerging technologies to address our most significant needs.
- Enhance the tools and processes we use to prioritize, execute and track our emissions reduction efforts.

As part of the net-zero roadmap, our Lower 48 business unit, for example, is implementing an ambitious emissions reduction strategy. For greenfield projects, we are targeting low-emissions design concepts with a focus on pneumatics, vapor controls for tanks, flaring and electric compression. For brownfield assets, retrofit projects targeting these same emissions sources are being executed for completion by the end of the decade. In addition, the Lower 48 BU intends to expand electrical infrastructure as needed in areas to support increasing grid connectivity of operations. [Read more](#) about the Lower 48 Emissions Reduction Strategy.

ILLUSTRATIVE NET-ZERO OPERATIONAL EMISSIONS ROADMAP

kg CO₂e/BOE



The Net-Zero Operational Emissions Roadmap is intended to be an illustrative example of how we intend to reach our net-zero operational emissions ambition. ~16.0 kg CO₂e/BOE is an approximation of our 2030 intensity. Offsets are likely to be required to mitigate our residual, hard-to-abate emissions. Offsets and net-zero options may be pursued simultaneously. The actual timing of deploying the actions described here may vary from the illustration.

Addressing Scope 3 Emissions

While we recognize that end-use emissions must be reduced to meet global climate objectives, it is our view that supply-side constraints through Scope 3 targets for targeted Paris-aligned North American and European oil and gas producers would be counterproductive in the absence of policy measures that address global demand. Curtailed supply would be replaced with production from less accountable operators and jurisdictions to meet transition demand. Scope 3 targets do not address demand and do not limit global production and in our view are ineffective in reducing global emissions.

The drive of some NGO and activist investors for Scope 3 targets is premised on a prescribed capital shift away from oil and gas which has been described in some financial sector climate frameworks. The Institutional Investors Group on Climate Change (IIGCC), for example, refers to ceasing oil and gas exploration and “running existing assets down.”¹² Similarly, the Glasgow Financial Alliance for Net-Zero (GFANZ) describes the importance of a “managed phaseout” of oil and gas.¹³ The push from activists for such phaseout does not appear to consider market and technology readiness, or related impacts to energy affordability and energy security.

This approach also does not take into account the projection from Paris-aligned scenarios that oil and natural gas, produced from responsible operators, will be needed in the coming decades to meet transition demand. Proponents of Scope 3 targets seek to translate a global carbon budget that is science-based to broad sectoral and company allocations that are not. The imposition of Scope 3 targets for a prescribed capital shift to phase out production that best meets actual demand is not a realistic way to address energy transition, climate change or shareholder value.

While a sector-wide reduction in demand for oil and natural gas products is foreseen as the transition progresses, our

Our role in addressing Scope 3 emissions and accelerating the energy transition includes several focus areas:

- **Advocating for policy** to address end-use emissions.¹⁰
- **Addressing upstream supply chain emissions** by engaging with major suppliers on our Climate Risk Strategy.¹¹
- **Selectively investing in liquefied natural gas opportunities.**
- **Developing options to invest in low carbon business opportunities** in hydrogen and CCS, subject to economic returns that make sense for our investors.

responsibility to shareholders is to strongly compete for transition demand by offering resilient, low cost of supply, low GHG emissions intensity production with Paris-aligned goals for operational emissions, while also pursuing energy transition opportunities. This approach provides long-term shareholder value and supports an orderly energy transition that avoids large-scale energy price shocks.

Other key considerations have also reinforced our rationale at ConocoPhillips not to set a Scope 3 target.

E&P Company versus Integrated Company

Pure play exploration and production companies do not have the opportunities to influence end-use emissions that integrated oil and gas companies hold through their ownership and control over the production and sale of end-use energy products. As an upstream producer, ConocoPhillips does not control how the commodities we sell into global markets are converted into different energy products or selected for use by consumers.

¹⁰ Intended to address Scope 3, Category 11 for use of sold products.

¹¹ Intended to address Scope 3, Categories 1 and 2 for purchased goods and services and capital goods.

¹² IIGCC, 2021. [Net-zero standard for oil and gas](#).

¹³ GFANZ, 2022. [The managed phaseout of high-emitting assets](#).

Double Counting

Duplicative counting of end-use emissions along the oil and natural gas value chain makes accurate accounting and credible target-setting problematic. For example, the Scope 3 emissions from refining the oil we produce are a refiner’s Scope 1 emissions. The combustion of that oil in the form of an end-use product such as gasoline are also Scope 3 emissions for the producer of the oil, the refiner and the marketer. The combustion of gasoline is also a Scope 1 emission for distribution and transportation companies. Likewise, our Scope 3 emissions from the combustion of natural gas at a power station would be the electricity producer’s Scope 1 emissions and our own Scope 2 emissions for electricity purchased to run our operations.

We believe that the most practical way to avoid double-counting of emissions and overlap of targets is for all companies to align with the Paris Agreement and set targets for their Scope 1 and 2 emissions.

Climate Policy to Address End-Use Demand and Emissions

We have been clear since our first Climate Change Position in 2003 that end-use emissions must be addressed to meet global climate commitments. Climate policies along with advances in technology and consumer choice will ultimately drive demand and end-use emissions. We accept that in the absence of full carbon capture and sequestration, demand for energy must shift toward low-carbon and non-carbon sources, so we take responsibility for encouraging that shift by the most practical and effective means available — our vocal support for carbon pricing that would cause a change in the choices made by end users, which is detailed in the Public Policy Engagement section. Our constructive advocacy for effective carbon pricing policy began when we became the first U.S. oil and gas company to join the United States Climate Action Partnership in 2007 and continued in 2018 when we joined the Climate Leadership Council as a founding member. It is also reflected in the fact that our main industry associations have now adopted positions on carbon pricing and other climate policies that align with our public positions.

However, we also recognize the policy trend in the U.S. toward a regulatory approach to emissions reductions, and we advocate for effective and efficient regulations and legislation to advance economic incentives and reduce

GHG emissions. To that end, we are leading discussions around additional policy options, aligned with our principles, that address end-use emissions.

Reporting

We calculate Scope 3 emissions using the Greenhouse Gas Protocol and the Ipieca 2016 Estimating Petroleum Industry Value Chain (Scope 3) Greenhouse Gas Emissions [methodologies](#) based on net equity production numbers. We report the four largest categories of Scope 3 emissions that apply to our operations. Scope 3 emissions sources include CO₂, methane (as CO₂e) and nitrous oxide (as CO₂e) for the four material categories of Scope 3 emissions that apply to our operations.

For oil and natural gas exploration and production companies, Scope 3 emissions fall primarily into the “use of sold products” category. Though we do not control how our total production is ultimately processed into consumer products, we make the conservative assumption that the majority of production is ultimately burned as fuel by end users. We use the API Compendium GHG emissions factors for crude oil and natural gas burned as fuel. This method accounts for all possible GHG emissions that could be associated with end use of our production. Our assumption and method are especially conservative when the “double counting” issues inherent in Scope 3 estimations for an exploration and production company are taken into account.

We conservatively calculate the other three categories of Scope 3 emissions by taking our entire volume of crude and natural gas and applying the relevant transportation, distribution and processing emissions factors from academic life cycle analyses, including the 2019 National Energy Technology Laboratory study: Life cycle analysis of natural gas extraction and power generation. In 2022, Scope 3 emissions increased in line with overall net production increase.

SCOPE 3 SOURCE	ESTIMATED MILLION TONNES CO ₂ E
Upstream transportation	5
Downstream transportation	8
Processing of sold products	14
Use of sold products	208

Additional Climate-Linked Performance Areas

Energy Efficiency

We continually strive to make our operations more energy efficient. This can provide environmental and economic benefits through lower production costs or greater sales revenue. Through the natural decline of production, as our fields diminish in size, they tend to require either the same, or in some cases, even greater amounts of energy to extract the product for processing or refining.

Total energy consumption in 2022 was 206 trillion British Thermal Units (BTUs). Approximately 97% of our consumption was combustion of fuel for our own energy use with the remainder from purchased electricity.

Water

Water sourcing and produced water management are global challenges that require local solutions. We manage water risks and mitigate potential impacts to water resources, taking into account the unique hydrologic, quality, use and ecological settings of each basin or offshore marine area. Water-related risks associated with fresh water withdrawal, water stress, offshore produced water discharges and onshore produced water disposal can affect our business.

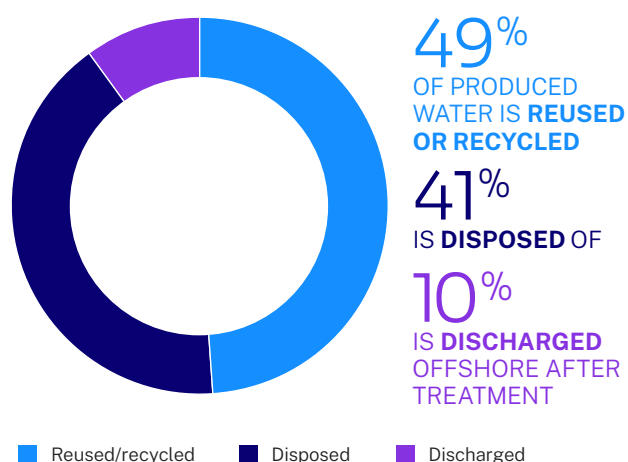
[Read more](#) about how we manage our water risks.

We measure and report on the volume of fresh water and non-fresh water withdrawn from local water sources, the volume of municipal waste water reused, and the volume of produced water that is reused, recycled, disposed or discharged after treatment. The data are used to estimate our water intensity and exposure to water stress. We also collect water forecast data for our Long-Range Plan which enables us to test our portfolio of projects against our water risks to make better-informed strategic decisions.

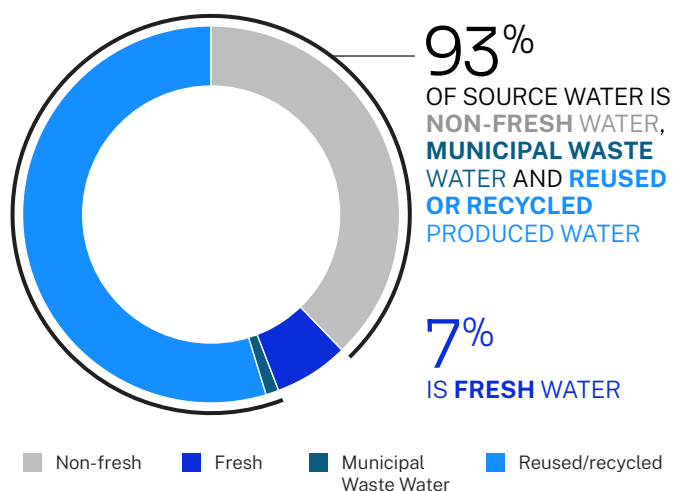
The 2022 fresh water consumption intensity for our unconventional assets in the U.S. (Eagle Ford, Delaware, Midland and Bakken) and in Canada (Montney) was 0.06 bbl/BOE EUR. The 2022 fresh water consumption intensity for our conventional (Alaska, Canada Surmont, LNG and Indonesia) and offshore assets (Norway) was 0.03 bbl/BOE. [Read more](#) about our water metrics.

We use the [World Resources Institute Aqueduct Risk Atlas](#) to assess our portfolio exposure to water stress. Our Anadarko, Permian Midland Basin and Alaska Kuparuk assets are located in basins with high or extremely high baseline water stress and accounted for 6.3% of our total fresh water withdrawal and 2.4% of our total fresh water consumption in 2022. However, we have divested many of our assets with high water stress; the Lost Cabin Gas Plant and the majority of our Anadarko and Permian conventional assets were divested in 2021 and 2022.

PRODUCED WATER MANAGED – GLOBAL



SOURCE WATER – GLOBAL



Measurement, Reporting and Verification

Our environmental and social performance metrics and disclosures undergo various internal and external audit, assessment and assurance processes. We have engaged in assurance practices for our sustainability disclosures for more than a decade, and we use third-party verification for external, independent, limited assurance of our metrics. We perform reasonable assurance for GHG emissions at select operated assets where it is required by country-level regulation. Measurement, reporting and verification of our climate efforts and GHG data is critical for establishing credibility and accountability around our targets and actions.

Each of our BUs is responsible for quantifying emissions and reporting the information to our corporate center for compilation and internal quality assurance. Our GHG emissions estimation methodologies use the rules, emissions factors and thresholds for regulatory emissions reporting with the following amendments: We use a reporting threshold of 25,000 tonnes of CO₂e per year for an asset and/or emissions source category unless the regulatory reporting threshold is lower. In our corporate reporting system, we include GHG emissions based on direct sources of emissions (Scope 1 emissions) and indirect sources of emissions from imported electricity and steam (Scope 2 emissions).

The method of data collection at each individual source can range from continuous emissions monitoring to emissions estimations. Our estimating approaches meet applicable regulatory reporting requirements or industry guidance, as appropriate. The quality of estimating methodologies, measurements and calculations is assessed internally by our corporate Environmental Assurance group.

We report GHG emissions on both a gross operated and net equity basis. GHG emissions from non-operated assets are included for affiliated companies and joint ventures in which ConocoPhillips owns greater than or equal to 20% working interest or when our share of GHG emissions (based on working interest) is greater than or equal to 25,000 tonnes of CO₂e per year. We request GHG emissions data from our partners on an annual basis. In certain cases, we

obtain the required information from regulatory reports. Additionally, we calculate emissions based on asset-specific emissions intensities and our equity share. Net equity is calculated using working interest ownership for non-operated international and Alaska assets. For Lower 48 non-operated assets, net equity emissions are estimated based on the combined working interest of the wells in which ConocoPhillips has interest and the BOE production of those wells compared to the total BOE production of the operating company.

Reporting to authorities and regulators is the responsibility of BUs, and we report our operated emissions in the following regions, countries and provinces in accordance with regulations:

- **Alberta, Canada:** Emissions Management and Climate Resilience Act: Specified Gas Reporting Regulation, Alberta Regulation 251/2004.
- **Australia:** The National Greenhouse and Energy Reporting Act 2007 (NGER Act) and the National Greenhouse and Energy Reporting (Measurement) Determination 2008.
- **British Columbia, Canada:** Greenhouse Gas Industrial Reporting and Control Act: Greenhouse Gas Emission Reporting Regulation, British Columbia Reg. 249/2015.
- **European Union:** EU Emissions Trading System, Monitoring and Reporting Regulation Council Directive 2003/87/EC, as amended by Council Directive 2009/29/EC.
- **Indonesia:** Minister of Environment Regulation No. 12 of 2012 regarding Guideline for the Emission Load Calculation for Oil and Gas Industry Activities.
- **Norway:** Greenhouse Gas Emission Trading Act of 17 December 2004.
- **United Kingdom:** UK Emissions Trading Scheme established through the Greenhouse Gas Emissions Trading Scheme of 2020.
- **United States:** 40 CFR 98 Subparts C, MM, PP, UU, W, and Y. Stationary Combustion Sources; Suppliers of CO₂; Suppliers of Petroleum Products, Injection of CO₂; Petroleum and Natural Gas Systems; Petroleum Refineries

Internal Audits and Assessments

In addition to the third-party assurance process, our Internal Audit group performs independent internal assurance of our non-financial sustainability reporting following the International Standards for the Professional Practice of Internal Auditing. The first review, completed in 2019, evaluated governance practices, control processes, risk management and metrics reporting practices. To continuously improve disclosure processes and controls, in 2022, Internal Audit reviewed sustainability monitoring and reporting practices, standards, and processes under the direction of our Board of Directors Audit and Finance Committee. Internal Audit also provided limited assurance over the 2022 environmental and social disclosures before issuance of this year's Sustainability Report.

Historically, we have sought third-party limited assurance of GHG emissions data annually and assurance of other environmental performance measures every three years. Beginning with the 2021 Sustainability Report, however, we expanded the scope of external assurance beyond GHG emissions data to include limited assurance of all governance, climate and human capital disclosures, as well as water and biodiversity metrics. The limited assurance assessment covered qualitative and quantitative measures. After a successful pre-assurance readiness review conducted in 2022 for 2021 data, we further expanded the scope of our reporting assurance to include third-party limited assurance of all sustainability disclosures and evaluate internal assurance governance processes and controls for climate-related risk disclosures. We plan to continue this scope annually going forward.

We continue to advance our internal processes and controls, and evaluate methods to continuously improve the quality, consistency and transparency of our GHG data in order to meet external expectations and evolving regulatory requirements.

Elevating Assurance of GHG Emissions

Over time we plan to elevate assurance of our Scope 1 and 2 emissions for all operated assets from limited assurance to reasonable assurance.¹⁴ To prepare for this,

we are conducting readiness pre-assessments within individual business units. Based on these assessments, an implementation plan will be developed to define the actions, timeline and resources required to move to a global level of reasonable assurance, with consideration for proposed regulatory disclosure requirements and timelines. We want to execute our plan at a pace that is manageable for the business and positions us well for potential future compliance obligations.

Climate-Related Risk Disclosures Governance

With increasing expectations for assurance of environmental, social and governance (ESG) data, potential for future integrated reporting, and in response to proposed climate-related regulatory requirements, we further reviewed our internal process and controls for climate-related risk disclosures relative to those already in place for financial disclosures. This exercise included conducting a pre-assessment of data, processes, systems and controls used to report Scope 1 and 2 emissions and comparing those against proposed regulatory requirements. It also included conducting a gap assessment between proposed SEC rules and our current climate-related disclosures in public filings and reports such as our Proxy Statement, 10-K and Sustainability Report. We continue to collaborate cross-functionally within ConocoPhillips to evaluate how to best manage the broadening governance of ESG disclosures and leverage skill sets gained through designing and maintaining financial assurance processes.

See our most recent [ERM CVS Assurance Statement](#) and [read more](#) about our internal quality assurance and third-party verification.

Since 2003, we have participated in the annual CDP survey. The survey collects a wide range of information concerning companies' efforts to manage climate-related issues effectively and drive emissions reductions. It includes an emphasis on governance, strategy, actions and reporting to try to provide a complete view of comparable performance. It also provides a view of sector performance. Our most recent CDP submission can be found in the [2022 CDP document](#).

¹⁴ Based on definitions from the ISO 14064-3:2018 Standard, reasonable assurance requires a third-party provider to consider and obtain an understanding of internal processes and controls governing non-financial ESG disclosures, and to conduct extensive testing procedures, including the recalculation and verification of data. The quality and quantity of audit evidence required by the third-party provider for limited assurance, however, is less than what would be expected for reasonable assurance. Testing procedures are less extensive with more limited recalculation and verification of data.

External Collaboration and Engagement

External engagement is important to understanding the issues and challenges relating to climate and the evolution of policy development. Current actions include:

- Taking part in global legislation and regulation development.
- Engaging with stakeholders, including investors, on climate-related risks.
- Working within industry groups to advance sector-wide net-zero solutions.

Supporting Industry Dialogue

We actively work with different organizations and associations around the world to enhance our understanding of the issues and trends facing our industry and company. The benefits we receive from trade and industry associations range from best practice sharing to technical standard setting and issue advocacy. We do not always agree with all positions taken by the organizations that we work with. For example, we may not always be fully aligned with the positions they take on climate change or regulatory reform. In these cases, we make our views known and seek to influence their policy positions. We have strong governance around our association activities and annually report on trade association memberships with dues more than \$50,000.

We are members or sponsors of external groups that support our efforts to manage climate-related risks.

Ipieca established its Climate Change Working Group in 1988. Since then, the group has monitored climate science and policy discussions, engaging with international governmental bodies and other stakeholders. It is not an advocacy body and does not engage in lobbying on climate or other issues.

In 2021, Ipieca ***clarified its purpose*** on providing best practice guidance on GHG emissions monitoring, reporting and management to improve industry performance. ConocoPhillips is aligned with Ipieca in its efforts to bring together members of industry to knowledge share on GHG reduction efforts.

Ipieca participates in the Intergovernmental Panel on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCCC) and provides Ipieca members with reliable and timely information about these and other international processes dealing with climate change.

We are sponsors of the ***MIT — Joint Program on the Science and Policy of Global Change*** which supports efforts to:

- Improve knowledge of interactions among human and natural Earth systems, with a focus on climate and energy, and of the forces that drive global change.
- Prepare quantitative analyses of global change risk and its social and environmental consequences.
- Provide independent assessments of potential responses to global risks, through emissions mitigation and anticipatory adaptation, contributing to improved understanding of these issues among other analysis groups, policymaking communities and the public.
- Augment the pool of people needed for work in this area by the education of graduate and undergraduate students in relevant disciplines of economic and Earth science analysis and methods of policy assessment.

An interdisciplinary team of natural scientists, social scientists and policy analysts supports this mission, with their efforts coordinated through the maintenance and application of a set of analytical frameworks that integrate the various components of global system change and potential policy response.

IHS Markit, now part of S&P Global, hosts forums where member companies can discuss global climate change and clean energy research and its implications for policy. They provide a wide range of research products to ensure that members are up to date with current developments around the world.

Additionally, we have worked with the following groups:

- [International Oil and Gas Producers Association](#) (IOGP).
- Socially responsible investors (SRIs).
- Nongovernmental organizations (NGOs).

Our engagement with investors has focused on climate-related risks in many one-on-one meetings and periodic conferences, such as with the [Interfaith Center on Corporate Responsibility](#). We have also engaged on climate-related issues and sustainability risks with institutions such as JP Morgan, Citi, Moody's, Fitch and S&P.

Cross-Sector Collaboration

External engagement and collaboration remain an area of focus for us because the energy transition will require joint efforts to achieve meaningful emissions reductions and evolve policy solutions. In 2022, we participated in or had membership in the following:

- **World Bank Zero Routine Flaring by 2030:** Initiative that aims to achieve consistency among efforts by governments, the oil and gas sector and development institutions to address routine flaring.
- **The Environmental Partnership:** Coalition of about 100 oil and natural gas companies working to improve methane emissions management.
- **E&P Net-Zero Principles Roundtable:** Facilitated by Ceres, a small group of financial sector stakeholders, E&P oil and gas companies and NGOs, seeking to define what it means to be a Paris-aligned E&P company.

- **Net-Zero Business Alliance:** Initiative from the Bipartisan Policy Center to bring together business leaders and frame an affirmative and pragmatic approach in the climate solutions debate and subsequently engage with governments (as a group and directly) to advance an aggressive climate strategy that is grounded in engineering, commercial and economic realities.
- **Net-Zero Company Benchmark:** Engaging with Climate Action 100+ twice each year to gather feedback to strengthen our approach to managing climate-related risk.
- **Natural Gas Initiative:** Program led by Stanford University researchers with participation from industry, government, inter-governmental organizations and foundations. Initiative aims to Increase public access to information about the accuracy of methane detection and quantification technologies.
- **Pathways Alliance:** Program that includes Canada's Oil Sands Innovation Alliance (COSIA) as well as the Oil Sands Pathways to Net-Zero Initiative, which is an alliance of Canada's top oil sands operators working toward achieving net-zero operational GHG emissions by 2050. ConocoPhillips was one of COSIA's founding members.
- **International Emissions Trading Association (IETA):** Nonprofit business organization created in 1999 to establish a functional international framework for trading GHG emissions reductions.
- **Climate Leadership Council (CLC):** International policy institute to promote a carbon dividends framework in the U.S.
- **Carbon Pricing Leadership Coalition (CPLC):** Global voluntary partnership to share and expand the evidence base for effective carbon pricing policies.
- **National Petroleum Council:** Advisory Committee to the U.S. Secretary of Energy. As an NPC member, ConocoPhillips is leading a study on Natural Gas GHG Emissions Across the Value Chain, a multi-stakeholder effort aimed at delivering recommendations on ways to reduce the GHG footprint of natural gas.

In addition to these groups, in July 2022 ConocoPhillips joined the [*Oil and Gas Methane Partnership \(OGMP\) 2.0 Initiative*](#), a voluntary, public-private partnership between the United Nations Environment Programme, the European Commission, the Environmental Defense Fund and 100 oil and gas companies. OGMP 2.0 has emerged as a globally recognized initiative for methane emissions measurement and reporting and is aimed at minimizing methane emissions from global oil and gas operations. We are committed to improving the transparency of our methane emissions reporting and delivering on our methane reduction objectives and targets by collaborating with industry peers to accelerate best practices in our operations.

In line with the Initiative's guidance, we plan to incorporate source-level and site-level measurements when estimating methane emissions from our operations.

To complement our work with OGMP 2.0, we are also participating in the [*Veritas Differentiated Gas Measurement and Verification Initiative*](#), a U.S.-based methane measurement initiative run by the Gas Technology Institute (GTI). The Veritas program is an effort among academics, environmental groups, certification organizations and oil and gas operators to develop new tools to assess and verify measurement-informed methane emissions. The Veritas program developed a series of protocols to calculate emissions reductions, including protocols for methane intensity, measurements to inform emissions inventories, reconciliation of emission factor inventories with actual measurements, supply chain summation to aggregate

Ceres, a nonprofit sustainability advocacy organization, facilitated collaboration among a small group of financial sector stakeholders, E&P companies and NGOs. They worked to define what it means to be a Paris-aligned E&P company. Recognizing the segment has limited opportunities to diversify its business model, the collaboration focused on solutions for reaching net-zero emissions that also meet transition demand.

The resulting product, ***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.

multiple industry segments, and audit and assurance for third-party verification of an emissions inventory.

We signed on to OGMP 2.0 and Veritas simultaneously as the two frameworks have the potential to operate in tandem. Our joint participation is an effort to influence the pace of action on methane emissions across the whole industry, not just at ConocoPhillips.

Public Policy Engagement

Our advocacy and lobbying are aligned with our focus on reducing our Scope 1 and 2 emissions and supporting sensible policies that reduce Scope 3 emissions.

ConocoPhillips believes a well-designed pricing regime on carbon emissions is the most effective tool to reduce greenhouse gas (GHG) emissions across the global economy, and we continue to advocate for policies aligned with our carbon pricing principles as well as effective and efficient regulatory actions. We support the aims of the Paris Agreement, which include limiting the rise of global average temperatures well below 2 degrees Celsius, as reflected in our Paris-aligned ambition to be a net-zero operational emissions company by 2050.

Proactive Engagement

Climate-related policy action can support an orderly transition to a low-carbon economy, facilitate the development of innovative technology and reduce the overall risks associated with climate. Since we published our first global climate change position in 2003, we have remained consistent in our view that market-based solutions at national and global levels, rather than a patchwork of less efficient regulatory approaches, will be most effective in reducing GHG emissions.

Among our efforts, ConocoPhillips is a founding member of the [Climate Leadership Council](#) (CLC), an international policy institute founded in collaboration with business and environmental interests to promote a carbon dividends framework in the U.S. as the most cost-effective, equitable and politically viable climate solution. Participation in the CLC provides an opportunity for ongoing dialogue about carbon pricing and framing the issues in alignment with our principles. We are also a member of Americans for Carbon Dividends (AFCD), the education and advocacy branch of the CLC, which focuses on progressing the bipartisan Baker-Shultz Carbon Dividends Plan. Our company leadership consistently engages with members of Congress and the administration to express support for that plan.

In 2021, ConocoPhillips was accepted as a Private Sector Partner within the Carbon Pricing Leadership Coalition (CPLC), a global voluntary partnership run by the World Bank to share and expand the evidence base for effective carbon pricing policies. Participation in the CPLC further demonstrates our commitment to carbon pricing and is complementary to our engagement with the CLC.

In addition to our work with the CLC and CPLC, we also recognize the policy trend in the U.S. toward a regulatory approach to emissions reductions, and we advocate for effective and efficient regulations and legislation to advance economic incentives and reduce GHG emissions. To that end, we are leading discussions around additional policy options, aligned with our principles, that address end-use emissions:

- Supporting development of alternative carbon pricing mechanisms including some sector-specific programs, which if developed for multiple sectors and combined with a World Trade Organization-compliant Border Carbon Adjustment (BCA) mechanism could function like a carbon price.
- Lobbying to support balanced and cost-effective regulations aimed at directly reducing methane emissions from new and existing oil and gas sources.
- Supporting the advancement of alternative transportation and power generation as a member of the Fuel Cell and Hydrogen Energy Association (FCHEA).
- Supporting the robust development of a voluntary offsets market through our membership in the International Emissions Trading Association (IETA) and advocating via IETA and other trades in support of the further development of a voluntary carbon market.
- Leading the U.S. National Petroleum Council study on Natural Gas GHG Emissions Across the Value Chain, including making policy recommendations at the national level.
- Evaluating implementation rules of the Inflation Reduction Act of 2022 to enhance investment economics of several low carbon technology projects.

The National Petroleum Council, a federal advisory committee to the U.S. Secretary of Energy, is conducting a study on natural gas GHG emissions to evaluate the feasibility and effectiveness of different approaches, individually and in combination, which could reduce and/or offset GHG emissions across the natural gas value chain up to the end-user. Ryan Lance is the private sector chair of the Study Committee, and ConocoPhillips is managing the study process, which is expected to be completed in early 2024. The study may identify reduction opportunities from technology investments, market mechanisms, and policy and

regulatory measures. The study will also evaluate ways to reduce natural gas GHG emissions, including methane, CO₂ from operations, and emissions attributed to flared natural gas, while valuing meaningful engagement with people and civic groups. Under most energy scenarios there is a demand for natural gas as a primary energy source, and the purpose of this study is to provide recommendations for simultaneously addressing affordability, energy security, and decarbonization to reduce the natural gas GHG footprint.

We have also demonstrated strong engagement with major trade associations to advance climate policy positions that include support for a market-based approach to reduce GHG emissions. To this end, we have shown successful leadership that has yielded positive results and progress within the American Petroleum Institute (API), the Business Roundtable (BRT), the U.S. Chamber of Commerce and others. Our advocacy further addresses methane and flaring regulation, clean fuel or power standards, and sector-specific regulations based on carbon-intensity benchmarks. Publicly communicating our governance processes and the depth of our advocacy efforts is a crucial component of our outreach in addressing stakeholder concerns.

We also work with our trade associations to drive alignment with our climate change position.

Within API's Climate Committee, for example, we work with peers to address climate change issues affecting the U.S. oil and natural gas industry. The group oversees the development of API's Climate Position, Climate Policy Principles and industry initiatives. The group developed the [Climate Action Framework](#), a combination of policies,

innovation and industry initiatives to reduce emissions from energy production, transportation and use by society. We are active in many API committees that can also involve or address climate-related issues, and we work to contribute our perspective in alignment with our positions and actions.

The [American Exploration and Production Council](#) (AXPC) Climate Change Group addresses climate change issues affecting the U.S. exploration and production sector of the oil and natural gas industry. The group has helped to develop AXPC's climate policy and principles, its ESG Metrics Framework and Template, and its position on methane regulations.

Most trade organizations in which we participate have climate change positions that align with ours. Where they do not, we continue to offer our viewpoint and attempt to work with them to better align their position with ours. For example, we have worked to influence API, BRT, the U.S. Chamber of Commerce and other organizations to support the direct federal regulation of methane. In addition to actively participating in trade organization position updates, we have also voted against or abstained from supporting

specific actions requested by a trade organization if their positions were not aligned with ours. We have also decided not to renew some memberships because of misalignment on a number of policy topics, one of which is climate change.

[Read more](#) about our alignment with our associations regarding climate change.

[Read more](#) about public policy governance and major trade association memberships.

Effective Policy

Climate change is a global issue which requires global solutions. Economy-wide governmental GHG management frameworks should be linked to binding international agreements comprising the major GHG contributors. Effective public policies should:

Integrate energy and climate policy: Climate change policy and energy policy should be coordinated to ensure a diverse and secure supply of affordable energy and avoid overlapping or duplicating existing energy and climate change programs. This must create a level competitive playing field among energy sources and between countries and encourage efficient use of energy.

Promote innovation: Climate change policy should promote government and private sector investment in energy research and development and match the pace at which new technology can be developed and deployed.

Demonstrate real GHG reductions: It should result in the stabilization of global GHG atmospheric concentrations and foster resiliency to the impacts of a changing climate.

Provide economic certainty: It should provide long-term certainty for investment decisions and avoid undue harm to the economy.

[Read more](#) about our climate change public policy principles.

Methane Policy

In the absence of a carbon price in the U.S., the economy-wide direct regulation of methane would be effective. We support well-formulated federal regulation of methane emissions from oil and gas exploration and production if that regulation:

- Encourages early adopters and voluntary efforts.
- Incorporates cost-effective innovations in technology.
- Supports appropriate state-level regulations.

Climate Change Public Policy

We believe that effective climate change policy must be aligned with the following principles:

- Recognize that climate change is a global issue which requires global solutions. Economy-wide governmental GHG management frameworks should be linked to binding international agreements comprising the major GHG contributors.
- Result in the stabilization of global GHG atmospheric concentrations.
- Coordinate with energy policy to ensure a diverse and secure supply of affordable energy.
- Utilize market-based mechanisms rather than technology mandates.
- Create a level, competitive playing field among energy sources and between countries.
- Avoid overlapping or duplicating existing energy and climate change programs.
- Provide long-term certainty for investment decisions.
- Promote government and private sector investment in energy research and development.
- Match the pace at which new technology can be developed and deployed.
- Encourage efficient use of energy.
- Foster resiliency to the impacts of a changing climate.
- Avoid undue harm to the economy.

Carbon Pricing

Demand-side emissions reduction efforts are required for climate goals to be achieved because supply-side constraints alone would be ineffective in reducing global emissions. ConocoPhillips believes a well-designed pricing regime on carbon emissions is the most effective tool to reduce GHG emissions across the global economy and, in particular, to address Scope 3 end-use emissions. A revenue-neutral carbon tax that is transparent, predictable and cost-effective to administer would be an effective policy option. It should result in some relief via the elimination of other laws and regulations aimed at reducing or controlling carbon and other GHG emissions. It is also the best way to regulate methane. Carbon pricing policy should support the implementation of currently economic emissions reduction projects and provide support for innovation to encourage the development of currently uneconomic projects. A price on carbon would also provide a stable and predictable market signal that would impact investment flows and end-user choices in a manner that minimizes adverse local economic and social impacts of an energy transition.

We advocate for carbon pricing directly through engagement with government legislators and regulators in all jurisdictions in which we operate, and indirectly via collaboration with trade associations that are aligned with our strategy. [Read more](#) about our position on carbon pricing.

We are a Founding Member of the [Climate Leadership Council \(CLC\)](#), an international policy institute founded in collaboration with business and environmental interests to promote a carbon dividends framework as the most cost-effective, equitable and politically-viable climate solution in the U.S. Participation in the CLC provides another opportunity for ongoing dialogue about carbon pricing and framing the issues in alignment with our principles. We also belong to and fund [Americans for Carbon Dividends \(AFCD\)](#), the education and advocacy branch of the CLC. We support and are advocating for a carbon price contingent upon four pillars: a gradually increasing carbon price, carbon dividends for all Americans, border carbon adjustments and regulatory simplification.

In 2022, we also worked closely with members of the Business Roundtable (BRT) and the American Petroleum Institute (API) to engage with the Voluntary Carbon Markets Initiative (VCMI), a platform for encouraging net-zero aligned participation in a voluntary carbon market. Through BRT and API, we worked with the architects of the VCMI to develop an inclusive framework and create space for future dialogues as carbon markets develop.

We have been actively engaged in climate-related discussions with policy makers and stakeholders since our first global [climate change position](#) was published in 2003. Since then, we have developed [Climate Change Action Plans](#), set an [emissions intensity target](#), integrated carbon-restricted [scenarios](#) into our strategic planning process and published carbon tax principles.

Global Principles for Country-Specific Carbon Tax Legislation

A well-designed carbon tax or other legislative proposal to fix and impose a price on carbon dioxide or other GHGs should meet the following principles:

- **Economy-wide:** A carbon tax designed to fix and impose a price should apply as broadly across the economy as administratively practicable.
- **Non-discriminatory:** GHG emissions alone should form the basis of taxation. A carbon tax should not “pick winners and losers” among industries or emissions sources or discriminate in providing subsidies to energy sources.
- **Uniform:** A carbon tax should apply to all GHG emissions at the same rate on a “units of carbon dioxide equivalent” basis using the *IPCC* standard 100-year global warming potential.
- **Transparent:** To most efficiently incentivize changes to consumer behavior, a carbon tax should be imposed at the point in the value chain which is as close as administratively practicable to the point and timing of the emission. If a point is chosen further upstream, a system of credits or other mechanisms should be designed to eliminate (or prevent) taxation of emissions applicable to taxable products sequestered downstream of the point of taxation and to those used as feedstocks for the manufacture of products in which GHGs are stored.
- **Avoid double taxation:** A federal carbon tax should preempt state, provincial and local carbon taxes and renewable production tax credits.
- **Provide regulatory relief:** A federal carbon tax should replace all environmental laws and regulations that are intended to reduce or control carbon and other GHG emissions.
- **Predictable:** The application of a carbon tax and the tax rate may be adjustable when necessary, but such adjustments should be infrequent and should be limited to those designed to achieve the broader environmental goal of the tax legislation.
- **Cost-effective administration:** Existing channels of tax collection and emissions reporting systems should be used if feasible. Where actual emissions cannot be measured, best efforts based upon sound science should be used as an estimate.
- **Globally competitive:** A country-specific carbon tax rate should be set in accordance with existing taxation channels and emissions reporting systems and be adjusted to ensure global competitiveness. Depending on the point of taxation chosen, carbon tax legislation should include a border adjustment mechanism or other attributes designed to mitigate competitive disadvantages to host country industry when competing in global markets.
- **Revenue recycling:** A carbon tax should be revenue-neutral and used in such a way as to minimize economic impact.
- **Compliance flexibility:** A federal carbon tax should include multiple options for compliance, including offset credits from a broad range of jurisdictions, cash payments or flexible compliance frequency.

History of Engagement

Our approach to public policy engagement on climate change has evolved. However, we remain consistent in our view that market-based solutions at national and global levels, rather than a patchwork of less effective regulatory approaches, are most likely to be effective in reducing GHG emissions.

Shortly after the merger of Conoco and Phillips Petroleum in 2003, we published our first global climate change position. Since then, we have consistently used our Sustainability Report to detail our commitments, priorities and actions. We have also participated in the [Carbon Disclosure Project \(now CDP\)](#) questionnaire in 2003.

Engagement Timeline

In 2004, we described actions that we would be taking to address climate change, including:

- Assessing data.
- Developing objectives to reduce GHG emissions.
- Improving operational efficiency.
- Developing climate change considerations for project planning and approval processes.
- Engaging in discussions on climate change through the International Petroleum Industry Environmental Conservation Association (now Ipieca).
- Joining the International Emissions Trading Association (IETA).

In 2005, we began trading in the European Union Emission Trading System and later established a team within our London-based Commercial team to originate carbon offsets through the UNFCCC's Clean Development Mechanism and Joint Implementation program.

Through our membership in the [U.S. Climate Action Partnership](#) (USCAP) beginning in 2007, we actively participated in efforts to design an effective legislative approach.

In 2008, we adopted and published our first Climate Change Action Plan to systematically address climate change risk.

In June 2009, the American Clean Energy and Security Act of 2009 (HR2454) (Waxman-Markey) bill passed the House of Representatives. Although the USCAP Blueprint for Legislative Action was considered influential in the design of the legislation, we had serious [concerns](#) about some of the detailed elements in the bill. Following passage of the House bill, our focus turned to addressing issues of concern in the Senate version of the legislation. In order to intensify our company's focus and resources on addressing the key issues, including the important role that natural gas can play in reducing U.S. GHG emissions, [we announced in February 2010](#) that the company would not be renewing our membership in USCAP.

Through more direct engagement, we were successful in helping to develop draft legislation that incorporated a more equitable approach to energy sectors while maintaining environmental effectiveness. We [issued a statement](#) regarding the draft legislation introduced in the Senate in May 2010.

Since 2010, we've continued to work toward approaches that are practical and effective, including active participation in dialogue with trade associations like the American Petroleum Institute (API), industry partners and the government to advocate for smart policy solutions. Detailed discussion of our major engagements on regulatory and legislative issues is provided later in this section.

In 2021, we made the decision to rejoin IETA to further our advocacy for market solutions to the climate challenge. IETA is a nonprofit business organization created in 1999 to establish a functional international framework for trading in GHG emissions reductions. IETA members seek to develop an emissions trading regime that results in real and verifiable GHG emissions reductions, while balancing economic efficiency with environmental integrity and social equity. IETA is a global carbon policy organization, and they support carbon offset trading systems. Their membership includes leading international companies from across the carbon trading cycle. IETA have a seat on the Task Force for Scaling Voluntary Carbon Markets (TSVCM).

Examples of Regulatory Engagement

Collaborating with a broad range of stakeholders on effective climate change policy and GHG emissions solutions is key to solving the climate change challenge.

In 2014, we publicly supported the Gas Capture Plan in North Dakota, now required, which took a pro-active approach to flare gas reduction. We entered into agreements with pipeline companies to ensure the availability of gathering infrastructure necessary to reduce emissions.

In 2016, we supported the U.S. Bureau of Land Management (BLM) Onshore Order 1, electronic filings, as the proposed changes reduced work and errors and sped up response time for both industry and the government.

Directly and through our trades we have worked to advance the development and deployment of carbon capture and storage to achieve a cleaner energy profile and improve U.S. economic security. In 2018, Congress passed the Furthering Carbon Capture, Utilization, Technology, Underground Storage, and Reduced Emissions Act to enhance the 45Q tax credit to further incentivize carbon capture and storage technology deployment in the United States. The primary issue with the 45Q tax credit is the interpretation of what constitutes secure geological storage (SGS). In particular, we support the adoption of a commercially reasonable ISO standard to demonstrate secure geological storage in the context of captured carbon dioxide that gets sequestered underground for enhanced oil recovery projects. The standard should establish criteria for transparency and assurance that carbon dioxide removal is achieved. We also support self-verification of compliance with the ISO standard given that our tax officer would attest to satisfying the requirements of 45Q under penalties of perjury.

In 2022-2023, the Environmental Protection Agency (EPA) and Bureau of Land Management (BLM) have each proposed regulations targeted at reducing methane emissions from

the oil and gas sector. We have engaged the regulators throughout the rulemaking process for each proposal and provided substantial technical comments to aid in the development of workable regulations through our trade associations. Our advocacy efforts highlight and build upon the progress industry has made to reduce emissions and continuously improve environmental performance.

Recent Legislative Engagement

In 2019, we worked within the broad coalition of Climate Leadership Council (CLC) members to better define details of the overarching implementation plan. That included work on topics such as carbon price escalation rates, points of taxation, regulatory backstop provisions, high energy-cost region challenges and a border carbon adjustment. While the policy work continues with CLC members, the results of that engagement are reflected in the more detailed [CLC plan](#) released in early 2020. We also engaged with members of Congress directly and through Americans for Carbon Dividends. This included reviewing several proposed climate bills and continuing to offer technical feedback on those bills to elected representatives and their staff. The company remains engaged with representatives from both sides of the political spectrum.

In 2022, ConocoPhillips joined the Oil Sands Pathways to Net-Zero Alliance, which includes Canadian Natural Resources, Cenovus Energy, Imperial, MEG Energy and Suncor Energy. Together this group represents the companies operating approximately 95% of Canada's oil sands production. The goal of the alliance is to achieve net-zero GHG emissions from oil sands operations by 2050 to help Canada meet its climate goals, including the country's Paris Agreement commitments and 2050 net-zero aspirations, with the help of CCS. ConocoPhillips is partnering with the founding members of the Pathways Alliance and governments to accelerate efforts to bring about meaningful change.

Association Engagement

Many trade organizations we participate in have climate change positions aligned to ours. Where they do not, we have continued to offer our viewpoint and attempt to work with them to better align their position with ours. For example, we've worked to influence the American Petroleum Institute (API), the Business Roundtable (BRT) and other organizations to support the direct federal regulation of methane. In addition to actively participating in trade organization position updates, we have also voted against or abstained from supporting specific actions requested by a trade organization if their positions were not aligned with ours. We have also decided not to renew some memberships because of misalignment on a number of policy topics, one of which is climate change. For more information about our governance and major trade associations please see [Political Support Policies and Procedures](#).

With our history of constructive engagement related to the issue of end-use emissions, we continue to devote significant time and effort engaging and advocating for a well-designed federal price on carbon, including within our trade associations. We believe a price on carbon is the most effective, equitable method to reduce GHG emissions, including methane, across the economy. To advance this position, ConocoPhillips joined the Climate Leadership Council (CLC) in 2019 as a Founding Member

along with the CLC's advocacy organization, Americans for Carbon Dividends (AFCD), which is focused on progressing the Baker-Shultz Carbon Dividends plan; since then, our Executive Leadership Team and Government Affairs staff have participated in well over 100 bipartisan meetings with members of Congress and the Administration. Our consistent, strong engagement with our major trade associations, including the API, BRT and the U.S. Chamber of Commerce, has influenced their climate policy positions to include support for a market-based approach to GHG emissions. In 2021, ConocoPhillips was accepted as a Private Sector Partner within the Carbon Pricing Leadership Coalition (CPLC), a global voluntary partnership run by the World Bank to share and expand the evidence base for effective carbon pricing policies. Participation in the CPLC further demonstrates our commitment to carbon pricing and is complementary to our engagement with the Climate Leadership Council.

As part of our routine review of trade association membership, the company evaluates how trade organization policy positions align with those expressed by ConocoPhillips, including:

Paris Agreement: ConocoPhillips' greenhouse gas (GHG) emissions reduction targets and actions are consistent with the Paris Agreement's aim to limit the rise of global temperature to well below 2 degrees Celsius. In measuring alignment, we considered policies which support the goals of the Paris Agreement as aligned with our own.

Carbon Pricing: A well-designed pricing regime on carbon emissions is the most effective tool to reduce greenhouse gas emissions across the global economy. Carbon pricing policy should support the implementation of currently economic emissions reduction projects and provide support for innovation to encourage the development of currently uneconomic projects. A revenue-neutral carbon tax that is transparent, predictable and cost-effective to administer would be an effective policy option. It should result in some relief via the elimination of other laws and regulations aimed at reducing or controlling carbon and other GHG emissions. In measuring alignment, we considered policies which support a market-based mechanism to reduce GHG emissions across the economy as aligned with our own.

Addressing Methane Emissions: The most effective tool for emissions reductions across the economy would be a well-designed federal pricing regime on carbon emissions. In the absence of a carbon pricing policy, we support enactment of cost-effective federal methane regulations on new and existing sources that would preserve a state's ability to adapt implementation to local conditions. In measuring alignment, we considered policies which support direct regulation of methane as aligned with our own.

ASSOCIATION ENGAGEMENT TABLE

ASSOCIATION	PARIS AGREEMENT	CARBON PRICING	ADDRESSING METHANE EMISSIONS
American Petroleum Institute (API)	Aligned	Aligned	Aligned
U.S. Chamber of Commerce (Chamber)	Some misalignments	Aligned	Aligned
Canadian Association of Petroleum Producers (CAPP)	Aligned	Aligned	Aligned
Natural Gas Supply Association (NGSA)	Some misalignments	Aligned	Some misalignments
International Oil & Gas Producers Association (IOGP)	Aligned	Aligned	Aligned
Business Roundtable (BRT)	Aligned	Aligned	Some misalignments
National Association of Manufacturers (NAM)	Aligned	No position	Some misalignments
American Exploration and Production Council (AXPC)	Some misalignments	No position	Aligned

CAUTIONARY STATEMENT This report contains forward-looking statements as defined under the federal securities laws. Forward-looking statements relate to future events, plans and anticipated results of operations, business strategies, and other aspects of our operations or operating results. Words and phrases such as “anticipate,” “estimate,” “believe,” “budget,” “continue,” “could,” “intend,” “may,” “plan,” “potential,” “predict,” “seek,” “should,” “will,” “would,” “expect,” “objective,” “projection,” “forecast,” “goal,” “guidance,” “outlook,” “effort,” “target” and other similar words can be used to identify forward-looking statements. However, the absence of these words does not mean that the statements are not forward-looking. Where, in any forward-looking statement, the company expresses an expectation or belief as to future results, such expectation or belief is expressed in good faith and believed to be reasonable at the time such forward-looking statement is made. However, these statements are not guarantees of future performance and involve certain risks, uncertainties and other factors beyond our control. Therefore, actual outcomes and results may differ materially from what is expressed or forecast in the forward-looking statements. Factors that could cause actual results or events to differ materially from what is presented include changes in commodity prices, including a prolonged decline in these prices relative to historical or future expected levels; global and regional changes in the demand, supply, prices, differentials or other market conditions affecting oil and gas, including changes resulting from any ongoing military conflict, including the conflict between Russia and Ukraine, and the global response to such conflict, security threats on facilities and infrastructure, or from a public health crisis or from the imposition or lifting of crude oil production quotas or other actions that might be imposed by OPEC and other producing countries and the resulting company or third-party actions in response to such changes; insufficient liquidity or other factors, such as those listed herein, that could impact our ability to repurchase shares and declare and pay dividends such that we suspend our share repurchase program and reduce, suspend, or totally eliminate dividend payments in the future, whether variable or fixed; changes in expected levels of oil and gas reserves or production; potential failures or delays in achieving expected reserve or production levels from existing and future oil and gas developments, including due to operating hazards, drilling risks or unsuccessful exploratory activities; unexpected cost increases, inflationary pressures or technical difficulties in constructing, maintaining or modifying company facilities; legislative and regulatory initiatives addressing global climate change or other environmental concerns; public health crises, including pandemics (such as COVID-19) and epidemics and any impacts or related company or government policies or actions; investment in and development of competing or alternative energy sources; potential failures or delays in delivering on our current or future low-carbon strategy, including our inability to develop new technologies; disruptions or interruptions impacting the transportation for our oil and gas production; international monetary conditions and exchange rate fluctuations; changes in international trade relationships or governmental policies, including the imposition of price caps, or the imposition of trade restrictions or tariffs on any materials or products (such as aluminum and steel) used in the operation of our business, including any sanctions imposed as a result of any ongoing military conflict, including the conflict between Russia and Ukraine; our ability to collect payments when due, including our ability to collect payments from the government of Venezuela or PDVSA; our ability to complete any announced or any future dispositions or acquisitions on time, if at all; the possibility that regulatory approvals for any announced or any future dispositions or acquisitions will not be received on a timely basis, if at all, or that such approvals may require modification to the terms of the transactions or our remaining business; business disruptions following any announced or future dispositions or acquisitions, including the diversion of management time and attention; the ability to deploy net proceeds from our announced or any future dispositions in the manner and timeframe we anticipate, if at all; potential liability for remedial actions under existing or future environmental regulations; potential liability resulting from pending or future litigation, including litigation related directly or indirectly to our transaction with Concho Resources Inc.; the impact of competition and consolidation in the oil and gas industry; limited access to capital or insurance or significantly higher cost of capital or insurance related to illiquidity or uncertainty in the domestic or international financial markets or investor sentiment; general domestic and international economic and political conditions or developments, including as a result of any ongoing military conflict, including the conflict between Russia and Ukraine; changes in fiscal regime or tax, environmental and other laws applicable to our business; and disruptions resulting from accidents, extraordinary weather events, civil unrest, political events, war, terrorism, cybersecurity threats or information technology failures, constraints or disruptions; and other economic, business, competitive and/or regulatory factors affecting our business generally as set forth in our filings with the Securities and Exchange Commission. Unless legally required, ConocoPhillips expressly disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

Cautionary Note to U.S. Investors –The SEC permits oil and gas companies, in their filings with the SEC, to disclose only proved, probable and possible reserves. We may use the term “resource” in this report that the SEC’s guidelines prohibit us from including in filings with the SEC. U.S. investors are urged to consider closely the oil and gas disclosures in our Form 10-K and other reports and filings with the SEC. Copies are available from the SEC and from the ConocoPhillips website.

Explore ConocoPhillips

Fact Sheets

Published annually to provide detailed operational updates for each of the company’s six segments.
conocophillips.com/factsheets

Annual Report

The ConocoPhillips Annual Report and Form 10-K provides details on the company’s financial and operating performance, a letter from our chairman and chief executive officer, and additional shareholder information. The report is available on our website at www.conocophillips.com/annualreport.

Plan for the Net-Zero Energy Transition Progress Report

Outlines our approach and progress to address risks specific to the energy transition. conocophillips.com/reports

Sustainability Report

Published annually to provide details on priority reporting issues for the company, a letter from our CEO and key environmental, social and governance metrics.
conocophillips.com/reports

Human Capital Management Report

Published annually to provide details of the actions the company is taking to inspire a compelling culture, attract and retain great people and meet our commitments to all stakeholders. conocophillips.com/hcmreport

Upcoming and Past Investor Presentations

Provides notice of future presentations and archived presentations dating back one year, including webcast replays, transcripts, slides and other information. conocophillips.com/investors

