

# Managing Climate-Related Risk Highlights

“In October 2020 we became the first U.S.-based oil and gas company to adopt a Paris-aligned climate risk strategy. Our objective is the sustainable success of our business through the energy transition.” — Chairman and CEO Ryan Lance

To manage climate-related risks, we:

- Have long recognized the need for action to address climate change and have been reporting on our performance to reduce our greenhouse gas (GHG) emissions since 2003.
- Reduced our gross operated global GHG emissions by approximately 30% as a result of discretionary projects since 2009 when compared to business-as-usual emissions.
- Reduced our methane intensity by nearly 65% since 2015 and set a target to further reduce methane intensity by 10% by 2025.
- Set an ambition to become a net-zero company for operational (scope 1 and 2) emissions by 2050, consistent with the Paris Agreement’s aim to limit the rise of global temperature to well below 2 degrees Celsius.
- Have a target to reduce our operational greenhouse gas emissions intensity to 35–45% by 2030.
- Endorsed the World Bank Zero Routine Flaring by 2030 initiative, with an ambition to meet that goal by 2025.
- Are advocating for a U.S. carbon price to address end-use (scope 3) emissions through our membership in the Climate Leadership Council.
- Established a low carbon technology team to evaluate low carbon opportunities and technologies that can closely integrate with our global operations, markets and competencies.

Paris-Aligned Climate Risk  
Framework to Meet a  
**Net-Zero Operational  
Emissions Ambition  
by 2050**

There is not just one pathway to a 2-degree future; there are numerous ways in which government action and technology development could interact with consumer behavior to bring about a lower-carbon future.



# Governance Framework

We have a comprehensive climate-related risk governance framework that extends from the board of directors, through executive and senior management to the working levels in each of our business units.



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

## Board Oversight

The ConocoPhillips Board of Directors oversees our position on climate change and related strategic planning and risk management policies and procedures. The Public Policy Committee of the board is responsible for identifying, evaluating and monitoring climate-related trends and risks that could affect business activities and performance.

## Executive Management

The Executive Leadership Team (ELT) has final responsibility for developing corporate strategy, implementing sustainability efforts, and reporting company performance. The Senior Vice President (SVP), Strategy and Technology, an executive officer with overall accountability for corporate planning and development, including corporate strategy and long-range planning, serves as the ELT's climate change champion. The Sustainability and Public Policy Executive Council (SPEC), a sub-committee of the ELT, has global oversight of existing and emerging sustainable development (SD) and public policy

risks and trends including SD and climate-related governance, strategy, risk management and reporting.

## Leadership Teams

The Sustainable Development Leadership Team (SDLT) which includes global business unit presidents and functional department heads, provides consultation and approval for SD focus areas, goals, priorities, action plans and results. Strategic planning, goal setting, implementation, performance and reporting for climate-related risk are reviewed by the SDLT.

## Business Units

Each 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. They are held accountable through an annual goal-setting process that includes the Climate Change Action Plan to mitigate risks and a GHG emissions intensity target, and they report progress to the ELT.

# Strategy

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

## Climate-Related Risk Scenarios

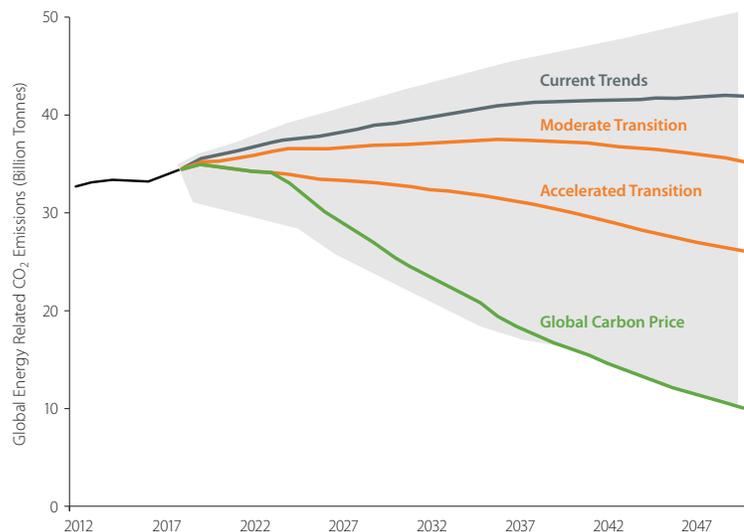
Climate-related risk management performance is driven by the strength of strategic planning, including the use of widely varying scenarios, as well as the financial strength and asset flexibility to manage

across a range of possibilities. This analysis is regularly presented to executive management and the board of directors to assist in strategic decision-making.

The scenarios we have developed describe possible pathways leading to a particular outcome. They are used in our strategic planning process to:

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

### ConocoPhillips' Corporate Scenarios



**Source:** Various ConocoPhillips estimates and third-party independently published projections. Our estimates are based on industry consultants and publicly available data. Gray area indicates the range of third-party projections.

## Climate Change Action Plan

Our sustainable development (SD) risk management process ensures that an action plan is developed to track mitigation activities for each risk included in the corporate SD Risk Register. These plans include details about our commitments, related responsibilities, resources and milestones. Climate-related risks broadly fall into three categories:

- Greenhouse gas (GHG) related policy.
- Emissions and emissions management.
- Physical climate-related impacts.

As part of annual updates to the register, the action plans and their effectiveness are evaluated, and decisions are made to continue mitigation measures, add new measures or simply monitor the risk for further developments. Our SD Risk Register and action plans are used to track performance and guide goal setting.

# 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 process, which includes an annual risk review by executive leadership and the board of directors.

## Assessing Climate-Related Risks

We periodically review emerging climate-related risks with our Executive Leadership Team as part of our scenario monitoring system.

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. Climate-related risks are identified and described by subject matter experts in each business unit and assessed using a matrix that evaluates both their likelihood and consequence to determine significant or high risks.



## Managing Climate-Related Risks

Climate-related risks from the corporate SD Risk Register are mapped to key categories in the enterprise risk management process. Our corporate strategy and the embedded Climate Risk Strategy are informed by the output of our scenarios and the risk

management system. The 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.

## Marginal Abatement Cost Curve

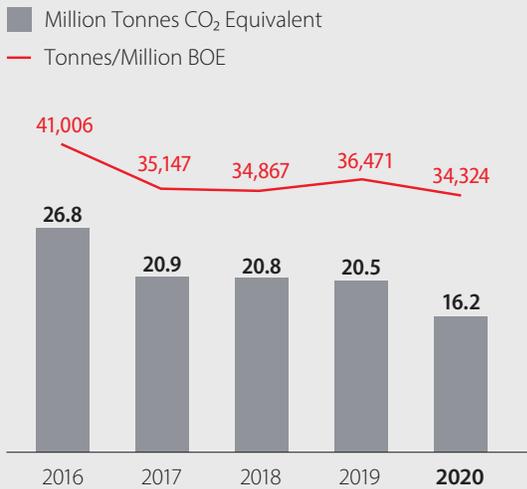
ConocoPhillips has been using a marginal abatement cost curve (MACC) to analyze operational greenhouse gas (GHG) emissions reduction projects since 2008 when we developed our first corporate Climate Change Action Plan. Output from the MACC informs our technology strategy, Long-Range Plan and annual budget. This process has been a key component in identifying and prioritizing emissions reduction projects to drive our actions since we set our first

public GHG emissions reduction target in 2017. In 2020, we had more than 100 projects focused on power generation and electrification of oil and gas operations, including the use of renewable energy and oil sands emissions reductions. Projects that are ready for implementation focus on flaring, venting and methane detection along with greenfield projects to utilize electric power generation and equipment.

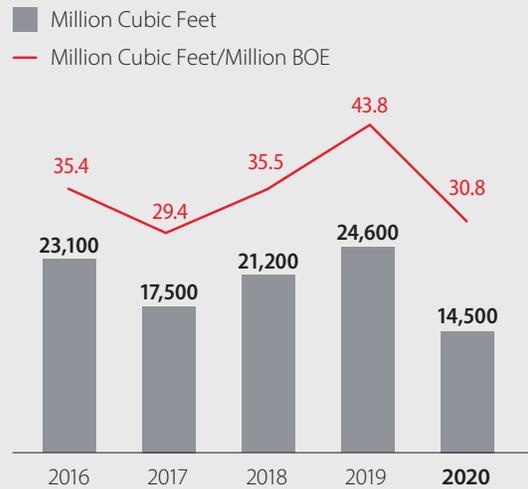
# Performance Metrics and Targets

We use key metrics and 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.

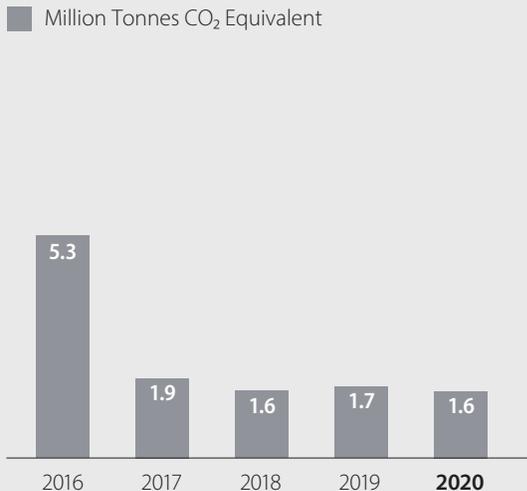
## Total GHG Emissions and Intensity



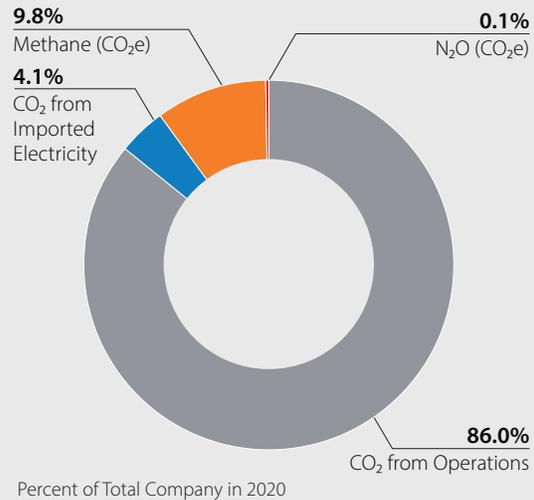
## Total Flaring Volume and Intensity



## Total Methane Emissions



## Total GHG Emissions



## Emissions Reduction Targets

In 2020, we developed a climate risk strategy that sets an ambition to reduce our operational GHG emissions to net zero by 2050. We set a new, more aggressive target to reduce GHG emissions intensity by 35–45% by 2030. In addition, we endorsed the World Bank Zero Routine Flaring by 2030 initiative with an aim to

achieve it by 2025 and set a target to reduce methane emissions intensity by 10% by 2025. These targets inform internal climate goals at the business level and support innovation on emissions reduction and efficiency.

# Reducing Emissions

We continue to voluntarily reduce our emissions. We participate in The Environmental Partnership in the U.S., a coalition of natural gas and oil companies working to improve methane emissions management. As part of our commitment, our U.S. Lower 48 operations have focused on three key areas:

- Leak Detection and Repair (LDAR) programs — In 2020, we conducted approximately 7,600 surveys across our assets to detect leaks and quickly repair them. While this is a regulatory requirement in some areas, over 40% of the surveys were done voluntarily. These surveys continue to provide a better understanding of where leaks occur and how we can minimize fugitive emissions.
  - 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.
  - Continuous Monitoring — We are piloting continuous monitoring devices for early detection of methane emissions to our operations, with a focus on our larger Lower 48 facilities. As of the end of 2020, approximately 360 devices covering over 100 locations have been installed.
- In Canada, GHG reduction projects include:
- Use of non-condensable gas in the oil sands to reduce GHG emissions intensity.
  - Multilateral well technology to increase production from a single surface location, reducing GHG emissions intensity.
  - Sponsoring the Carbon XPRIZE to develop breakthrough technologies to convert CO<sub>2</sub> into valuable products.

## SOURCES OF EMISSIONS AND MITIGATING ACTIONS

### Piping Components

**Issue:** Unintended emissions from various piping components such as valves, flanges and compressor seals.

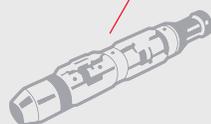
**What we've done:** Implemented a leak detection and repair program across our Lower 48 operations.



### Liquids Unloading

**Issue:** Emissions as a result of removing liquid that collects in some wells.

**What we've done:** Upgraded our plunger lift controllers to reduce emissions.



### Innovative Technology Trials

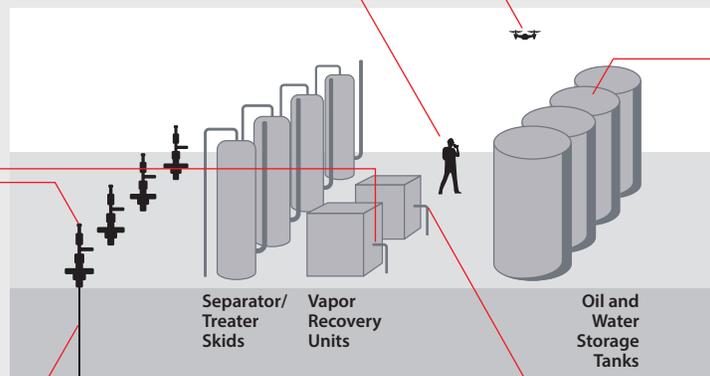
**What else we're doing:** Initiated trials to use innovative technologies such as drones and remote sensing devices to monitor and detect leaks more quickly and efficiently.



### Hatches

**Issue:** Unintended emissions from hatches used to cover the openings at the top of tanks.

**What we've done:** Identified and implemented a better seal gasket.



### Pneumatic Controllers

**Issue:** Emissions from devices powered by natural gas to operate pumps and valves.



**What we've done:** Replaced, removed, or retrofitted high-bleed pneumatic devices throughout our Lower 48 operations. We are also evaluating the use of compressed air instead of natural gas at select locations.

A simplified view of a typical wellsite.

More information about managing our climate-related risks is available at <http://www.conocophillips.com/sustainability/managing-climate-related-risks/>