# Reducing Scope 1 and 2 Emissions

We have set near-, medium- and long-term goals to reduce our operational emissions and guide us toward achieving our net-zero ambition. For mitigating residual, hard-to-abate operational emissions, we have a strategy in place to develop and purchase voluntary offsets. We also employ assurance practices to support our sustainability data and disclosures, with a goal of increasing verification and providing transparency and accountability around our emissions performance.

## **Targets and Performance**

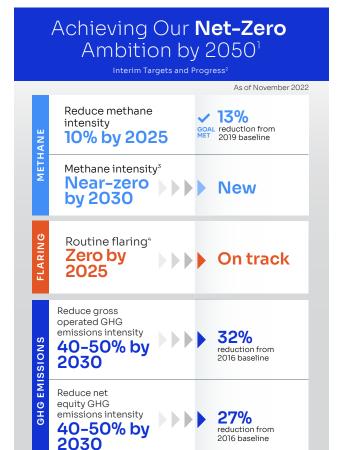
Our plan focuses on actionable goals and targets that will drive emissions reductions, demonstrating a commitment from our Executive Leadership Team and Board of Directors to meet the challenges of the energy transition. The pathway to achieving net-zero emissions by 2050 includes key milestones for Scope 1 and 2 GHG emissions reductions, including methane and flaring commitments.

#### **METHANE**

Reducing methane emissions is a critical part of reducing the GHG intensity of our portfolio and achieving our net-zero ambition. We have already made significant progress in reducing methane emissions; in total, we have reduced our methane emissions intensity by approximately 70% since 2015 and have exceeded our 2025 methane intensity reduction goal of 10%, achieving a 13% reduction in 2021 from a 2019 baseline.

In 2022, ConocoPhillips joined the Oil and Gas Methane Partnership (OGMP) 2.0 Initiative and the Veritas Differentiated Gas Measurement and Verification Initiative to advance our commitment to methane emissions measurement and disclosure. More information about these initiatives may be found in the Collaboration and Engagement section.

Finally, in response to joining OGMP 2.0 and achieving our near-term methane target four years early, we set a new medium-term target to achieve a near-zero methane emissions intensity by 2030. This near-zero target is defined as 1.5kg CO $_2$ e/BOE or approximately 0.15% of natural gas produced. Revising our target and setting a new milestone on the pathway to net-zero by 2050 demonstrates our adaptability and accountability in holding ourselves to a high standard.



- <sup>1</sup> Scope 1 and 2 emissions on a gross operated and net equity basis.
- <sup>2</sup> Progress results as of December 31, 2021 for Scope 1 and 2 emissions.
- $^{3}\,$  Defined as 1.5kg CO2e/BOE or ~0.15% of natural gas production.
- <sup>4</sup> In line with the World Bank Zero Routine Flaring initiative.

Our methane emissions reductions come from both voluntary activities and from portfolio changes. We currently have a multi-year pneumatics replacement program that will retrofit 46,000 pneumatics devices across Lower 48, estimated for completion by 2031. 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. This has included a wide range of ground-based and aerial technologies, each providing strengths for different monitoring applications. The main objective of 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 test new technologies for methane detection and monitoring. We have implemented systems to monitor for methane leaks through both continuous fixed methane monitoring and aerial technology. We have installed more than 2,000 fixed methane monitoring devices at nearly 400 sites throughout our Permian, Eagle Ford and Bakken assets. In 2022, we also conducted flyovers in our Permian and Eagle Ford assets through our work with The Environmental Partnership to survey approximately 450 ConocoPhillips sites from the air.

#### **MILESTONE**

After achieving our near-term methane intensity target by the end of 2021, we set a new, near-zero methane intensity target to be attained by 2030.

#### **FLARING**

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. In 2022, based on our flaring reductions to date, we committed to achieving zero routine flaring² by 2025, five years in advance of the World Bank goal, and we continue to make strong progress. In 2021, routine flaring represented only 5% of total volume of gas flared and from Q1 to Q3 of 2022 we decreased routine flaring by an additional 15%, based on preliminary data. Achieving this target is a key near-term action within our ambition to achieve net-zero by 2050.

While our flaring emissions make up only about 9% of our total GHG emissions, the target will drive continued near-term focus on routine flaring reductions across our assets. 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.

#### **GREENHOUSE GAS EMISSIONS**

In September 2021, we strengthened our medium-term GHG emissions intensity reduction target to 40-50% by 2030 from a 2016 baseline and expanded the target to apply on both a gross operated and net equity basis. The target covers Scope 1 and Scope 2 emissions as these are the emissions over which we have the most control. Our Scope 1 and Scope 2 GHG emissions and emissions intensity calculations directly measure our performance and help us understand climate risk. Lower intensity assets are more resilient to policy, legal, technology and market risk. The company has already progressed toward meeting our target over the past several years. Between 2016 and 2021, we achieved a

32% GHG intensity reduction on a gross operated basis and a 27% GHG intensity reduction on a net equity basis. To add additional accountability to reducing our GHG emissions intensity, our annual Variable Cash Incentive Program that applies to all employees requires that we achieve annual GHG emissions intensity aligned with our 2030 target trajectory range.

To stay on track and achieve this medium-term GHG target, our Low Carbon Technologies organization works across our business units to develop and implement region-specific net-zero scenarios with detailed, time-bound actions, identify technology solutions for hard-to-abate emissions and pilot new methods to reduce and accelerate emissions reduction. These asset-level options inform our corporate net-zero strategy for Scope 1 and 2 emissions reductions.

Our Lower 48 business unit is implementing an ambitious emissions reduction strategy. For greenfield projects, our teams are targeting completion of low-emission design concepts by the end of 2023 with a focus on pneumatics, vapor controls for tanks, flaring and electric compression. For brownfield assets, retrofit projects targeting these same emissions sources will be executed between 2023 and 2030. In addition, we intend to expand electrical infrastructure as needed in areas to support increasing grid connectivity of our operations.

In our Canada business unit, we focus on improvements in operational efficiency to reduce the GHG emissions intensity of our in situ oil sands operations. We are using technology to co-inject non-condensable gas (NCG) with steam to reduce steam requirements and increase production at Surmont. This allows for a reduction in the steam-to-oil ratio (SOR) and consequent reduction in GHG emissions intensity.

We are also pursuing a limited range of renewable energy projects, concentrating on the evaluation of projects that can provide power directly to our facilities to reduce Scope 1 and 2 emissions. 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 also led a large study that aims to better understand the long-term load demand for the Permian basin as well as upgrades that may be required if the basin was to fully electrify to better prepare key stakeholders. As part of this project, we have engaged with several key Permian operators representing about 40% of Permian Basin production to collaborate on infrastructure and electrification solutions. Another renewables project underway is an offshore wind farm pilot project in Bohai Bay in China, launched in partnership with CNOOC to supply power to the Penglai oilfield.

<sup>&</sup>lt;sup>2</sup> 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.

In addition to progress against our operational GHG emissions intensity target, we are also working toward reducing our net equity GHG emissions intensity. In service of our net equity target, we began engaging with our major operating partners to align on approaches to managing climate-related risk. This includes discussions with QatarEnergy for our LNG partnership in Qatar as well as Origin Energy for our APLNG business.

### Offsets

While operational emissions reductions will drive our progress toward our net-zero emissions ambition, ultimately offsets are likely to be required to mitigate our 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, we are investing now to secure a lower-cost offset position for the future.

In early 2022, ConocoPhillips sent invitations to prospective offset developers to propose investment opportunities for ConocoPhillips participation. The invitation 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 in our offsets registry accounts for future use. 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. Through carbon credit delivery, the NBCF can also contribute to ConocoPhillips' net-zero ambition after other emissions reduction avenues have been exhausted.

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 the carbon credits to be issued as a part of the NBCF investments, we are also directly supporting offset projects in Mexico aimed at improved forest management for future offset issuance.