

CLIMATE REPORT 2020

# PATHWAY TO NET-ZERO

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At Occidental, we are leveraging our expertise in carbon management and storage to achieve net-zero, with a vision toward total carbon impact leadership that accelerates progress on global climate goals.



# WE ARE OCCIDENTAL

Occidental is an international energy company with operations in the United States, Middle East, Africa and Latin America. We are one of the largest oil producers in the U.S., including a leading producer in the Permian and DJ basins, and offshore Gulf of Mexico. Our midstream and marketing segment provides flow assurance and maximizes the value of our oil and gas. Our chemical subsidiary OxyChem manufactures the building blocks for life-enhancing products. Our Oxy Low Carbon Ventures subsidiary is advancing leading-edge technologies and business solutions that economically grow our business while reducing emissions. We are committed to using our global leadership in carbon dioxide management to advance a low-carbon world.

Visit [oxy.com](https://www.oxy.com) for more information.

## TESSERACT

The dynamic graphic you see in many forms throughout these pages is a tesseract – an energized structure that exists and moves in four dimensions, transcending the gravity, space and time of our conventional 3D world. The tesseract symbolizes both the spirit and strategic direction of Occidental. We envision a future few others can imagine, and we are going there now, boldly forging our pathway to net-zero.

## ABOUT THIS REPORT

The report begins with an introductory letter from Vicki Hollub, our President and CEO, highlighting our climate-related leadership and the actions we are taking to advance our net-zero ambitions. We provide a pathway detailing milestones, as well as an overview of progress on our commitments, climate-related governance and risk management processes and systems, planning and execution of climate strategies, and metrics and targets for reducing greenhouse gas emissions.

The report reflects the four-element framework recommended by the Task Force on Climate-related Financial Disclosures (TCFD).<sup>1</sup> The TCFD's recommendations are structured around four thematic areas: Governance, Strategy, Risk Management, and Metrics and Targets. This report was prepared in 2020 based on performance in earlier years, and the results of the scenario analysis are based on specific assumptions and estimates. Given the inherent uncertainty in predicting and modeling future conditions, caution should be exercised when interpreting the information provided. The results are not indicative of, and this report does not represent, a preferred or expected outcome of the future.

<sup>1</sup> The TCFD – established by the Financial Stability Board in response to a request from the G20 Finance Ministers and Central Bank Governors – developed a voluntary disclosure framework for climate-related financial disclosures. The framework is organized around four themes: Governance, Strategy, Risk Management, and Metrics and Targets.

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### CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements based on management's current expectations relating to Occidental's operations and business prospects. Words such as "estimate," "project," "predict," "will," "would," "should," "could," "may," "might," "anticipate," "plan," "seek," "intend," "believe," "expect," "aim," "goal," "target," "objective," "likely" or similar expressions that convey the prospective nature of events or outcomes generally indicate forward-looking statements. You should not place undue reliance on these forward-looking statements, which speak only as of the date of this report. Actual results may differ from anticipated results, sometimes materially, and reported results should not be considered an indication of future performance. Factors that could cause results to differ include, but are not limited to: the scope and duration of the COVID-19 pandemic and actions taken by governmental authorities and other third parties in response to the pandemic; our indebtedness and other payment obligations, including the need to generate sufficient cash flows to fund operations; our ability to successfully monetize select assets, repay or refinance our debt and the impact of changes in our credit ratings; assumptions about energy markets; global and local commodity and commodity futures pricing fluctuations; technology developments; supply and demand considerations for, and the prices of, our products and services; actions by the Organization of Petroleum Exporting Countries ("OPEC") and non-OPEC oil producing countries; results from operations and competitive conditions; future impairments of our proved and unproved oil and gas properties or equity investments, or write-downs of productive assets, causing charges to earnings; unexpected changes in costs; availability of capital resources, levels of capital expenditures and contractual obligations; the regulatory approval environment, including our ability to timely obtain or maintain permits or other governmental approvals, including those necessary for drilling and/or development projects; our ability to successfully complete, or any material delay of, field developments, expansion projects, capital expenditures, efficiency projects, acquisitions or dispositions; risks associated with acquisitions, mergers and joint ventures, such as difficulties integrating businesses, uncertainty associated with financial projections, projected synergies, restructuring, increased costs and adverse tax consequences; uncertainties and liabilities associated with acquired and divested properties and businesses; uncertainties about the estimated quantities of oil, natural gas and natural gas liquids reserves; lower-than-expected production from development projects or acquisitions; exploration, drilling and other operational risks; disruptions to, capacity constraints in, or other limitations on the pipeline systems that deliver our oil and natural gas and other processing and transportation considerations; general economic conditions, including slowdowns, domestically or internationally, and volatility in the securities, capital or credit markets; governmental actions and political conditions and events; legislative or regulatory changes, including changes relating to hydraulic fracturing or other oil and natural gas operations, retroactive royalty or production tax regimes, deepwater and onshore drilling and permitting regulations, and environmental regulation (including regulations related to climate change); environmental risks and liability under international, provincial, federal, regional, state, tribal, local and foreign environmental laws and regulations (including remedial actions); potential liability resulting from pending or future litigation; disruption or interruption of production or manufacturing or facility damage due to accidents, chemical releases, labor unrest, weather, natural disasters, cyber-attacks or insurgent activity; failure of risk management; our ability to retain and hire key personnel; reorganization or restructuring of our operations; changes in state, federal or foreign tax rates; actions by third parties that are beyond our control; and the factors set forth in Part I, Item 1A "Risk Factors" of Occidental's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and in Occidental's other filings with the U.S. Securities and Exchange Commission ("SEC"). Unless legally required, Occidental does not undertake any obligation to update any forward-looking statements, as a result of new information, future events or otherwise.

### ABOUT THE INTERNATIONAL ENERGY AGENCY SUSTAINABLE DEVELOPMENT SCENARIO

The Sustainable Development Scenario modeled in this report is derived from assumptions contained in the International Energy Agency's 2019 World Energy Outlook. The scenario is not a forecast or prediction of the future. There can be no assurance that the scenario modeling or assessment presented in this report are reliable indicators of the actual impact of climate change on Occidental's asset portfolio or business. Statistics and metrics included in this report are estimates and may be based on assumptions or developing standards.

### ABOUT OUR GHG EMISSIONS

The estimated Occidental GHG emissions described in this report are derived from a combination of measured and estimated data using the best reasonably available information. We use industry standards and best practices for estimating GHG emissions from similar sources, including guidance from the U.S. EPA, API and IPIECA. The uncertainty associated with Occidental's emission estimates depends on variation in the processes and operations, the availability of sufficient or equivalent data, the quality of available data or estimations, and the methodologies used for measurement and estimation. The estimates may vary over time as updated data become available, emission estimation methodologies are refined, and to reflect changes to Occidental's assets, operations or emissions boundaries. Occidental's reporting of estimated Scope 2 and 3 emissions from third parties is an evaluation of our products and operations' emission lifecycle to express the magnitude of our emission reduction ambitions and does not in any way indicate an acceptance by Occidental of any responsibility for such emissions.

### 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. Any reserve estimates provided in this presentation that are not specifically designated as being estimates of proved reserves may include "potential" reserves or other estimated reserves not necessarily calculated in accordance with, or contemplated by, the SEC's latest reserve reporting guidelines.

**"OUR FUTURE DEPENDS ON A WORLD WITH LOWER GREENHOUSE GAS EMISSIONS. AT OCCIDENTAL, WE ARE LEVERAGING OUR EXPERTISE IN CARBON MANAGEMENT AND STORAGE — WITH THE ULTIMATE GOAL OF ACHIEVING NET-ZERO."**

**CEO LETTER**

In 2020, Occidental expanded its vision for a low-carbon future by leveraging its carbon management expertise to achieve net-zero in our operational and energy-use emissions by 2040 and our total emissions inventory by 2050. Amid an unprecedented global pandemic and low oil prices, we made progress in advancing carbon capture, utilization and storage (CCUS) technologies with the potential to benefit our business and the climate. We set new targets to reduce greenhouse gases (GHG), including methane, and remain on track to end routine gas flaring by 2030.

With the acquisition of Anadarko, Occidental increased its portfolio of flexible, high-quality assets and advantageous mix of long- and short-cycle projects. Our industry leadership in enhanced oil recovery (EOR) provides a competitive advantage in carbon management and storage, and the development of carbon-neutral fuels. We have over 40 years of experience injecting, transporting, separating and storing carbon dioxide (CO<sub>2</sub>), and are uniquely positioned to build a transformational and sustainable business model — one that will use human-made CO<sub>2</sub> emissions to create solutions and products critical to our low-carbon future.

As a member of the Oil and Gas Climate Initiative (OGCI), a CEO-led effort by the world's most influential energy companies, we continued our efforts to reduce our carbon footprint and invest in economically viable low-carbon technologies. In recognition of the critical role that public policy will play in a low-carbon economy, we are working with the Carbon Capture Coalition and others to expand opportunities created by the U.S. FUTURE Act, which incentivizes CCUS by advancing legislative support for research, development and deployment. I was honored to join the World Economic Forum's stewardship board for the Platform for Shaping the Future of Energy and Materials, which brings together leadership from many industries to accelerate the transition to a more sustainable, secure and affordable energy system.

Oxy Low Carbon Ventures (OLCV), our business unit dedicated to advancing cutting-edge, low-carbon technology solutions, is creating a marketplace for CO<sub>2</sub> and low-carbon fuels. OLCV announced several key partnerships with the potential to grow our business while reducing emissions, including an agreement to build the world's largest direct air capture and storage facility in the Permian Basin.

Simultaneously, we made progress on our ongoing efforts to reduce emissions from our global operations. We were the first U.S. oil and gas company to endorse and commit to the World Bank's "Zero Routine Flaring by 2030" initiative.

Our management and the Board of Directors work together and understand that climate issues, like other business concerns, continuously evolve. In 2019, the Board created the Sustainability and Shareholder Engagement Committee to oversee stakeholder engagement, external reporting on environmental, social and governance (ESG), and sustainability matters.

2020 marks Occidental's 100th anniversary. A constant theme throughout our history has been our ability to respond, adapt and lead through change. Our future depends on a world with lower GHG emissions. At Occidental, we are leveraging our expertise in carbon management and storage so that, over time, the energy and products we produce have a lower net-carbon intensity — with the ultimate goal of achieving net-zero. We will do this with innovation that reduces the impact of our and others' operations in ways that benefit and expand our business, while helping energize our planet and society.



**Vicki Hollub**  
President and Chief Executive Officer

**REPORT HIGHLIGHTS**

Established a pathway with key milestones to achieving:

- Net-zero for our operational and energy use emissions (Scope 1 and 2) before 2040, with the ambition to accomplish before 2035;
- Net-zero for our total emissions inventory, including product use (Scope 1, 2 and 3) before 2050; and
- Total carbon impact through carbon removal and storage technology and development beyond 2050.

Committed to full elimination of routine gas flaring by 2030.

Set mid-term targets to reduce our upstream oil and gas GHG and methane emissions intensities by 2025; and

Set mid-term targets to reduce the carbon emissions intensity of our chemical products by 2025.

# STRATEGY TO ACHIEVE NET-ZERO

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Pathway to Achieve Net-Zero

Reducing Operational Emissions

Industry Leadership



# STRATEGY TO ACHIEVE NET-ZERO

Occidental is using our industry-leading carbon management expertise to transform into a more sustainable business – one that will help capture and use human-made carbon dioxide (CO<sub>2</sub>) emissions to create a variety of solutions and products critical to our low-carbon future. This business model is our pathway to achieve net-zero.

Occidental has the largest CO<sub>2</sub> management operations in the world, safely and permanently storing approximately 20 million tons of CO<sub>2</sub> annually in secure geologic formations as part of our enhanced oil recovery (EOR) operations while providing robust, transparent measurement of the stored carbon. Our current position will allow us to offset the emissions equivalent of over 4 million cars with the capture and use of anthropogenic or human-made CO<sub>2</sub>, a greenhouse gas (GHG) component. As we expand our capacity to capture and store carbon emissions through cross-industry partnerships, technology advancements and project development, we will have the opportunity to offset much more. Our subsurface expertise will enable us to broaden our portfolio of storage options to include saline reservoirs.

A key differentiator is our comprehensive, enterprise-wide strategy, which is predicated on our 40 years of experience with integrated carbon management and large-scale carbon separation, transportation, use and storage, obtained from our EOR business. By leveraging this valuable expertise, we are positioned for success in a low-carbon economy with a competitive advantage that enhances our existing business and sets us apart from our peers.

Occidental's strategy for business sustainability builds upon our strengths as an oil and gas company: a deep understanding of the subsurface and the ability to operate older fields at a low cost while maximizing hydrocarbon recovery. We received U.S. Environmental

Protection Agency (EPA) approval of two geologic storage Monitoring, Reporting and Verification (MRV) plans for our CO<sub>2</sub> operations in Hobbs, New Mexico, and Denver City, Texas, in the Permian Basin. The MRV plans, which were the first-ever approved by EPA for simultaneous CO<sub>2</sub> EOR and sequestration, provide a credible and transparent framework for assessing the suitability of the reservoir for storage and reporting the amount of CO<sub>2</sub> stored through the process.

With our large-scale CO<sub>2</sub> infrastructure and unmatched core competency in CO<sub>2</sub> management, Occidental is developing new low-carbon business opportunities. These include direct air capture (see DAC, page 09), products from human-made CO<sub>2</sub> and offset solutions, and expanded opportunities for storage that energy-intensive businesses can use to decarbonize. Our asset base and long history and expertise in EOR will allow us to capitalize on new business opportunities as the value of CO<sub>2</sub> increases under low-carbon scenarios beyond EOR.

Our operational emissions will be reduced through efficiency improvements, process changes or switching to less carbon-intensive power and feedstock. Negative emissions and emission-reduction impacts may be achieved through capturing GHG directly from the atmosphere, carbon capture projects that prevent emissions (see White Energy, page 09), enabling zero or low-carbon power production (see NET Power, page 09).

## CARBON MANAGEMENT BY THE NUMBERS

As part of our strategy to achieve net-zero, Occidental is the global leader in the safe and permanent storage of CO<sub>2</sub>.

### A TOP PRODUCER IN THE PERMIAN BASIN WITH

# 3 million

#### NET ACRES

Equivalent of approximately 4700 square miles – about the size of Hawaii's Big Island and Maui combined

### CO<sub>2</sub> STORED

# 20 million

#### TONS STORED ANNUALLY

Equivalent of over 4 million passenger cars taken off the road, or approximately 23 million acres of forests saved each year

### EXISTING CO<sub>2</sub> INFRASTRUCTURE

# 14 CO<sub>2</sub> plants

# 2500 miles

#### OF CO<sub>2</sub> PIPELINES

### VERIFICATION

# First 2 U.S. EPA-approved

#### MONITORING, REPORTING AND VERIFICATION (MRV) PLANS

# PATHWAY TO ACHIEVE NET-ZERO

## 01 MILESTONE

### ACHIEVE NET-ZERO FOR SCOPE 1 AND 2 EMISSIONS BEFORE 2040, WITH THE AMBITION TO ACCOMPLISH BEFORE 2035

#### 2020 - 2025 ACTIVATION

- World's 1st commercial scale Direct Air Capture (DAC) facility comes online
- 1st CO<sub>2</sub> storage site receives human-made CO<sub>2</sub>
- Emissions-free power facility to support carbon capture
- Operational efficiencies at Occidental facilities
- CO<sub>2</sub> industrial capture project expansion
- Continued methane emissions reduction activities

#### 2025 - 2030 EXPANSION

- Multiple large volume CO<sub>2</sub> storage sites operational
- DAC expansion
- Routine flaring ended
- Strategic CO<sub>2</sub> pipeline buildout to support broader capture and use
- Increase renewable energy deployment
- Increase emissions-free power deployment
- Unconventional CO<sub>2</sub> storage development
- Industrial 'Clean Campus'

#### 2030 - 2040 BROAD DEPLOYMENT

- Natural CO<sub>2</sub> replaced with human-made CO<sub>2</sub> in all EOR operations
- Growth of non-EOR CO<sub>2</sub> utilization
- Expansion of CO<sub>2</sub> storage sites
- Broader DAC deployment in U.S. with expansion pilots internationally
- Expanding low-carbon fuel products
- Use of CO<sub>2</sub> as a chemical feedstock

## 02 MILESTONE

### AMBITION TO ACHIEVE NET-ZERO FOR SCOPE 1, 2 AND 3 EMISSIONS BEFORE 2050

#### 2040 - 2050 GLOBAL MARKET DEVELOPMENT

- Large-scale national and international deployment of DAC and Carbon Capture Utilization and Storage (CCUS) technologies
- Occidental's domestic oil and gas production is carbon neutral
- CO<sub>2</sub> feedstock utilized in domestic manufacturing
- Widespread deployment of industrial capture applications

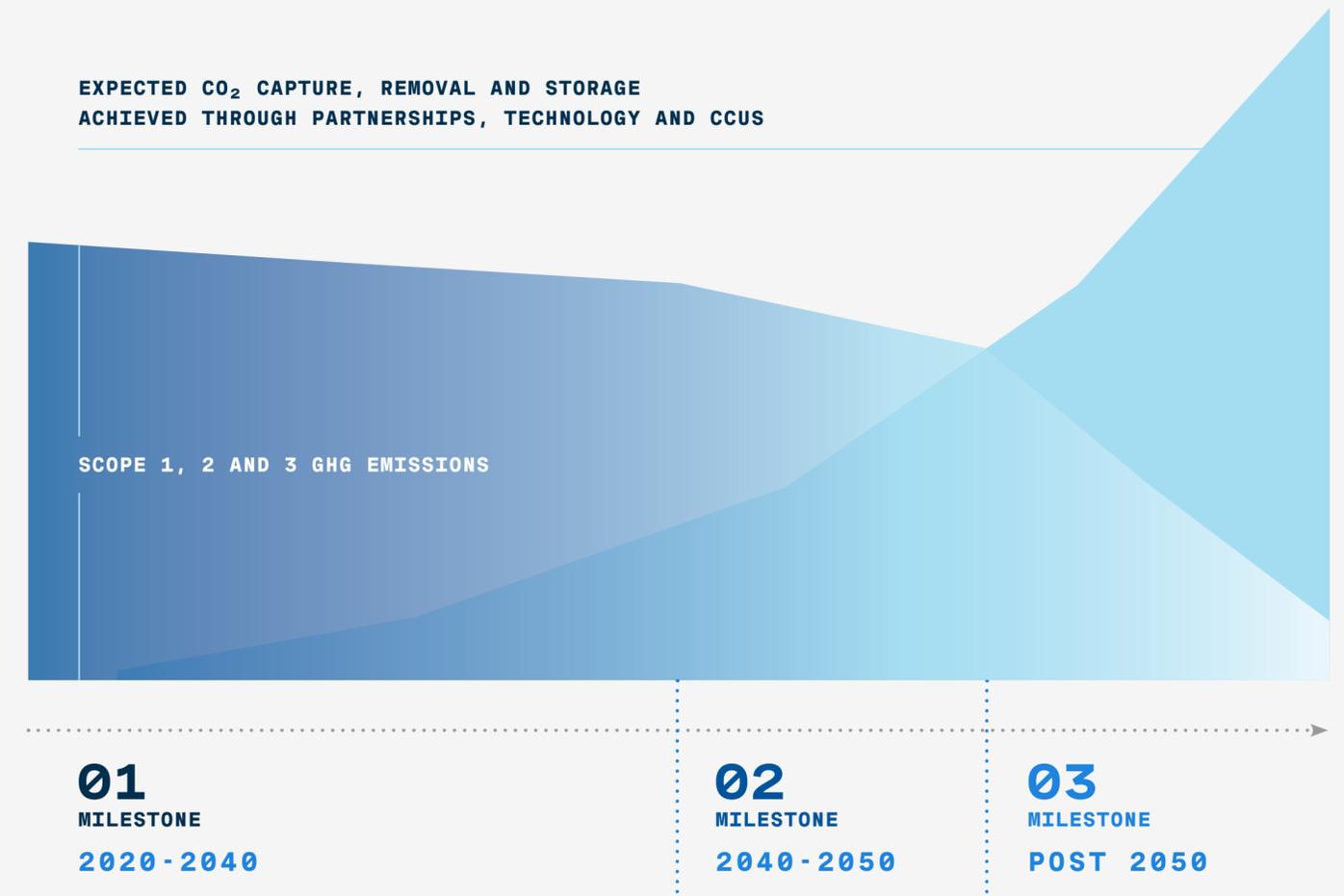
## 03 MILESTONE

### TOTAL CARBON IMPACT BEYOND OUR OWN CORPORATE INVENTORY OF SCOPE 1, 2 AND 3 EMISSIONS POST 2050

While we recognize the magnitude of our ambitions to achieve net-zero for our operations and products, we believe our pathway and capabilities can extend beyond our own corporate inventory. Through the efforts of Oxy Low Carbon Ventures (OLCV), we will be well placed to partner with other energy and fuel producers, manufacturers and transportation sectors to help provide lower-carbon products through CCUS.

Our pathway to achieve net-zero combines continuous operational upgrades and improvements that lower emissions associated with our oil, gas and chemicals production coupled with industrial-scale carbon management solutions. Ultimately, our goal is leadership in total carbon impact beyond our own corporate inventory of Scope 1, 2 and 3 emissions.\*

#### EXPECTED CO<sub>2</sub> CAPTURE, REMOVAL AND STORAGE ACHIEVED THROUGH PARTNERSHIPS, TECHNOLOGY AND CCUS



\* Scope 1: Direct reported emissions from our operations  
 Scope 2: Indirect reported emissions from our consumption of power, heat and steam  
 Scope 3: All indirect reported emissions (not included in Scope 2) that occur in the value chain of the reporting company, including upstream and downstream emissions

PATHWAY TO ACHIEVE NET-ZERO

The focal point of our long-term net-zero strategy is Oxy Low Carbon Ventures (OLCV), our business unit launched in 2018 to sustainably enhance our business while providing impactful solutions for reducing global GHG emissions. OLCV principally focuses on developing CCUS technologies to remove human-made CO<sub>2</sub> from the atmosphere for use in manufacturing low-carbon products like bio-fuels, chemicals and concrete, and for geologic sequestration.

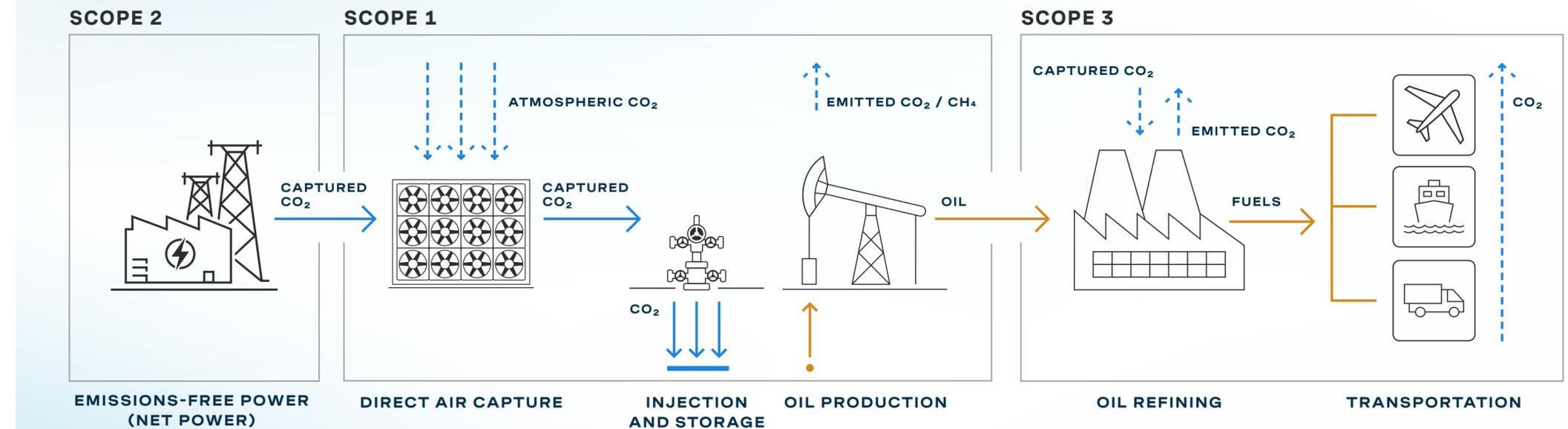
Our decades of experience with large-scale CCUS as part of our EOR operations, combined with the recent creation of OLCV, make us uniquely capable of realizing our ambition to achieve net-zero and provide solutions to others looking to do the same. As the largest commercial purchaser and injector of CO<sub>2</sub> for EOR in the Permian Basin, Occidental has insight into the CO<sub>2</sub> marketplace.

To accelerate the global adoption of CCUS and support negative emissions partnerships for energy-intensive industries, OLCV's Technical Advisory Services group shares its knowledge and expertise with third-party businesses to help them assess and develop CCUS and storage projects. These efforts offer powerful, practical initiatives critical to reducing emissions across industries around the globe.

Occidental is taking a holistic approach to reducing GHG emissions while helping other third-party organizations implement lower emissions projects. Based on our expertise and experience, we have identified three principal classes of opportunities for us to make the largest GHG-reduction impacts:

LOW-CARBON OIL PRODUCTION CYCLE

Low-carbon oil is created by using CO<sub>2</sub> emissions that are injected and stored permanently underground. The emissions injected and stored are greater than those generated through the production and use of oil.



DIRECT EMISSIONS REDUCTION

- Improve operational and process efficiencies
- Reduce flaring and fugitive emissions, upgrading equipment to reduce methane and CO<sub>2</sub> emissions
- Implement GHG monitoring and control systems

CCUS PROJECT DEVELOPMENT

- Deploy CO<sub>2</sub> capture facilities and maximize CO<sub>2</sub> storage with new technologies, such as DAC and CCUS
- Utilize CO<sub>2</sub> to create low-carbon fuels and products such as ethylene and polyvinyl chloride
- Provide CCUS technical advisory services

ENERGY EFFICIENCY

- Apply technology to increase energy efficiency
- Utilize combined heat and power (CHP) and renewable energy
- Use hydrogen as a feedstock

PATHWAY TO ACHIEVE NET-ZERO

OLCV continues to make significant progress with key partners who support our net-zero ambition.

**INDUSTRIAL CARBON CAPTURE PARTNERSHIPS**



**EMISSIONS-FREE POWER**



**DIRECT AIR CAPTURE**



**CO<sub>2</sub> AS FEEDSTOCK**



**INDUSTRIAL CARBON CAPTURE PARTNERSHIPS**

An industrial storage partnership, Project Interseqt with White Energy will capture CO<sub>2</sub> emissions from White Energy's ethanol plants in Hereford and Plainview, Texas. Captured CO<sub>2</sub> will then be transported to Occidental's West Seminole EOR field for injection and storage to create lower-carbon oil. The carbon intensity of the ethanol produced by White Energy will also be lowered.

**CO<sub>2</sub> COMMODITIZATION AND CARBON TRACKING**

As CCUS projects gain scale, there will be a need for defined, accepted and transparent processes of carbon tracking in the emerging carbon commodity and carbon-neutral fuels market. OLCV is partnering with:

- Carbon Finance Labs to leverage information technology, updated regulatory processes and marketplaces to create entirely new high-value carbon products and services and opportunities for Occidental products.
- Xpansiv CBL Holding Group (XCHG) to launch the first carbon-attributed, tradeable oil and gas product that accounts for carbon intensity by incorporating emissions reductions from our CCUS operations.

**EMISSIONS-FREE POWER**

NET Power puts carbon capture technology at the center of its natural gas power plant design, generating electricity with zero-emissions, providing reliable, on-demand and low-cost electricity that requires 80 times less acreage than equivalent solar facilities. The CO<sub>2</sub> captured in a NET Power plant could be used for CCUS or product development for fuels, plastics, chemicals, cement and more.

**TERRALITHIUM**

A partnership between American Lithium and OLCV, TerraLithium gives manufacturers a more responsible way to source ultra-pure lithium that can be used for lithium-ion batteries in electric vehicles. TerraLithium's patented technology extracts trace lithium from brine, including geothermal brine, a waste product of geothermal power plants. This process is an alternative to conventional lithium production, which has significant environmental challenges, with some facilities using nearly 500,000 gallons of water per ton of lithium. We are leveraging OxyChem and our expertise in the manufacture of chlor-alkali products to scale and commercialize this technology.

**DIRECT AIR CAPTURE**

DAC pulls CO<sub>2</sub> directly from the air, providing a pathway to reduce the amount of CO<sub>2</sub> in the atmosphere. In 2020, OLCV executed a licensing agreement with Carbon Engineering to deploy its DAC technology at the first-of-its-kind Permian Basin facility.

**CO<sub>2</sub> AS FEEDSTOCK**

In collaboration with the Houston-based Cemvita Factory, OLCV is exploring new bio-engineered pathways to use captured CO<sub>2</sub> as feedstock for sustainable production of cement, intermediate chemicals, ethylene and polymers.

# REDUCING OPERATIONAL EMISSIONS

Occidental's longstanding policy is to seek continuous improvement in resource recovery, conservation, pollution prevention and energy efficiency, including ongoing efforts to recycle and reuse water, as well as manage and capture methane and other GHG emissions. Our business decision-making process integrates these principles to advance the corporation's commitment to the low-cost production of oil, natural gas and essential chemical products.

We take a hands-on approach to improve the efficiency and reliability of the equipment and facilities used in our oil and gas activities. To reduce the carbon impact of our operations, Occidental employs different techniques to reduce gas flaring, improve energy efficiency and deploy innovative technologies.

Occidental devotes significant resources to capturing emissions of methane and volatile organic compounds (VOCs) by retrofitting existing facilities and optimizing the design and construction of new facilities. We are minimizing our emissions by using energy-efficient equipment at our oil and gas production facilities and applying standardized designs, for example, where we can consolidate individual field tankage or test stations into larger facilities. We are actively replacing compressors, pumps and other major equipment throughout our Permian Basin operations to operate on electricity or use low-emission engines. We continue to reduce methane emissions with industry best practices, including Leak Detection and Repair (LDAR) systems, optical gas imaging (OGI), forward-looking infrared (FLIR) cameras and green completion practices. Occidental is also increasing the

efficiency of its product transportation and distribution chains in order to reduce logistics costs and associated GHG emissions.

As an oil and gas producer, we are concerned when any methane (as the primary component of "natural gas") escapes our equipment and does not make it to market. To limit these losses, we participate in programs including the American Petroleum Institute (API)'s Environmental Partnership and the World Bank's Zero Routine Flaring by 2030 initiative that are committed to continuously improve operational performance and develop best practices and guidelines for application of best available control technologies. Occidental was the first U.S. oil and gas company to join the World Bank's program.

## SCOPE 1 REDUCING GAS FLARING IN THE PERMIAN

In Occidental's New Mexico operations, a new gas gathering system has dramatically reduced volumes of flared gas. This gathering system reduces our reliance on third-party takeaway capacity and avoids unscheduled flaring events by facilitating the transfer of sales gas to multiple third-party midstream companies.

Aspects of this system design include a closed loop flowback system that captures gaseous vapors released from flowback fluids directly into the gathering system via vapor recovery units.

Equipment upgrades also included in this system design increase the reliability and redundancy of our production systems, leading to reduced downtime and significantly lower flaring volumes at the facility level.

We estimate that this gathering system reduced 2019 annual carbon dioxide equivalent (CO<sub>2</sub>e) flaring emissions by more than 60 percent, relative to flaring emission projections had the gathering system not been constructed.

Occidental secured extra capacity within the different third parties' systems to provide additional natural gas capacity should interruptions from one party occur. Collectively, these actions provide our New Mexico operations the flexibility to move produced gas into the sales-gathering system under a wide variety of scenarios, significantly decreasing the necessity to flare. Notably, this multiple take-away design can be replicated and tailored to other upstream oil and gas projects to reduce flaring.



REDUCING OPERATIONAL EMISSIONS

SCOPE 3  
FUEL SWITCHING IN UPSTREAM DRILLING OPERATIONS

Our Colorado operations commenced a trial using three new-generation Tier 4 rigs. These rigs were built to utilize cleaner, lower-carbon natural gas fuel instead of diesel fuel, subsequently reducing air pollutants and greenhouse gases. Using the newer rigs enhanced operational performance and reduced environmental impacts, including noise pollution.

As represented in the chart, our Tier 4 rigs, in direct comparison to the typical Tier 2 diesel fuel-powered rig, have the advantage of replacing diesel usage by approximately 96 percent with compressed natural gas (CNG).

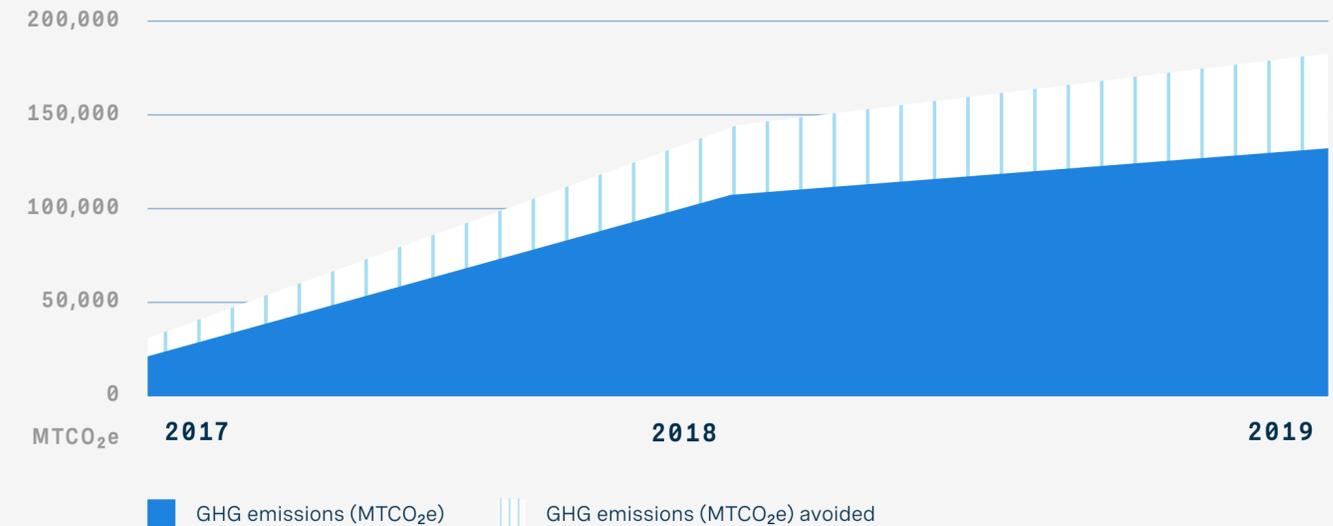
Additionally, the switch to natural gas fuel decreased other environmental air pollutants as follows:

- Nitrogen oxide (a contributor to ground-level ozone) reductions of approximately 75 percent
- Particulate matter reductions of approximately 90 percent and
- Sulfur oxides reductions of approximately 50 percent

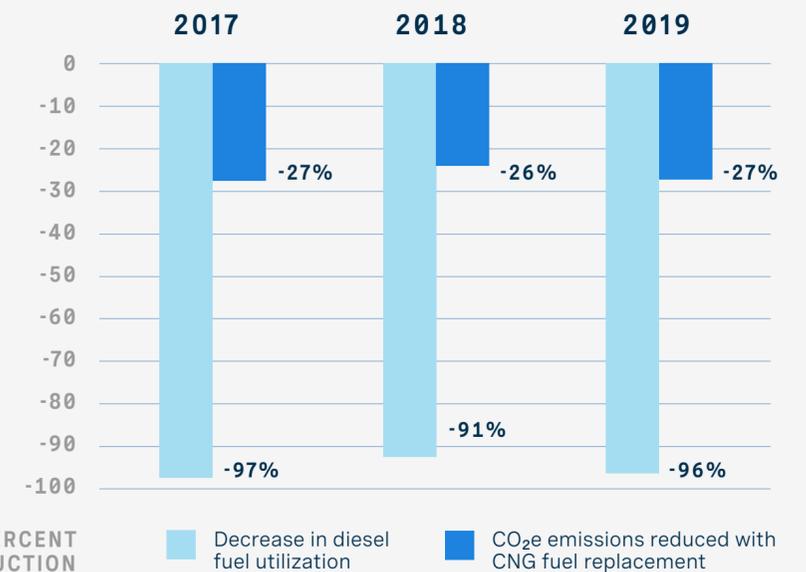
Occidental continues to work with our contractors and vendors to evaluate the feasibility of expanding this program to the other basins where we operate.

Occidental also executed a pilot project that used grid electricity to power a drilling rig in the DJ Basin. The pilot project demonstrated equivalent performance as diesel generators with a 50 percent cost savings in energy-related costs, compared to a rig powered by diesel generation, and significant emissions and noise reduction potential. Occidental's DJ Basin operation's recently developed an Electric Rig Project Charter to evaluate additional potential locations with adequate power infrastructure and coordinate with the utility company to execute necessary upgrades.

RIG FUEL SWITCHING: EMISSIONS AVOIDED



RIG FUEL SWITCHING: EMISSIONS REDUCED



Our Tier 4 rigs, in direct comparison to the typical Tier 2 diesel fuel-powered rig, have the advantage of:

**96%**

(APPROX.)

REPLACEMENT OF DIESEL USAGE WITH COMPRESSED NATURAL GAS (CNG)

**↓15%**

ESTIMATED GHG EMISSION DECREASE BY 2019

REDUCING OPERATIONAL EMISSIONS

SCOPE 2  
REDUCING INDIRECT EMISSIONS: GOLDSMITH SOLAR PLANT

Our Goldsmith Solar Plant began operating in 2019 and immediately reduced our indirect (Scope 2) GHG emissions for Occidental's Goldsmith EOR field. This project reduces the reliance on power from the electric grid, where power is supplied with non-renewable resources. Total power consumption and the corresponding GHG emissions at the Goldsmith field, measured as CO<sub>2</sub>e metric tons (MTCO<sub>2</sub>e), were reduced by approximately 10 percent. These GHG reductions continued into 2020 and beyond.

Goldsmith, the first large-scale solar facility in Texas that directly powers oil and gas operations, features 174,000 photovoltaic panels with a total capacity of 16 MW – enough to power the operations at the Goldsmith EOR field.

**"OCCIDENTAL IS TAKING AN IMPORTANT STEP TOWARD REALIZING OUR ASPIRATION TO BECOME CARBON NEUTRAL THROUGH THE USE OF EMISSIONS-FREE SOLAR ELECTRICITY. USING SOLAR ENERGY IN OUR OPERATIONS IS ANOTHER WAY OXY LOW CARBON VENTURES IS ENHANCING THE PROFITABILITY AND SUSTAINABILITY OF OUR BUSINESS WHILE MEETING THE CHALLENGE OF REDUCING ATMOSPHERIC GREENHOUSE GASES."**

**VICKI HOLLUB**  
PRESIDENT AND CEO



GOLDSMITH SOLAR PLANT, PERMIAN BASIN, TEXAS



INGLESIDE COGENERATION CONTROL ROOM, INGLESIDE, TEXAS

REDUCING OPERATIONAL EMISSIONS

**REDUCING EMISSIONS AT OXYCHEM:  
EFFICIENT ENERGY GENERATION AND UTILIZATION**

OxyChem develops and manufactures a broad range of life-enhancing chemicals including feedstocks for low global warming potential refrigerant to advanced chlorine production processes and water disinfection technology products. OxyChem's innovative engineering techniques include designs for high-efficiency emissions control, heat and energy recovery and zero-emissions equipment.

For years, energy efficiency has been a key component to our strategy of being a low-cost operator, including efforts to produce our own energy-efficient or low-carbon-intensity power. Because power consumption is a significant cost of our chemicals manufacturing operations, OxyChem has focused on cogeneration hydrogen fuel usage and new technologies with improved high-efficiency emission control designs.

Cogeneration, or combined heat and power (CHP), significantly increases electrical power generation efficiency and reduces CO<sub>2</sub> emissions by at least 50 percent over traditional methods. OxyChem's

cogeneration facilities are highly efficient natural gas-fired power plants that co-produce electricity and steam for adjacent chemical plants, while also providing excess electricity to local markets.

The GHG emission-reduction benefits from CHP are substantial. At OxyChem manufacturing facilities, utilizing CHP is estimated to reduce GHG emissions by 4.3 million MTCO<sub>2</sub>e per year compared to equivalent power supplied from the electrical grid.

OxyChem manufacturing facilities utilize the hydrogen byproduct from the chlor-alkali process as a non-carbon fuel source. The hydrogen fuel used in the hydrogen-fired boilers and cogeneration units offset natural gas consumption and lowers our CO<sub>2</sub> emissions by approximately 490,000 MTCO<sub>2</sub>e. The use of hydrogen fuel reduces our GHG intensity. Recently, OLCV has looked to expand these efforts through opportunistic renewable power projects, industrial partnerships and new technology development.

Cogeneration, or combined heat and power (CHP), significantly increases electrical power generation efficiency and reduces CO<sub>2</sub> emissions by at least 50 percent over traditional methods.

# INDUSTRY LEADERSHIP

Occidental's vast experience in managing CO<sub>2</sub>, coupled with our carbon management strategy, has enabled us to create solutions and partnerships with a diverse set of key stakeholders that work toward improved business and climate solutions.

Occidental was the first U.S. oil and gas company to endorse the World Bank's "Zero Routine Flaring by 2030" initiative to reduce greenhouse gas emissions.



Occidental joined the Getting to Zero Coalition, a partnership between the Global Maritime Forum, the Friends of Ocean Action and the World Economic Forum. This coalition brings together global decision-makers from across the maritime shipping value chain with key stakeholders from the energy sector and from governments with a goal to reduce shipping-related emissions by at least 50 percent by 2050.

OxyChem received the industry's highest Sustainability Leadership Award from the American Chemistry Council (ACC) for its partnership with Water Mission, which facilitates access to clean drinking water for refugees and disaster areas around the world.



OxyChem was a founding board member of the Alliance to End Plastic Waste, an industry coalition to help find solutions to prevent plastics from entering the environment.



OxyChem joined the Vinyl Institute's Vinyl Sustainability Council and achieved the industry's Vantage Vinyl sustainability certification.



Occidental was among the first U.S. companies to join the OGCI, a collaborative effort to reduce the industry's carbon footprint and invest in economically viable low-carbon technologies.



Occidental was a founding member of API's The Environmental Partnership, formed to accelerate environmental improvements, with a focus on reducing methane and VOC emissions.



Occidental collaborates with the Carbon Capture Coalition and other groups outside of the oil and gas industry to progress solution-driven public policies supporting the advancement of a sustainable, low-carbon economy, including the revised CO<sub>2</sub> sequestration tax credit in the United States, which has been critical to incentivizing CCUS projects.



# COMMITMENTS AND TARGETS

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Climate-related Commitments and Targets

Commitments for Decarbonizing Operations and Reducing GHG Emissions

Commitments toward Governance and Engagement

GHG Emissions Metrics

Accolades and Accomplishments



# CLIMATE-RELATED COMMITMENTS AND TARGETS

Occidental has made a series of commitments during the past years, in addition to new commitments and targets declared in 2020. The following page summarizes our progress toward fulfilling these commitments.

Effective 2020, our goals are to accomplish:

Net-zero for our operational and energy use emissions (Scope 1 and 2) before 2040, with an ambition to achieve before 2035;

Net-zero for our total emissions inventory including product use (Scope 1, 2 and 3) with an ambition to achieve before 2050; and

Total carbon impact through carbon removal and storage technology and development past 2050.

These goals and strategic plan to thrive in a low-carbon economy, while responsibly managing climate-related risks, are described in detail in this TCFD-aligned Climate Report and our ongoing history of reporting to CDP and other environmental, social and governance (ESG) ratings organizations.

A summary of Occidental's GHG emissions trend, along with our 2025 targets, are presented on page 18. Additional disclosure of sustainability information and performance metrics are available at: [oxy.com/sustainability/performance](https://oxy.com/sustainability/performance).

We report performance using the IPIECA Sustainability Reporting Guidance for the Oil and Gas Industry and the Sustainability Accounting Standards Board (SASB) standards and indicators for the oil and gas and chemicals sectors. We will continue to engage with our stakeholders to lead actions and disclose climate-related risks and opportunities associated with our business.

## 2025 EMISSIONS REDUCTION TARGETS

Occidental has set the following 2025 GHG emissions-reduction targets for operations:

### OCCIDENTAL OIL AND GAS\*

TOTAL DIRECT AND INDIRECT  
GHG EMISSIONS INTENSITY

**0.02**  
MTCO<sub>2</sub>e/BOE

METHANE EMISSIONS  
INTENSITY

**<0.25%**  
OF MARKETED GAS

ROUTINE FLARING  
ELIMINATION

**↓100%**  
BY 2030

### OXYCHEM

TOTAL SCOPE 1+2 GHG  
EMISSIONS BY

**↓187,990**  
MTCO<sub>2</sub>e  
BY 2025

TOTAL DIRECT AND  
INDIRECT GHG EMISSIONS

**↓2.33%**  
BY 2025

TOTAL DIRECT AND INDIRECT  
GHG EMISSIONS INTENSITY

**↓2.7%**  
BY 2025

\* Total GHG (Scope 1 + Scope 2) and Methane Emission Intensity targets are aligned with Oil and Gas Climate Initiative (OGCI) targets. Methane emissions intensity refers to the amount of methane emissions from Occidental's operated oil and gas assets as a percentage of the total gas produced and marketed.

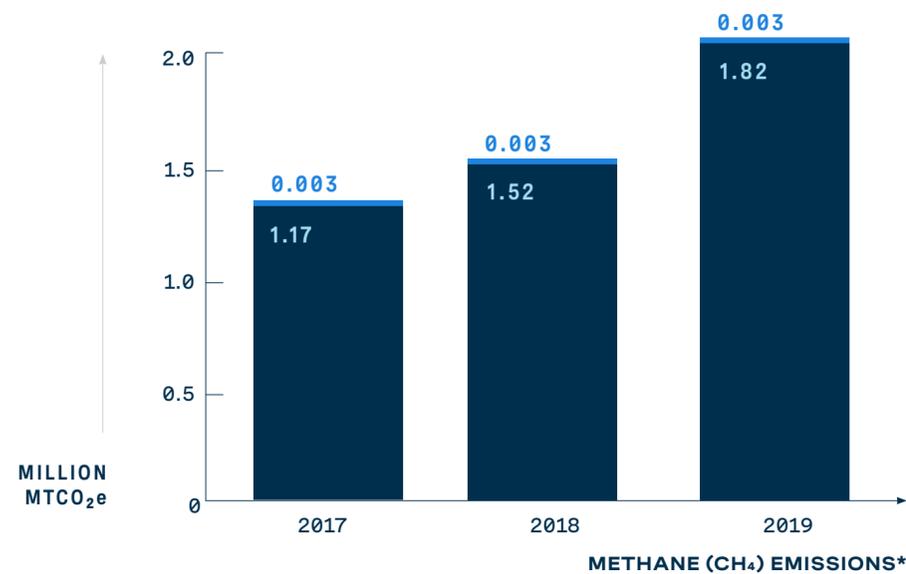
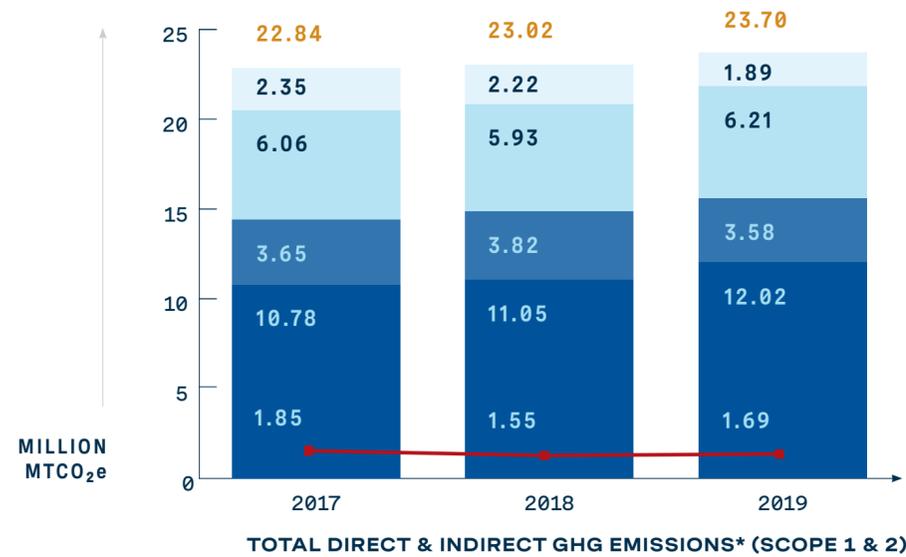
## DECARBONIZING OPERATIONS AND REDUCING GHG EMISSIONS

COMMITMENT		ACTION	COMMITMENT		ACTION
Monitor and disclose Scope 1 + 2 GHG emissions		Occidental reports emissions and other climate-related data at <a href="https://oxy.com/sustainability/performance">oxy.com/sustainability/performance</a>	Reduce GHG emissions (Scope 1+2) associated with chemicals production		Beginning in 2020, OxyChem has set a target to reduce total GHG emissions (CO <sub>2</sub> e) 2.33% by 2025.
Monitor and disclose Scope 1 CO <sub>2</sub> e emissions intensity			Reduce GHG emissions intensity (Scope 1+2) of chemicals production		OxyChem has a target to reduce GHG intensity of its products (CO <sub>2</sub> e/ton of product) 2.7% by 2025.
Monitor and disclose methane emissions intensity, produced oil and gas					
Disclose Occidental's 2030 goals for oil and gas operations CO <sub>2</sub> e emissions intensity (tonnes/BOE)		Aligned with OGCI, Occidental has set a mid-term target to reduce upstream oil and gas emissions intensity from 0.0392 in 2017 to 0.02 MTCO <sub>2</sub> e/BOE, by 2025.	Develop and disclose a metric to account for net-zero		In this report, we announced our net-zero aspiration for reported Scope 1, 2 and 3 emissions, and Total Carbon Impact.
Disclose Occidental's 2030 goals for oil and gas operations methane emissions intensity (tonnes/BOE)		Aligned with OGCI, Occidental has set a mid-term target to reduce methane emissions intensity from 0.39% in 2017 to below 0.25% (based on marketed gas), by 2025.	End routine gas flaring by 2030		In 2020, Occidental endorsed and committed to the World Bank's "Zero Routine Flaring by 2030" initiative. Occidental will eliminate all (100%) routine flaring by 2030.
Limit the upstream CO <sub>2</sub> e emissions intensity for new U.S. oil and gas field production activities starting in 2020 to a level that is 10% below the 2018 value		Occidental's upstream CO <sub>2</sub> emissions intensity value for 2018 is 0.0352 MT/BOE. For new U.S. oil and gas field production, we have set an average upstream target limit of < 0.0317 MTCO <sub>2</sub> e/BOE starting from 2020 and progress to 0.02 MTCO <sub>2</sub> e/BOE by 2025.	Fulfill API Environmental Partnership commitments for leak detection surveys and high-bleed pneumatics replacement		In 2019, Occidental completed more than 900 surveys, exceeding our annual commitment to the API Environmental Partnership.
			Community investment supporting Sustainable Development Goals (SDG)		Beginning with 2020, social investments data will attribute the amount supporting SDG.

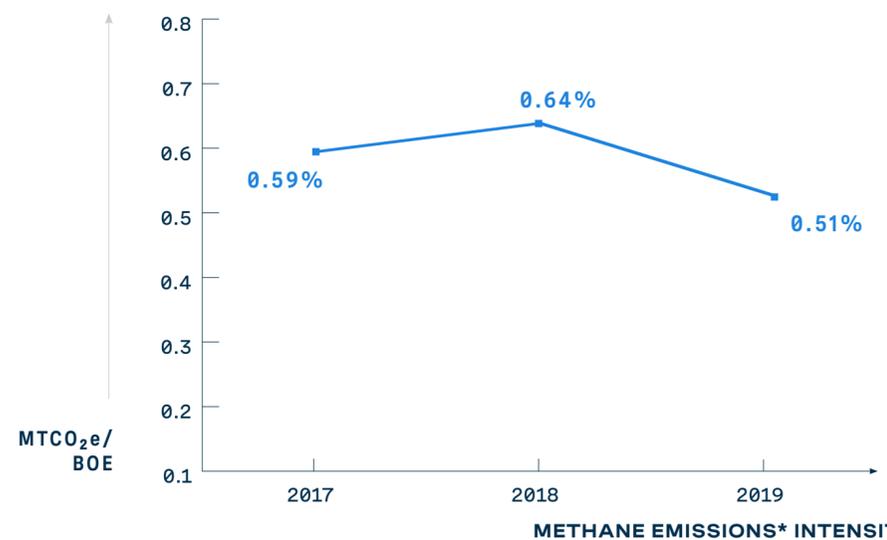
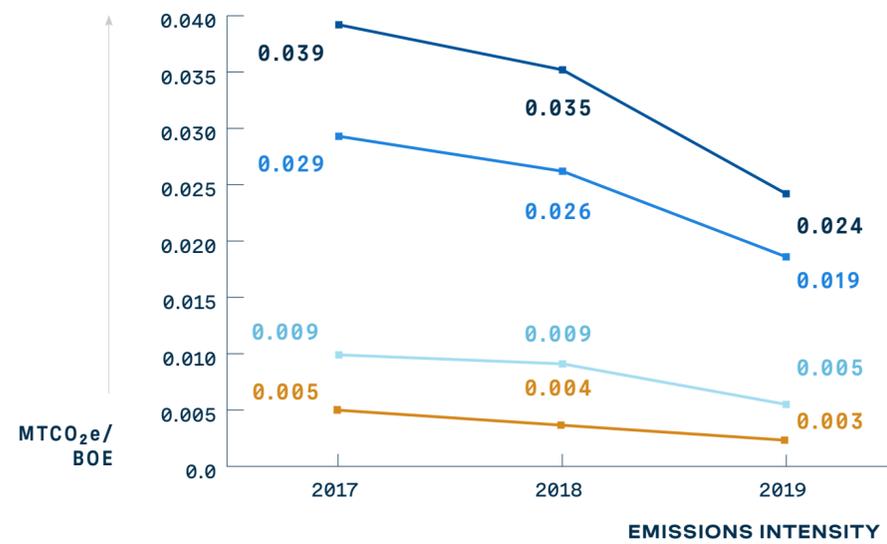
## GOVERNANCE AND ENGAGEMENT

COMMITMENT		ACTION
Board-level committee dedicated to ESG and climate-related issues		The Board's newly formed Sustainability and Shareholder Engagement Committee.
Support and investments in CCUS/CO <sub>2</sub> enterprises/partnerships		Since 2019, executive officer variable compensation has included a sustainability metric associated with the advancement of CCUS activity.
Support OLCV		OLCV is advancing leading-edge technologies and business solutions that economically grow while reducing emissions.
Support OGCI		Occidental is a contributing member of OGCI.
Active engagement with investors on ESG issues, including climate		Occidental routinely engages with its investors and other stakeholders on ESG-related issues, including climate.
Publish TCFD-aligned Climate Report		Since 2018, Occidental has published a climate-related risks and opportunities report informed by the recommendations of the TCFD.
Engage with and respond to ESG risk ratings and questionnaire		Occidental responds to several ESG questionnaires, including <a href="#">CDP Climate</a> .

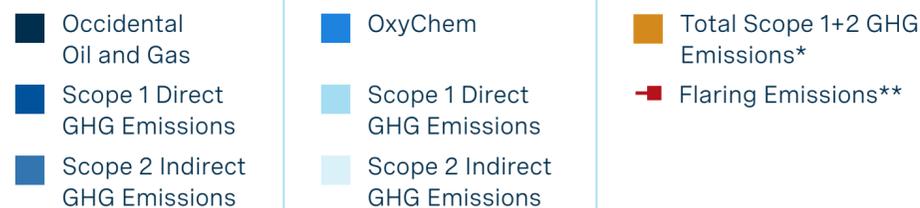
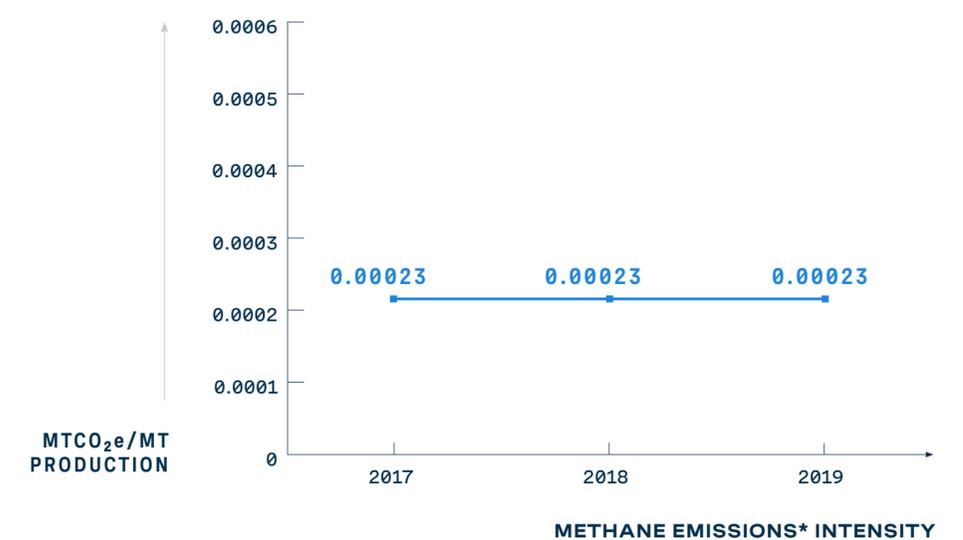
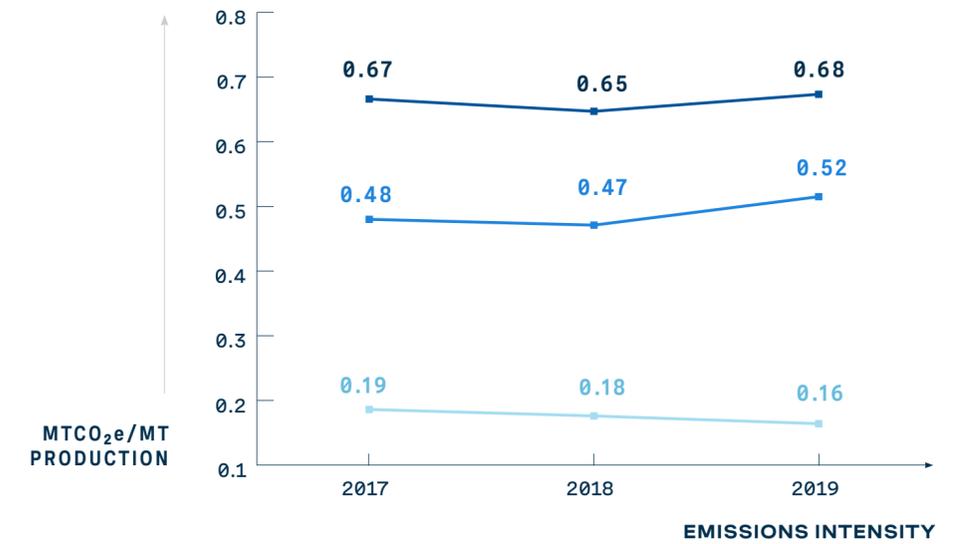
### GHG EMISSIONS METRICS



### OCCIDENTAL OIL AND GAS EMISSIONS INTENSITY SUMMARY



### OXYCHEM EMISSIONS INTENSITY SUMMARY



\* 2019 Occidental Oil and Gas data includes Occidental and Anadarko operated assets. For GHG emissions, consistent with the U.S. EPA reporting, we included operated GHG emissions for the entire year (2019); however, we have used gross production for the period we owned and operated (i.e., August 2019 onward). 2017 and 2018 data does not include Anadarko operated assets.

\*\* Flare Emissions data for the period 2017-2019 include total of Routine, Non-Routine and Safety flaring. Target for flare emissions reduction is aligned with the World Bank's Zero Routine Flaring initiative.

# ACCOLADES AND ACCOMPLISHMENTS

Occidental is meeting the challenges of an acute oil price downturn exacerbated by the global COVID-19 pandemic, and are proud of our progress on ESG commitments and recognition for the following accomplishments:

- We set targets to reduce GHG and methane emissions intensity.
- Occidental was the first U.S. oil and gas company to endorse the World Bank's "Zero Routine Flaring by 2030" initiative to reduce GHG emissions. Occidental, as a member of the OGCI, is committed to advancing the Global Methane Alliance Program, launched by UNEP to support the inclusion of methane emission reduction targets in countries' Paris Agreement-aligned Nationally Determined Contributions.
- OxyChem is a founding member of the Vinyl Sustainability Council and initial participant in the industry's +Vantage Vinyl™ program. The program is the U.S. vinyl industry's first sustainability initiative focused on advancing the industry's contribution to sustainable development.
- OxyChem is a founding member of the Alliance to End Plastic Waste, which aims to invest \$1.5 billion over the next 5 years to help eliminate plastic waste in the environment, especially in the ocean.
- OxyChem is also a member of the World Economic Forum Low-Carbon Emitting Technologies workgroup focusing on innovation to help reduce the carbon footprint of the chemical industry.
- Inclusion in the FTSE4Good Index, designed to measure the performance of companies that demonstrate strong environmental, social and governance performance.
- Recognition by the Transition Pathway Initiative for achieving Level 4, under its Management Quality framework.
- Recognition by CDP as a "Legacy Reporter" (10-plus years reporting to CDP).



# GOVERNANCE

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Board of Directors Engagement

Stakeholder Engagement

Public Policy Engagement and Advocacy

Executive Engagement



# GOVERNANCE

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The Board of Directors, its committees and senior management work together to implement and promote effective corporate governance with oversight of Occidental's policies and procedures and management of business risks. The Board's risk oversight structure for Environmental, Social and Governance (ESG) and sustainability matters – including climate-related risks and opportunities – follows.

## ENVIRONMENTAL, HEALTH AND SAFETY COMMITTEE

Reviews environmental, health and safety performance as part of our risk management processes

## AUDIT COMMITTEE

Oversees our Enterprise Risk Management (ERM) process, which involves a cross-functional team reporting to our ERM Council. This group of senior executives is responsible for identifying, assessing, monitoring, managing and reporting enterprise risks, including client risks

## SUSTAINABILITY AND SHAREHOLDER ENGAGEMENT COMMITTEE

Oversees stakeholder engagement, external reporting on ESG and sustainability matters, and monitors the progress of OLCV

## EXECUTIVE COMPENSATION COMMITTEE

Establishes the parameters and goals that determine executive compensation, including elements related to sustainability performance and climate-related targets

GOVERNANCE



VICKI HOLLUB  
PRESIDENT AND CEO

### BOARD OF DIRECTORS ENGAGEMENT

Senior management reports to the Board of Directors on environmental and sustainability matters, including climate-related risks and opportunities, during regularly scheduled Board and Committee meetings, annual strategy sessions and informally during regular business. During the Board's 2020 session, the OLCV team updated the Board on Occidental's low-carbon strategic process, including a review of objectives, the CO<sub>2</sub> economy and competitive landscape, and low-carbon investment opportunities. These agenda items reflect the Board's engagement and efforts to heighten its understanding of how a low-carbon economy is expected to affect the company while supporting and strengthening Occidental's shareholder value proposition. Future Board strategy sessions will continue to refine and enhance consideration of climate-related risks and opportunities.

The Board is committed to a diversity of thought, background and experience, as well as gender and ethnicity in its membership. Our directors have a wide range of backgrounds and experiences, including in government service, non-governmental organizations and private sector industries. Of our 11 directors, two are diverse based on gender and two are diverse based on ethnicity.

The Board's independent chair coordinates and approves meeting agendas and serves as a liaison with Occidental's stockholders.

### STAKEHOLDER ENGAGEMENT

Occidental builds trust through regular and transparent communication and engagement with stakeholders. Our goal is to understand and proactively address issues to develop beneficial outcomes. We look forward to continuing this dialogue on emissions and climate-related risks and opportunities.

### PUBLIC POLICY ENGAGEMENT AND ADVOCACY

Ensuring public trust in carbon reduction strategies is essential for advancing CCUS policy and the transition to a low-carbon future. Occidental engages the U.S. EPA, Department of Energy and other federal agencies, as well as state legislative bodies and agencies, such as the California Air Resources Board (CARB), to advance CCUS and low-carbon energy solutions. Occidental continues to take a leadership role in engaging key government stakeholders and policy groups by leveraging our proven carbon management expertise.

- Occidental worked with a bipartisan coalition that successfully sought U.S. enactment of the FUTURE Act, which extended the federal tax credit for CCUS and expanded it to include direct air capture and utilization. We continue to work to strengthen the FUTURE Act.
- In collaboration with the EPA, CARB and other stakeholders, Occidental is helping to develop protocols that transparently measure, report and verify CO<sub>2</sub> storage. We recently submitted the first application for Permanence Certification under CARB's CCS Protocol, building upon our expertise as the recipient of the first EPA-approved MRV plan.
- We are an active member of the Carbon Capture Coalition, comprised of over 80 diverse stakeholder members from industries, unions and NGOs working to support federal legislation, regulations and policies to incentivize CCUS.

GOVERNANCE

**EXECUTIVE ENGAGEMENT**

Occidental President and CEO Vicki Hollub and other senior executives are visible leaders in promoting the role of oil, gas and energy companies in reducing GHG emissions. Our leaders have appeared at numerous industry and climate-related forums in the U.S. and abroad, discussing the role that Occidental, in partnership with other leaders in policy and industry, can play in reducing emissions and ultimately atmospheric concentrations of GHG. Although the COVID-19 pandemic has curtailed travel and resulted in many ESG events being canceled or rescheduled, engagement with our stakeholders remains a top priority.

Occidental is an active member of the OGCI, a voluntary CEO-led initiative by major international oil, gas and energy companies taking practical actions on climate change. OGCI members leverage their collective strength to lower carbon footprints of energy, industry and transportation value chains via engagements, policies, investments and deployment. Occidental executives hold several leadership positions within OGCI, including Ms. Hollub on the CEO Steering Committee and Richard Jackson, U.S. Onshore Resources and Carbon Management - President, Operations, on the Board of OGCI's Climate Investments fund.

Ms. Hollub also serves as Chair of the Secretary of Energy Advisory Board (SEAB). The SEAB provides advice and recommendations to U.S. Secretary of Energy Dan Brouillette on the priorities for the Department of Energy (DOE), including promoting America's energy security and spurring innovation. The DOE has supported various initiatives aimed at advancing and deploying CCUS technologies.

Ms. Hollub and the Board of Directors regularly engage with key ESG investors on issues and opportunities pertinent to Occidental, including our carbon management strategies and those more generally facing the global energy industry.

Representatives from Occidental's investor relations, legal and health, safety and environment teams also meet with ESG stakeholders. Some event highlights since our 2019 climate report include:

- In October 2020, Dr. Robert Zeller, Vice President of Technology for Oxy Low Carbon Ventures, gave a keynote address highlighting Occidental's carbon management and low-carbon projects at the 2020 DOE CarbonX Summit.
- In May 2020, Ms. Hollub joined the CEOs participating in the OGCI in an "Open Letter from the CEOs of the Oil and Gas Climate Initiative" reiterating their commitment to address climate change and the transition to a lower-carbon future. The CEOs also pledged to accelerate emissions reduction efforts in their own companies.
- In January 2020, Ms. Hollub spoke at the "Shaping the Future of Energy and Materials" session at the World Economic Forum Annual Meeting 2020 in Switzerland. Ms. Hollub is on the stewardship board for the Platform for Shaping the Future of Energy and Materials, which brings together leadership from many industries to accelerate the transition to a more sustainable, secure and affordable energy system.
- In December 2019, Dr. Zeller participated in a panel discussion on "CO<sub>2</sub> Capture Project's Survey of CO<sub>2</sub> Storage Regulations" as part of the IETA BusinessHub COP 25 conference in Madrid.
- In September 2019, Ms. Hollub participated in the OGCI CEO Forum and dialogue at NYC Climate Week.
- In May 2019, Mr. Jackson testified before the U.S. Senate Committee on Energy and Natural Resources on the importance of public policy that supports carbon capture and storage and the benefits that would provide to society.



**OIL AND GAS CLIMATE INITIATIVE CONFERENCE**

Occidental is an active member of the OGCI, a voluntary CEO-led initiative by major international oil, gas and energy companies taking practical actions on climate change.

# INTEGRATED RISK MANAGEMENT

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Integrating Climate into Occidental's Risk Management Approach

The IEA Sustainable Development Scenario



# INTEGRATING CLIMATE INTO OCCIDENTAL'S RISK MANAGEMENT APPROACH

Occidental has long recognized that robust risk assessment and proactive Enterprise Risk Management (ERM) are essential to safe, reliable and efficient operations. Occidental's ERM program identifies and evaluates significant risks, such as those reflecting climate-related regulatory changes and physical, commercial and reputational risks, to inform strategic and capital planning. We consider various energy scenarios, including the performance of our assets and reserves in modeling based on the [International Energy Agency \(IEA\) World Energy Outlook \(WEO\)](#), to assess potential future climate-related impacts to our business. Larger capital projects require a carbon price-sensitivity analysis before approval.

Integration of climate-related risks into our ERM system and strategic planning process support readiness for emerging opportunities and resilience against potential risks. The outcomes inform our engagement with stockholders, state and national regulators, industry associations, consumers of our chemical products, environmental groups and other stakeholders.

To support strategic planning discussions at senior management and Board levels, Occidental considers various scenarios to assess potential future climate-related impacts on the company's existing assets. We factor carbon pricing and transition risks in a range of scenarios around commodity prices, capital returns and the risks and opportunities of GHG abatement and CO<sub>2</sub>

utilization. Our risk evaluation also includes potential physical and social impacts of severe weather events and business disruption in flood-prone and water-stressed areas.

## OUR APPROACH TO TRANSITION RISK

Occidental's risk management incorporates analyses of short-, medium- and long-term financial risks of a lower-carbon economy to better understand the resiliency of our current and potential assets and capital investments. It also provides information to target opportunities.

In alignment with the IEA, the UN Intergovernmental Panel on Climate Change and other leading organizations, we believe wide-scale deployment of CCUS is critical to achieving global climate goals, while meeting society's demands for energy and better standards of living. OLCV is focused on advancing CCUS-related business opportunities and policies with a goal of reducing our carbon impact and greenhouse gas emissions. In 2020, we dedicated additional resources and structure to the OLCV team.

Our decades of experience with large-scale carbon CCUS as part of EOR operations and the more recent creation of OLCV make us uniquely capable of realizing our ambition to achieve net-zero and providing solutions to others looking to do the same. As the largest commercial

purchaser and injector of CO<sub>2</sub> for EOR in the Permian Basin and a global leader in this technology, Occidental has insight into market-driven CO<sub>2</sub> supply pricing and routinely utilizes this information in our business and strategic planning.

## PHYSICAL RISK

Occidental has offshore oil and gas platforms and facilities along the U.S. Gulf Coast that have been in the path of severe weather, which at times resulted in the interruption of some operations. Facilities exposed to physical risks are hardened against severe weather events and are routinely inspected. They have historically weathered such events without casualties or major damage. These facilities have emergency preparedness and response plans initiated in advance of identified storms. Following severe weather events, facilities undergo detailed inspection and recovery protocols to support a safe and timely return to full production. Other potential physical or resource risks that could arise from long-term shifts in climate, including water or raw material scarcity, changes or disruptions in energy markets, geopolitical risks or other supply and logistics challenges, are considered in our business continuity planning and ERM processes.

## PORTFOLIO REVIEW

### THE IEA SUSTAINABLE DEVELOPMENT SCENARIO

We believe sound, externally developed scenarios benefit stakeholders seeking to compare companies across industries. The [Task Force on Climate-related Financial Disclosures \(TCFD\)](#) recommends organizations use a scenario to test portfolio resilience in which global warming is kept to well below a 2°C increase compared with pre-industrial levels.

In this section, we discuss our carbon pricing assumptions and portfolio review process, including the performance of our assets and reserves in stress-test modeling based on the 2019 IEA Sustainable Development Scenario (SDS). The SDS reflects a pathway to achieving key energy-related components of the U.N. Sustainable Development Agenda, including universal access to modern energy by 2030, urgent action to tackle climate change measures to improve poor air quality, and is aligned with holding temperature increases to well below 2°C and pursuing efforts to limit it to 1.5°C, without any recourse to net-negative emissions.

Occidental used the 2019 SDS as it was issued closest in time to our reserve modeling exercise. To better understand the potential long-term impacts of a lower-carbon economy, we model our internal base planning case against the 2019 SDS.

We recognize that additional climate scenarios are being developed using a spectrum of price and supply and demand assumptions. We believe our strategy for resilience — utilizing and storing CO<sub>2</sub> at a price and volume that adjusts relative to potential economic or regulatory carbon constraints or incentives — is flexible enough to be attractive to investors in various carbon-constrained scenarios while still aligning with the goals of the Paris Climate Agreement. We continue to evaluate new scenarios and reassess our asset portfolio based on material changes in leading market forecasts, carbon pricing regimes and significant changes to our asset mix.

THE IEA SUSTAINABLE DEVELOPMENT SCENARIO

PROCESS AND RESULTS

Across our business segments, Occidental bases its strategic and capital planning processes on a low-capital approach that is intended to maximize the value of our portfolio and execute on our priorities. Key elements of our portfolio review and carbon modeling include:

- Referencing the IEA SDS;
- Developing strategic alternatives expected to maximize shareholder value in a future with uncertain carbon constraints and defined carbon budgets; and
- Developing options for delivering sustainable shareholder value under scenarios with stringent regulation of CO<sub>2</sub> emissions and potentially changing demand for oil and gas, and its derived products.

For our assessment of potential impacts to proved reserves, Occidental used a reference case model to represent our asset base at year-end 2019. Oil and gas product prices under the SDS are generally higher than our reference case model prices calculated in accordance with Securities and Exchange Commission (SEC) rules for estimating proved reserves. Considering product and CO<sub>2</sub> prices under the SDS, proved U.S. reserves showed an impact of less than 1 percent and the Net Present Value (NPV) 10 valuation showed no negative impact. Similar to the U.S., non-U.S. proved reserves showed an impact of less than 1 percent and the NPV10 valuation showed no negative impact. Occidental's worldwide portfolio of aggregate proved reserves showed an impact of less than 1 percent and the NPV10 valuation showed no negative impact.

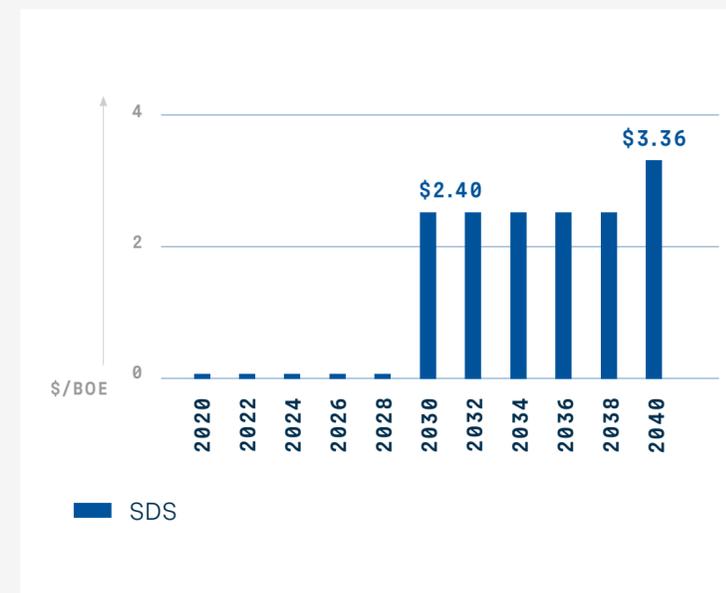
The assessment was based on a representative portfolio of assets that contained a majority of proved reserves from U.S. and non-U.S. oil and gas locations reported in our 2019 Form 10-K. Planned capital spending and expected operating costs from the approved development plans that support the reserves were embedded in the model. Consistent with SEC requirements for estimating proved reserves, we used a calculated average West Texas Intermediate (WTI) oil price of \$55.69 and a calculated average Henry Hub gas price of \$2.58. We used a \$0 price on CO<sub>2</sub> emissions for the reference case model, since none of Occidental's oil and gas operations or products are currently subject to a carbon pricing structure.

The results of the scenario analysis further demonstrate the strength and resiliency of Occidental's assets, including in a lower-carbon economy. We benefit from a high-return, short-cycle upstream portfolio. This allows us to minimize the risk of stranded investments as 1) our assets can generate returns in the low-carbon scenarios generated under the SDS and 2) we have the flexibility to shift capital given any sudden change in policy that would impact project economics.

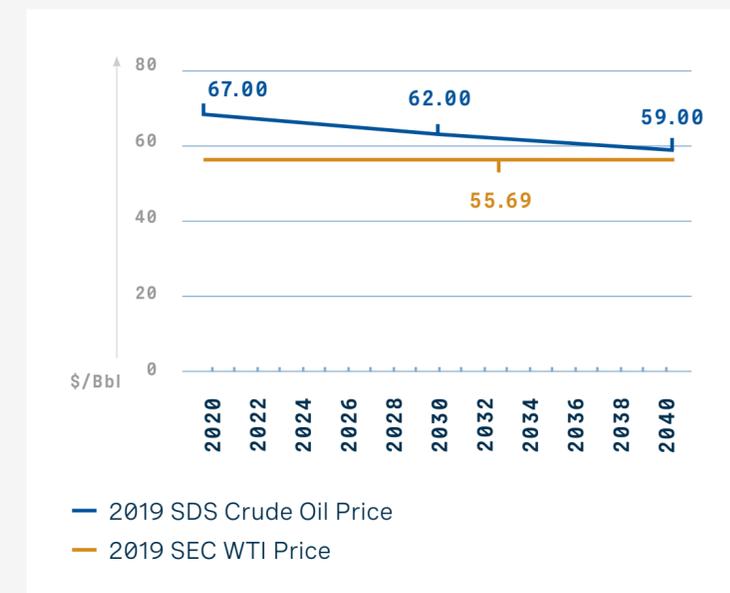
Portfolio impacts were assessed by applying the SDS outcomes for oil and natural gas prices and CO<sub>2</sub> prices in the regions where we operate. Currently, no carbon tax applies to any of Occidental's oil and gas operations or products. However, as part of our commitment to informed capital planning and risk management, we include an assumed price on carbon in our capital approval process for the purpose of sensitivity modeling. The sensitivity modeling conducted represents the combined portfolio assets of Occidental and Anadarko, which we acquired in 2019. This modeling allows our capital planners and senior management to analyze the long-term risks of carbon price exposure when extending the operating life or reserves of existing fields or entering new projects, while simultaneously instilling a culture of carbon-price sensitivity in capital planning and allocation.

For this report, we conducted sensitivity analysis on our CO<sub>2</sub> burden applying the SDS's carbon price projection, which reaches \$100 per metric ton by 2030 and \$140 per metric ton by 2040. For our portfolio, we estimate a carbon price of \$2.40 per BOE from 2030 until 2040, when we increased the carbon price to \$3.36/BOE, based on the emissions intensity for Occidental's worldwide oil and gas operations and the SDS U.S. carbon pricing projections.

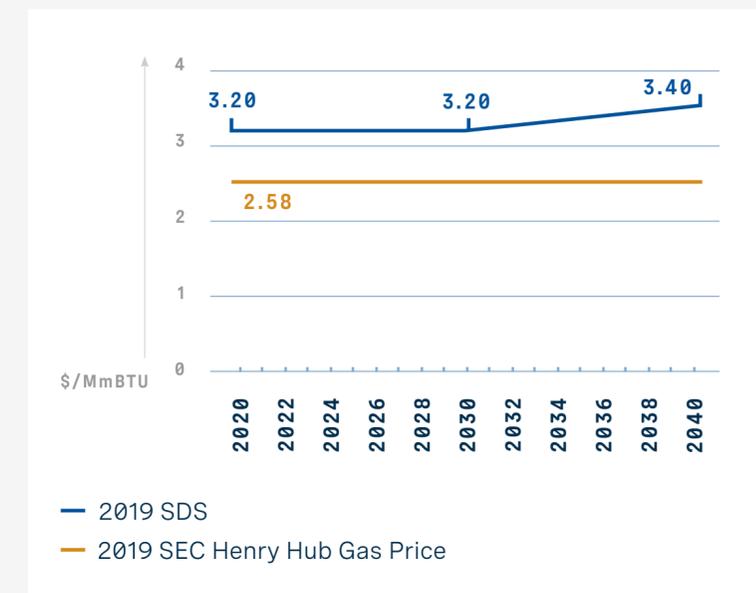
2019 WEO OXY CO<sub>2</sub>e PRICE



OIL PRICE FOR PORTFOLIO ANALYSIS



NATURAL GAS PRICES FOR PORTFOLIO ANALYSIS



# SUMMARY OF CLIMATE REPORT HIGHLIGHTS

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# SUMMARY OF CLIMATE REPORT HIGHLIGHTS

## STRATEGY

### OUR PATHWAY TO ACHIEVE NET-ZERO

- Competitive advantage as low-cost producer, EOR capabilities and industry-leading CCUS;
- Net-zero for our operational and energy use emission (Scope 1 and 2) before 2040 with the ambition to accomplish before 2035;
- Net-zero for our total emissions inventory, including product use (Scope 1, 2 and 3) before 2050; and
- Total carbon impact through carbon removal and storage technology and development beyond 2050

## METRICS AND TARGETS

### TRACKING PERFORMANCE AND PROGRESS

- Progress on our commitments on reducing GHG and methane emissions
- Introduce new time-bound GHG and methane targets
- New approach to account for net-zero
- Commitment to resource OLCV and to link executive compensation to OLCV performance
- Routine reporting of corporate GHG and ESG data

## GOVERNANCE

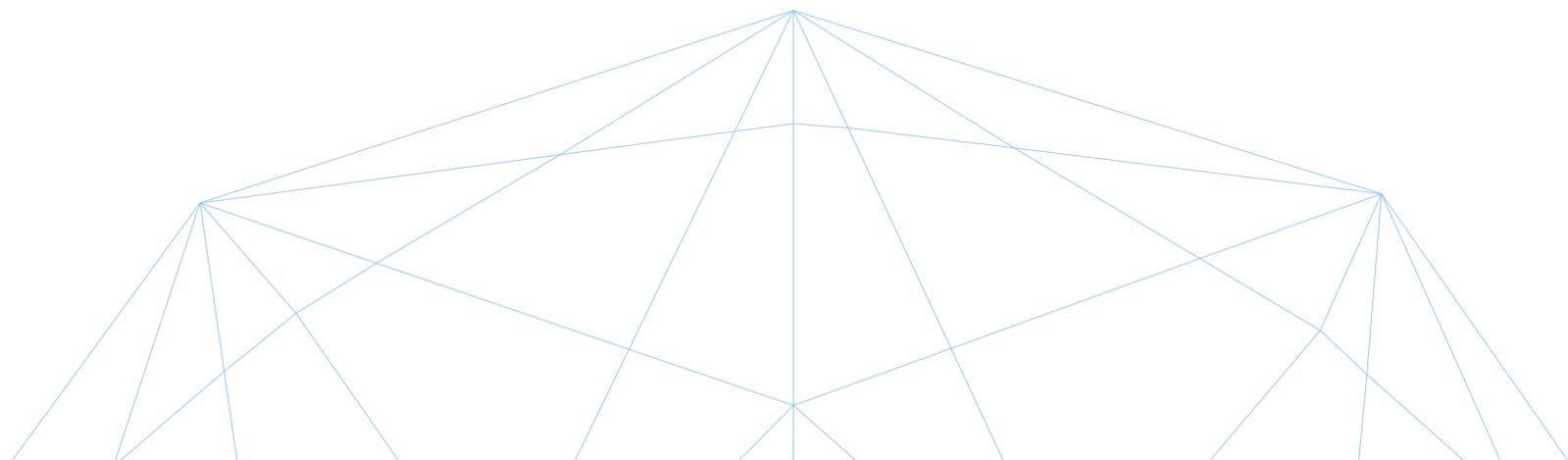
### BOARD AND EXECUTIVE OVERSIGHT ON CLIMATE-RELATED RISKS AND OPPORTUNITIES

- Board and Executive level governance structure
- New Board-level Sustainability and Shareholder Engagement Committee
- Management alignment on climate-related goals
- Active engagement with stakeholders and industry

## RISK MANAGEMENT

### INTEGRATION OF CLIMATE RISKS WITHIN OCCIDENTAL'S ERM

- Expansive approach, grounded in Occidental's ERM system
- Stress testing business and asset resiliency against climate scenarios and carbon price burden
- Agility to respond to emergent climate- and emissions-related regulations



# GLOSSARY

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# GLOSSARY

## A

**Anthropogenic CO<sub>2</sub>** : Human-made CO<sub>2</sub>

## B

**BOE:** Barrel of oil equivalent is the energy released by burning one barrel of oil, and is used to express the energy contained in other hydrocarbon streams in barrels – for example, Occidental uses a conversion of 6,000 cubic feet of natural gas = 1 BOE.

## C

**CARB:** [California Air Resources Board](#)

**CHP:** Combined Heat and Power

**CNG:** Compressed Natural Gas

**CO<sub>2</sub>:** Carbon dioxide

**CO<sub>2</sub> EOR:** Carbon dioxide Enhanced Oil Recovery. Occidental is an industry leader in applying CO<sub>2</sub> EOR, which can increase ultimate oil recovery by 10 to 25 percent in the fields where it is employed.

**CO<sub>2</sub>e:** Carbon dioxide equivalent – obtained by converting a mixture of GHG to a single number based on the global warming potential of each individual GHG in the mixture.

**CCUS:** Carbon capture, utilization and storage

**CDP:** A nonprofit organization that manages a system for disclosing environmental impacts. Formerly known as the [Carbon Disclosure Project](#).

**CH<sub>4</sub>:** Methane

## D

**DAC:** Direct air capture pulls CO<sub>2</sub> directly from the atmosphere and delivers it in a pure, compressed form so it can be used in processes like Enhanced Oil Recovery to create low-carbon fuels and products or permanent carbon removal through carbon sequestration. DAC technology allows for collection of atmospheric CO<sub>2</sub>, making it a key solution for addressing difficult to capture, and historical, emissions.

**DJ Basin:** Denver-Julesburg Basin in the U.S. Rockies region.

**DOE:** Department of Energy

## E

**EOR:** Enhanced Oil Recovery, a technique to increase oil production through the use of water or carbon dioxide flooding.

**EPA:** [U.S. Environmental Protection Agency](#)

**ERM:** Enterprise Risk Management

**ESG:** Environmental, Social and Governance

## G

**GHG:** Greenhouse gases – primarily comprised of carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and nitrogen trifluoride.

## H

**Henry Hub:** A natural gas pipeline located in Erath, Louisiana, that serves as the official delivery location for futures contracts on the New York Mercantile Exchange.

**HSE:** Health, Safety and Environment

## I

**IEA:** [International Energy Agency](#)

**IPIECA:** Originally, the [International Petroleum Industry Environmental Conservation Association](#), but since 2002: “IPIECA, the global oil and gas industry association for environmental and social issues.”

## M

**MMCFpd:** Million cubic feet per day

**Metric Ton or Tonne (MT):** 1,000 kilograms (approximately 2,205 pounds)

**MRV:** Monitoring, Reporting and Verification

## N

**Net-Zero:** For Occidental, net-zero means that our greenhouse gas emissions generated directly from our operations (Scope 1), the emissions generated by creating the power we use to run our operations (Scope 2), and the emissions generated from the products that we sell (material Scope 3 emissions), are either eliminated or offset.

**NPV:** Net Present Value of revenues minus expenses using an annual discount rate.

## O

**OLCV:** [Oxy Low Carbon Ventures](#)

## P

**Permian Basin:** A hydrocarbon-bearing sedimentary basin largely contained in the western part of Texas and the southeastern part of New Mexico.

## S

**SASB:** [Sustainability Accounting Standards Board](#)

**Scope 1 Emissions:** As defined by the Greenhouse Gas Protocol, Scope 1 or direct emissions are emissions from sources that are owned or controlled by the reporting entity.

**Scope 2 Emissions:** As defined by the Greenhouse Gas Protocol, Scope 2 or indirect emissions are emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity.

**Scope 3 Emissions:** As defined by the Greenhouse Gas Protocol, Scope 3 or other indirect emissions are emissions from the extraction and production of purchased materials and fuels, transport-related activities not owned or controlled by the reporting entity, electricity-related activities (e.g., transmission and distribution losses) not covered in Scope 2, waste disposal, etc.

**Sustainable Development Scenario:**

IEA scenario that integrates the objectives of three Sustainable Development Goals (SDGs): universal access to modern energy by 2030, stringent control of GHG emissions consistent with the objectives of the Paris Agreement, and a steep reduction in conventional air pollutant emissions.

**SEC:** [U.S. Securities and Exchange Commission](#)

## T

**TCFD:** [Task Force on Climate-related Financial Disclosures](#)

## W

**WTI:** West Texas Intermediate – a type of crude oil that is the underlying commodity of the New York Mercantile Exchange’s oil futures contracts and a common benchmark for pricing crude oil.

# APPENDIX: GHG EMISSIONS SUMMARY

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GHG Emissions Summary 2017-2019



GHG EMISSIONS SUMMARY	2017		2018		2019	
	GHG EMISSIONS	INTENSITY	GHG EMISSIONS	INTENSITY	GHG EMISSIONS	INTENSITY
OCCIDENTAL PETROLEUM CORP	MILLION MTCO <sub>2</sub> e	MTCO <sub>2</sub> e/BOE	MILLION MTCO <sub>2</sub> e	MTCO <sub>2</sub> e/BOE	MILLION MTCO <sub>2</sub> e	MTCO <sub>2</sub> e/BOE
Scope 1: Direct GHG Emissions	16.84	N/A	16.98	N/A	18.23	N/A
Scope 2: Indirect GHG Emissions	6.00	N/A	6.04	N/A	5.47	N/A
<b>Total Direct + Indirect GHG Emissions (Scope 1 + 2)</b>	<b>22.84</b>	N/A	<b>23.02</b>	N/A	<b>23.70</b>	N/A
OCCIDENTAL OIL AND GAS*	MILLION MTCO <sub>2</sub> e	MTCO <sub>2</sub> e/BOE	MILLION MTCO <sub>2</sub> e	MTCO <sub>2</sub> e/BOE	MILLION MTCO <sub>2</sub> e	MTCO <sub>2</sub> e/BOE
Scope 1: Direct GHG Emissions	10.78	0.0293	11.05	0.0262	12.02	0.0186
Scope 2: Indirect GHG Emissions	3.65	0.0099	3.82	0.0091	3.58	0.0055
<b>Total Direct + Indirect GHG Emissions (Scope 1 + 2)</b>	<b>14.43</b>	<b>0.0392</b>	<b>14.87</b>	<b>0.0352</b>	<b>15.60</b>	<b>0.0242</b>
<b>Flare Emissions**</b>	<b>1.85</b>	<b>0.00503</b>	<b>1.55</b>	<b>0.00369</b>	<b>1.69</b>	<b>0.00262</b>
<b>Methane Emissions***</b>	<b>1.17</b>	<b>0.59%</b>	<b>1.52</b>	<b>0.64%</b>	<b>1.82</b>	<b>0.51%</b>
OXYCHEM	MILLION MTCO <sub>2</sub> e	MTCO <sub>2</sub> e/MT	MILLION MTCO <sub>2</sub> e	MTCO <sub>2</sub> e/MT	MILLION MTCO <sub>2</sub> e	MTCO <sub>2</sub> e/MT
Scope 1: Direct GHG Emissions	6.06	0.48	5.93	0.47	6.21	0.52
Scope 2: Indirect GHG Emissions	2.35	0.19	2.22	0.18	1.89	0.16
<b>Total Direct + Indirect GHG Emissions (Scope 1 + 2)</b>	<b>8.41</b>	<b>0.67</b>	<b>8.15</b>	<b>0.65</b>	<b>8.10</b>	<b>0.68</b>
<b>Methane Emissions***</b>	<b>0.003</b>	<b>0.00023</b>	<b>0.003</b>	<b>0.00023</b>	<b>0.003</b>	<b>0.00023</b>

\* 2019 Occidental Oil and Gas data includes Occidental's and Anadarko's operated assets. For GHG emissions, consistent with the U.S. EPA reporting, we included operated GHG emissions for the entire year (2019); however, we have used gross production for the period we owned and operated (i.e., August 2019 onward).

\*\* Flare Emissions data for the period 2017-2019 include total of Routine, Non-Routine and Safety flaring. Target for flare emissions reduction is aligned with the World Bank's Zero Routine Flaring Initiative.

\*\*\* Methane emissions intensity refers to the amount of methane emissions from Occidental's operated oil and gas assets as percentage of the total gas produced and marketed.

Not Applicable (N/A)—Intensity is tracked at the business unit level due to different measurement units of production; for Occidental Oil and Gas it is BOE and for OxyChem it is MT.



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