

2022

## Environmental, Social, and Governance Report

A Sustainability Accounting Standards Board and Task Force on Climate-related Financial Disclosures Report

Posted July 20, 2023

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### ENVIRONMENTAL, SOCIAL, AND GOVERNANCE REPORT

### Glossary

#### **Company Abbreviations**

KMI	=	Kinder Morgan, Inc., its operated subsidiaries, and its operated investees	SFPP	=	SFPP, L.P.
<b>KMAP</b> <sup>TM</sup>	=	Kinder Morgan Assessment Protocol <sup>TM</sup>	TGP	=	Tennessee Gas Pipeline

Unless the context otherwise requires, references to "KMI," "Kinder Morgan," "we," "us," "our," or "the company" are intended to mean Kinder Morgan, Inc., and its operated subsidiaries, and operated investees. All dollar amounts in U.S. dollars. Where applicable, values have been rounded to the nearest whole number. Unless stated otherwise, our reporting boundary for the data in this report is for the assets where we have operational control. For this Report, we do not consider the Jones-Act-qualified product tankers operated by Intrepid Ship Management to be under our operational control.

#### **Common Industry and Other Terms**

°C	=	degrees Celsius	CCS	=	carbon capture sequestration
/d	=	per day	CCUS	=	carbon capture, utilization, and storage
/yr	=	per year	CDP	=	CDP, formerly Carbon Disclosure Project
ACC	=	American Chemistry Council	CEO	=	Chief Executive Officer
AGA	=	American Gas Association	CER	=	Canadian Energy Regulator
API	=	American Petroleum Institute	CFO	=	Chief Financial Officer
APS	=	Announced Pledges Scenario	CFR	=	Code of Federal Regulations
AR5	=	IPCC Fifth Assessment Report, 2014	$CH_4$	=	methane
ARPA-E	=	U.S. Advanced Research Projects Agency-Energy	$CO_2$	=	carbon dioxide
ASEA	=	National Agency for Safety, Energy and Environment of Mexico	CO <sub>2</sub> e	=	carbon dioxide equivalent
BBbl	=	billion barrels	COO	=	Chief Operating Officer
bbl or bbls	=	barrel or barrels	COVID-19	=	Coronavirus Disease 2019, a widespread contagious disease, or the related pandemic declared and resulting worldwide economic downturn
Bcf	=	billion cubic feet	DOE	=	U.S. Department of Energy
BLS	=	U.S. Bureau of Labor Statistics	DOT	=	U.S. Department of Transportation
Board	=	Board of Directors	DRA	=	drag reducing agent
BOE	=	barrel of oil equivalent	EBDA	=	earnings before depreciation, depletion, and amortization expenses, including amortization of excess cost of equity investments
CAO	=	Chief Administrative Officer	EBITDA	=	earnings before interest, income taxes, depreciation, depletion and amortization expenses, including amortization of excess cost of equity investments
CCATF	=	Climate Change Adaption Task Force	EDGAR	=	Electronic Data Gathering, Analysis, and Retrieval

### **Common Industry and Other Terms (continued)**

		Common Industry and	Other Terms	s (ca	ontinued)
EEO-1	=	Employment Information Report	kg	=	kilogram
EHS	=	environmental, health, and safety	LDAR	=	leak detection and repair
EIA	=	U.S. Energy Information Administration	LED	=	light-emitting diode
EJ	=	exajoule	LEED	=	Leadership in Energy and Environmental Design
EOR	=	enhanced oil recovery	LEPA	=	Liquid Energy Pipelines Association
EPA	=	U.S. Environmental Protection Agency	LMS	=	Learning Management System
ESG	=	environmental, social, and governance	LNG	=	liquefied natural gas
EV	=	electric vehicle	LTIR	=	lost time incident rate
ft <sup>3</sup>	=	cubic feet	MMBbl	=	million barrels
FERC	=	U.S. Federal Energy Regulatory Commission	MMBtu	=	million British thermal units
GAAP	=	generally accepted accounting principles	MMcf	=	million cubic feet
GDP	=	gross domestic product	MWh	=	megawatt-hours
GHG	=	greenhouse gas	$N_2O$	=	nitrous oxide
GHGRP	=	Greenhouse Gas Reporting Program	NETL	=	U.S. National Energy Technology Laboratory
GIS	=	geographical information system	NGA	=	U.S. Natural Gas Act
GRI	=	Global Reporting Initiative	NGOs	=	non-government organizations
GWh	=	gigawatt-hours	NO <sub>x</sub>	=	nitrogen oxides
GWP	=	global warming potential	NZE	=	Net Zero Emissions by 2050 Scenario
HFC	=	hydrofluorocarbon	OGI	=	optical gas imaging
HMSDC	=	Houston Minority Supplier Development Council	OMS	=	Operations Management System
HR	=	Human Resources	ONE	=	Our Nation's Energy
IAB	=	Industrial Advisory Board	OSHA	=	U.S. Occupational Safety & Health Administration
ICA	=	U.S. Interstate Commerce Act	PHMSA	=	U.S. Pipeline and Hazardous Materials Safety Administration
IEA	=	International Energy Agency	PM <sub>10</sub>	=	particulate matter 10 micrometers or less in diameter
ILI	=	in-line inspection	РРР	=	purchasing power parity
ILO	=	International Labor Organization	PRCI	=	Pipeline Research Council International, Inc.
IMP	=	integrity management program	РТО	=	paid time off
INGAA	=	Interstate Natural Gas Association of America	PV	=	photovoltaic
IPCC	=	United Nations Intergovernmental Panel on Climate Change	PwC	=	PricewaterhouseCoopers LLP
IRA	=	Inflation Reduction Act of 2022	QMRV	=	quantification, monitoring, reporting, and verification
ISO	=	International Organization for Standardization	RCP	=	Representative Concentration Pathway
IT	=	information technology	RNG	=	renewable natural gas

## Common Industry and Other Terms (continued)

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RP	=	recommended practice	TCFD	=	Task Force on Climate-related Financial Disclosures
RROG	=	reporting-regulated-only gathering	TRIR	=	total recordable incident rate
SASB	=	Sustainability Accounting Standards Board	U.S.	=	United States of America
SCADA	=	supervisory control and data acquisition	USCG	=	U.S. Coast Guard
scf	=	standard cubic feet	USFWS	=	U.S. Fish and Wildlife Service
SDGs	=	United Nations Sustainable Development Goals	VOCs	=	volatile organic compounds
SEC	=	U.S. Securities and Exchange Commission	VP	=	Vice President
$SIM^{\mathbb{R}}$	=	Safety In Motion <sup>®</sup>	WDPA	=	World Database on Protected Areas
$SO_x$	=	sulfur oxides	WEO	=	World Energy Outlook
STEM	=	science, technology, engineering, and math			

### Important Information about Policies, Procedures, Practices, and Forward-Looking Statements

Our Report includes descriptions of our vision, mission and values, and various policies, procedures, processes, standards, systems, programs, initiatives, assessments, technologies, practices, and similar measures related to our operations and compliance systems ("Policies and Procedures"). References to Policies and Procedures in our Report do not represent guarantees or promises about their efficacy, or any assurance that such measures will apply in every case, as there may be exigent circumstances or other factors or considerations that may cause exceptions or the implementation of other measures in specific instances.

Our Report includes forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Section 21E of the Securities Exchange Act of 1934 ("Exchange Act"). Forward-looking statements include any statement that does not relate strictly to historical or current facts and include statements accompanied by or using words such as "anticipate," "believe," "intend," "plan," "projection," "forecast," "strategy," "outlook," "continue," "estimate," "expect," "may," "to," "will," "shall," and "long-term" or comparable terms. In particular, express or implied statements concerning the occurrence, timing or impact of future actions, conditions, or events, including our Policies and Procedures and their efficacy, long-term demand for our assets and services, our future operating results, our ability to generate revenues, income, or cash flow or to pay dividends, the timing and extent of the energy transition, and energy transition-related risks and opportunities, including the role of natural gas and other hydrocarbons in the energy transition, and opportunities related to lower carbon fuels and CCUS, are forward-looking statements.

Forward-looking statements are not guarantees or assurances of performance. Forward-looking statements are included for the purpose of providing management's current expectations and plans for the future, based on the beliefs and assumptions of management and the information currently available to them. Forward-looking statements are subject to risks, uncertainties, and assumptions. There is no assurance that any of the actions, conditions, events, or results of the forward-looking statements will occur, or if any of them do, what impact they will have on our results of operations or financial condition. Because of these uncertainties, you are cautioned not to put undue reliance on any forward-looking statement.

Future actions, conditions, or events and future results of operations may differ materially from those expressed in or implied by these forward-looking statements. Many of the factors that will determine these outcomes are beyond our ability to control or predict. These statements are necessarily based upon various assumptions involving judgments with respect to the future, including, among others: the timing and extent of changes in the supply of and demand for the products we transport and handle; national, international, regional and local, competitive, economic, political, and regulatory conditions and developments; our ability to identify, and the economic and technological viability of, energy-transition related opportunities, including alternative uses for our existing assets; the timing and success of business development efforts; the timing, cost, and success of expansion projects; the development and performance of new technology and products, services and programs, particularly those related to energy efficiency and emission reductions; commodity prices; counterparty financial risk; the condition of capital and credit markets; inflation rates; interest rates; the political and economic stability of oil- and natural gas- producing nations; energy markets; federal, state, or local income tax legislation; changes in laws, regulations, or government policy applicable to our business; weather conditions; environmental conditions; regulatory and legal decisions; terrorism; cyber-attacks; and other uncertainties. The foregoing and the other risks and uncertainties described in this Report and in our most recent Annual

Report on Form 10-K and subsequent Exchange Act reports filed with the SEC, including under the headings "Risk Factors," "Information Regarding Forward-Looking Statements," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and elsewhere, could cause actual results to differ materially from those expressed in or implied by forward-looking statements. Our SEC reports are available through the SEC's EDGAR system at https://www.sec.gov, and on our website at https://www.kindermorgan.com.

Forward-looking statements speak only as of the date they were made, and except to the extent required by law, we undertake no obligation to update any forward-looking statement because of new information, future events, or other factors.

Our Report contains references to KMI's website. These references are for readers' convenience only. We are not incorporating our Report by reference into any other document posted on https://www.kindermorgan.com or https://www.sec.gov and are not incorporating any other document posted on either website into this Report.

Our Report also includes links to websites owned and operated by third parties, which are provided for readers' information and convenience only. We are not responsible for these websites or their content. Further, we disclaim any responsibility for any third party disclosure that references KMI or any portion of this Report.

Certain data included in our Report has been derived from a variety of sources, including government publications, independent industry publications, and other published independent sources. Although we believe that such third-party sources are reliable, we have not independently verified, and take no responsibility for, the accuracy or completeness of such data.

Except where and how specified in *Appendix D* – *Third-Party Assurance Statement*, our Report and the data presented in it have not been externally audited, assured, attested, or verified by a third party. We make no warranty, express or implied, regarding the accuracy, adequacy, completeness, legality, reliability, or usefulness of our Report.



### A Message from Our CEO

The changing energy landscape continued to produce new challenges and opportunities in 2022. Our industry has had to contend with geopolitical disruptions, severe weather, supply chain uncertainty, and the resulting concerns about issues like energy security, reliability and affordability, as well as the response to climate change. Our values and mission help keep us focused while we navigate these matters.

Historically, energy transitions have occurred not by eliminating existing sources of energy, but rather by adding new energy sources to meet growing demand. We remain confident that the best way to serve markets during the energy transition is through an all-of-the-above energy mix. For example, when used in combination with intermittent renewable energy sources like wind or solar, natural gas provides an energy mix that is dependable and dispatchable, while also enabling progress on emissions reductions. Accordingly, we are investing in lower carbon fuel opportunities, including our natural gas business segment, and in our other core businesses.



### **Emissions Mitigation**

We believe that an orderly energy transition will require a wide range of new, cost-effective emission reduction and lower carbon technologies, some of which have not yet been developed. Even as we anticipate the development of technologies needed for largescale, economic emission reductions from our operations, we seek and implement cost effective emission reduction strategies available today. These include studying ways to improve emissions monitoring, reducing pipeline blowdowns, upgrading existing equipment, and modifying operating processes to increase efficiency and lessen fuel usage and leaks. From 2021 to 2022, we reduced our operational Scope 1 emissions by approximately 2.6%.

### Using our Assets in the Energy Evolution

Most of our recent growth capital expenditures have been allocated to assets that serve lower carbon fuels, including conventional natural gas. Last year we began work on two renewable diesel hubs in California. Both hubs are now in service, with a combined capacity of up to 38,000 barrels per day of renewable diesel. We also recently completed the renewable feedstock storage and logistics hub at our Harvey, Louisiana facility. This conversion and expansion project demonstrates our ability to adapt our existing infrastructure to meet the growing needs of the U.S. renewable fuels market. We have also established a growing renewable natural gas platform with our acquisitions of Kinetrex, Mas Ranger, and North American Natural Resources.

Together these projects are projected to contribute to the avoidance of approximately 10.1 million metric tons of  $CO_2e$  per year, equivalent to the carbon sequestered by 12 million acres of forest. As always, we will remain disciplined and focused on attractive returns when evaluating new opportunities in this area.

### Governance

Our Board, including through its EHS Committee, oversees and facilitates our efforts to make thoughtful, informed decisions about risks and opportunities related to environmental matters, including climate change. For example, our largest source of GHG emissions is combustion from our fleet of nearly 500 natural gas-fired compressors. While electrification is widely favored as a potential means of reducing GHG emissions, we found that electrifying our natural gas-fired compressor fleet would be neither economically feasible nor particularly effective at reducing combined Scope 1 and Scope 2 emissions for us at this time. While a large-scale transformation of our compressor fleet to electric power may not be an option today, we continue to look for other ways to make progress on our emissions reductions. We expect that, in time, cost-effective technologies or other solutions for reducing GHG emissions from our compressor fleet will be developed.

### **Environmental Justice**

As the world attempts to transition to a different energy environment, issues related to environmental justice have become a larger part of the discussion. We are committed to the fair treatment and involvement of people affected by our projects. We believe our approach to community outreach and engagement helps us incorporate a more diverse set of views, identify specific concerns, and continue to effectively engage with these and other communities.

### **Diversity and Employee Development**

Currently, 38% our executive officers are either female or minority. Talent and diversity are among the fundamental considerations in our efforts to identify, develop, and promote the best leaders for the company's future. We participate in specialized job fairs and engage with organizations that focus on providing employment opportunities to minority candidates. We seek a broad range of candidates for open positions, opportunities for promotion, and our internship and work-study programs. We are able to draw candidates from this pool to participate in our Core Leadership, Emerging Leaders Institute, and New Vice President Training programs, which help build our employee leadership skill set. As a result of our efforts, when planning for succession to senior management positions, we can look to our internally developed, diverse pool of talent.

We have disclosed our workforce composition by age, gender, disability status, and minority representation since our 2018 ESG report. We posted our 2021 EEO-1 employer information report on our website in 2022, and we plan to post these reports annually.



### Conclusion

We believe our assets and infrastructure are and will continue to be critical in a net-zero world – transporting and storing the commodities in use today and those of the future. We remain dedicated to conducting our business in a safe, economic, and environmentally sound way to improve lives and create a better world for the benefit of our stakeholders, customers, and neighbors.

Steven flean

Steve Kean, Chief Executive Officer

## Part 1 – Sustainability Report

### **1.0 Introduction**

(SASB Midstream EM-MD-110a.2, SASB Exploration & Production EM-EP-110a.3, SASB Marine Transportation TR-MT-110a.2, GRI 2-3, GRI 2-9, GRI 2-13, GRI 2-14, GRI 3-1, CDP C1.1b, CDP C1.2)

### Our ESG Strategy

Our vision is to deliver energy to improve lives and create a better world. We do this by pursuing our mission to provide energy transportation and storage services in a safe, efficient, and environmentally responsible manner for the benefit of people, communities, and businesses. Our ESG strategy is consistent with our vision and mission.

### Environmental

While delivering the secure and reliable energy the world needs, we also pursue opportunities that contribute to the global effort to address climate change. We continue to support a lower carbon future and enable our downstream customers to meet their GHG goals through:

- expansion of our conventional natural gas transmission, responsibly sourced natural gas, RNG, and LNG businesses;
- pursuing lower carbon commercial opportunities through our energy transition ventures group;
- investments in CCUS;
- midstream assets supporting the transportation and handling of renewable fuels, including renewable diesel and sustainable aviation fuel, and associated feedstocks; and
- evaluation of hydrogen opportunities.

We seek to minimize our environmental impact by:

- reducing methane and other GHG emissions from our operations; and
- employing a variety of strategies to lessen our impact on areas such as:
  - sensitive habitats and conservation areas for threatened or endangered species,
  - wetlands, and
  - waterbodies.

### Social

It is important to us to build and maintain healthy relationships with our employees, contractors, suppliers, and the communities where we operate and have expansion projects. We work to attract, develop, and retain a diverse, inclusive, and respectful workforce. We support our employees' career development goals through workforce training, tuition reimbursement, and other development programs. We look for opportunities for our employees to get involved in community programs and strengthen their relationships with our stakeholders. We expect our consultants, contractors, suppliers, vendors, and business partners to adhere to standards of conduct consistent with our Code of Business Conduct and Ethics, or "Code of Conduct," and our Supplier Code of Conduct when conducting company-related business activities. We recognize the importance of identifying project stakeholders, determining and monitoring their needs and expectations, and then working with them to address those needs and expectations as appropriate before, during, and after project completion.

### Governance

Our Board oversees our management of risks and opportunities through recurring meetings of the Board and its committees. Likewise, our management team convenes a series of regularly scheduled meetings to engage our CEO, President, COO, business segment presidents and COOs, corporate function heads, and subject matter personnel on day-to-day issues related to our business. We use these meetings to monitor our progress and performance and to identify, evaluate, and address risks and opportunities, including, where appropriate, climate-related risks and opportunities.

### Oversight of ESG Reporting

We report our performance against ESG-related environmental and safety metrics to our Board and investors. These metrics are reviewed and discussed in our regularly scheduled meetings with senior management. Certain EHS-related ESG metrics are included in performance criteria used to determine incentive compensation for our employees, including executives. The environmental metrics include an incentive to minimize releases from our operations; those related to natural gas and CO<sub>2</sub> operations help us meet our Natural Gas business segment GHG targets and avoid GHG emissions. Our GHG targets and performance against those targets are described in *Section 3.4.2 GHG Targets* of the *Sustainability Report*.

Our EHS leadership includes a standing EHS Committee of our Board. The EHS Committee's charter is available on our website at <u>https://www.kindermorgan.com/WWWKM/media/Documents/Governance/KMI\_EHS\_COMMITTEE-CHARTER.pdf</u>. This committee assists our Board in overseeing management's establishment and administration of our EHS policies, procedures, programs, and initiatives. Each of these items helps promote the health and safety of our employees, contractors, customers, the public, and the environment.

Our Board has delegated the review and approval of our Report to its EHS Committee. Our Report has also been reviewed by and received input from each business segment and our ESG Disclosure Committee, which consists of our:

- CEO,
- President,
- COO,
- CFO,
- CAO,
- General Counsel,
- Corporate Secretary,
- Treasurer,
- · business segment presidents, and
- other corporate officers.

## Our Report

Our Report is comprised of our "Sustainability Report" and our "TCFD Report." We post a summary spreadsheet of our sustainability policies and metrics. This summary spreadsheet also includes the Energy Infrastructure Council/GPA Midstream ESG Reporting template. These disclosures can be found on our ESG/Sustainability webpage at <u>https://www.kindermorgan.com/Safety-Environment/ESG</u>.

In this Report, we use SASB's latest final standards and primarily include metrics from the SASB Extractives & Minerals Processing Sector Oil & Gas – Midstream Standard (EM-MD, Version 2018-10) as well as the TCFD recommendations.

We also incorporate metrics from CDP and GRI, as well as other SASB sectors applicable to our business, noting both the topic standard reference number and Oil & Gas Sector Standard reference numbers, where applicable. In addition, we use third-party guidance, including investor-published guidance on engagement priorities, in developing our Report.

In addition, we reference the activities where our business contributes to SDGs. The United Nations General Assembly has adopted 17 SDGs as part of a global agenda for equitable, socially inclusive, and environmentally sustainable economic development. Our mission aligns with the Assembly's:

- Goal 3: ensure healthy lives and promote well-being for all at all ages; and
- Goal 7: ensure access to affordable, reliable, sustainable, and modern energy for all.

Also, many of our business and community investment activities support other SDGs such as those relating to:

- Goal 8: decent work and economic growth;
- Goal 9: industry, infrastructure, and innovation;
- Goal 14: life below water; and
- Goal 15: life on land.

### New to our Report

In this year's report, we have disclosed new metrics, including contractor safety targets, local procurement spend, percentage of local employees, number of employees in senior management, newly hired employees, and percentage of employees receiving training. We have also improved our disclosure regarding air emission reduction initiatives and external stakeholder collaboration.

### Description of Appendices

In *Appendix A.1 – ESG Disclosure Topics & Accounting Metrics*, we summarize the ESG metrics included throughout the Report. *Appendix A.2 – GHG Accounting Metrics* summarizes our GHG metrics. *Appendix A.3 – 2022 EEO-1 Report Submission* will include the 2022 EEO-1 Report as submitted to the U.S. Equal Employment Opportunity Commission after the Commission's EEO-1 Component 1 data collection system opens in the fall of 2023.

In *Appendix B* – *Activity Metrics*, we include a set of metrics that quantify the scale of our business. These activity metrics are intended to allow users of our Report to normalize data and facilitate comparisons in conjunction with our ESG accounting metrics.

In *Appendix C – ESG Content Index*, we include a cross-reference table of ESG topics covered in our Report and other Kinder Morgan-published documents, including our Annual Report on Form 10-K for the year ended December 31, 2022 (2022 Form 10-K) and 2023 Annual Meeting Proxy Statement (2023 Proxy Statement), to the corresponding SASB Sustainable Industry Classification System<sup>TM</sup> code, GRI disclosure code, CDP question number, and SDGs target. This cross-reference table also includes the relevant page number in the Report and other Kinder Morgan-published documents.

In *Appendix D – Third-Party Assurance Statement*, we include the Report of Independent Accountants for our Report provided by PwC, an independent registered public accounting firm. PwC performed a limited assurance engagement on specific metrics included in our Report for 2022.

As indicated in *Appendix A.1 – ESG Disclosure Topics & Accounting Metrics, Appendix A.2 – GHG Accounting Metrics,* and *Appendix B – Activity Metrics,* certain of the 2022 company-wide quantitative metrics disclosed throughout this Report have either undergone third-party assurance by PwC or were

tested by our Internal Audit department. The testing process by our Internal Audit department includes reviewing and re-performing the processes and procedures for compiling and calculating the metric and performing sample testing of supporting documentation to check accuracy. Tick marks in the Appendices indicate which metrics were assured by PwC or tested by our Internal Audit department.

### 2.0 Overview of Business

(GRI 2-1, GRI 2-6, GRI 203-1/11.14.4)

We are committed to doing business the right way, every day. To meet this commitment, our employees and representatives are expected to act in accordance with our core values of:

- integrity,
- accountability,
- safety, and
- excellence.

We are one of the largest energy infrastructure companies in North America. Our four business segments are:

- Natural Gas Pipelines,
- Products Pipelines,
- Terminals, and
- CO<sub>2</sub>, which includes our energy transition ventures group.

As of December 31, 2022, we owned an interest in or operated approximately 83,000 miles of pipelines, 140 terminals,700 Bcf of working natural gas storage capacity, and an RNG generation capacity of approximately 2.2 Bcf/yr.

Our pipelines transport:

- natural gas,
- refined petroleum products,
- crude oil,
- condensate,
- CO<sub>2</sub>,
- renewable fuels, and
- other products.

Pipelines are the safest, most efficient, and least costly method of transporting natural gas and petroleum products compared to other modes of transportation such as rail, barge, and truck.<sup>1,2,3,4</sup> The industry's

<sup>&</sup>lt;sup>1</sup> DOT-PHMSA. "General Pipeline FAQs." DOT-PHMSA, 6 Nov 2018. 2022.

<sup>&</sup>lt;https://www.phmsa.dot.gov/about-phmsa/phmsa-faqs>.

<sup>&</sup>lt;sup>2</sup> Furchtgott-Roth, Diana. "Pipelines are Safest for Transportation of Oil and Gas." Manhattan Institute for Policy Research, Jun 2013. 2021. <a href="https://www.manhattan-institute.org/pdf/ib\_23.pdf">https://www.manhattan-institute.org/pdf/ib\_23.pdf</a>>.

<sup>&</sup>lt;sup>3</sup> Hughes, Charles. "The Energy Bottleneck: Why America Needs More Pipelines." Manhattan Institute for Policy Research, Jul 2017: 9-12. 2021. <a href="https://media4.manhattan-institute.org/sites/default/files/R-CH-0717.pdf">https://media4.manhattan-institute.org/sites/default/files/R-CH-0717.pdf</a>>.

<sup>&</sup>lt;sup>4</sup> INGAA. "Pipeline Safety & Reliability: Safety and Reliability Metrics." INGAA, Apr 2022.

<sup>&</sup>lt;https://www.ingaa.org/File.aspx?id=28478&v=6dac677e>.

safety performance in recent years continues to improve and the total number of incidents and incidents impacting people or the environment continues to decline.<sup>5</sup>

Our terminals store and handle various commodities including:

- gasoline,
- diesel fuel,
- jet fuel,
- chemicals,
- metals,
- petroleum coke, and
- ethanol and other renewable fuels and feedstocks.

We are also the largest transporter of  $CO_2$  in North America for use by us and others in EOR projects, primarily in the Permian Basin.

Our common stock is listed on the New York Stock Exchange under the ticker symbol "KMI." For more information about us, please see our 2022 Form 10-K, which can be found at <u>https://www.sec.gov/ix?</u> <u>doc=/Archives/edgar/data/0001506307/000150630723000023/kmi-20221231.htm</u>.

## 2.1 Code of Business Conduct and Ethics

Our Code of Conduct establishes the standards of ethical conduct that our employees and representatives, including contract security providers, are expected to meet and outlines how everyday behavior should align with our core values.

Our Board's Audit Committee has responsibility for:

- oversight of the implementation and administration of our Code of Conduct;
- review and assessment, at least annually, of the effectiveness of our Code of Conduct; and
- recommendations to the Board of suggested changes to our Code of Conduct.

We maintain programs to prevent and detect potential violations of our Code of Conduct. Annually, each of our employees, including management, is required to demonstrate an understanding of or undergo additional training on our Code of Conduct, including sections on anti-corruption, human rights, and information governance. The training explicitly promotes an open feedback culture. Our Internal Audit department administers an annual Code of Conduct questionnaire to both employees and contractors, providing an opportunity to report violations, in addition to the reporting channels discussed below. Our Internal Audit department evaluates the questionnaire responses and oversees follow-up as necessary.

We encourage employees to speak up, seek guidance, and report issues or concerns through appropriate channels and grievance mechanisms. Employees can report incidents involving any ethics, compliance, or human rights violation through several channels, including the Kinder Morgan Ethics Hotline, a third-party platform. Our ethics hotline allows reports to be made confidentially and anonymously. Reported concerns and grievances are evaluated and investigated, as appropriate, by our Internal Audit, HR, EHS, or Legal Departments. Our Code of Conduct also summarizes our violence and conflict policy. For more

<sup>&</sup>lt;sup>5</sup> API-AOPL. "2020 Pipeline Safety Excellence Performance Report & 2020-2022 Strategic Plan." API-AOPL, 17 Jun 2021: 12-13. 2021. <a href="https://www.api.org/-/media/APIWebsite/oil-and-natural-gas/primers/2020-API-AOPL-Pipeline-Safety-Excellence-Performance-Report-and-20202022-Strategic-Plan.pdf?">https://www.api.org/-/media/APIWebsite/oil-and-natural-gas/primers/2020-API-AOPL-Pipeline-Safety-Excellence-Performance-Report-and-20202022-Strategic-Plan.pdf?</a> la=en&hash=3F9DB3F7D2FFA2FAD78E14E6146FC89BA3C1CDDD>.

### 2.2 Management System

### Management System Overview

We value the safety of our workforce and integrate a culture of safety, emergency preparedness, and environmental responsibility through our OMS. Our OMS conforms to *API RP 1173* for *Pipeline Safety Management Systems* and establishes a framework that helps us:

- provide employees and contractors with a safe work environment;
- comply with laws, rules, regulations, policies, and procedures; and
- identify opportunities to improve through a regular process of goal setting, action, assessment, and management review.

Specifically, our OMS provides a detailed road map to build and sustain a culture focused on safety and environmental compliance. Employees receive annual training on our OMS, and we evaluate and drive improvements in each business segment's implementation of our OMS. The main components of our OMS include:

- stating goals and policies for our physical operations;
- describing our approach to sound operations;
- setting forth the roles and responsibilities for conducting sound operations;
- establishing a set of processes to be followed in our operations;
- incorporating our EHS requirements; and
- providing for audits, assessments, and periodic changes to improve and maintain compliance with our OMS.

We strive to be a good neighbor and contribute to responsible development through our systematic approach to EHS management. This approach supports our ability to:

- comply with laws and regulations; and
- strive to improve our environmental, health, and safety performance.

As part of our OMS, our employees are expected to help us meet our goals and expectations, identify and address risks to people and the environment, and identify opportunities for improvement. Our employees are required to complete training, participate in periodic safety culture surveys, and are encouraged to share information on incidents. Our employees and contractors have the power to stop work if an activity is not well understood or could lead to potential harm, and we regularly communicate that they have that authority.

### Management of Change

We review, approve, and implement policy and procedural changes through our management of change process or similar established processes. Through this process, our ESG Disclosure Committee or select members of our senior management reviews or approves ESG-related policies, including but not limited to our:

- Code of Conduct,
- Human Rights Statement,
- EHS Policy Statement,
- Biodiversity Policy,
- Indigenous Peoples Policy,

- Community Relations Policy, and
- Supplier Code of Conduct.

## Audit Program

We maintain an operations audit program that monitors, among other things, our environmental and safety practices. Our operating facilities with site-specific requirements, permits, or plans are audited every three to five years, depending upon the nature of the facility. Audits are performed by qualified third parties or internal personnel not involved in the operations being audited. The audit results are used to develop and implement corrective measures where warranted.

### Incident Management

Our policies and procedures require the internal reporting of incidents and investigation of significant incidents. Our employees and contractors are required to report and document workplace incidents, including illnesses and injuries. Our incident management system provides us with the capability to:

- gather incident data and impacts;
- identify and analyze immediate or root causes, or both;
- determine corrective actions and deadlines;
- verify corrective actions have been completed; and
- identify trends and share preventive actions.

Our senior management plays a vital role in fostering a strong safety culture and values the insights gained from our safety performance metrics relative to our targets and incident investigations. Weekly senior management meetings, chaired by our CEO, include reports and discussions of notable workplace incidents and near misses that may have occurred during the previous week. Our senior management has established detailed safety performance metrics at the business segment level, with our corporate and business segment COOs, to focus performance on factors related to both safety and operational reliability. These metrics are reviewed during each business segment's quarterly business review.

Incidents, including injuries, are regularly reviewed by our business segments to identify potential trends. These trends are communicated to appropriate persons within the company, who meet regularly to share information about incidents and related improvements. Trends are included in discussions at weekly safety meetings, monthly operations meetings, and other regular operations meetings. In addition, management has periodic discussions with union representatives about health and safety.

## Lessons Learned

Sharing lessons learned from internal and external incidents is an integral part of our OMS and reinforces our commitment to performance improvement. Our emphasis on timely incident assessment, information sharing, and tracking corrective actions reinforces our employees' understanding that risk management is a top priority. Sharing lessons learned not only helps our employees understand the importance of continuous learning and improvement, it also helps protect against complacency. Equally important is that everyone understands that sharing and voicing concerns is not only encouraged, but is considered a responsibility. Our lessons learned processes contribute to an environment in which employees and contractors are comfortable identifying and speaking up about risks and help emphasize the urgency of communicating risk information up, down, and across the organization.

### Asset Integrity Management - Pipelines

For most of our pipelines, where appropriate, we have established an IMP that incorporates integrity assessment measures intended to:

- identify, analyze, and prioritize potential threats to our pipelines, including actual and potential precursor events that can result in pipeline incidents;
- use a comprehensive and integrated means for examining, prioritizing, and comparing the spectrum of risks and risk reduction activities available;
- implement structured and easily communicated methods for selecting and implementing risk reduction activities, including integrity assessments, remediation, and preventive measures;
- track system performance with the goal of improving performance; and
- communicate emerging needs and new technology application opportunities to top management to provide timely resource allocation.

We conduct pipeline inspections using various methods including:

- ILIs,
- non-destructive testing,
- above-ground surveys,
- hydrostatic integrity tests, and
- direct assessments.

These inspection methods help us determine the physical condition of most of our pipelines and gather information to assist us in keeping our pipelines safe and operational. For our inspections, where possible, we prefer to utilize ILI technology referred to as smart pigs, which provides more detailed data about corrosion and other material defects.

In our ongoing pursuit of operational excellence, we developed KMAP<sup>TM</sup>, a patented, innovative pipeline integrity solution designed to search for flaws in longitudinal welds. KMAP<sup>TM</sup> is a unique analytical process that we employ to provide additional analysis beyond traditional ILI analytical methods. We developed KMAP<sup>TM</sup> as a proactive solution for conducting more thorough inspections of our pipelines. We have been successfully using this technology since 2011.

## Environmental, Health, Safety and Emergency Response Training

We use an LMS to provide and track training for our employees who take required and voluntary online courses covering technical development, leadership, safety, environmental, and corporate policies, including our OMS and Code of Conduct. Our operations employees receive initial environmental, health, safety, and emergency response training and subsequent recurring training, appropriate for their positions. Training can be individually tailored by an employee's supervisor or the employee, who can self-register for any course in our LMS.

Employees receive position-relevant training on environmental topics including:

- environmental awareness;
- waste management procedures;
- spill control procedures;
- environmental sampling procedures; and
- stormwater runoff handling procedures, such as water treatment.

For employees who are likely to respond to emergencies, we provide emergency management training consistent with the USCG, EPA, DOT, CER, and ASEA requirements. We also have an extensive pipeline operator qualification program.

Annually, we strive to have 100% of the training courses assigned through our LMS completed by the end of the year. In 2022, we completed 99.7% of the assigned courses. We have processes in place to help employees complete their training; including email reminders and training administrators who monitor completion of training. We also report overdue training to management on a monthly basis.

For more information, see our *Section 7.2 Employee and Contractor Safety Statistics and Average Hours of Health, Safety, and Emergency Response Training* of the *Sustainability Report* and our OMS webpage at <u>https://www.kindermorgan.com/About-Us/OMS</u>.

### 2.2.1 Third-Party Certifications

### ACC Responsible Care<sup>®</sup> Program

Our Terminals business segment has participated in the ACC Responsible Care<sup>®</sup> Program since 2010. The Responsible Care<sup>®</sup> Program is an EHS and security performance initiative that includes a management system framework and allows members to demonstrate their commitment to the health and safety of their employees, the communities in which they operate, and the environment. As part of the Responsible Care<sup>®</sup> program, once every three years a third party audits our Terminals business segment headquarters in Houston, Texas and each of the participating terminals to certify our performance.

Fifteen of our terminals, including our largest, participate in the program. In 2022, the ACC awarded twelve of our terminals certificates for their strong safety performance. Eight terminals received an "Excellence in Safety" designation, which recognizes facilities with zero deaths, zero days away from work cases, and zero job transfer or restriction cases among both employees and contractors during the prior year. In addition, three terminals received the "Honor in Safety" certificate, and one was awarded the "Achievement in Safety" certificate.

In addition, Kinder Morgan Liquids Terminals LLC was named a Responsible Care<sup>®</sup> Partner Company for 2022. In addition to recognizing our safety record, this award acknowledges our community engagement, efforts to promote ethics in communications with our stakeholders, supply chain management processes, and initiatives to undertake sustainability and continuous improvement.

### 3.0 Greenhouse Gas Emissions

### 3.1 Gross Global Scope 1 and 2 Emissions, Percentage Methane, Percentage Covered under Emissions-Limiting Regulations

(SASB Midstream EM-MD-110a.1, SASB Exploration & Production EM-EP-110a.1, GRI 305-1/GRI 11.1.5, CDP C6.1, C6.2, CDP C6.3, CDP C7.3, CDP C7.6, CDP C7.9, CDP C8.1-8.2f)

Our GHG emissions, including methane, are calculated using the methodologies outlined in the *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> World Resources Institute and World Business Council for Sustainable Development. "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard." World Resources Institute and World Business Council for Sustainable Development, Mar 2004. 2021. <a href="https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf">https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf</a>.

Our Scope 1 emissions reported below include:

- facilities and GHG emission sources applicable to the EPA's GHGRP;
- facilities that are exempt from the EPA's GHGRP because they emit less than 25,000 metric tons of CO<sub>2</sub>e/yr; and
- sources that are exempt from the EPA's GHGRP, such as mobile equipment and refrigerants.

Scope 1 emissions include direct emissions from sources owned or controlled by the reporting company. Examples of our Scope 1 emission sources by emission type include:

- flared hydrocarbons flaring from processing, gathering, and other operations;
- other combustion engines and turbines that drive compressors, boilers and heaters, vapor combustion devices, and stationary and fleet vehicle engines;
- process emissions dehydration and gas sweetening processes;
- other vented emissions blowdowns and compressor starts; and
- fugitive emissions equipment component leaks, refrigerants, and vapor handling systems.

"Other combustion" is our largest emission type, and the largest source of emissions within this type are our natural gas fired compressor drivers, comprising approximately 74% of our 2022 total Scope 1 emissions. "Other vented emissions" is our second largest emission type and includes emissions from blowdowns for maintenance, integrity testing, and emergency activities at our pipelines, compressors, and compressor stations. Our strategies to manage our methane and GHG emissions are described in *Section 3.2 Strategy to Manage Gross Global Scope 1 and 2 Emissions* of the *Sustainability Report*.

Our Scope 2 emissions consist of indirect emissions from purchased electricity.

Our gross global operational control Scope 1 and Scope 2 emissions and GHG emission intensity are provided below and include the emissions from assets we operate, including the emissions from those assets where we own less than a 100% interest. The emissions from the assets we operate and where we own less than a 100% interest are reported in full and not reported at the percent of our ownership. This table also includes GHG emission credits purchased.

Our gross global equity share Scope 1 and Scope 2 emissions, which include our share of emissions from assets in which we own an interest of less than 100% regardless of whether we operate the assets, were 15.9 million metric tons  $CO_2e$  in 2022 and are included in *Appendix A.2 – GHG Accounting Metrics*.

Year Ended December 31,						
2020	2021	2022				
(In million metric tons of CO <sub>2</sub> e, except percentages and emission intensity)						
15.3	15.3	14.9				
2 %	1 %	3 %				
67 %	74 %	74 %				
	2020 (In million metric to er 15.3 2 %	2020     2021       (In million metric tons of CO <sub>2</sub> e, except per emission intensity)       15.3     15.3       2 %     1 %				

	Year Ended December 31,				
	2020	2021	2022		
	(In million metric tons of CO <sub>2</sub> e, except percentages a emission intensity)				
Process emissions	4 %	3 %	4 %		
Other vented emissions	18 %	13 %	11 %		
Fugitive emissions from operations	9 %	9 %	8 %		
Percentage covered under emissions-limiting regulations	0 %	0 %	0 %		
Percentage methane	27 %	22 %	19 %		
Scope 2 emissions					
Gross global market-based Scope 2 emissions(a)(c)(d)	3.1	3.1	3.2		
Total gross global Scope 1 & 2 emissions	18.4	18.4	18.1		
GHG emission credits purchased(e)					
Purchased credits (thousand metric tons CO <sub>2</sub> e)(f)	113	86	0		
GHG emission intensity					
Company-wide BOE throughput (MMbbl/yr)(g)	5,100	5,400	5,600		
Scope 1 and 2 emission intensity (metric tons CO <sub>2</sub> e per BOE throughput)(a)(g)	0.004	0.003	0.003		

(a) GHG emissions were quantified per the SASB Midstream Standard and the ISO 14064-1:2006, *Greenhouse gases – Part 1: Specification with guidance at the organization level for the quantification and reporting of greenhouse gas emissions and removals.* Emissions are reported for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs from direct and indirect sources. The IPCC AR5 GWPs were used to convert CH<sub>4</sub> (28) and N<sub>2</sub>O (265) emissions to CO<sub>2</sub>e. The following GWPs were used for HFCs: R-410A: 1725, HFC-134A: 1300, HCFC-22: 1760, R-404A: 3260, R-407C: 1526, R-1234YF: 4, R-600A: 5, R-407C: 1526, HFC-32: 677, HFC-23: 12,400, CFC-12: 10,200, R-422D: 2,625, R-600: 5, R-600A: 5. Gross emissions are GHGs emitted to the atmosphere before accounting for offsets, credits, or other similar mechanisms that have reduced or compensated for emissions. Scope 1 and 2 emissions for our continuing operations in Canada and Mexico are less than 500 thousand metric tons. Emission values displayed as zero are less than 50,000 metric tons.

- (b) Excludes emissions from construction activities, wastewater treatment, fire suppression activities, chemical injection pumps, sulfur recovery units, refrigerants from mobile equipment where no fuel was purchased during the reporting year or not tracked in our fleet database, fugitive emissions from natural gas supply lines for the Terminals and Products Pipelines business segments, and insignificant emissions from small combustion activities. Also excludes Natural Gas Pipelines business segment LNG cold boxes, storage tanks at natural gas processing facilities, truck loading, and enclosed circuit breakers.
- (c) There were no emissions from divestitures that were greater than 5% of the Scope 1 and Scope 2 total emissions for the applicable business segments in 2020, 2021, or 2022. Emissions from divestitures that are less than or equal to 5% are included.
- (d) Scope 2 emissions include indirect emissions from purchased electricity that were calculated using the market-based method and exclude emissions from acquired and consumed steam, heat, and cooling. Location-based emissions are included in *Appendix A.2 GHG Accounting Metrics*.
- (e) Represents the credits purchased during the calendar year. Actual emissions that were offset for 2020 and 2021 are 146 thousand and 46 thousand metric tons of CO<sub>2</sub>e, respectively. Ruby Pipeline, L.L.C. procured emission reduction credits or renewable energy credits to offset Scope 1 and 2 emissions from construction and ongoing operations. These were Climate Action Reserve Climate Reserve Tonnes credits, which are verified through a third party. No credits were purchased in 2022. As of January 13, 2023, we ceased to own our 50% interest in Ruby Pipeline, L.L.C.
- (f) The price paid per metric ton of CO<sub>2</sub>e was \$3.75 and \$6.75 in the years 2020 and 2021, respectively.
- (g) ONE Future's definitions are used for annual throughput. If no ONE Future definition applies, throughput is generally defined as product receipt. Throughput was converted to MMBtu using product-specific heat content, obtained from the EIA, EPA, or business segment data. This is then converted to BOE by dividing by 5.8 MMBtu per bbl of crude oil. The CO<sub>2</sub> that we transport does not have a heating value, and therefore, has a BOE equal to zero.

Our gross global Scope 1 emissions decreased approximately 2.6% from 2021 to 2022. This was primarily driven by:

- updating our calculation methodology at one of our processing facilities to use actual fuel usage data, which resulted in lower combustion emissions;
- reductions in methane emissions from pipeline blowdowns, including repair and maintenance events;
- reductions in methane emissions from non-recurring unplanned events, such as the pipeline rupture on EPNG that occurred in 2021; and

• the increased use of pipeline sleeves, which eliminate the need for a blowdown when pipeline repair work is needed.

Flaring emissions increased from our gas gathering and processing equipment due to increased production in the areas where these assets are located.

Our gross global market-based Scope 2 emissions increased due to increased electricity consumption in our Natural Gas Pipelines and  $CO_2$  business segments. Increased utilization of the liquefaction units at the Elba Island LNG Terminal, the acquisition of Stagecoach Gas Services LLC, and increased production in our  $CO_2$  business segment were the primary contributors to the increase.

On April 29, 2022, the EPA signed proposed amendments to the GHGRP. The proposed amendments include multiple changes to existing emission estimation methodologies, including increasing the emission factor for uncombusted fuel, i.e., methane slip, from reciprocating compressor engines. The proposed emission factors would increase between 45% and 600% depending on the type of engine. The EPA aims to issue a final rule in 2023 and to require GHG emissions reports filed in 2024 for 2023 emissions to follow the new rule. If the rule is finalized as proposed, we would expect our Scope 1 GHG emissions reported in our 2023 Report to increase when we incorporate these updated emission factors.

PwC provided limited assurance of our 2022 GHG emissions inventory, including the emissions reported to the EPA's GHGRP. The assurance statement for 2022 is included in *Appendix D – Third-Party Assurance Statement*. In addition, Scope 1 emissions submitted to the EPA's GHGRP undergo additional electronic validation and verification checks. The EPA notifies us if any potential errors are identified and we resolve the issue either by providing an acceptable response describing why the flagged issue is not an error or by correcting the flagged issue and resubmitting the annual GHG report.

## 3.2 Strategy to Manage Gross Global Scope 1 and 2 Emissions

(SASB Midstream EM-MD-110a.2, SASB Exploration & Production EM-EP-110a.3, GRI 2-12, GRI 305-2/GRI 11.1.6, GRI 305-5/11.2.3, CDP C1.1b, CDP C3.1)

## 3.2.1 GHG Emission Reduction Efforts

We support domestic and international efforts to mitigate climate change. Some of our efforts to reduce methane and other GHG emissions are described in the sections below.

# 3.2.1.1 Methane Emission Reduction Commitment (GRI 2-28)

We recognize that methane emissions associated with the production, transportation, storage, and distribution of natural gas should be minimized so that those emissions do not diminish the climate advantage of natural gas over other fuels. We have an economic incentive to minimize methane emissions because pipeline quality natural gas has a methane content of approximately 95%. Minimizing our methane emissions maximizes the amount of natural gas kept in our pipelines and delivered to our customers. We support performance-based federal regulations and have worked to minimize methane emissions in our operations for nearly 30 years.

We continue to apply methane emission reduction strategies and report voluntary methane emission reductions as part of the EPA's Methane Challenge program and the ONE Future Coalition.

In this Report, *GHG or methane emission reductions* are defined as emissions mitigated or avoided that would otherwise have been emitted.

These initiatives have resulted in approximately 139 Bcf of methane emission reductions in the U.S. since 1993, which is equivalent to approximately 75 million metric tons  $CO_2e$ . These results reflect both the environmental benefit of minimizing and preventing methane emissions, and the economic incentive to keep natural gas in our pipelines and storage facilities.

### EPA's Methane Challenge Program

For almost 30 years, we voluntarily participated in the EPA's Natural Gas STAR Program, implementing initiatives to reduce our methane emissions. The EPA discontinued the formal STAR program in 2022. In 2016, we became a partner in the EPA Natural Gas STAR Methane Challenge Program, which expanded the Natural Gas STAR program and provided us a flexible way to make specific and transparent commitments to implement methane emission reductions from our operations. We continue to participate in the Methane Challenge Program under the ONE Future Emission Intensity Commitment Option for our natural gas transmission and storage assets.

### ONE Future – Founding Member

ONE Future is a coalition of members across the natural gas value chain focused on identifying policy and technical solutions for reducing methane emissions associated with the delivery of natural gas. ONE Future's members include some of the largest natural gas production, gathering and boosting, processing, transmission and storage, and distribution companies in the U.S. In 2022, these ONE Future companies accounted for approximately 25% of total natural gas production, 27% of the total gas processed, 63% of natural gas transmission pipeline miles, and 47% of the total U.S. natural gas delivered by local distribution companies.<sup>7</sup>

ONE Future members aspire to:

- limit energy waste, and
- achieve a cumulative methane emission intensity target, or "leakage" rate, for member companies of 1% or less of total natural gas production across the natural gas value chain by 2025.

The ONE Future 2022 Methane Emission Intensities Report shows a methane emission intensity rate of approximately 0.462% for member companies, outperforming the 2025 target by 54%. ONE Future members collaborated with DOE's NETL on a methane emission life cycle analysis. The NETL study, which was last updated in 2021, indicated that in 2017 the average life cycle methane emission rate for ONE Future members was 0.76%; below the 1.06% rate for the U.S.<sup>8</sup>

Our targets and performance are described in greater detail in *Section 3.4.2 GHG Targets* of the *Sustainability Report*.

 <sup>&</sup>lt;sup>7</sup> ONE Future Coalition. "2022 Annual Report on Calendar Year 2021 Methane Intensities." ONE Future Coalition, 10 Nov 2022. 2023. <a href="https://onefuture.us/wp-content/uploads/2022/11/ONE-Future-2022-Annual-Report-112822-A.pdf">https://onefuture.us/wp-content/uploads/2022/11/ONE-Future-2022-Annual-Report-112822-A.pdf</a>'.
 <sup>8</sup> NETL. "Industry Partnerships and Their Role in Reducing Natural Gas Supply Chain Greenhouse Gas Emissions – Phase 2." DOE NETL, 12 Feb 2021: 1-2. 2021. <a href="https://www.osti.gov/servlets/purl/1765004">https://www.osti.gov/servlets/purl/1765004</a>>.

### INGAA Climate Change Statement

We helped develop and support INGAA's 2021 Vision Forward, a climate statement that addresses climate change and building a cleaner energy future for natural gas transmission and storage operations.<sup>9</sup> Our own *Statement on Climate Change* can be found at <u>https://www.kindermorgan.com/WWWKM/</u> media/Documents/Climate\_Change\_KM\_Statement.pdf.

### Methane Emission Reduction Strategies

We have implemented one or more of the following asset management strategies that reduce methane emissions at a number of our facilities:

- perform maintenance and repairs on component leaks, including those identified through methane leak surveys performed at least annually;
- communicate policies and procedures detailing program requirements to improve methane management;
- minimize methane emissions from transmission pipeline blowdowns by:
  - using sleeves and composite wraps when repairing pipelines and performing hot taps to make new connections, eliminating the need for pipeline blowdowns; and
  - reducing the amount of gas within the pipeline, i.e., pumping down, so that less gas needs to be evacuated during certain repairs or testing;
- conduct performance-based monitoring and replacement for reciprocating compressor rod packing;
- use dry seals for new centrifugal compressor installations;
- convert our reciprocating engine and turbine gas starters to electric or air operated starters;
- cathodically protect our pipelines which helps prevent pipeline degradation and leaks;
- install electrically operated glycol pumps to replace natural gas operated pumps;
- test advanced methane emission reduction technologies and work practices such as aerial methane detection as well as laser absorption monitoring;
- increase the number of measurements from vapor recovery units to improve methane emission factors used in our GHG inventory;
- install low- or zero-bleed natural gas pneumatic devices at new facilities; and
- collaborate with customers, peers, and regulators on best practices and new technologies.

For more examples of how we implement our methane emission reduction strategies, see *Our Commitment to Reducing Methane Emissions* case study video and fact sheet at <u>https://www.kindermorgan.com/Safety-Environment/ESG/Case-Studies</u>.

## Methane Emission Detection Technologies

We engage with peer companies and customers to share experiences and strategies concerning methane detection technologies and best practices, both of which are evolving rapidly. We are using innovative technologies and evaluating emerging technologies and approaches in various ways, including:

- testing different configurations of infrared and laser absorption sensors;
- contracting multiple service providers who use sensors mounted on helicopters and fixed-wing aircraft to conduct aerial methane detection surveys. In 2022, we conducted such surveys on approximately 583 miles of our natural gas pipelines;
- evaluating continuous methane detection; and
- using OGI cameras or other EPA-approved technologies to verify suspected leaks.

<sup>&</sup>lt;sup>9</sup> INGAA. "INGAA Climate Report." INGAA, Nov 2021. 2021. <a href="https://www.ingaa.org/File.aspx?id=39061">https://www.ingaa.org/File.aspx?id=39061</a>>.

Certain facilities in each of our business segments are subject to GHG reporting programs with the EPA or ASEA, as applicable, and to federal and state LDAR regulations. We monitor and quantify GHG emissions to satisfy the requirements of these rules using our emissions monitoring equipment. We also use monitoring tools to conduct leak surveys for both regulatory and voluntary programs.

Since the inception of the EPA's GHGRP, our annual methane leak surveys have included natural gas processing plants and transmission and storage compressor stations subject to the EPA's GHGRP. At these facilities, we conduct methane leak surveys using OGI cameras or other EPA-approved technologies. We use EPA-approved methods, such as direct flow measurement, to estimate methane leak rates from compressors and other components. For compressor leaks, we use direct flow measurements to develop entity-specific emission factors. For these facilities, we conduct direct measurements at least annually for the following sources, when applicable:

- compressor unit rod packing vents,
- compressor unit blowdown and isolation valve vents,
- compressor wet seal oil degassing vents,
- atmospheric storage tanks, and
- equipment/pipeline components.

Monitoring frequency and methods vary depending on facility type, and surveys may be conducted monthly, quarterly, or annually. We conduct LDAR inspections and identify leaks using OGI, flame ionization detectors, and other technologies. When a leak is detected, our operations personnel are informed and the leak is added to a tracking schedule. Identified leaks are tracked and repaired as required under applicable regulations, or, for leaks identified under our voluntary detection program, reminders are sent quarterly until the leak is repaired.

We anticipate evaluating and potentially implementing other methane emission reduction technologies or methane emission reduction work practices at our natural gas operations on a case-by-case basis. We report our use of specific technologies and work practices annually to the EPA.

## 3.2.1.2 Other GHG Emissions Reduction Efforts

In addition to methane emission reductions, we have implemented one or more of the following Scope 1 emission reduction strategies at one or more of our facilities:

- developed procedures to shut down our equipment to reduce idle time;
- optimized temperature controls and preventative maintenance to reduce fuel consumption;
- shut in oil production wells during routine maintenance;
- captured waste heat from certain processes to reduce fuel consumption for heating equipment;
- used vapor recovery units in lieu of vapor combustion units; and
- reduced flaring emissions by:
  - improving compressor reliability,
  - re-injecting unprocessed gas when processing equipment is down for maintenance,
  - automating gas control,
  - improving flaring metering,
  - reducing flare assist gas, and
  - optimizing downtime.

Efficient equipment uses less energy to maintain equivalent output. We continue to evaluate new ways to reduce our emissions by increasing the efficiency of our equipment.

We employ CCUS at our Snyder Gas Plant through the capture of  $CO_2$  removed by amine units at the facility for use in our EOR operations rather than venting  $CO_2$  to the atmosphere. In 2022, we captured and injected approximately 126 thousand metric tons of  $CO_2$  from this process.

To reduce the GHG emissions related to individual personal vehicles, we offer employees in our Houston corporate headquarters a 100% transportation subsidy to encourage the use of local public transportation. Our current flexible and hybrid work schedules are also expected to reduce GHG emissions from employees' commutes.

## 3.2.2 Research and Development

### Emission Reduction Industry Initiatives and Studies

We participate in several industry initiatives regarding emission reduction strategies. Below are a few examples of how we actively engage with various trade associations and regulatory entities to share data, our experience with methane monitoring and management, and best practices for achieving emission reductions.

## • IAB for DOE's ARPA-E Project

As a participant in the IAB for DOE's ARPA-E Project, we advised ARPA-E and Colorado State University on the development of a methane emission test site. This test site simulated actual natural gas leaks that might occur at production and gathering facilities and underground pipelines. This test site project is part of the ARPA-E Methane Observation Networks with Innovative Technology to Obtain Reduction program. The goal is to develop cost-effective methane leak detection technologies to more precisely and efficiently locate and measure methane emissions associated with natural gas operations in order to further reduce methane emissions. We participated in multiple aspects of the project, including:

- development of the test site;
- evaluation of the various leak detection technologies being developed; and
- providing guidance to the test site developers on industry expectations and steps for regulatory approval of these technologies.

The project identified several technologies capable of detecting leaks within two meters of a leak's location. Further development and testing of technologies in the field are needed to enhance their successful deployment. The testing site is still used for research involving methane emission detection, safety, and other field measurement projects as well as for hands-on OGI methane detection training.

• METEC Industry Advisory Board

In 2022, we became a member of the Methane Emissions Technology Evaluation Center (METEC) Industry Advisory Board. The board provides baseline funding, guidance, and support to the methane emission test site discussed above. The funding goes toward staffing, facility maintenance, and developing classes and workshops to further understand next-generation leak detection methods. Guidance and support provided by the board may include input on expanding or modifying the test site to support emerging methane detection technologies, testing, or research.

### • New York State's Emission Measurement Project

We are participating in a research study, conducted by the University of Texas at Austin and funded by the New York State Energy Research and Development Authority. The aim of the study is to better understand methane emissions from midstream assets and to refine methane emission

factors. Phase one of the project, which included aerial methane measurement of several of our assets, was completed in 2021. Phase two of the project, which includes determining the viability and scalability of continuous methane emission detection technologies, was conducted in 2022. This phase evaluated multiple types of fixed location methane monitoring sensors, which were installed at multiple points in and around our compressor stations. We are awaiting publication of the project results.

• Stanford Natural Gas Initiative

We are an affiliate member of this collaboration of more than 40 research groups drawn from engineering, science, policy, geopolitical, and business disciplines at Stanford University. This initiative works with a consortium of industry partners and other external stakeholders to generate the knowledge needed to use natural gas to its greatest social, economic, and environmental benefit. As an affiliate member, we have access to informed research and the ability to interact with Stanford faculty and industrial colleagues on issues related to natural gas.

### • Cheniere Midstream QMRV GHG Program<sup>10</sup>

In 2022, we joined a collaboration among Cheniere Energy, Inc., several other midstream operators, methane detection technology providers, and leading academic institutions on a project to quantify, monitor, report, and verify GHG emissions associated with the operation of natural gas gathering, processing, transmission, and storage systems. Historically, emission inventories have been reported by aggregating activity-based data from equipment and applying calculated emission factors, for example, from the EPA's GHGRP. Factor-based reporting, which is sometimes referred to as "bottom-up" reporting, may result in over- or under-estimated emissions. Cheniere's QMRV program is intended to improve the understanding of GHG emissions and further the deployment of advanced monitoring technologies and protocols, such as aerial measurement, which are sometimes referred to as "top-down" techniques.

Cheniere and global emissions researchers from Colorado State University and the University of Texas designed a top-down measurement protocol to be field-tested at participating midstream operators' facilities. Select pipeline segments and compressor stations on our TGP, Kinder Morgan Louisiana Pipeline, and Natural Gas Pipeline Company of America systems participated in this project.

One of the project goals was to use full-facility GHG estimates derived from top-down techniques to evaluate and improve the bottom-up GHG emission inventories from 15 midstream natural gas facilities in the U.S.. However, the results of the study showed significant variance between the results of the top-down aerial measurement and the bottom-up GHG inventory method. The study indicated that when aerial measurements, or other top-down techniques, are used to inform inventories, additional screening and measurement of all emission sources will be required. The study indicates that top-down measurement methods will require additional testing and improvement before they can be reliably used in complex midstream facilities.

The dollar amounts we have invested annually in research and development projects related to GHG emissions and climate change are provided below. The 2022 amount includes contributions for GHG-related projects through PRCI, ONE Future, and the Stanford Natural Gas Initiative. It also includes investments in the Cheniere Midstream QMRV GHG Project, the New York State's Emission

<sup>&</sup>lt;sup>10</sup> Brown, Jenna, et al. "Informing methane emissions inventories using facility aerial measurements at midstream natural gas facilities." ChemRxiv, 15 Feb 2023. <a href="https://chemrxiv.org/engage/chemrxiv/article-details/63e6b8aafcfb27a31f8ec5b9">https://chemrxiv.org/engage/chemrxiv/article-details/63e6b8aafcfb27a31f8ec5b9</a>.

Measurement project, and pipeline hydrogen feasibility studies.

		Year Ended December 31,					
		2020			2021		2022
				(In t	thousands)		
Research and development investments in GHG emissions climate change-related projects	s and other \$		251	\$	375	\$	775

### CCUS

We participate with other organizations to advance CCUS policy and technology. For example, we collaborate with the Energy Advance Center, an energy group focused on CCUS advancement. The group meets regularly to discuss CCUS matters at the federal level.

### 3.2.3 Industry and Agency Participation

Our employees have undertaken leadership roles in the INGAA GHG Task Force, serving as co-chairs from late 2008 to 2011, and from 2013 through 2020. From 2021 to 2022, one of our employees served as Chair of the Environmental Committee, under which the GHG Task Force resides.

We have collaborated with the EPA, academic institutions, and other industry members on methane emission reductions and management strategies to identify the most effective means of implementing methane emission reductions at natural gas transmission and storage operations.

In 2022, we continued our participation in the New York City Mayor's Office of Resiliency CCATF, which was established to:

- identify critical infrastructure in New York City that could be at risk from the effects of climate change;
- facilitate knowledge sharing and develop coordinated adaption strategies to secure these assets; and
- develop findings and recommendations.

We also support Arizona's Climate Change Action Plan through our participation in an afforestation program called Trees for Tucson in Tucson, Arizona. Since 2017, we have contributed to planting approximately 3,000 trees in the Tucson metropolitan area. These trees sequester  $CO_2$ , helping to offset  $CO_2$  in the atmosphere.

### 3.2.4 Energy Management (GRI 2-1, GRI 302-1/GRI 11.1.2, GRI 302-4, CDP C8.2, CDP C8.2a)

One of the most impactful ways we reduce our overall emissions is by managing our energy consumption. Per our OMS, which is described in greater detail in *Section 2.2 Management System* of the *Sustainability Report*, we strive for continuous improvement in our energy efficiency and have implemented several energy management initiatives.

We employ energy management personnel who oversee multiple programs and strategies to both minimize energy costs and monetize our reductions in energy usage.

### Demand Response

We participate in curtailment and demand response programs. By analyzing our operations and energy consumption at a detailed level, we are able to reduce the amount of energy we pull from local electric grids at the request of local electric grid operators. We participate in demand response, load management, and utility reliability programs including the Base Interruptible Program in California and the Electric Reliability Council of Texas Emergency Response Service program. We also participate in the Four Coincident Peak program in Texas, which relies on incentives to reduce load when available capacity is low.

### Engineering Design

We have reduced energy consumption by optimizing our pipeline and facility design to utilize devices that use less energy while maximizing output. For example, we use variable frequency drives on many of our pumps to improve pipeline flow control and increase energy efficiency. Variable frequency drives also allow us to monitor pump efficiency, control pump speed, and reduce surges to nearby power suppliers.

### DRA

We use DRA to reduce energy consumption in our liquids pipelines. DRA reduces friction inside pipelines, which allows us to move more product through our pipelines using less energy. Our use of DRA reduces our electricity needs and allows us to reduce the use of pumps, completely shut down unneeded pump stations, or avoid construction of new pump station infrastructure.

In 2022, our deployment of DRA in our Products Pipelines business segment avoided approximately 337 GWh of electricity consumption, which equates to the use of 30 main line pumps.<sup>11</sup> This energy savings is roughly equivalent to 239,000 metric tons of CO<sub>2</sub>e emissions avoided, which is comparable to the electricity used by approximately 46,000 homes for one year or the carbon sequestered by 283,000 acres of forest in one year.<sup>12</sup>

### Offices and Buildings

We continue to seek ways to improve our energy efficiency in the office buildings we own. Our Houston headquarters building is LEED Gold certified. Most of the lighting in our Houston headquarters building, and in several of our leased office spaces, is on automated timers that turn off lights when not in use. Two of our office facilities use LED lighting and we have ongoing initiatives to replace compact fluorescent bulbs with LED lighting at many of our other facilities to further reduce energy consumption.

### Electricity Consumption

In 2021, we entered into a two-year retail power agreement to purchase wind power in Texas. We also acquired an Emission-Free Energy Certificate, from PJM Emission Free Energy Certificates, which we have applied to the electricity consumption at three of our facilities in Pennsylvania. They define emission-free energy as electric power from a generating unit that does not directly produce any air emissions. Through these two sources, we purchased approximately 6.8 million kilowatt hours of carbon free power in 2022. We continue to explore additional opportunities to purchase green power.

<sup>&</sup>lt;sup>11</sup> To calculate the avoided energy consumption in each pipeline, actual hourly operational performance data is compared to estimated energy usage with untreated friction loss. Main line pumping unit refers to a 2,000 horsepower pump with 85% utilization for the year.

<sup>&</sup>lt;sup>12</sup> The equivalent number of homes and tree acreage is calculated using EPA's Greenhouse Gas Equivalencies Calculator. EPA. "Greenhouse Gas Equivalencies Calculator." EPA, Mar 2023. 2023. <a href="https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator">https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator</a>.

Our electricity consumption is provided below.

		Year End December 31,			
	2020	2020 2021			
		(In GWh)			
Total electricity consumption(a)(b)	6,984	7,335	7,886		

(a) Total electricity consumption is from purchased power for the assets we operate.

(b) There were no significant discontinued operations in 2020, 2021, or 2022.

### Renewable Energy

We have programs to make energy efficiency improvements in our operations and explore new lower carbon technologies where and when economically feasible. For example, some of the equipment at our facilities is powered through solar panels installed on-site. As these locations are often very remote and far from an existing electric grid, these installations have been successful from both an energy-efficiency perspective and cost-saving perspective. In 2022, we consumed approximately 956 MWh of renewable energy from the solar panels we operate, equivalent to approximately 678 metric tons of CO<sub>2</sub>e avoided.<sup>13</sup>

The amount of renewable energy consumed from the solar panels we operate is provided below.

	2020	2021	2022	
	(In MWh)			
Renewable energy consumed from the solar panels we operate(a)	1,053	1,058	956	

(a) The renewable energy we consumed from the solar panels we operate is estimated using the National Renewable Energy Laboratory's PVWatts<sup>®</sup> Calculator.

### 3.3 Scope 3 Emissions

(GRI 305-3/GRI 11.1.7, CDP C6.5)

Scope 3 emissions are other indirect GHG emissions from sources upstream and downstream of our value chain that are not owned or controlled by us and are not included in our Scope 1 and Scope 2 emissions. Calculating and reporting Scope 3 emissions is complex as these emissions come from a wide range of sources, some of which are difficult to measure or estimate. Emissions reported as our Scope 3 emissions may be reported by other companies as Scope 1 or 2 emissions. For example, our Scope 3 emissions from employee business air travel may be reported by an airline as its Scope 1 emissions. We are currently evaluating the feasibility of reporting our Scope 3 emissions in the future.

We continue to increase our handling of lower carbon fuels, like RNG, biofuels, and biofuels feedstocks that contribute to lower global emissions. In 2022, our activities, i.e., handling ethanol, renewable diesel and biodiesel, and RNG, contributed to the avoidance or reduction of approximately 14.5 million metric tons of CO<sub>2</sub>e. In addition, we have announced projects starting in or after 2023 that, once in service, could potentially contribute to the avoidance or reduction of an additional 10.1 million metric tons of CO<sub>2</sub>e annually. These activities are described in *Section 2.3.1 Transition Risk Analysis* of the *TCFD Report*.

<sup>&</sup>lt;sup>13</sup> Estimated renewable energy consumed is equal to the amount generated. Solar panel energy generation is calculated using the National Renewable Energy Laboratory's PVWatts® Calculator. Dobos, Aron P. "PVWatts® Calculator." PVWatts® Calculator. National Renewable Energy Laboratory, 21 Sep 2021. 2022. <a href="https://pvwatts.nrel.gov/index.php">https://pvwatts.nrel.gov/index.php</a>>.

### 3.4 GHG Reductions and Targets

### 3.4.1 GHG Reductions (GRI 305-5/11.2.3, CDP C4.3)

Our voluntary GHG emission reductions, volume of voluntary methane emission reductions, and estimated value of natural gas saved are provided below.

	Year Ended December 31,					
	2020	:	2021		2022	
Voluntary GHG emission reductions (million metric tons CO <sub>2</sub> e)(a)	3.1	2	3.6		3.5	
Volume of voluntary methane emission reductions (Bcf)(b)(c)	5.	9	6.6		6.6	
Estimated value of natural gas saved (millions)(d)	\$ 21	1 \$	38	\$	45	

(a) GHG emission reductions are methane emission reductions converted to CO<sub>2</sub>e. The reported CO<sub>2</sub>e is based on a GWP of 28 if the methane were directly emitted to the atmosphere (GHGRP Subpart W, IPCC 2007). Calculation is from 40 CFR Part 98.233, Equation W-36: methane (scf) multiplied by 0.0192 kg/ft<sup>3</sup> (methane density) multiplied by 0.001 metric tons/kg (kg to metric tons conversion) multiplied by 28 metric tons CO<sub>2</sub>e per metric ton methane (GWP). Emission reduction values using a GWP of 25 for 2020, 2021, and 2022 are 2.8, 3.2, and 3.2 million metric tons CO<sub>2</sub>e, respectively.

(b) Methane content of pipeline quality natural gas is estimated at 95% per Methane Challenge Program guidance. GHG reduction calculations use methodologies specified by the EPA Natural Gas Methane Challenge program and the shelved EPA Natural Gas STAR programs.

(c) Methane emission reductions include reductions from compressor station leak repairs, pipeline pumpdowns, gas turbine installations, electric motor installations, and alternative pipeline maintenance technologies that reduce the need for pipeline blowdowns.

(d) The estimated value of natural gas saved from methane emission reductions is based on EIA's U.S. natural gas annual average Citygate price. For 2022, this price was \$6.83 per thousand ft<sup>3</sup>.<sup>14</sup>

## 3.4.2 GHG Targets (CDP C4.1)

### Methane Emission Intensity Target

Through ONE Future, we have committed to achieving a methane emission intensity target of 0.31% for our natural gas transmission and storage operations by 2025. Methane emission intensity is a measure of methane emissions as a percentage of total volumes of throughput. The transmission and storage industry allocation of the ONE Future target of 0.31% represents an approximate 31% reduction from the 2012 baseline transmission and storage industry segment intensity of 0.45%.<sup>15</sup> To meet this target, we have committed to reducing methane emissions, while maintaining pipeline integrity and safety and minimizing customer impacts.

Our methane emission intensity target and progress toward achieving this target are provided below.

	Year	Year Ended December 31,				
	2020	2021	2022			
Methane emission intensity rate target(a)	0.31 %	0.31 %	0.31 %			
Methane emission intensity rate(a)	0.04 %	0.03 %	0.03 %			

(a) The emission intensity rate is calculated by dividing our natural gas transmission and storage total methane emissions by our natural gas transmission and storage throughput. Methane emissions are calculated using the procedures in 40 CFR 98 Subpart W.

<sup>&</sup>lt;sup>14</sup> U.S. Energy Information Administration. "U.S. Natural Gas Citygate Price (Dollars per Thousand Cubic Feet)" Mar 2022. U.S. Energy Information Administration. 2022. <a href="https://www.eia.gov/dnav/ng/hist/n3050us3m.htm">https://www.eia.gov/dnav/ng/hist/n3050us3m.htm</a>.

<sup>&</sup>lt;sup>15</sup> ONE Future Coalition. "Methane Emission Estimation Protocol v.4." ONE Future Coalition, Dec 2021. 2022. <a href="https://onefuture.us/wp-content/uploads/2021/12/ONE-Future-Protocol-2021.pdf">https://onefuture.us/wp-content/uploads/2021/12/ONE-Future-Protocol-2021.pdf</a>>.

In 2020, 2021, and 2022 we performed better than our transmission and storage methane emission intensity target of 0.31%. In 2022, our methane emission intensity rate was approximately 90% lower than our target and 93% lower than the 2012 transmission and storage industry segment rate of 0.45%.

Additionally, many of the companies that operate assets in which we own an interest have established their own methane reduction targets or methane reduction initiatives. Approximately 83% of the methane emissions in 2022 from these third-party-operated assets were associated with companies that have adopted methane emission reduction targets or methane reduction initiatives.

### Compressor Station Leak Survey Target

In 2021, we successfully met our target, set in 2017, that by the end of 2021, we would conduct annual leak surveys at 100% of our then-owned natural gas transmission and storage compressor stations. In 2022, we continued to conduct annual or quarterly leak surveys at 100% of our transmission and storage compressor stations.

In 2021, we set an additional target to conduct at least annual leak surveys at 100% of our 123 active natural gas gathering and boosting compressor stations by the end of 2025. In 2022, we met this target early, surveying 100% of our natural gas gathering and boosting compressor stations.

### Short-Term Methane-Related GHG Emission Mitigation and Avoidance Targets

Our short-term GHG emission reduction target is an annual methane reduction target. We have surpassed our annual GHG reduction target for each of the last three years, including our 2022 GHG reduction target of 2.5 Bcf of methane emission reductions, equivalent to 1.3 million metric tons of CO<sub>2</sub>e. Our actual methane emission reductions are also reported in *Section 3.4.1 GHG Reductions* of the *Sustainability Report*. For 2023, we have set a short-term GHG reduction target of 2.55 Bcf of methane emission reductions are last three of 2.55 Bcf of methane emission reductions are also reported in *Section 3.4.1 GHG Reductions* of the *Sustainability Report*. For 2023, we have set a short-term GHG reduction target of 2.55 Bcf of methane emission reductions, equivalent to approximately 1.4 million metric tons of CO<sub>2</sub>e.

 Year Ended December 31,

 2020
 2021
 2022

 (In million metric tons of CO<sub>2</sub>e)

 Target GHG reductions(a)
 1.2
 1.3
 1.4

 Actual GHG reductions(a)(b)
 3.2
 3.6
 3.5

Our target and actual annual GHG reductions are provided below.

(a) Reductions are emissions mitigated or avoided that would otherwise have been emitted.

(b) The CO<sub>2</sub>e is based on a GWP of 28 if the methane were directly emitted to the atmosphere (IPCC AR5). Calculation is from 40 CFR Part 98.233, Equation W-36: methane (scf) multiplied by 0.0192 kg/ft<sup>3</sup> (methane density) multiplied by 0.001 metric tons/kg (kg to metric tons conversion) multiplied by 28 metric tons CO<sub>2</sub>e per metric ton methane (GWP).

### Medium- and Long-Term GHG Emission Reduction Targets

We believe that our assets are both valuable to our business and vitally important to an energy mix that provides stakeholders in the United States and around the world with reliable, affordable, and clean energy during the transition to, as well as in, a net zero world. Our assets move and will need to move reliable, affordable, and clean energy products of today and the future. Our opportunities to participate in the energy transition are described in *Section 2.3 Resilience of Our Strategy* of the *TCFD Report*.

We believe that reducing GHG emissions in our operations is important. We have focused our efforts on meaningful opportunities to participate in the energy transition and reduce GHG emissions through:

• our ONE Future commitment,

- investing in our energy transition ventures group and specifically our renewable natural gas business,
- investing in carbon capture and storage,
- deploying and installing vapor recovery units over vapor combustion units where appropriate,
- including estimated Scope 1 and 2 emissions in our larger capital project estimates.
- participating in emissions monitoring or measuring equipment research and development studies,
- undertaking research on transporting and storing hydrogen, and
- exploring solar power opportunities.

As described below under "*Decarbonizing our larger GHG emission sources,*" we have undertaken and will continue to undertake analysis and additional steps, within our control, to reduce our operational Scope 1 GHG emissions. Further, we plan to look for opportunities to reduce our Scope 2 emissions, such as increasing our use of green power when renewing power purchase agreements, where appropriate.

While aspirational absolute or net zero GHG emissions reduction commitments are increasingly common, we do not believe that existing technology and economic circumstances allow us to set this type of GHG reduction commitment at present. We believe that any commitment we make to reduce GHG emissions over the medium- or long-term should be based on a clearly defined, feasible path to achievement that is reasonably within our control and allows us to maintain and grow our business.

As third parties develop new and cost-effective technologies that help reduce GHG emissions, we expect to look for opportunities to deploy those technologies. We also expect to continue to assist in the development of those technologies with other companies and government-sponsored programs. We commit to reassess annually the feasibility of setting medium and long-term GHG reduction targets for our operations, as such new and cost-effective technologies are developed.

### Decarbonizing our larger GHG emission sources

In 2021, we established a cross-functional employee group to review our larger sources of GHG emissions and determine the feasibility of reducing GHG emissions from these sources. As shown in the chart below, in 2021 our largest sources were Scope 1 combustion emissions, vented emissions, and fugitive emissions, and Scope 2 emissions from purchased electricity.



## 2021 GHG Emission Sources

## Combustion – Natural Gas Fired Compressors

Our largest source of 2021 GHG emissions came from combusting natural gas to power the nearly 500 natural gas-fired compressor stations in our Natural Gas Pipelines business segment. These emissions made up 61% of our combined Scope 1 and 2 GHG emissions. We focused first on assessing the feasibility of reducing these emissions, primarily by electrifying our natural gas-fired compressor stations.

Our feasibility review included the following primary considerations:

- replacement cost,
- comparability and reliability of operations, and
- potential reduction in GHG emissions.

## Replacement cost

Our Natural Gas Pipelines business segment compressors have a combined output of over 6 million horsepower. We estimate that the cost to replace our natural gas compression fleet with electric driven compression would average \$3,200 to \$4,800 per horsepower, which includes estimated costs for new or upgraded electric power facilities to service the electric compression. The cost per horsepower to install replacement compression depends on several variables, including compressor size, number of units replaced, available facility space, commercial power availability, and other factors. Many of our facilities are located in rural areas where the local utility does not have the capacity to provide the large amount of electricity needed to power our compressor stations. These smaller power providers typically would expect us to pay in advance for additional facilities needed to achieve the required capacity, as opposed to recovering their costs over time through rates charged to us. We estimate the potential cost to replace natural gas fired compressors used in our Natural Gas Pipelines business segment with electric compressors, including associated electricity upgrades, could exceed \$20 billion, or approximately 50% of our current market capitalization. We would have no assurance of our ability to recover these costs through rates charged to customers.

### Comparability and reliability of operations

Our natural-gas powered compressors have access to fuel that is abundant, reliable, and inexpensive because they are fueled by a portion of the natural gas flowing through our natural gas pipelines. The shift to using external power for electric-powered compressors would require not only capital investment for power facilities as discussed above, but also significant annual electricity costs, which would contribute to higher operating costs. Incrementally, if all or a significant portion of our compressor stations were solely electric, then the compressors that power our natural gas pipelines, which provide reliable energy to backstop intermittent sources like wind and solar, would themselves be less reliable, which could adversely affect power generation, residential and industrial customers. For example, installing electric-powered compressors to move natural gas to power plants potentially creates an inherently unstable system because, if power is lost to the compressor stations, natural gas supplies to the power plants would also be lost, impairing restoration of power to the compressor stations.

### Potential reduction in GHG emissions

A further complication is that switching from natural gas compression to electric compression would simply exchange Scope 1 emissions for Scope 2 emissions. In many cases, the Scope 2 emissions that would be generated by electric power producers today to power electric compressors would be greater than the Scope 1 emissions generated by the natural gas fired compressors. To have a positive impact on reducing our combined Scope 1 and Scope 2 emissions, any conversion to electric compression would also require identifying and procuring sources of electricity with lower GHG emissions per kilowatt hour than those of our natural gas fired compressors. The available lower emission electricity sources may be limited in supply and as noted above, are less reliable. Another option would be to purchase renewable energy credits. However, renewable energy credits may not reduce carbon emissions, may not be available in sufficient quantities, and may carry costs that outweigh their benefits.

Based on our analysis, we determined that a large-scale replacement of our natural gas fired compression with electric compression is not economically feasible for us at this time. We reached this conclusion based on the estimated cost, the uncertainty of obtaining a return on our investment, the potential impact on our operations and operating expenses, and the relatively small, incremental reduction, if any, in our GHG emissions that is likely to result.

While large-scale transformation of our natural gas-fired compressor fleet is not a feasible option today, we are continuing to look for other ways to make progress on our emissions reductions. We currently have some electric compressor stations in our Natural Gas Pipelines business segment. Further, we have begun evaluating the economic feasibility of using some electric compression for new capital projects in our Natural Gas Pipelines business segment, subject to our need to ensure reliability of our services and our customers' willingness to underwrite incremental costs through the rates they pay. Further, we will continue to evaluate replacing existing natural gas fired compression with electric compression as technology develops, carbon emissions of the power generation sector decrease, and other factors that influence the economic feasibility of replacing such natural gas fired compression evolve.

We also reviewed the feasibility of self-powering these compressors using solar powered electric generating facilities that would need to be located near our facilities. In our review, we evaluated our twenty largest GHG emitting compressor stations in 2020, which represented 4% of our compressor stations. We estimated the electricity that would be required to run the electric compressors to equal the total horsepower generated by these natural gas-fired powered compressor stations. Assuming the solar powered electric generating facilities would generate six megawatts per acre, we estimated that we would need to acquire roughly an additional 3,000 acres beyond the acreage we already own at these compressor sites to install solar arrays.
We do expect that, in time, third parties will develop cost-effective technologies or other solutions to reduce or capture the  $CO_2$  emissions from our natural gas-fired compressor stations and potentially use or sequester those emissions in an environmentally friendly and economically beneficial way. We are working with third parties in an effort to be a part of the solution.

Given that the option of electrifying all our natural gas-fired compressor stations is vastly cost-prohibitive, we believe it to be prudent to maintain our fleet of natural gas compressor stations as technologies that could provide meaningful and cost-effective ways to reduce GHG emissions are developed. In the meantime, we will continue to focus on further reducing methane emissions from our natural gas pipeline operations as discussed below, and when spending capital to install, upgrade, retrofit, or replace natural gas-fired compressors in our Natural Gas Pipelines business segment, we will evaluate the feasibility of using electric compressors. We also will continue to evaluate government incentives, including those that were included in the IRA, for opportunities to reduce our Scope 1 and 2 GHG emissions.

# Vented and Fugitive Emissions

Vented emissions that primarily result from natural gas pipeline blowdowns, and fugitive emissions that primarily result from component leaks in our Natural Gas Pipelines business segment, comprise 11% and 7%, respectively, of our 2021 Scope 1 and 2 GHG emissions inventory. Reducing these methane emissions is important to combat climate change in the short term because methane is eighty-four times more potent than  $CO_2$  on a 20-year time horizon and twenty-eight times more potent on a 100-year time horizon.

To safely perform work on a section of our natural gas pipelines, we must first remove the gas from that section of pipe. This can be accomplished by blowing down the gas to the atmosphere or pumping it down to another section of pipe. Pumping down the gas takes longer and is more costly than blowing down the gas but pumping down results in lower GHG emissions. To reduce our GHG emissions, we have implemented a process of pumping down our pipeline prior to planned work, such as expansion or maintenance projects, hydrostatic integrity testing, and anomaly digs. We also occasionally undertake unplanned natural gas pipeline blowdowns when necessary for safety or emergency reasons.

We perform leak surveys at compressor stations within our Natural Gas Pipelines business segment to help identify fugitive emission sources. These leak surveys are currently conducted at least annually. Performing maintenance and repairs on leaks identified during the leak survey reduces GHG emissions from fugitive sources. Increasing the frequency of leak surveys may lead to increased GHG emission reductions because leaks would be identified and repairs completed more frequently.

We plan to continue to increase our use of pump downs over blowdowns on our natural gas pipelines. We will begin transitioning from annual to quarterly leak detection surveys on our natural gas pipeline compressor stations in 2023 and expect to have all of our natural gas pipeline compressor stations surveyed quarterly by 2028, dependent upon regulatory requirements. We believe the potential outcome of these activities would reduce our methane emission intensity 30% by 2030 from a base year of 2021.

# Other GHG Emission Sources

We have Scope 2 emissions primarily from our purchase of electricity for our operations. Relative to such purchased electricity, we plan to look for opportunities, where appropriate, to increase our green power utilization when renewing power purchase agreements.

# 4.1 Air Emissions

We are committed to minimizing our emissions by operating our facilities in a manner consistent with air quality control standards. To manage our air permitting and compliance program in each of our business segments, we conduct the following activities:

- monitor, record, and report emissions and pay permit fees per federal, state, provincial, or local requirements;
- identify and maintain a list of stationary air emission sources;
- quantify emissions when changes or modifications occur at a facility to determine if the facility permitting status is affected;
- manage permit requirements in our compliance tracking system along with required actions, deadlines, and designated responsible persons; and
- provide regular training to increase our operations, engineering and maintenance employees' understanding of permit requirements.

We also have initiatives in place to reduce our  $NO_x$ ,  $SO_x$ , VOCs,  $PM_{10}$ , and other relevant air emissions by enhancing processes that improve efficiency, reduce leaks, and reduce fuel usage. We implement the following practices on a case-by-case basis:

- implementing procedures to shut down our equipment and reduce idle time;
- minimizing tank roof landings;
- optimizing temperature controls to reduce fuel consumption;
- installing additional controls, such as low NO<sub>x</sub> technologies like Clean Burn Conversion, on our compressor engines;
- replacing existing equipment, including engines and turbines, with newer, more efficient equipment; and
- reducing flaring by:
  - improving compressor reliability,
  - automating gas control,
  - improving flaring metering, and
  - optimizing downtime.

# Air Emissions Reduction Initiatives

Philadelphia Terminal Vapor Combustion Unit Modification

At one of our terminals, a vapor combustion unit was modified to capture VOC emissions during ethanol barge loading, which is expected to reduce the terminal's VOC emissions by 98%.

• New York Engine Modification Project on TGP

We are conducting two research and development projects on TGP with the aim of reducing  $NO_x$  emissions from some of our older engines by modifying the engines' combustion chambers to more efficiently combust natural gas. The project is ongoing and we expect the final results by the end of 2023.

Our criteria air pollutant emissions that are reportable to regulatory agencies are provided below.

	Yea	Year Ended December 31,			
	2020	2021	2022		
	(In	(In thousand metric tons)			
Air emissions(a)(b)(c)					
NO <sub>x</sub> (excluding N <sub>2</sub> O)	52.2	50.6	50.0		
SO <sub>x</sub>	0.3	0.2	0.2		
VOCs	12.7	12.0	12.3		
PM <sub>10</sub>	1.4	1.3	1.2		

(a) Includes emissions that are reportable to a U.S. state, U.S. federal, or Mexican federal agency. For 2022, emissions were calculated or reported as of March 14, 2023. Due to timing of regulatory agency submittals, these emissions may differ from what is reported to a regulatory agency.

(b) For locations that report emissions less frequently than annually, emissions are included from emission fee estimates or from the most recent agency submittal.

(c) There were no significant discontinued operations in 2020, 2021, or 2022.

#### 5.0 Water Management

#### (GRI 303-1/11.6.2, GRI 303-2/11.6.3, CDP W1.1, CDP W1.2, CDP W6.1)

Water resources are important to the ecosystems and communities in which we operate. Our commitment to efficient operations includes responsibly managing our water consumption, our wastewater effluent, and disposal of the water we use. We have policies and procedures to meet or exceed water and wastewater effluent monitoring, measurement, recordkeeping, and reporting requirements. While certain sectors of the energy industry can be relatively water intensive, our primary business is in the energy infrastructure sector where water usage is less intensive. Because of this, we can readily build and operate pipelines and terminals without creating an undue burden on the water supply, even in water-stressed areas. Although our operations' water-related risks are low, we are nevertheless committed to responsibly managing the consumption and disposal of the water we do use.

Our water uses are primarily for:

- cooling for our CO<sub>2</sub> business segment power plant,
- hydrostatic integrity testing of new and existing pipelines and related equipment prior to operation,
- processing in natural gas processing facilities,
- dust control, and
- cleaning our equipment.

Our water management practices also apply to produced water, a by-product of our  $CO_2$  business segment's EOR projects. Produced water is either re-injected into an oil-producing formation or disposed of by injecting it into a non-oil-producing formation.

One of the ways we reduce our water usage and wastewater effluent is that, when performing hydrostatic integrity testing on large segments of pipe, we often test in smaller sections and reuse the same water from one section to the next. In 2022, we reused 23 thousand cubic meters of fresh water during hydrostatic pressure testing. This minimizes the amount of water used and the amount requiring disposal. We also

collect condensation from the air conditioning units at our Houston headquarters to irrigate the building's flowerbeds.

We monitor our stormwater and wastewater discharges and, if necessary, treat it prior to release in order to meet water quality standards that protect human and aquatic life. In addition, our operations follow procedures to minimize the risk of accidental discharges. In the event of a non-permitted wastewater discharge, we have response and incident management procedures and reporting processes. Significant discharge incidents are investigated, and corrective actions are implemented, if necessary, to address incident causes.

#### 5.1 Water Usage

(SASB Exploration & Production EM-EP-140a.1, GRI 303-3/11.6.4, GRI 303-5/11.6.6, CDP W1.1, CDP W1.2, CDP W6)

#### Hydrostatic Integrity Testing

As part of our asset IMP, described in *Section 12.1 Asset Integrity Management* of the *Sustainability Report*, we conduct regular testing of new and existing pipelines and tanks. For some of these tests, we use hydrostatic integrity testing, a process where water is injected into a pipeline or tank to test the integrity of the pipeline or tank. Often a portion of the hydrostatic integrity tests, we use water from non-fresh water sources.

The volume of water we used for hydrostatic integrity testing of our in-service PHMSA-regulated pipelines and tanks is provided below. We have developed processes to track the water we use for hydrostatic integrity testing of pipelines not regulated by PHMSA and newly constructed pipelines as they are placed in service and we expect to include these volumes in a future report.

	Year Ended December 31,			
-	2020 2021		2022	
	(In thousand cubic meters)			
Fresh water withdrawn for hydrostatic integrity testing(a)(b)(c)(d)	57	159	69	
Fresh water reused for hydrostatic integrity testing(d)(e)	_	_	23	
Fresh water returned from hydrostatic integrity testing(d)(f)	_	_	32	
Fresh water recycled for hydrostatic integrity testing(d)(g)	_	_	0	
Fresh water disposed from hydrostatic integrity testing(d)(h)	_		13	
Non-fresh water withdrawn for hydrostatic integrity testing(i)	—	_	24	

(a) For 2020 and 2021, volume of fresh water use for our pipelines was calculated using the dimensions of the pipeline tested and did not account for fresh water reuse or fresh water loss.

(b) For 2020 and 2021, volume of fresh water use for our tanks was calculated using tank strapping tables in accordance with API Manual of Petroleum Measurement Standards, 14.10, 2nd Edition, 2.2D.

(c) Our methodology for reporting fresh water withdrawn for hydrostatic testing was updated in 2022 to use water usage forms which provide more precise data for volume of fresh water use and account for fresh water reuse and fresh water loss. The values for 2020 and 2021 were not revised because fresh water use, water reuse, and water loss were not captured at that time. Under the previous estimation methodology, fresh water withdrawn for hydrostatic integrity testing would be 76 thousand cubic meters for 2022.

(d) Fresh water is from groundwater, surface water, and municipal water, including purchased and non-purchased volumes.

(e) Water used multiple times for hydrostatic integrity testing since withdrawal from its original source.

(f) Water that is 1) discharged to the ecosystem, usually via outfall; 2) sent to publicly owned treatment works, sanitary systems, or other water treatment facilities who ultimately discharge to the ecosystem, usually a receiving water of the State; or 3) discharged to the ground and allowed to percolate into the soil.

- (g) Water used for vegetation or site dust suppression.
- (h) Water that is incinerated, disposed of in a waste injection well, or transported to a facility that incorporates it into other non-recycled waste, e.g., landfill disposal.
- (i) Water from non-fresh water sources, such as oceans, bays, and brackish water, includes purchased and non-purchased volumes.

Water usage can vary year-over-year depending on the pipeline and tank integrity assessment methods and reassessment intervals. It also depends on the size of pipe or tank being tested. Where possible and allowed by the regulations, we use ILI technology to assess the integrity of pipelines in lieu of hydrostatic testing. ILI technology does not use water and provides a more detailed assessment of the integrity of the pipeline. In 2020, PHMSA implemented the "Maximum Allowable Operating Pressure Reconfirmation Rule." We use hydrostatic testing as the predominant method to comply with this regulation; as a result, our Natural Gas Pipelines business segment's water usage from 2019 to 2021 increased. The decrease in water usage from 2021 to 2022 was mostly due to smaller average length and diameter of pipe and a lower number of tanks being tested in 2022.

#### Water Usage from our CO<sub>2</sub> Business Segment

Our  $CO_2$  business segment operates multiple gas processing plants and a power plant that powers equipment in the SACROC oil field. These plants use fresh water for cooling and steam and supplies come from local water utilities and groundwater sources. Less frequently, fresh water is trucked to our operations located in remote areas. The amount of fresh water used during the EOR process is relatively insignificant compared to the amount used at the gas processing plants and power plant. We assume fresh water withdrawn is equal to fresh water consumed since the majority of fresh water used in our  $CO_2$ business segment operations evaporates.

The amount of fresh water withdrawn, fresh water consumed, and fresh water withdrawn intensity for our  $CO_2$  business segment are provided below.

	Year Ended December 31,			
	2020 2021		2022	
	(In thousand cubic me	ters, except water witl	hdrawn intensity)	
Fresh water withdrawn(a)	1,208	1,361	1,459	
Fresh water consumed(a)	1,208	1,361	1,459	
Fresh water withdrawn intensity (thousand cubic meters of fresh water consumed per BOE throughput)(b)(c)	0.03	0.03	0.03	

(a) For 2020 and 2021, water usage volumes from certain facilities or processes may have been excluded if the volumes were insignificant to the overall volumes presented above. Fresh water usage for 2022 was updated from prior years to be limited to our SACROC operations, which was about 97% of total fresh water usage in 2021 and 2020 for the  $CO_2$  business segment, and excludes all other  $CO_2$  business segment facilities.

(b) Fresh water withdrawn intensity is calculated by dividing CO<sub>2</sub> business segment fresh water withdrawn (thousand cubic meters) by CO<sub>2</sub> business segment BOE throughput in bbl/yr.

(c) The  $CO_2$  business segment's BOE throughput methodology was updated in 2022 to incorporate produced gas, which aligns to the BOE throughput methodology used in other metrics. We have revised for comparability the 2020 and 2021 fresh water withdrawn intensity to reflect the updated methodology.

### 6.1 Environmental Management Policies and Practices for Active Operations

(SASB Midstream EM-MD-160a.1, SASB Exploration & Production EM-EP-160a.1, GRI 2-29, GRI 304-2/11.4.3, GRI 304-3/11.4.4)

Our Biodiversity Policy outlines the approaches we use to address our impacts on biodiversity in areas where we operate. We assess the environmental risk and impact from many of our new or existing project sites and where warranted, make adjustments to the location, scope, or timing of a new project in an effort to minimize or avoid impacts to critical habitats with high biodiversity value, including vulnerable species or sensitive ecosystems.

#### Project Development

Prior to beginning a new construction or expansion project, we develop plans and procedures that consider a number of important factors that help:

- maintain operational efficiency,
- minimize our impact on biodiversity, and
- take into consideration our stakeholders' concerns.

Our project development plans look at the overall impact of the project and may include:

- surveying,
- environmental and cultural impact avoidance,
- monitoring,
- mitigation,
- construction,
- revegetation, and
- operation.

# Pre-construction and Construction

To evaluate a proposed route for a new pipeline project, we conduct the following surveys:

- civil surveys that provide information on soil, topography, and land use;
- cultural surveys that provide cultural significance and archaeological information; and
- environmental surveys that provide information about water, vegetation, wildlife, and other important biodiversity considerations.

In addition to the information collected in these surveys, our teams also consult with federal, state, and local stakeholders during development and pre-construction about project-specific considerations, including environmental issues. We consider and use this information to help us select facility sites and develop pipeline routes that avoid or minimize impacts on people, critical habitats, and land.

We strive to minimize impacts on biodiversity in the areas where we work and operate. Land and habitat reclamation is a key component of our construction efforts, both when designing a new route for a pipeline project and when performing maintenance on facilities that have been in service for many years. We may employ the following construction and mitigative procedures to take into account biodiversity issues:

- erosion and sediment control plans to stabilize soil and prevent sediment flow into sensitive areas;
- revegetation plans to promote successful revegetation of soils disturbed by project-related activities;

- construction techniques that allow for the movement and protection of wildlife and livestock during construction;
- horizontal directional drilling technology to install pipelines while minimizing and or eliminating impact to sensitive areas;
- project-specific spill prevention and response procedures; and
- traffic plans to keep affected roadway crossings safe and accessible.

# Mitigation in High Conservation Value Areas

We employ a variety of strategies to minimize our operating assets' impact on high conservation value or biodiversity areas, such as sensitive habitats and conservation areas with threatened or endangered species, wetlands, and waterbodies.<sup>16</sup> Our integrity management teams assess whether our pipelines and facilities could affect commercially navigable waterways, populated areas, or environmentally sensitive areas.<sup>17</sup> We work to meet or exceed the regulatory standards that protect these important areas.

Our PHMSA-regulated assets determined to be located within environmentally sensitive areas are subjected to more stringent and frequent integrity management measures to improve the assets' resilience and help protect the surrounding environment. Read more about our IMP described in *Section 12.1 Asset Integrity Management* of the *Sustainability Report*.

Based on the nature of the project and project area, our project framework requirements may include some or all of the following:

- designating an environmental inspector with wetlands or waterbody knowledge to verify that environmental conditions are met during construction;
- establishing baseline characteristics for high conservation value areas to help develop mitigation measures during a project;
- routing to avoid construction through or minimize disturbances to wetlands and waterbody crossings;
- establishing spill prevention and response procedures that provide for prompt and effective cleanup in the event of a spill;
- delineating wetlands and waterbodies; and
- developing detailed mitigation and avoidance plans for project areas identified as habitat for threatened or endangered species and fisheries.

# Restoration

When impacts to the environment cannot be completely avoided or minimized, we can employ measures to restore an ecosystem's composition, structure, and function. Post-construction actions for new projects include restoring the right-of-way, including landowner agreed-upon specifications, and restoring the land within our facility fence lines where appropriate. In some instances, we are able to improve habitats with our restoration work. For example, for some pipeline replacement projects we plant native vegetation, such as shrubs and seed mixes, to promote a healthy ecosystem that is expected to quickly adapt to local conditions, and then monitor its progress. In tandem with these efforts, we may also use weed control to minimize encroachment of invasive species. In other projects, we have constructed new habitats; preserved, restored, enhanced, or created wetlands; and improved existing conservation or preservation areas.

<sup>&</sup>lt;sup>16</sup> Threatened or endangered species defined by federal, state, provincial, and local regulatory agencies.

<sup>&</sup>lt;sup>17</sup> Environmentally sensitive areas in the U.S. are defined by the 49 CFR 195.6 designation of unusually sensitive areas. Canada's CER rules define environmentally sensitive areas in the GeoGratis database published by Natural Resources Canada.

Our restoration, revegetation, and reclamation efforts may include where appropriate:

- grading construction right-of-way to restore pre-construction contours and leave the soil in the proper condition for planting;
- stabilizing streambeds and banks, natural drainage ways, and steep grades to meet permit requirements;
- establishing successful revegetation of soils disturbed by project-related activities;
- working with affected landowners to restore structures, fences, hedges, or other property displaced or damaged during construction;
- implementing spray programs for noxious weeds and ongoing environmental monitoring to identify and repair post-construction areas of concern; and
- striving to meet the post-construction biodiversity targets and deadlines established in our project plans.

# Biodiversity Enhancement Initiatives

We are involved in a number of projects designed to enhance biodiversity within our operating areas. We have made long-term commitments to managing biodiversity and participate in conservation education and community outreach initiatives as described below.

• Trees for Tucson

We are a designated Tree Champion by the Tucson Clean and Beautiful organization for our ongoing commitment to the Trees for Tucson program that plants trees in communities to increase shading, mitigate extreme heat, absorb CO<sub>2</sub>, and improve the environment in support of the City of Tucson's Climate Change Mitigation and Adaptation Plan. In 2022, we contributed to planting 715 new shade trees in the Tucson metro area.

• Houston Wilderness Tree Planting

In cooperation with Houston Wilderness, a nonprofit organization dedicated to protecting, preserving, and promoting the ten eco-regions in the greater Houston area, employees from our Terminals business segment's Kinder Morgan Deer Park Complex and Kinder Morgan Export Terminal participated in two tree planting events in 2022. Our Deer Park employees were joined by students and administrators from KIPP Texas Houston schools and the Kinder Morgan Export Terminal employees by volunteers from the neighborhood surrounding our facility. Together, these two events resulted in the forestation of approximately 950 trees.

• *City of Greensboro – Tree Conservation Ordinance* 

Our Products Pipelines business segment's Greensboro Rail Expansion Project in North Carolina will impact approximately 14 acres for the installation of a new rail spur and pipeline within the Greensboro Terminal facility. To offset some of the project impacts, we allocated 1.4 acres of a forested area within our existing Greensboro Terminal as a conservation area.

• Contra Costa County Flood Control Vegetation Restoration Plan

As part of our Products Pipelines business segment's SFPP Pipeline Integrity Project in California, we had to remove trees in order to access the site and expose the underground pipeline for inspection and necessary repairs. We planted three trees for every tree we removed.

# • Ohlone West Conservation

As part of our Products Pipelines business segment's Dig Project in California, we purchased 2.3 acres of mitigation credits for impacts to the Alameda whipsnake and the California tiger salamander habitats. We also planted three trees for each tree removed within the project area.

• DuPage County Wetlands Restoration

In 2022, we undertook a project to upgrade a section of Natural Gas Pipeline Company of America LLC's Illinois pipeline to enable it to accept smart pigs for pipeline inspections. We had to temporarily disturb one acre of herbaceous wetlands, which we replanted with appropriate shrubs after project completion.

For more information, see our EHS Policy Statement, our Biodiversity Policy, and for examples of how we operationalize our Biodiversity Policy, see our case studies, on our ESG/Sustainability webpage at <a href="https://www.kindermorgan.com/Safety-Environment/ESG">https://www.kindermorgan.com/Safety-Environment/ESG</a>.

# 6.2 Percentage of Land Owned, Leased, and/or Operated within Areas of Protected Conservation Status or Endangered Species Habitat

(SASB Midstream EM-MD-160a.2, GRI 304-1/11.4.2, GRI 304-3/11.4.4)

#### Areas of Protected Conservation Status or Endangered Species Habitats

The percentage of land we operate within or near areas of protected conservation status or endangered species habitat is provided below.

	2020	2021	2022
Percentage of land operated within or near areas of protected conservation status or endangered species habitat(a)			
Near designated areas(b)	27 %	28 %	31 %
Within designated areas(c)	3 %	3 %	3 %
Within or near designated areas(b)(c)	30 %	30 %	34 %

(a) The acreage of land used in this analysis is based on acreage where we have active operations. We may own or lease, but do not operate, additional land that is not included in this analysis. This calculation assumes that the acreage operated for pipelines includes land within the 50-foot corridor of a pipeline's centerline and excludes production facilities and non-PHMSA jurisdictional gathering lines in the CO<sub>2</sub> business segment. Acreage operated for a facility includes land within the facility's security fence line for the Natural Gas Pipelines, Terminals, and CO<sub>2</sub> business segments and acreage we own, within and outside the security fence line, for the Products Pipelines business segment. We use WDPA determinations for the areas characterized as protected conservation areas. For our Mexico operations, the areas characterized as endangered species habitats are determined by the International Union for Conservation of Nature endangered or critically endangered designations. For our U.S. operations, recommended by SASB, because we believe the USFWS dataset better reflects the biodiversity risk for our operations. For the 2022 reporting year, we downloaded the USFWS dataset and the WDPA dataset in the fourth quarter of 2022 and used our GIS datasets as of the fourth quarter of 2022 to complete our analysis.

- (b) Defined as operated land within five kilometers of the boundary of a protected conservation area or endangered species habitat.
- (c) Defined as operated land within the boundary of protected conservation area or endangered species habitat.

#### Acreage Disturbed and Restored

	2022
	(acres)
Acreage disturbed(a)	67
Acreage restored(b)	67

(a) Calculated by comparing our operations footprint in Nov 2021 to Nov 2022. This calculation assumes that the acreage includes a 50-foot corridor of a pipeline's centerline. Facility sites are considered to be permanently disturbed.

(b) Acreage used for permanent right-of-way is assumed to be restored according to federal, state, and other agency requirements postconstruction.

#### 6.3 Hydrocarbon Spills

(SASB Midstream EM-MD-160a.4, SASB Exploration & Production EM-EP-160a.2, GRI 306-3/11.8.2)

According to data from PHMSA and FERC, 99.999% of crude oil, petroleum products, and natural gas transported by pipelines reach their destinations safely and uneventfully.<sup>18</sup>

We work to prevent liquid hydrocarbon releases from our operations, but sometimes such releases do occur. They usually are:

- below reportable quantities,
- contained in secondary containment facilities, and
- promptly remediated, if necessary.

Our emergency response procedures are designed to promptly limit the impact to the environment if a release occurs or migrates outside of containment. Although measures are in place to prevent environmental contact, there are infrequent cases where some volume of hydrocarbon migrates outside containment. Hydrocarbon spills reported in Unusually Sensitive Areas, as defined in the footnote of the table below, may not necessarily impact an Unusually Sensitive Area if the spill occurred within our facility fence line and did not reach the Unusually Sensitive Areas.

The number, volume, volume in Unusually Sensitive Areas, and recovered volume of hydrocarbon spills are provided below.

	Year Ended December 31,				
	2020 2021		2022		
	(In barrels, except percentages and number of spills)				
Number of hydrocarbon spills(a)(b)	41	41	29		
Aggregate volume of hydrocarbon spills(a)	2,380	3,035	2,966		
Aggregate volume of hydrocarbon spills in Unusually Sensitive Areas(a)(c)	1,398	869	2,644		
Volume recovered(d)	1,769	1,827	2,900		
Percentage recovered	74 %	60 %	98 %		

 (a) A spill is defined as greater than one barrel of hydrocarbon liquid released to surface water, soil, groundwater, or ice-covered surfaces. This excludes spills contained within impermeable or sufficiently impervious secondary containment. Impermeable or sufficiently impervious secondary containment includes containment with earthen berms that utilize liners (e.g., earthen berm with gunite lining).
(b) We do not operate in the Arctic and therefore have nothing to report for SASB EM-MD160a.4.

(c) Includes spills, as defined in note (a), in Unusually Sensitive Areas in the U.S. as identified in the National Pipeline Mapping System by PHMSA. Unusually Sensitive Areas in Canada are identified by the Canadian Council on Ecological Areas Conservation Areas Reporting and Tracking System; the National Hydro Network – 2016, Government of Canada; Natural Resources Canada; Earth

Sciences Sector; and Canada Centre for Mapping and Earth Observation. If the National Pipeline Mapping System data was unavailable for a spill location, we used the protected conservation areas by the WDPA and the areas characterized as endangered species habitats by the USFWS, as the basis for whether the spill occurred in an Unusually Sensitive Area.

(d) The volume of spills recovered is the amount of spilled hydrocarbons removed from the environment through short-term spill response activities, excluding amounts that were recovered during longer-term remediation at spill sites and amounts that evaporated, burned, or were dispersed. The volume recovered is reported for the year the associated spill occurred.

There were fewer spills in 2022 versus 2021. One spill made up most of the hydrocarbon spill volume in 2022. This was a 2,400 bbl release of crude oil on our Hiland Crude Gathering system, located in an unusually sensitive area. Over 99% of the crude oil has been recovered.

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<sup>&</sup>lt;sup>18</sup> API-AOPL. "2020 Pipeline Safety Excellence Performance Report & 2020-2022 Strategic Plan." API-AOPL, 17 Jun 2021: 45. 2021. <a href="https://www.api.org/-/media/APIWebsite/oil-and-natural-gas/primers/2020-API-AOPL-Pipeline-Safety-Excellence-Performance-Report-and-20202022-Strategic-Plan.pdf">https://www.api.org/-/media/APIWebsite/oil-and-natural-gas/primers/2020-API-AOPL-Pipeline-Safety-Excellence-Performance-Report-and-20202022-Strategic-Plan.pdf</a>?

# 6.4 Marine Transportation Spills and Releases to the Environment

(SASB Marine Transportation TR-MT-160a.3)

We own a fleet of 16 medium-range Jones Act-qualified product tankers, each with 330,000 bbls of cargo capacity. The fleet is the largest and most modern in the industry and transports crude oil, condensate, and refined products under long-term contracts.<sup>19</sup> Our vessels are operated by Intrepid Ship Management, a subsidiary of Crowley Maritime Corporation, a leading operator and technical manager in the U.S. maritime industry. Consistent with our own philosophy, one of Intrepid's goals is to operate with no harm to people, property, or the environment.

Intrepid's management system is designed to fulfill the requirements of:

- International Safety Management Code for the Safe Operation of Ships and for Pollution Prevention,
- ISO 9001:2008 Quality management system, and
- ISO 14001:2004 Environmental management systems.

The number and aggregate volume of marine spills and releases from our Jones Act-qualified product tankers are provided below.

	Year Ended December 31,			
-	2020	2021	2022	
Number of marine spills and releases to the environment	1	0	0	
Aggregate volume of marine spills and releases to the environment (cubic meters)(a)	0	0	0	

(a) The 2020 aggregate volume of marine spills and releases to the environment are less than half of a cubic meter. There were no marine spills or releases to the environment in 2021 or 2022.

# 6.5 Environmental Fines and Penalties

#### (GRI 307-1)

In line with our OMS, we strive to comply with applicable environmental regulations. Notwithstanding our efforts, we occasionally receive environmental fines and penalties for alleged releases, permit violations and similar events. Payments for environmental fines and penalties may not occur in the same year of the incident and may occur several years after an incident.

Our environmental fines and penalties paid are provided below.

		Year Ended December 31,				
	2	020	2	2021		2022
			(In th	ousands)		
Environmental fines and penalties paid(a)	\$	119	\$	475	\$	192

(a) Environmental fines and penalties paid include monetary fines, penalties, and settlements greater than \$5,000 paid to environmental regulatory agencies and excludes the costs of supplementary environmental projects, any work we were mandated to complete as part of the enforcement action, and the amounts paid to non-environmental regulatory agencies. Environmental fines and penalties are reported based on the year the payment was made. The year when the payment was made may differ from the year the incident took place.

<sup>&</sup>lt;sup>19</sup> Based on average ship age and number of latest generation vessels operated. Fleet age assessment based on Appendix A of the Wilson Gillette December 2021 report of operational Jones Act product tankers and large oceangoing barges.

# 7.1 Discussion of Safety Management Systems to Integrate Culture of Safety and Emergency Preparedness

(SASB Midstream EM-MD-540a.4, SASB Exploration & Production EM-EP-320a.2, GRI 403-1/11.9.2, GRI 403-4/11.9.5, GRI 403-6/11.9.7, GRI 403-8/11.9.9, GRI 403-9/11.9.10)

Our employee and contractor safety management systems are integrated into our OMS, which governs our health and safety strategy and is overseen by our CEO and business segment management. An overview of our OMS, including our health and safety training, are described in *Section 2.2 Management System* of the *Sustainability Report*. Additional details about our contractor safety policies are also provided in *Section 8.0 Supply Chain Management* of the *Sustainability Report*.

#### Safety Initiatives

Our safety initiatives are managed at the business segment level and safety programs are tailored to specific operations.

• Safety In Motion<sup>®</sup>

In 2022, our Natural Gas Pipelines business segment continued to expand the implementation of the SIM<sup>®</sup> program, which offers a multifaceted approach to eliminating sprain and strain injuries. The SIM<sup>®</sup> process uses an action and education process that has a track record of preventing, reducing or managing strain, pain, and musculoskeletal injuries. The process includes a training program that, through physical demonstrations during training, allows employees to experience how small changes in physical techniques significantly reduce the risk factors that lead to unnecessary stress and strain. The SIM<sup>®</sup> system encompasses:

- ergonomics;
- body mechanics;
- fitness; and
- auditing, observation, coaching, and medical management.
- Hazard Recognition Training

The ability to recognize and mitigate hazards in the workplace prior to and during work reduces the likelihood of an employee injury. Our business segments have developed training programs designed to provide employees with real world scenarios to help improve their hazard identification skills.

• Incident Investigation Training

We have a training module designed to help employees who conduct incident investigations understand the importance of evaluating the processes and systems linked to the work or task being conducted at the time of the incident. By identifying where there may be opportunities for improvement within our processes and systems, we are better able to provide our employees with the training and knowledge that they need to perform their jobs safely and successfully.

#### • Safety Culture Surveys

Periodically, our full-time business segment employees participate in confidential safety culture surveys. These surveys are designed to engage with our employees and collect information about our safety culture. The results of these surveys are communicated to employees and used to develop safety action plans.

• 100 Days of Summer

To combat the rise in heat-related workplace injuries and illnesses that occur in summer, our Terminals and Natural Gas business segments have implemented a campaign designed to heighten employee awareness of the hazards of heat stress and dehydration that can result from higher temperatures and increased outdoor exposure during June, July, and August. The campaign includes communications to employees about procedures they can follow to minimize risks and stay safe.

• Safety Meeting Packets

Our business segments periodically hold meetings and distribute safety materials with the goal of fostering a culture of continuous improvement and providing consistent safety messaging. The packets include lessons learned from internal and external incidents.

Additional contractor safety initiatives are described in *Section 8.0 Supply Chain Management* of the *Sustainability Report*.

Safety Awards

• International Liquid Terminals Association Platinum Safety Award

Our Terminals business segment was awarded the Platinum Safety Award by the International Liquid Terminals Association for our top safety performance in 2022. This award is the highest safety recognition award given by the association with only two companies receiving this award each year.

# 7.2 Employee and Contractor Safety Statistics and Average Hours of Health, Safety, and Emergency Response Training

(SASB Exploration & Production EM-EP-320a.1, SASB Marine Transportation TR-MT-320.a.1, GRI 403-2/11.9.3, GRI 403-5/11.9.6, GRI 403-7/11.9.8, GRI 403-9/11.9.10)

We strive for continuous improvement in our safety performance. Although our ultimate target is zero incidents, we also have other non-zero employee safety performance targets that we establish at the beginning of each year. The first is to outperform the annual industry average TRIR and the second is to outperform our own three-year TRIR average.

Our 2023 company-wide TRIR target is 0.7, which is the average of the baseline years 2020, 2021, and 2022. In 2020, we established a longer-term, company-wide employee TRIR target to improve our TRIR to 0.7 by 2024 compared to the baseline of 1.0 in 2019. This target was established to drive improvement in our safety performance and represents a TRIR reduction of 30% over a five-year period.

Our performance against our previous targets is specified in the table below.

# Employee Safety Metrics

Employee incident rates, employee incident rate targets, and the number of employee work-related fatalities are provided below. The table below excludes self-reported COVID-19 cases classified as recordable incidents per OSHA guidance. Incident rates including work-related, self-reported COVID-19 cases can be found in *Appendix A.1 – ESG Disclosure Topics & Accounting Metrics*.

	Year Ended December 31,			
	2020	2021	2022	
		ordable incidents per 10 kers, except fatalities)	)0 full-time	
Employee total recordable incident rate(a)(b)(c)	0.7	0.7	0.8	
Target – employee TRIR industry three-year average(d)	2.0	1.8	1.4	
Target – employee TRIR three-year average(e)	1.0	0.9	0.8	
Number of employee fatalities(c)	0	0	0	

(a) TRIR calculation: total number of incidents multiplied by 200,000 divided by the number of employee hours actually worked. The 200,000 represents the hours 100 employees worked per year. 100 employees working 40 hours per week, 50 weeks per year is a standard base for calculating incident rates.

- (b) Employee TRIR includes regular full-time, regular part-time, and temporary employees. It also includes Natural Gas Pipelines and Terminals business segment contractors we supervise on a day-to-day basis.
- (c) 2020, 2021, and 2022 employee rates and fatalities are calculated using incident classifications as of January 15, 2021, February 9, 2022, and February 28, 2023, respectively. Injuries or illnesses may later be reclassified.
- (d) The BLS typically publishes incident rate data for a given year in the fourth quarter of the following calendar year. We use the most recent BLS data available at the beginning of each year. We calculate the industry average using the weighted average of BLS industry rates based on codes from the North American Industry Classification System. For 2022, these include 4862-pipeline transportation of natural gas, 49319-other warehousing and storage, 4883-support activities for water transportation, and others. The 2020, 2021, and 2022 target industry rates are an average of the most recent three-year period. For example, to calculate our 2022 target industry TRIR, we first calculate the 2022 industry rate by weighing the 2020 BLS industry rates using our 2021 employee hours and then, to calculate our 2022 three-year average target industry TRIR, we averaged the annual industry TRIR values that were calculated for 2020, 2021, and 2022.
- (e) The three-year target is based on the average TRIR for previous three-year period.

#### Health, Safety, and Emergency Response Training Hours

Our health, safety, and emergency response training programs are described in *Section 2.2 Management System* of the *Sustainability Report*.

In 2022, our employees complete 142 thousand hours of health, safety, and emergency response training through our LMS, with each employee taking an average of 13 hours of training. This is equivalent to a roughly \$7.6 million annual investment in training for health, safety, and emergency response.<sup>20</sup>

The average number of employee hours spent on health, safety, emergency response, and other safety training topics not required under OSHA 1910, are provided below.

<sup>&</sup>lt;sup>20</sup> This is calculated by multiplying our total training hours by our employees' hourly median salary, calculated from the annual employee median salary disclosed in our 2023 Proxy Statement.

	Year Ended December 31,			
	2020	2021	2022	
Average hours per employee of health, safety, and emergency response training(a)(b)	13	12	13	

(a) Training time is assigned to the business segment the employee was active under at the end of the calendar year.

(b) Our health, safety, and emergency response training covers topics required under the U.S. 29 CFR Part 1910 OSHA standards; Canada Labour Code; and Mexican, state, and provincial equivalent programs, including training on: confined spaces, crane safety, electrical safety, emergency response, fall protection, fire protection, hazard communication, lockout/tagout, personal protective equipment, process safety management, and respiratory protection. This metric also includes position-relevant training on other safety topics that are not explicitly required under OSHA 1910, such as: safe driving, which addresses hazards such as distractions while driving and adverse weather conditions; back safety, which explores the factors that lead to back injuries such as physical activity, posture, and load positioning; and ergonomics, which explains how various postures and movements affect the body and how to mitigate ergonomic hazards.

#### Contractor Safety Metrics

Our contractor incident rates and the number of contractor fatalities are provided below. These incident rates and contractor work-related fatalities exclude self-reported COVID-19 cases classified as recordable incidents per OSHA guidance. Incident rates including work-related, self-reported COVID-19 cases can be found in *Appendix A.1 – ESG Disclosure Topics & Accounting Metrics*.

	Year Ended December 31,			
	2020	2022		
	(In number of recordable incidents per 100 full- workers, except fatalities)			
Contractor total recordable incident rate(a)(b)	0.4	0.2	0.2	
Target - contractor TRIR industry three-year average	_	—	1.6	
Target – contractor TRIR three-year average(a)(b)	—	—	0.4	
Number of contractor fatalities(b)	0	0	0	

(a) Contractor rates are based on incidents contractors incurred while doing work for us on a defined major project. Major projects are capital expansion projects that are active and meet a minimum total estimated project cost in the current year or prior years. If hours for a major project were not available, hours were estimated based on major project spend. Incidents for the contractor's employees operating our marine tankers are not included, but are included in the marine LTIR in Section 7.3 Marine Transportation Lost Time Incident Rate of the Sustainability Report.

(b) 2020, 2021, and 2022 rates and fatalities are calculated using incident classifications as of January 20, 2021, January 26, 2022, and January 24, 2023, respectively. Injuries or illnesses may later be reclassified.

#### 7.3 Marine Transportation Lost Time Incident Rate

(SASB Marine Transportation TR-MT-320a.1, GRI 403-9/11.9.10)

As described in *Section 6.4 Marine Transportation Spills and Releases to the Environment* of the *Sustainability Report*, Intrepid Ship Management operates our Jones Act marine transportation vessels. Intrepid maintains processes and procedures for reporting, investigating, and recordkeeping and determines the classification for each case of injury or illness related to our Jones Act marine vessels. In the event of a marine injury or illness, Intrepid engages contracted medical services, including:

- physician advice at sea,
- maritime telemedicine,
- physician and nurse case management, and
- arrangement and management of shore side medical services.

Intrepid has initiatives and programs for fleet safety officers and quality training focused on the following topics:

- safety leadership,
- sharing best practices, and
- increasing crew training on
  - job safety,
  - work permits, and
  - housekeeping.

Intrepid has also initiated job safety training programs to improve hazard recognition and incident prevention, and to prevent common musculoskeletal injuries.

We do not include Intrepid's incidents or hours worked in our contractor TRIR in Section 7.2 Employee and Contractor Safety Statistics and Average Hours of Health, Safety, and Emergency Response Training of the Sustainability Report.

Intrepid's LTIR on our marine transportation vessels are provided below.

		Year Ended December 31,		
	2020	2021	2022	
	(In number o	of lost time incidents pe	er 1,000,000 hours worked)	
Marine lost time incident rate(a)		0.6	0.7 0.7	

(a) Marine LTIR calculation: total number of lost time injuries multiplied by 1,000,000 divided by number of employee hours on-board per Oil Companies International Marine Forum Marine Injury Reporting Guidelines.

# 8.0 Supply Chain Management

(GRI 204-1/11.14.6, 407-1/11.13.2)

We developed a Supplier Code of Conduct that outlines our expectations for our consultants, contractors, suppliers, vendors, and business partners. Our Supplier Code of Conduct specifies that the third parties we work with are expected to adhere to these requirements and our core values. New suppliers are required to certify that they have reviewed our Supplier Code of Conduct when they are added to our supplier tracking system. We detail our expectations for the following topics:

- environmental, health, and safety,
- freedom of association and collective bargaining,
- forced labor,
- living wages and remuneration,
- working conditions,
- transacting business, and
- anti-corruption.

In addition to adhering to our Supplier Code of Conduct, we encourage our suppliers to communicate these expectations, or those set forth by a similar standard or policy, throughout their own business operations and supply chains.

Please see our Supplier Code of Conduct for more details on the expectations we have for our consultants, contractors, suppliers, vendors, and business partners located at <u>https://www.kindermorgan.com/Safety-Environment/ESG/Social</u>.

# Supplier Due Diligence

We conduct due diligence on potential new suppliers and regularly check our existing suppliers to monitor their compliance with our Code of Conduct, including steps to prevent corruption, and other social standards. Potential and existing suppliers are checked to verify whether they are excluded from receiving federal contracts, certain subcontracts, and certain types of federal financial and non-financial assistance and benefits.

We do not issue new contracts with suppliers that have an active company-wide exclusion in the U.S. Government's System for Award Management. Suppliers can be excluded for the following reasons:

- fraud,
- bribery,
- corruption,
- failure to pay minimum wage,
- violating federal criminal laws, and
- unfair trade practices.

If we identify an active exclusion for an existing supplier, we contact the supplier to inquire about the nature of the exclusion and to initiate reductions in our business with them. If, in response to our inquiries, a supplier can resolve its active exclusion with the U.S. Government, it may then continue to serve as our supplier.

We also screen service suppliers during our selection process using ISNetworld, a nationally recognized contractor management firm. We require service suppliers to provide documentation including:

- safety performance,
- environmental performance,
- operator qualifications,
- insurance,
- drug and alcohol tests results, and
- a management system questionnaire.

We require certain subcontractors to provide documentation including:

- safety performance,
- environmental performance, and
- operator qualifications.

We manage service supplier and subcontractor compliance with our requirements using a risk-ranking scorecard to grade each supplier as recommended, acceptable, or at-risk. Suppliers considered at-risk must go through a variance process and improve their grade, or the suppliers are not approved for work.

# Supplier Demographics

We aim to build relationships with diverse suppliers including minority-owned, women-owned, veteranowned, Indigenous Peoples, and small businesses. We review the diversity status of our suppliers and encourage diverse suppliers to bid on our projects. We are working to further diversify our supplier and contractor network.

We are members of the HMSDC, whose mission is to bring together major corporations and certified Minority Business Enterprises. Through this organization, we are introduced to Minority Business Enterprises who have earned a designation from HMSDC verifying their ability to meet corporate

standards and business requirements within their category or field. We believe these relationships are instrumental in developing and growing a robust diverse supplier base.

As an HMSDC member, we participate in the Supplier Diversity Advisory Committee. Within the Supplier Diversity Advisory Committee's Procurement Process subcommittee, we work with peer companies to define and document procurement program frameworks, assisting HMSDC members in developing and strengthening their strategic sourcing, contracting, and supplier qualification and management programs. In 2022, one of our employees was appointed Chair of the Supplier Diversity Advisory Committee for the 2023 term.

The percentage and equivalent dollars of our small business, minority-owned, women-owned, and veteran-owned supplier procurement spend as well as our local procurement spend is provided below.

	Year End December 31,				
	 2020		2021		2022
Percentage of small business, diverse, and veteran-owned supplier procurement spend vs. total supplier procurement spend(a)(b)	41 %		48 %		47 %
Small business spend	—		37 %		37 %
Minority-owned supplier spend	—		3 %		1 %
Women-owned supplier spend	—		6 %		6 %
Veteran-owned supplier spend	—		1 %		1 %
Multiple-category supplier spend(c)	_		1 %		2 %
Small business, diverse, and veteran-owned supplier spend (millions)(a)	\$ 1,675	\$	1,249	\$	1,511
Local procurement spend(millions)(d)	—		_	\$	3,225

(a) For 2020, small business, minority-owned, women-owned, and veteran-owned suppliers are based on supplier diversity status as designated by Dun & Bradstreet as of Q4 2020. For 2021 and 2022, we determined supplier diversity status quarterly through Dun & Bradstreet; if a supplier was diverse in any quarter, it is reflected as diverse in our overall statistics for 2021 and 2022.

(b) Procurement spend is expenditures related to the purchase of goods and services under the purview of our Procurement department. This excludes legal costs, benefit costs, payments to joint venture partners and intercompany payments, payments to customers, and other expenditures outside the scope of our Procurement department, e.g., royalties, tax assessments, and permit fees.

(c) Multiple-category supplier spend is defined as having at least two of the following categories: minority-owned, women-owned, and veteran-owned.

(d) Local procurement spend is procurement spend with companies headquartered or having offices located in the U.S. and this was 99.7% of total procurement spend in 2022.

#### Service Supplier Safety

We use a multi-faceted approach to foster a culture of safety among our service suppliers, i.e., contractors. Our approach begins with our due diligence processes, described above. Additional actions we undertake to integrate a culture of safety with our service suppliers include:

- facility safety orientations,
- field, project, and desktop audits,
- job evaluations,
- training,
- benchmarking and safety statistical analysis, and
- safety inspector placement and training.

Our contractor safety statistics are shown in Section 7.2 Employee and Contractor Safety Statistics and Average Hours of Health, Safety, and Emergency Response Training of the Sustainability Report.

# For more information, see our Contractor Environmental/Safety Manual at <u>https://www.kindermorgan.com/WWWKM/media/Documents/Contractor%20Safety%20Manual/KMContractorSafetyManual.pdf</u>.

#### Supplier Audits

We monitor our service suppliers' environmental and safety performance through multiple audit programs. We conduct both random and prioritized audits based on a supplier's past performance and the amount of risk the project presents. Our field audits follow our Field Audit Network process, which describes the steps for preparing for the audit, conducting the audit, and uploading the findings and recommendations to our internal tracking systems. Audits are completed by our internal auditors or by third-party auditors.

In addition to our regular service supplier audits, we maintain other risk-specific supplier audits such as audits for asbestos remediation contractors and waste treatment, storage, disposal, and recycling facilities.

Our supplier monitoring statistics are provided below.

	Year Ended December 31,				
	2020	2021	2022		
Service supplier monitoring(a)					
Percentage of service suppliers subject to performance audits	100 %	100 %	100 %		
Number of service suppliers audited(b)	548	503	501		
Percentage of service suppliers audited(b)	16 %	15 %	14 %		

(a) Includes field and desktop audits.

(b) Includes active, medium- and high-risk service suppliers. Audits are generally not performed for inactive, low-risk, or minimal-risk service suppliers.

# 9.0 Waste Management

(SASB Refining & Marketing EM-RM-150a.1, GRI 306-2/11.5.3, GRI 306-3/11.5.4, GRI 306-4/11.5.5)

We are committed to managing our hazardous and non-hazardous waste through multiple strategies for both environmental and economic benefits. Our routine business operations generate various types of waste including:

- municipal waste,
- construction and demolition debris,
- exempt oil and gas exploration and production waste, and
- hazardous liquid and solid waste.

Our employees receive position-relevant training about:

- products we handle and use;
- safe practices for working with hazardous waste;
- site-specific emergency plans;
- spill prevention, control, and countermeasure plans; and
- documentation methods.

We seek to reduce the amount of waste generated throughout our operations by:

- reducing sources of waste,
- substituting less-hazardous or non-hazardous products, and
- reusing materials.

# Hazardous Materials Management

Hazardous waste that cannot be reduced or reused is shipped to permitted facilities for recycling, energy recovery, treatment to remove the hazardous constituents, or disposal. We profile, manage, and track our hazardous waste. By tracking hazardous waste from generation to disposal, we reduce the likelihood of environmental impacts and potential long-term liabilities. We use software to track and internally report the amount of hazardous waste generated and recycled as well as third-party transportation, treatment, and disposal details.

The amount of hazardous waste generated and the percentage recycled are provided below.

	Yea	Year Ended December 31,			
	2020	2021	2022		
	(In metr	(In metric tons, except percentages)			
Amount of hazardous waste generated(a)(b)	6,255	4,836	3,580		
Percentage recycled(c)	54 %	64 %	54 %		

(a) Values as of April 2023 for 2022 data, May 2022 for 2021 data, and July 2021 for 2020. They exclude universal hazardous waste and hazardous waste generated within Canada and Mexico. Hazardous waste weights are reported in the year the waste was shipped.

(b) States must follow the EPA's hazardous waste classifications although they may create regulations for additional state specific hazardous waste. Hazardous waste only includes waste classified by the EPA as hazardous. Consequently, waste with only state hazardous waste codes, but no EPA hazardous waste codes are excluded.

(c) Hazardous waste recycled from U.S. operations includes shipments with the reclamation and recovery handling type and the handling codes H010, H020, H039, H050, and H061.

Due to the uneven nature of hazardous waste generation in our operations, there can be large changes in the amount of hazardous waste generated and recycled year-over-year. The primary factors that can affect waste generation during a given year include the number and size of construction, remediation, and maintenance activities.

#### Non-Hazardous Waste Management – Business Waste Recycling

Our efforts to reduce non-hazardous waste include business waste recycling programs in our Houston headquarters building and educating our employees about recycling opportunities. The recycling program at our Houston headquarters is a single-stream program that includes office paper, cardboard, glass, plastic, and aluminum. We send our retired or unused IT equipment, company-wide, to third-party companies who break down the equipment into materials that can be recycled. When we close or reduce square footage in existing offices, we inventory furniture and send items to nearby offices or donate it to local non-profit organizations.

The amount of recycled business waste from our Houston headquarters is provided below.

	Year Ended December 31,			
	2020	2021	2022	
		(In tons)		
Recycled aluminum, cardboard, glass, paper, and plastic	46	72	72	

#### Chemical Management

As part of Emergency Planning and Community Right-to-Know Act Tier II reporting, we maintain an inventory of hazardous chemicals stored at many of our facilities. Our facilities that exceed reporting thresholds submit annual reports documenting the quantity and type of hazardous material on site. These reports help agencies such as local fire departments, local emergency planning committees, and state

emergency response commissions prepare for chemical emergencies. More information about how we work with first responders to prepare for emergencies is detailed in *Section 12.3 Business Continuity Planning and Emergency Preparedness* of the *Sustainability Report*.

# **10.0 Competitive Behavior**

(SASB Midstream EM-MD-520a.1)

Our policies prohibit improper conduct that is intended to impede competition, eliminate a competitor, or control prices or services in a market. We strive to compete fairly and honestly in each phase of our business and to conduct our operations in compliance with applicable federal, state, provincial, and foreign antitrust laws.

Some of our U.S. natural gas, refined petroleum products, and crude oil transmission pipelines are subject to regulation by the FERC under the NGA or ICA, or by various state regulators including the Railroad Commission of Texas. These regulations set forth the rules and regulations governing the services we provide, and in many instances require that we maintain posted tariffs that set forth the rates we charge for providing transportation and storage services on our regulated pipelines.

Our Mexico assets are regulated by various Mexican regulatory agencies and operate under a permit that establishes certain conditions and specifications, including for maintenance, safety, and economics.

For more information, see our Code of Conduct at <u>https://www.kindermorgan.com/WWWKM/media/</u> Documents/Governance/KM\_Code\_of\_Business\_Conduct\_and\_Ethics.pdf.

Our monetary losses as a result of legal proceedings associated with federal pipeline and storage, rate, access, and pricing regulations are provided below.

		Year Ended	December 3	31,		
	2020	20	)21		2022	
		(In m	illions)			
Total amount of monetary losses as a result of legal proceedings associated with federal pipeline and storage, rate, access, and pricing regulations(a)	\$ 1.	3 \$	0	\$		0

(a) Excludes legal fees and FERC rate settlements. Includes the amount of fines or settlements associated with the enforcement of federal pipeline and storage regulations, related to rates, pipeline access, price gouging, or price fixing, enacted by the FERC, U.S. Commodity Futures Trading Commission, U.S. Federal Trade Commission, CER, Mexico Energy Regulatory Commission, or civil actions (e.g., civil judgment, settlements, or regulatory penalties), or criminal actions (e.g., criminal judgment, penalties, or restitutions) asserted by an entity, whether a regulatory agency, business, or individual.

The settlement paid in 2020 was for matters that were alleged to have occurred more than a decade prior to our ownership and control of El Paso Corporation and El Paso Marketing L.P. Beginning in 2003, several lawsuits were filed by purchasers of natural gas against El Paso Corporation, El Paso Marketing L.P., and numerous other energy companies. The purchasers claimed the energy companies conspired to manipulate the price of natural gas by providing false price information to industry trade publications that published gas indices. These cases have been settled or dismissed. The payment made in 2020 was for a contractual true-up claim arising from a previous El Paso Corporation and El Paso Marketing L.P. settlement.

Our policies prohibit us and our employees from engaging in corrupt practices and provide guidelines on acceptable behavior. Our employees, directors, agents, contractors, business partners, and third-party representatives are prohibited from giving or accepting bribes, kickbacks, or other improper payments in connection with our business. While the U.S. Foreign Corrupt Practices Act contains a narrow exception that allows for small-dollar facilitation payments to be made to a foreign official in order to expedite routine governmental actions that are non-discretionary in nature, our policies do not allow facilitation payments of any kind.

As part of our management system for preventing corruption and bribery, our internal controls require that transactions be:

- accurately described with an explanation of the purpose of the transaction;
- sufficiently supported by documentation; and
- appropriately approved by the required level of management, based on the dollar value of the transaction, prior to entering into a commitment and again before processing for payment.

Additionally, we have internal controls for adding payees to our accounting system and for approving payments to vendors. Our controls require review and approval by one or more individual(s) a level higher in our accounting system reporting chain than the person requesting the new payee or payment.

The amount of legal or regulatory fines, settlements, or penalties associated with bribery and corruption is provided below.

		Y	ear Enc	led Decei	nber 3	81,		
	 2020			2021			2022	
Legal or regulatory fines, settlements, or penalties associated with bribery and corruption	\$	0	\$		0	\$		0

For more information, see our Code of Conduct at <u>https://www.kindermorgan.com/WWWKM/media/</u> Documents/Governance/KM\_Code\_of\_Business\_Conduct\_and\_Ethics.pdf.

# **12.0 Operational Safety**

# 12.1 Asset Integrity Management

We work to provide safe, reliable, and efficient system operations. Our employees use our OMS to assess operational risks related to our assets. We develop programs, policies, and procedures to address those risks. Our primary tools for maintaining safe operations include our asset IMPs.

#### Pipelines and Liquids Terminals

We conduct activities to monitor the integrity of our transmission pipelines and facilities and liquids terminals, including:

- monitoring transmission pipelines and liquids terminals 24 hours a day, seven days a week by trained personnel using SCADA computer systems;
- visually inspecting pipeline rights-of-way by air or ground on a regular basis;

- performing internal transmission pipeline inspections periodically using smart pigs;
- using cathodic protection to protect pipelines, storage tanks, and storage wells from external corrosion;
- evaluating new technologies for maintenance and integrity testing;
- using our public awareness program, described in *Section 16.1.1.1 Public Awareness Program* of the *Sustainability Report*, to communicate with stakeholders in an effort to prevent third-party damage to our pipelines;
- participating in the Pipeline Safety Management Systems Group to share best practices for safe operations;
- working to develop and improve our business processes, operations procedures, and risk and opportunity assessments;
- maintaining and improving our integrity management procedures in compliance with applicable regulations;
- maintaining roles and responsibilities as defined in our OMS and integrity management procedures;
- providing employee training; and
- executing quality assurance programs such as third-party audits and application of performance metrics.

Our OMS addresses the oversight of and fosters a culture of excellence and continuous improvement of our asset IMP. It includes annual, quarterly, and monthly reviews.

- The annual review is attended by our COO, each business segment President, and senior pipeline integrity management team members. The review may include any known threats for each business segment and covers assessment methodologies, effectiveness, repair criteria and reassessment needs, and the adequacy of the IMP. This review may include new technology that could enhance pipeline safety, if applicable.
- The quarterly and monthly reviews include progress and plans for reducing risks associated with high consequence assets and operations.

More information on how we use smart pigs as part of our IMP can be found on our *Maintaining our pipelines' integrity through in-line inspections* case study video and fact sheet at <u>https://www.kindermorgan.com/Safety-Environment/ESG/Case-Studies</u>.

# Underground Natural Gas Storage Facilities

We maintain risk management programs and monitoring systems for well and reservoir integrity and deliverability at each of our underground natural gas storage facilities. Our operations and maintenance procedures are subject to periodic inspections and audits by regulators and our own internal auditors that are independent of the business segments. We have procedures in place to meet or exceed regulations to maintain the safety and reliability of our underground natural gas storage facilities over the long term.

We collaborate with industry regulators and other stakeholders to improve standards for and reliability of underground natural gas storage by:

- co-leading the updates of API RP 1170 Design and Operation of Solution-mined Salt Caverns Used for Natural Gas Storage and API RP 1171 Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs;
- participating on PHMSA's Integrity of Underground Natural Gas and Hydrogen Storage team that recommends funding of research projects to enhance the reliability and safety of underground natural gas storage in aquifers, depleted reservoirs, and salt caverns;

- chairing the PRCI's underground storage committee that is using advanced tools to enhance the understanding of the effect of hydrogen on storage casing integrity in underground natural gas storage facilities; and
- sharing best practices with industry groups such as the AGA and PRCI.

# 12.2 Damage Prevention

Because one of the greatest operational risks to our pipelines is line strikes by third parties, we support organizations whose mission is to promote safe digging, including:

- *Common Ground Alliance* we are a platinum-level sponsor and regularly promote Common Ground Alliance's message to "call 811 before you dig" on our website and social media channels;
- *Pipeline Ag Safety Alliance* a member-driven organization whose mission is to prevent damage to buried pipelines through education and improved communication with agricultural communities;
- *Drain Tile Safety Coalition* a nonprofit coalition sponsored by pipeline and utility operators and One Call Centers committed to improving drain tile safety and preventing accidents involving underground infrastructure; and
- Area Damage Prevention Councils, State One Call Centers, and One Call Boards in the states where we operate.

# 12.3 Business Continuity Planning and Emergency Preparedness

Our business continuity plans are intended to help us respond quickly in an emergency. They also address preparations for and recovery of functions to address potential business or supply chain disruptions.

We maintain site-specific emergency response plans for notifying and communicating with external stakeholders, including regulatory agencies, and actions to respond quickly and efficiently in an emergency. We have backup control centers in different parts of the country so we can relocate our critical control room personnel and maintain operations during emergencies. Our corporate Crisis Support Team augments our business segments' existing emergency response procedures and capabilities with additional resources as needed. We monitor events that present risks to our assets by utilizing GIS platforms and other tools to identify potential operational disruptions. We provide certain employees and contractors with emergency response training. Our emergency response personnel are trained to use the National Incident Management System Incident Command System and to respond to emergencies by:

- securing the safety of the public, our employees, and the environment;
- promptly notifying governmental response organizations and agencies;
- engaging with the local utility provider;
- managing the emergency;
- coordinating response activities; and
- restoring service.

As an example of our efforts to keep our employees and communities safe and stay ahead of everchanging regulatory requirements, in 2022, our teams completed additional Incident Command System training in anticipation of the implementation of California-specific requirements for more robust emergency response processes.

#### Pandemic Preparedness

Since 2006, we have had a Pandemic Preparedness Plan and Pandemic Preparedness Committee to plan, reduce risk, and mitigate impacts to employees and critical business functions. Our Pandemic Preparedness Committee, which consists of leaders across our business segments and corporate functions, is charged with determining the appropriate planning and response measures should a pandemic occur. The Pandemic Preparedness Committee has regularly scheduled meetings to evaluate potential events presenting risk to our operations.

Our Pandemic Preparedness Plan generally follows guidance set forth by the following organizations:

- World Health Organization,
- Centers for Disease Control and Prevention,
- U.S. Food and Drug Administration,
- OSHA,
- API,
- state and local health agencies, and
- other governmental regulatory agencies.

Based on the size and scope of an event, our crisis support team works with our business segments and corporate functions to implement a standardized pandemic tracking process. Functional areas report back to the Crisis Support Team, giving us the ability to detect abnormal clusters of pandemic-like illnesses to better identify potential risk areas and take corrective actions.

To help prevent the spread of disease during a pandemic, we may implement certain non-medical interventions, such as:

- educating our employees and raising employee awareness with the latest Centers for Disease Control and Prevention guidance;
- having our office-based employees work remotely;
- providing return to the office safety guidelines to remote employees prior to their return;
- enhancing our workplace cleaning procedures, including improving office air circulation and filtration systems;
- establishing a secure supply chain to provide the necessary personal protective equipment to our workforce;
- establishing testing programs for early detection, contact tracing, and mitigation;
- hosting on-site vaccine distribution clinics;
- · promoting social distancing and workforce modifications; and
- isolating employees that perform critical work tasks and job functions.

# First Responder Joint Exercises

To better prepare personnel and practice our emergency response, we regularly conduct joint mock emergency exercises with first responders. By conducting these exercises, employees and emergency responders are not only able to test their equipment, personnel, and procedures, but also to meet and work together face-to-face prior to an actual emergency.

Example drill scenarios include, among others, the following:

- pipeline ruptures, releases, and line strikes;
- severe weather events, e.g., hurricanes, floods, tornadoes, and blizzards;
- wildfires; and
- security incidents, including physical or cyber-attacks.

# Natural Disaster Preparedness and Response

We plan for and have established procedures for responding to a wide variety of natural disasters. We maintain hazard identification and risk assessments for our transmission pipelines to identify potential risks and natural disaster scenarios and develop response plans. This planning involves local response officials, other operators and their facilities, and land and right-of-way personnel.

We use a variety of tools to forecast and monitor weather-related events, including:

- weather event and tide level monitoring through news feeds and third-party services;
- GIS mapping of real-time situational data to monitor forecasted paths and impacted areas, including supply chain resources;
- internal communication to provide updates to affected personnel and management; and
- annual testing of backup work locations that support critical business functions.

In 2022, Hurricane Ian made landfall first in Florida and then in South Carolina. Our preparations focused on safety, potential effects on the environment, mitigating impacts to operational assets, and restoration of services impacted by the storm. Our crisis support team provided the following services:

- established internal incident command response structure;
- staged standby materials and services for potential hurricane impacts;
- · deployed backup power generators, electrical equipment, and repair services for our assets; and
- coordinated resource sharing across business segments in impacted areas.

# Emergency Response Notification System

We maintain an emergency response notification system to inform internal support personnel and enable efficient communication and decision-making in response to emergency events, including reporting to regulatory agencies. Our process facilitates real-time communication of emergency events to our personnel with incident response or reporting responsibilities. Once an incident has ended, we determine and document lessons learned and track corrective actions, if any, to completion.

# Emergency Response Supply Chain Support

We endeavor to maintain a reliable supply chain to operate under various conditions. For planning prior to an emergency, we maintain:

- lists of emergency response contractors, supply vendors, transportation and fuel sources, and our emergency response equipment;
- redundant resources in critical areas of our emergency response supply chain; and
- procedures to temporarily raise spending authority to assist affected employees and increase security resources.

# 12.4 Reportable Pipeline Incidents

(SASB Midstream EM-MD-540a.1)

One of our primary goals is to prevent pipeline incidents. Should an incident occur, we investigate the causes and contributing factors in an effort to prevent similar incidents going forward. Despite our prevention efforts, incidents occurred in the reporting period.

The number of reportable pipeline incidents and percentage of reportable pipeline incidents that are significant are provided below.

	Year Ended December 31,			
	2020	2021	2022	
Number of reportable pipeline incidents(a)(b)(c)	55	37	39	
Percentage of reportable pipeline incidents that are significant(d)	45 %	46 %	56 %	

(a) Reportable hazardous liquid pipeline incidents include explosions or fires not intentionally set by the operator, releases of five gallons or more (excluding releases of less than five bbls associated with pipeline maintenance activities), a fatality, an injury necessitating hospitalization, or estimated property damage, including cost of clean-up and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000.

- (b) Reportable gas gathering, transmission, storage, and distribution incidents include: (1) an event that involves a release of gas from a pipeline, gas from an underground natural gas storage facility, liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences: (i) a death, or personal injury necessitating in-patient hospitalization; (ii) estimated property damage of \$50,000 or more in 2020, and per January 2021 PHMSA rule change, \$122,000 as of March 2021, including loss to the operator and others, or both, but excluding cost of gas lost; (iii) or unintentional estimated gas loss of three MMcf or more; (2) an event that results in an emergency shutdown of an LNG facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident; and (3) an event that is significant in the judgment of the operator, even though it did not meet the criteria of item (1) or (2) of this definition.
- (c) The number of pipeline incidents and significant incidents reported for 2020, 2021, and 2022 uses data as of March 2021, March 2022 and March 2023, respectively.
- (d) Significant reportable pipeline incidents are defined as an incident that includes any of the following conditions: (1) a fatality or injury requiring in-patient hospitalization (2) \$50,000 or more in total costs, measured in 1984 dollars. For 2020, 2021, and 2022, the thresholds in 1984 dollars are \$108,926, \$111,098, and \$115,815, respectively. (3) Highly volatile liquid releases of five barrels or more or other liquid releases of 50 barrels or more; and (4) Liquid releases resulting in an unintentional fire or explosion. Gas distribution incidents caused by a nearby fire or explosion that impacted the pipeline system are excluded from this definition. For highly volatile liquid and CO<sub>2</sub> releases, PHMSA combines the unintentional and intentional release volumes to determine if the incident meets the significant liquid release threshold.

In each year presented above, the most frequent reason that reported incidents were categorized as significant was due to total incident costs exceeding the monetary threshold of \$50,000 in 1984 dollars, or \$115,815 for 2022.

#### Reporting-Regulated-Only Gathering Pipeline Incidents

PHMSA's RROG rule, extending the annual, accident, and safety related condition reporting requirements to all hazardous liquid gathering lines, went into effect January 1, 2021. The hazardous liquid gathering lines covered by this rule are defined as RROG. We are reporting these incidents separately because the other requirements of PHMSA 49 CFR 195 – Pipeline Safety: Transportation of Hazardous Liquids by Pipeline regulation do not apply to these gathering lines.

The number of reportable RROG pipeline incidents and percentage of reportable RROG pipeline incidents that are significant are provided below.

	Year Ended De	cember 31,
	2021	2022
Number of reportable RROG pipeline incidents(a)(b)(c)	8	11
Percentage of reportable RROG pipeline incidents that are significant(d)	13 %	18 %

(a) Reportable RROG hazardous liquid pipeline incidents include explosions or fires not intentionally set by the operator, releases of five gallons or more (excluding releases of less than five bbls associated with pipeline maintenance activities), a fatality, an injury necessitating hospitalization, or estimated property damage, including cost of clean-up and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000.

(b) The number of reportable RROG pipeline incidents and significant incidents reported for 2021 and 2022 uses data as of March 2022 and March 2023, respectively.

(c) The Terminals business segment does not have any pipelines to which PHMSA RROG rules apply.

(d) Significant reportable RROG hazardous liquid pipeline incidents are defined by SASB as an incident that includes one of the following conditions: a liquid release volume greater than or equal to 50 bbls, a highly volatile liquid release greater than five bbls, a fatality, an injury necessitating hospitalization, liquid releases resulting in a fire or explosion, or total cost that exceeds \$50,000 in 1984 dollars. For 2021 and 2022, the threshold in 1984 dollars is \$111,098 and \$115,815, respectively. For highly volatile liquid and CO<sub>2</sub> releases, the unintentional and intentional release volumes were combined to determine if the incident meets the significant liquid release threshold. These incidents are not classified as significant by PHMSA.

# **12.5** Natural Gas and Hazardous Liquid Pipelines Inspection (SASB Midstream EM-MD-540a.2)

We aim for safe operations and zero pipeline incidents. As described in *Sections 2.2 Management System* and *12.1 Asset Integrity Management* of the *Sustainability Report*, we use risk management programs and state-of-the-art technology for maintenance and integrity testing at our transmission pipelines and facilities and liquids terminals facilities. We work to meet or exceed the regulatory requirements for testing and inspecting our pipelines, find opportunities to improve, and apply sound integrity management principles and technologies.

The number of inspections we make varies from year to year depending on our annual integrity program requirements.

The percentage of natural gas pipelines and hazardous liquid pipelines inspected through ILIs, pressure tests, direct assessments, or other technologies are provided below.

	Year	Year Ended December 31,				
	2020	2021	2022			
Percentage of natural gas pipelines inspected(a)(b)	20 %	15 %	27 %			
Percentage of hazardous liquid pipelines inspected(a)(b)	28 %	25 %	38 %			

(a) For segments of pipe that are inspected more than once for the same types of anomalies during the same calendar year, the mileage inspected used in this calculation is counted once. In some limited instances where multiple inspections for different types of anomalies are conducted on the same segment in the same year, the mileage for each inspection is counted separately.

(b) For 2022, the GIS pipeline mileage used to calculate the percentage of natural gas and hazardous liquid pipelines inspected is as of the third quarter of 2022. It excludes production and flow lines in the CO<sub>2</sub> business segment.

From 2020 through 2022, approximately 38,650 miles of our natural gas pipelines and 10,980 miles of hazardous liquid pipelines were assessed using ILIs, pressure testing, or direct assessments.

# 13.0 Management of Changes to the Legal and Regulatory Environment

(SASB Exploration & Production EM-EP-530a.1)

Our businesses are regulated by multiple government agencies, including the EPA, PHMSA, FERC, CER, ASEA, OSHA, USCG, and other federal, state, provincial, and local agencies. To identify, assess, and manage new ESG regulatory risks and opportunities, we maintain a process for identifying, communicating, and verifying compliance with changes in applicable regulatory requirements. Dedicated internal regulatory personnel work with internal and third-party subject matter specialists, industry trade groups, and agency personnel to identify changes in the following topics that may affect our operations:

- environmental, personal safety, process safety, and pipeline safety, hazardous material transport, climate change, cyber and physical security regulatory requirements, interpretations, and guidance;
- industry codes and standards; and
- external incident reports, including:
  - U.S. National Transportation Safety Board and Chemical Safety Board incident investigations,
  - CER and PHMSA advisory bulletins and failure reports, and
  - ASEA reports.

We distribute a monthly regulatory update of proposed and final published rules to internal personnel with compliance roles and responsibilities. Our compliance and business segment personnel evaluate which

proposed requirements warrant providing our feedback, assess the potential impact of proposed rules, and coordinate potential compliance approaches.

In the U.S., we engage with policy makers from both major political parties at the federal, state, and local levels. We generally advocate for fair and transparent policies that are practical, economical, and have a positive benefit to our stakeholders and customers. The focus of our engagement is on policy that impacts our business including, but not limited to, pipeline safety policies, environmental and safety regulations, methane regulation, cybersecurity policies, and corporate taxation. We also engage in and support incentives that could help advance the use of CCUS, RNG, renewable diesel, and hydrogen.

We comment on the formulation of legislative and regulatory policies at the federal, state, provincial, and local levels at times as an individual company but, more often, through trade associations. These trade associations primarily include INGAA, Energy Infrastructure Council, GPA Midstream, AGA, LEPA, and the International Liquid Terminals Association. We prefer that the trade associations and other business organizations with which we work take positions, such as those related to climate change, that are consistent with our own. We recognize that this may not always be possible due to the variety of companies and other stakeholders that work with these organizations. However, we continue to work with these groups to develop solutions and find common ground on issues that are relevant to our industry.

In 2022, we were members of the following trade associations, which are 501(c)(6) organizations under the Internal Revenue Code, with dues in excess of \$25,000:

- American Gas Association,
- American Maritime Partnership,
- GPA Midstream,
- Interstate Natural Gas Association of America,
- Liquid Energy Pipeline Association, formerly Association of Oil Pipe Lines,
- Pipeline Research Council International,
- Southern Gas Association,
- Texas Oil and Gas Association,
- Texas Pipeline Association, and
- The Permitting Institute.

In 2022, our employees served on the board of directors for the following trade associations:

- Alabama Natural Gas Association,
- American Chemistry Council,
- Florida Energy Pipeline Association,
- GPA Midstream,
- International Liquid Terminals Association,
- Interstate Natural Gas Association of America,
- Liquid Energy Pipeline Association, formerly Association of Oil Pipelines,
- Natural Gas Association of Georgia,
- Southern Gas Association,
- Texas Oil and Gas Association, and
- Texas Pipeline Association.

Our Board oversees our participation in national trade associations through periodic reports by our COO to our Board's EHS Committee.

We generally find that it is more effective to take a collaborative approach in identifying and addressing proposed regulatory changes related to our assets and operations. We often share data with industry groups and regulatory agencies and engage in discussions with both about potential regulatory changes and compliance strategies.

We track applicable final regulations, interpretations, and guidance in our internal database. Using the database, business segment and corporate compliance professionals verify that they have reviewed the updated regulations, interpretations, and guidance that may impact their business and completed the necessary compliance activities. The COO and business segment COOs review progress quarterly. The COO briefs our Board's EHS Committee on the most significant proposed and final regulatory changes, any comments we have provided on proposed regulations, and any resulting compliance activities.

# **13.1 Political Contributions and Lobbying Expenses** (GRI 415-1/11.22.2)

As outlined in our Code of Conduct, it is our policy to not sponsor employee-funded political action committees nor make contributions to political parties or candidates for public office. This policy extends to 527 groups, 501(c)(4) groups, and independent political spending.

Contributions we make toward ballot measures, lobbying or lobbying groups, and trade associations are intended to promote the interests of our company and its stockholders and are made without regard to the private political preferences of our executives. Any lobbying expenditures, including by trade associations, are limited to expenses related to advocating on matters of public policy and are not made to political campaigns, candidates, or political parties. Our CEO, President or General Counsel signs-off on and oversees any contributions made toward ballot measures, lobbying, or lobbying groups.

We encourage employees, contractors, and others affiliated with us to vote and keep informed on political matters and to support, with their own funds and on their own time, the candidates, or parties of their choice. Employees may not use the company's funds to contribute to political parties or candidates for public office. We also encourage and support employees who take a role in community affairs in accordance with our Code of Conduct.

While we made no contributions to political campaigns, candidates, or parties, the payments we made to lobbyists or lobbying organizations, our trade associations dues, the portion of our trade association dues attributed to lobbying, and payments made in relation to ballot measures are provided below.

	Y	ear En	ded December 3	81,	
	 2020		2021		2022
		(I	n thousands)		
Contributions to political campaigns, candidates, and parties	\$ 0	\$	0	\$	0
Payments to lobbying organizations(a)	\$ 197	\$	514	\$	846
Trade association dues(b)	\$ 2,477	\$	2,091	\$	2,139
Non-deductible portion of trade association dues attributed to lobbying and political expenditures(b)	\$ 222	\$	216	\$	170
Payments made in relation to ballot measures	\$ 0	\$	0	\$	0

(a) These are not payments for political expenditures, i.e., political campaigns, candidates, and parties.

(b) Includes only 501(c)(6) organizations under the Internal Revenue Code for which our dues were greater than or equal to \$25,000 for the calendar year. 2020 and 2021 were revised to include only 501(c)(6) organizations and to add a trade association that had not been reported.

# Climate-Related Lobbying and Trade Associations

# Direct Lobbying

We direct our lobbying efforts toward topics applicable to our business, including non-climate issues like taxes and pipeline safety. We do not believe any of our 2022 direct lobbying efforts were contrary to the goal of the Paris Agreement to limit global average temperature rise. Examples of our direct climate-related lobbying activities include the following:

- We provided educational information to U.S. House and Senate offices during the past Congress as they considered a fee on methane emissions as part of the budget reconciliation process. As originally introduced in the Senate, the proposed stand-alone bill was administratively unworkable we made suggestions to make the proposal fairer and more efficient.
- We advocated for reasonable incentives for CCUS, including in stand-alone legislation and as part of the IRA 2022. Provisions reflecting our advocacy were included in the IRA 2022.
- We are now working with various coalitions to help inform the development of U.S. Treasury Department guidance related to tax credits for CCUS and renewable natural gas.
- We worked with the Texas Railroad Commission to help structure their application to the EPA for primacy over the permitting of Class VI wells for CCUS in a way that will help the viability of CCUS in Texas.

#### Trade Association Alignment

In 2022, we reviewed the alignment between us and trade associations to whom we paid annual dues greater than \$25,000, where a portion of those dues went to lobbying. We reviewed each association's current policy statements, climate-related political lobbying efforts, and other publicly available information to determine their alignment with our ESG strategy. The results on whether or not these trade associations aligned with our lower carbon future and methane mitigation strategy are described below.

When determining alignment, we considered the following, which are part of our lower carbon future and methane mitigation strategy and described in greater detail in *Section 1.0 Introduction* of the *Sustainability Report*:

- Energy Transition and Lower Carbon Future we support a lower carbon future, including helping our customers to meet their GHG goals through:
  - expanding our natural gas transmission, responsibly sourced natural gas, RNG, and LNG businesses;
  - investing in midstream assets that support the transportation and handling of renewable fuels, including renewable diesel and sustainable aviation fuel, and associated feedstocks;
  - pursuing lower carbon commercial opportunities; and
  - supporting the advancement of CCUS, hydrogen, and renewable opportunities.
- Methane Mitigation we recognize that methane emissions associated with the production, transportation, storage, and distribution of natural gas should be minimized so that those emissions do not diminish the climate advantage of natural gas over other fuels.

Association	Association Climate Position	Alignment with our Lower Carbon Future and Methane Mitigation Strategy
American Gas Association	AGA is committed to reducing GHG emissions through smart innovation, new and modernized infrastructure, and advanced technologies that maintain reliable, resilient, and affordable energy service choices for consumers.	Aligned

Association	Association Climate Position	Alignment with our Lower Carbon Future and Methane Mitigation Strategy
American Maritime Partnership	American Maritime's Emission Reduction Goals: 1) Absolute GHG emission reduction of 50% by 2030, 2) Reducing the carbon intensity of maritime shipping - 40% by 2030 and 70% by 2050.	Aligned
Gas Processors Association Midstream	GPA Midstream Association's mission is to responsibly serve and represent the midstream energy industry through collaborative expertise, safety and advocacy from its member companies and staff, focused on sustainability, to the benefit of all.	Partially aligned - GPA's comments on the EPA methane regulation were not fully consistent with our methane mitigation strategy. We will remain a member because GPA's advocacy on non-climate topics is important to us.
Interstate Natural Gas Association of America	INGAA's members recognize the need to build upon our efforts and to continue to act to address global climate change by advancing our commitment to minimize and reduce GHG emissions, including methane emissions. INGAA members are determined to lead the effort to modernize our nation's interstate natural gas delivery network infrastructure with a goal of reducing emissions and helping minimize the impact on our climate. Our commitments will include an active effort to do even more to address climate change by supporting renewables, as well as new and innovative technologies and process enhancements that will further reduce emissions. Working together, we are determined to support sound public policies that protect the environment while ensuring a safe, reliable and resilient energy transmission system that provides the affordable energy so many of our businesses and families need.	Aligned
Liquid Energy Pipeline Association (formerly AOPL)	LEPA recognizes climate change is a challenge and is committed to promoting innovations that minimize pipeline GHG emissions while meeting the world's energy needs.	Aligned

Association	Association Climate Position	Alignment with our Lower Carbon Future and Methane Mitigation Strategy
Texas Oil and Gas Association	TXOGA members continue to have an essential role to play by delivering meaningful GHG emission reductions and innovative solutions. To further achieve climate progress, GHG emission-reduction efforts are a global responsibility with participation from all sectors and industries. TXOGA supports public policy that recognizes oil and natural gas are indispensable, facilitates meaningful GHG emissions reductions, and balances economic, environmental, energy and national security needs while promoting innovation. TXOGA seeks to be part of the solution to climate change. TXOGA is a member of the Texas Methane & Flaring Coalition established in December 2019 to develop solutions to reduce flaring and methane emissions with a goal to end routine flaring by 2030.	Aligned
Texas Pipeline Association	TPA is one of seven trade associations, along with more than 45 companies, who are part of the Texas Methane & Flaring Coalition, which is working to identify and promote operational and environmental recommended practices to minimize flaring and methane emissions.	Aligned

# 13.2 Tax Transparency

(GRI 201-1/11.14/2/11.21.2, GRI 201-4/11.21.3, GRI 207-1/11.21.4)

We are committed to complying with tax laws, as well as following the spirit of those laws, in the countries in which we operate. In line with our core values of integrity and accountability and our Code of Conduct, we manage our tax affairs by applying responsible tax practices and acting transparently. Driven by large depreciation expenses, partially created by bonus depreciation for capital expenditures, we have generated taxable losses for the past several years. Given the large investments we made in prior years, we now have a large federal net operating loss balance, which can be used to offset taxable income. A significant portion of our tax contribution is in the form of property taxes that support the local communities in areas where we operate.

Income taxes paid by country, property taxes paid, and royalties and duties paid are provided below.

	Year Ended December 31,					
	 2020		2021		2022	
	(In millions)					
Income taxes paid(a)(b)(c)						
U.S. Federal	\$ 32	\$	48	\$	55	
U.S. State	\$ 16	\$	19	\$	24	
Canada	\$ 236	\$	(2)	\$	0	
Mexico	\$ 5	\$	5	\$	4	
Total income taxes paid, net	\$ 289	\$	70	\$	83	
		*	(A.5			
Property taxes paid(d)(e)	\$ 576	\$	605	\$	608	
Royalties and duties paid(f)	\$ 47	\$	60	\$	81	

(a) We do not have current operations in Brazil, the Cayman Islands, Scotland, or the Netherlands. There were no taxes paid in Brazil, the Cayman Islands, Scotland, or the Netherlands in 2020, 2021, and 2022. The entities in Brazil and the Cayman Islands are from legacy acquisitions and we are working to close these entities.

(b) Negative amounts indicate a refund was received.

(c) Includes cash taxes from the following unconsolidated C-corp joint ventures: Citrus LLC, Natural Gas Pipeline Company of America LLC, and Products (SE) Pipe Line Corporation.

(d) Property taxes paid include the net tax paid for a reporting year for each business segment where we operate, inclusive of non-operated joint ventures and corporate owned assets. Property taxes are budgeted for in October of the year prior to the reporting year, based on projected property valuations and tax rates, and taxes are accrued based on the estimated budget. In the reporting year, tax bills are received, verified and payments submitted. Property tax returns and related findings are filed in the first and second quarters of the reporting year and any adjustments are accounted for in the final property tax payments.

(e) Non-operated joint ventures are included in the net property taxes using either actual paid amounts or property tax expensed, adjusted for KMI percentage ownership of each joint venture.

(f) Royalties and duties paid for the CO<sub>2</sub> business segment include royalty payments, severance taxes, state-specific tax levies, conservation taxes, and school taxes. For the Natural Gas Pipelines business segment royalties and duties paid include royalty payments, severance taxes, and state-specific tax levies. The Terminals and Products Pipelines business segments do not pay royalties or duties.

The Canada tax payments in 2020 represent the income tax impact of gains recognized on the sales of our Canadian pipelines and terminals. Post-sale, we have minimal active operations in Canada and expect to have no material tax liability in future years.

We do not have a presence in countries that are considered as partially compliant or non-compliant with the exchange of information request standard according to the Organisation for Economic Co-operation and Development tax transparency report. Additionally, the countries to which we pay taxes are members of the Global Forum on Transparency and Exchange of Information for Tax Purposes.

We also provide extensive tax information in our 2022 Form 10-K, which can be found at <u>https://</u>www.sec.gov/ix?doc=/Archives/edgar/data/0001506307/000150630723000023/kmi-20221231.htm.

We employ a comprehensive strategy for identifying and addressing data security risks that is aligned with the U.S. Commerce Department's National Institute of Standards and Technology *Framework for Improving Critical Infrastructure Cybersecurity*. This framework outlines standards and practices to promote the protection of critical infrastructure. The framework is overseen by third-party experts who provide guidelines on how to manage supply chain cybersecurity. Our strategy includes both short- and long-term initiatives to increase the security surrounding our assets and is supplemented using third-party threat monitoring, rigorous security protocols, and government partnerships.

#### Governance Structures

We are committed to protecting sensitive information and have a dedicated cybersecurity group within our IT department. This group:

- reports quarterly to senior management including the CEO, President, CFO, COO, CAO, Chief Information Officer, General Counsel, business segment Presidents, and Corporate Security;
- prepares management briefings that include company-wide cybersecurity status and initiatives; and
- provides a forum for discussing data security risk solutions and formulating action plans.

Our Board's Audit Committee is briefed quarterly on cybersecurity risk and our cybersecurity management program and initiatives.

#### Measures to Monitor and Respond to Data Breaches and Cyberattacks

We have made investments to address data security risks through:

- continuous third-party security monitoring of our network perimeters,
- advanced persistent threat group monitoring to keep informed of emerging serious threats,
- standardization of network security architecture which separates business and SCADA networks, and
- security information and event management software systems.

Our risk-based approach focuses on critical systems where failure or exploitation could potentially impact pipeline safety or reliability. Our critical business systems are fully redundant and backed up at separate locations. Separate business and SCADA networks allow for isolation of potential threats and enhances the security of these systems. Our security information and event management software systems correlate security events and aggregate security-related incident data, such as malware activity and other possible malicious activities. This program sends alerts if the data analysis shows that an activity could be a potential security issue.

Security functionality is continuously monitored by our network operations center, which:

- monitors critical SCADA systems and telecommunications circuits,
- communicates directly with control centers,
- assigns support staff and management to address identified issues, and
- monitors data centers' physical operating conditions.

In addition to the monitoring performed by the network operations center, our network traffic is analyzed for signs of malicious activity through the Cybersecurity and Infrastructure Security Agency's CyberSentry program and a third-party security operations center, which operates continuously. If malicious activity is detected, our cybersecurity staff are notified.

We maintain a dedicated SCADA group within our IT department to evaluate and respond to significant events and incidents that may impact our operations. Anti-virus solutions are deployed on the SCADA systems and workstations in our data centers and control centers.

Our processes and cybersecurity plans are part of our overall emergency response plans, and we conduct multi-agency worst case drills for continual process improvement.

In the event that data and network defenses are bypassed, processes detailed in our Cyber Incident Response Plan would help identify, contain and eradicate threats, and bring our systems back online if needed. Additionally, the plan requires that the appropriate level of our management be made aware of incidents and be updated as the situation warrants.

# Vulnerability Assessments and Penetration Testing

We hire an independent third-party cybersecurity firm to perform penetration testing annually. The thirdparty checks for vulnerabilities on our external and internal network perimeters, such as our website and our internal network and sites. In 2022, we initiated regular internal vulnerability assessments and penetration testing of our systems. If vulnerabilities are found, corrective actions are implemented to remediate any issues.

#### Government and Industry Group Engagement

We engage with a wide variety of government agencies and industry groups to enable cross-sharing and to identify opportunities to improve our security, including:

- active participation in IT Sector Coordinating Councils; and
  - attendance at classified briefings and security architecture reviews hosted by the:
    - DOE,
    - Federal Bureau of Investigation, and
    - Department of Homeland Security.

Partnership with these security agencies provides us with intelligence on a wide range of critical infrastructure protection and cybersecurity issues as well as an opportunity to exchange best practices.

#### Employee Training

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Employees are required to take annual cyber and physical security training. This training is designed to help employees guard our cyber and physical data. The key objectives of the training are to teach employees how to:

- spot common types of phishing emails,
- understand key concepts for safely browsing the internet,
- identify physical risks to the security of our data, and
- report suspicious emails to the proper channels.

Employees are tested on their ability to identify phishing emails. Quarterly, our business segments compete and an employee from the business segment with the fewest clicks on phishing campaign email links is selected to win a prize. Cybersecurity performance is also considered in annual employee performance reviews.
## 15.1 Employees

(SASB Investment Banking & Brokerage FN-IB-330a.1, Professional & Commercial Services SV-PS-330a.2, GRI 401-1/11.10.2, GRI 405-1/11.11.5)

We use a strategic approach to building a diverse, inclusive, and respectful workplace. Our HR department provides expertise and tools to attract, develop, and retain diverse talent and support our employees' career and development goals. We value our employees' opinions and encourage them to engage with management and ask questions on topics such as our goals, challenges, and employee concerns. Our CEO and our President maintain communication with our employees through regular emails and audio messages. They also hold periodic video meetings with randomly selected manager- and director-level employees, who are encouraged to ask questions and share ideas.

# Employee Compensation

We link total compensation to our financial performance and to the attainment of our short-term and long-term strategic, operational, and financial objectives. We believe that an effective compensation program should reward employees for:

- advancing our business strategies;
- advancing the interests of our investors and other stakeholders;
- upholding and complying with our policies, including contributing to a discrimination-free workplace;
- incentivizing compliance with our ESG policies, including our Code of Conduct and our EHS policies; and
- meeting our environmental, safety, and compliance targets.

We are committed to paying our employees a fair wage and our pay policies help establish a living wage. Pay is based on a thorough analysis of the market, salaries of employees in similar jobs, and applicable laws. We establish pay rates that are competitive with external markets and facilitate equitable pay internally for similar jobs. Employee compensation includes competitive base salaries in the markets in which we operate and competitive benefits, including retirement plans, opportunities for annual bonuses, and, for eligible employees, long-term incentives, and an employee stock purchase plan. In 2022, over 96% of our employees were eligible for the employee stock purchase plan.

## Annual Incentive Plan

Our Annual Incentive Plan is designed to foster our executive officers' and employees' personal stake in our continued success through the possible payment of annual cash bonuses that are dependent on a combination of individual and company performance. Under the Annual Incentive Plan, a pool of bonus dollars is budgeted at the beginning of each year for annual cash bonuses that may be paid to our executive officers and other employees, depending on the extent to which we meet certain financial performance objectives set at the beginning of the year by our Board's Compensation Committee. The Compensation Committee then establishes the final bonus pool based primarily on the extent to which the financial performance objectives have been met. The Compensation Committee may also adjust the budgeted pool of bonus dollars upward or downward based on our overall performance in other areas, including targets for safety and environmental incident rates, regulatory compliance, and other financial measures.

# Employee Benefits

We offer a variety of benefits to eligible employees, their children, spouses, domestic partners, and the children of domestic partners. These programs are described in more detail below:

- PTO: Our PTO program offers employees flexibility to schedule time away from work to handle personal and family commitments. PTO hours may be used for various reasons, including but not limited to: short-term illnesses, vacations, bonding with a newborn or newly adopted or fostered child, or attending school functions.
- Maternity leave: Short-term disability coverage is available to new mothers for the birth of a child. Eligible employees receive up to 100% pay based on years of service for six or eight weeks.
- Parental leave: Starting in 2022, employees welcoming a new child, either through birth or adoption, are eligible for 80 hours of paid parental bonding time, which can be used at any time within six months from the birth or adoption of the child.
- Mother's Rooms: Private rooms with refrigerators are designated for nursing mothers in our Houston headquarters and most of our regional offices.
- Flexible work schedules: Flexible starting and ending work times, and reduced schedules are options to help manage work/life balance.
- Variable work schedules: The 9/80 work schedule gives employees the opportunity to have every other Friday off by adding an additional hour to eight of the nine workdays in the pay period. Half-day off workweeks provide the option to work nine hours each day Monday through Thursday and four hours on Friday of each week.
- Hybrid work schedule: Eligible employees have the ability to work remotely up to two days a week on non-core in-office work days.
- Bereavement leave: Up to three days off with pay due to the death of an immediate family member.
- Military leave: Actively serving employees are paid the difference between their KMI pay and their active military pay for up to two years.
- Disability leave: Sick or injured employees who are unable to work for more than seven consecutive days may be eligible for short-term disability leave. Employees on an approved leave can receive up to 100% of pay for up to 26 weeks, based on years of service.
- Tuition reimbursement: Up to \$5,250 per calendar year.
- Financial support: Employees may apply for disaster relief grants if they suffer an emergency hardship as a result of certain natural disasters and live in a state or county with a major disaster declaration.

# Corporate Culture Survey

In 2022, we introduced a survey to assess our employees' opinions of our corporate culture to help us continue to build a company that embodies the best of who we are and who we aspire to be. The survey was distributed to employees with director titles and above and had a participation rate of 95%. Each business segment president or shared services leader reviewed the survey results and formed working groups tasked with developing a deeper understanding of the data and creating action plans to leverage what we do well and to work on areas where we have an opportunity to strengthen our culture. We continue to make progress on these action plans, and updates are presented during business segment or shared service business reviews.

## Wellness Initiatives

Our Wellness 360° program provides a holistic approach to wellness for our employees and their eligible dependents, focusing not only on physical well-being, but emotional and financial health as well. Participants are able to access helpful resources designed to support a healthy lifestyle such as a behavioral science-based weight loss program, a flexible fitness program membership, and monthly

webinars related to physical, mental, and financial health among many others. Our employees also have access to ergonomic training through our LMS system, which explains how various postures and movement affect the body and how to mitigate ergonomic hazards both on the job and on personal time.

#### Employee and Board of Directors Composition

Starting in 2022, we posted our 2021 EEO-1 employer information report to our website. Most of the data in the table below is based on the EEO-1 report. We plan to post the our EEO-1 reports annually after submittal to the U.S. Equal Employment Opportunity Commission.

The number of full-time, part-time, and temporary employees; voluntary and involuntary turnover rates; and composition of our workforce by age, gender, disability status, and minority representation are provided below. The gender and minority representation of our Board of Directors is also provided below.

	2020	2021	2022
Full-time employees(a)	10,525	10,529	10,595
Part-time employees(a)	7	9	8
Temporary employees(a)	2	2	4
Employee age representation(b)			
Average age	45	45	45
Percentage under 18 years old	0 %	0 %	0 %
Percentage from 18 through 29 years old	10 %	10 %	10 %
Percentage from 30 through 50 years old	53 %	54 %	54 %
Percentage over 50 years old	37 %	37 %	36 %
Female employee representation(b)(c)			
Percentage of workforce(d)	16 %	16 %	16 %
Percentage of management	20 %	20 %	22 %
Percentage of executive officers(e)	25 %	25 %	23 %
Percentage of Board of Directors(f)	13 %	13 %	13 %
Minority employee representation(b)(g)			
Percentage of workforce(d)	30 %	30 %	31 %
Percentage of management	20 %	21 %	21 %
Percentage of executive officers(e)	17 %	17 %	15 %
Percentage of Board of Directors(f)	7 %	7 %	7 %
Percentage of workforce with disabilities(d)(h)	4 %	6 %	6 %
Newly hired employees (i)			
Number of newly hired employees	—	—	1,499
Percentage female	—	—	16 %
Employee turnover			
Involuntary employee turnover(j)(k)	6 %	3 %	2 %
Voluntary employee turnover(k)(l)	4 %	8 %	10 %
Total employee turnover	10 %	11 %	12 %

(a) 2020, 2021, and 2022 employee counts are as of December 31. The total number of full-time employees in Mexico for 2020, 2021, and 2022 were 1, 14, and 14 respectively. In 2022, 100% of U.S. employees are local to the U.S and 100% of Mexico employees are local to Mexico. An employee is considered local if they do not require a visa to work in the country.

(b) 2020 U.S. and Mexico data were queried in November 2020. 2021 U.S. and Mexico data were queried in December 2021. 2022 U.S. and Mexico data were queried in November 2022. The total number of employees used to calculate these percentages, from our EEO-1 reports, for 2020, 2021, and 2022 were 10,525, 10,529, and 10,595 respectively. Both full-time and part-time employees are included.

(c) In 2020, 2021, and 2022, 0.9%, 0.6%, and 0.3% of employees, respectively, selected "I prefer not to answer" for gender.

(d) Workforce includes positions in management, professional positions, and remaining positions.

- (e) Executive officers are as defined by Rule 3b-7 under the Securities Exchange Act of 1934 and listed in the 2023 Proxy Statement. The decrease in the percentage between 2022 and 2021 is the result of a temporary increase in the total number of executive officers while Steve Kean, CEO, transitions to his announced retirement in August 2023. We expect after his retirement the total number of executive officers will return to the 2021 level.
- (f) For 2022, minority representation for the Board of Directors is confirmed by board members and gender representation is consistent with the pronouns used in the 2023 Proxy Statement, reported as of March 31, 2023.
- (g) U.S. data is categorized per the Equal Employment Opportunity Commission's Employer Information Report EEO-1. Mexico is excluded, as there is no requirement to collect diversity data. Minority includes the number of U.S. employees who classify themselves as Asian, Black, or African American, Hispanic, or Latino, Native American, or Alaska Native, Native Hawaiian, or Pacific Islander, and "Two or more races" and the Canada employees who identified themselves as a visible minority, other than Aboriginal peoples, who are non-white in color or non-Caucasian in race, regardless of their place of birth or citizenship.
- (h) Data is captured by using an Office of Federal Contract Compliance voluntary self-identification survey.
- (i) Excludes rehires and transfers to KMI employment through mergers and acquisitions.
- (j) Includes count of involuntary terminations from full-time and part-time positions. Excludes divestitures. Approximately one-third of the 6% involuntary turnover percentage for 2020 includes employees who voluntarily requested and were given severance packages as part of the organizational effectiveness and efficiency program.
- (k) Percentage based on count of terminations divided by average number of full- and part-time employees. Excludes employees in Mexico.
- (1) Includes count of employee-initiated voluntary terminations from full- and part-time employment. Excludes retirees.

#### **15.2 Diversity and Inclusion**

We consider employee diversity an asset and support equal opportunity employment. We take affirmative action to employ and advance in employment all persons without regard to their race/ethnicity; sex; sexual orientation; gender, including gender identity and expression; veteran status; disability; or other protected categories, and base employment decisions solely on valid job requirements.

We prohibit discrimination or harassment against any employee or applicant on the basis of race, gender, or other protected categories listed in our Code of Conduct. We are committed to a harassment free workplace, supported with workplace harassment and discrimination prevention training for our employees. Employees and supervisors review our Harassment and Discrimination Prevention policy every two years as part of our HR Policy Renewal training.

#### Diversity Initiatives

We seek to engage with a broad range of candidates for open positions and undertake initiatives such as active participation in specialized job fairs aimed at increasing diversity representation in our workplace. Additionally, we partner with organizations whose focus is providing employment opportunities, including apprenticeships and internships, for minority candidates.

• Board Oversight

As part of our annual succession planning process, we identify minority and female candidates to include in the plan for senior positions. We review our succession plan, including a discussion on development opportunities for potential successors, with the Nominating and Governance Committee of our Board.

• Board Diversity

The Nominating and Governance Committee is responsible for advising our Board on matters of diversity. Over time, our Board's intention is to decrease the size and enhance the gender and racial diversity of our Board.

• Executive Leadership

In 2020, our CEO added a leadership expectation for our President, COO, business segment presidents, General Counsel, CFO, VP of Government Relations and Communications, CAO, and VP of Corporate Development to establish a plan for enhancing diversity and equality of opportunity in hiring, development, and promotion decisions. These expectations are discussed

and reinforced during the annual performance review process. Currently, 38% of our executive officers are female or a minority.

A diversity lead from HR has been assigned to each business segment to support their efforts to enhance diversity and equality of opportunity in hiring, development, and promotion decisions.

• Leadership Training

We have updated our internal leadership training programs, described in *Section 15.3 Human Capital Development Programs* of our *Sustainability Report*, to incorporate more diversity and inclusion content.

• Women @ Work Initiative

In 2022, our HR team began facilitating a focus group made up of women who are or have been a leader in field operations who gave insight into the challenge of attracting women to non-traditional operations careers. Goals include increasing the number of women applicants for field operation positions, brainstorming ways to support our women operators, and encouraging more employees to join this initiative. After the initial focus group, recommendations were presented to business segment leadership who committed to additional female summer interns to field operations in 2023.

# Recruitment

• Seeking Diverse Applicants

We use the services of a major job posting board with over 1,000 diversity partners including companies and organizations that specifically target and attract women, minorities, veterans, and individuals with disabilities.

We also partner with a job-delivery company as part of our commitment to post job openings with local employment offices and community-based organizations that focus on women, minorities, veterans, and individuals with disabilities. Some of the websites for these organizations include:

- Hire a Hero,
- Job Opportunities for Disabled American Veterans,
- RecruitABILITY, and
- U.S. Diversity.

To increase our opportunities to recruit minority and female job candidates, we have identified contingency search firms and job-posting sites for broadening and diversifying our job applicant pool, such as:

- Women in Technology,
- Society of Women Engineers,
- National Society of Black Engineers, and
- Society of Hispanic Professional Engineers.

Military veterans have tools and skills that translate into what we do every day. We value the leadership, drive, discipline, and strong work ethic that is developed in the military. We are committed to providing opportunities to veterans and do so by building partnerships with military-focused recruiting companies and attending job fairs that focus on placing veterans.

# • Hiring Process

In order to promote a more diverse workforce, we have enacted certain practices that we believe make our hiring process more inclusive and helps promote the hiring of talent regardless of an applicant's gender, ethnicity, or other status. We seek to have a diverse candidate pool for consideration for our job openings. To help eliminate bias during interviews, we aim to select interview panels with diverse representation.

# • Employing Locally

We recognize the importance of hiring locally and benefiting the economies of those communities in which we operate. We post our job openings to a variety of organizations' job boards including local employment offices, veteran's offices, colleges and universities, and vocational rehabilitation centers. In addition to job postings, we also attend local job fairs to hire talent from the communities in which we operate.

We are often one of the major employers in many smaller communities and we offer local talent rewarding, well-paying jobs that allow employees to build a career within the energy industry.

# • Internship and Work Study Programs

Since 2011, we have partnered with the Genesys Works program in Houston, Texas. Genesys Works is a non-profit organization that provides meaningful corporate internships to local high school students from underserved communities, primarily serving minority students. In 2022, we had 10 students from the Genesys Works program interning with us. During their internships, students are able to develop business skills, gain professional work experience, and create a plan for a successful future.

We are a partner with the Cristo Rey Jesuit Work-Study Program. Cristo Rey Jesuit is a private high school offering a rigorous college preparatory education to young people of limited economic resources who live in Houston. Approximately 98% of Cristo Rey students are students of color. The program places students in Houston businesses where they earn up to 50% of the cost of their education and develop and hone social and technical skills in the workplace. In 2022, we had 8 students participating in this work-study program.

Building Opportunities and Learning Together is a paid internship program for college students. This 11- to 12-week program provides our interns with an opportunity to use their newly gained skills on a challenging project. Each student is assigned a mentor and supervisor who guides them throughout their internship. Supervisors are responsible for determining project scope and conducting periodic evaluations of their intern's progress. At the end of the program, interns make presentations on their projects, with recommendations, to their business segment management, peers, and HR. In 2022, 34 students participated in our internship program.

We partner with INROADS, a program that advances diverse youth in corporate America, to help increase minority and female representation in our summer internship program. In 2022, 3 of our interns came through INROADS.

We also partner with San Jacinto College on an IT-related apprenticeship program. In 2022, we had two apprentices from San Jacinto College. We also continue to partner with the Energy Education Center to educate diverse high school students about our industry. In the future, we expect to draw from the Energy Education Center for internship candidates following completion of their first year of college.

## 15.3 Human Capital Development Programs

(GRI 401-2/11.10.3, GRI 404-1/11.10.6/11.11.4, GRI 404-2/11.10.7)

Our employees are an integral part of our success, and we value their career development. We encourage and support professional development and learning for our employees by offering workforce training, tuition reimbursement, and other development programs. These programs help improve recruitment, development, and retention.

We support our employees' ongoing career goals and development through several programs. These programs help maximize our employees' potential and give them the skills they need to further enhance their careers.

#### New Employee On-boarding Orientation Program

We understand that developing our employees' skills starts from day one. New employees participate in an orientation program designed to help them:

- learn more about our company,
- understand processes and goals for their new positions, and
- locate the internal resources available to help them succeed.

## Performance Review Program

Employee performance reviews are conducted to maximize employee productivity and provide development feedback. Our performance review program allows employees to receive a timely and objective review of their job performance at least once a year.

## New Supervisor Training – Core Leadership

Our Core Leadership Training program is designed to help newly promoted or hired managers to successfully make the transition from an individual contributor to a first-time manager – 93 employees successfully completed the program in 2022. This leadership development course takes a blended approach to learning, including:

- online learning activities,
- monthly virtual conference call roundtables to reinforce desired behaviors, and
- follow-up by participants' supervisors.

The program focuses on the knowledge and skills we believe are core to being an effective leader and takes approximately six months to complete, with a time commitment of two to four hours per month.

#### Leadership Development Training – Emerging Leaders Institute

Our Emerging Leaders Institute is an internal two-year leadership-development training program designed to develop leadership bench strength. Employees who are nominated to participate in this program develop leadership skills, business acumen, and advanced presentation skills. In 2022, 103 employees participated in the program.

#### *New Vice President Training – The Next Level Training Program*

Our Next Level program is based on the concept of leaders developing leaders and is provided to employees transitioning from director-level roles to vice presidents. This program focuses on the skills needed to transition between these roles and its content includes:

- discussions with senior leadership,
- self-assessments, and

• development planning.

The percentages of female and minority participants in our leadership training programs, Core Leadership, Emerging Leaders Institute, and Next Level Training Program, are provided below.

	Yea	ar Ended December 31,	
	2020	2021	2022
Participation in leadership training programs(a)			
Percentage female	16 %	13 %	21 %
Percentage minority	28 %	28 %	26 %

(a) There were no Emerging Leaders Institute or Next Level Training Program participants in 2020 and 2021 because the programs were paused due to COVID-19.

## Total Employee Training Hours

In addition to health, safety, emergency response, and other safety topics, we provide employee development training on topics including:

- corporate policies,
- environmental protection,
- leadership and management,
- on the job skills, and
- software and IT systems.

The total hours spent on employee development training are provided below.

	Ŷ	ear Ended December	31,
	2020	2021	2022
		(In thousands)	
Total hours of employee development training(a)	350	419	568

(a) Training time is assigned to the business segment the employee was active under at the end of the calendar year.

In addition to our investments in health, safety, and emergency response training, we invested roughly \$31 million in other employee development training in 2022, or about \$2,900 per full-time employee. Together with health, safety, and emergency response training we have invested approximately \$38 million, or about \$3,600 per employee.<sup>21</sup> In 2022, 100% of our active employees received training.

#### Tuition Reimbursement

We offer our full-time employees a tuition reimbursement program that gives employees the opportunity to complete college level courses that encourage and support career growth.

#### Relocation Assistance

We provide relocation assistance to eligible employees for career development opportunities that may become available at our other locations.

<sup>&</sup>lt;sup>21</sup> This is calculated by multiplying our total training hours by our employees' hourly median salary, calculated from the annual employee median salary disclosed in our 2023 Proxy Statement.

# **16.1 Processes to Manage Risks and Opportunities Associated with Community Rights and Interests** (SASB Exploration & Production EM-EP-210b.1, GRI 413-1/11.15.2)

Our communities play an important role in how we conduct our business. We live, work, and play in these communities. Our policies are designed to facilitate our building trust and fostering collaboration within the communities in which we operate, including our commitment to:

- community engagement,
- respect,
- transparency and responsiveness,
- good faith negotiations,
- employee and contractor training,
- fairness, and
- responsible construction.

We engage our leadership and deploy resources to help us fulfill these requirements. Our internal Corporate Communications and Public Affairs department helps develop and implement our community relations strategies to reach a variety of stakeholders identified through stakeholder mapping. Our internal community consultation guidelines recognize that it is important to identify project stakeholders, determine and monitor their needs and expectations, and then work with them to meet those needs and expectations as appropriate. In addition, project-specific team members help fulfill our commitment to communicate and work with communities in an effort to build trust and foster collaboration. Our Public Affairs team provides insight, guidance, and resources to operations and project-specific employees.

As described in *Section 6.1 Environmental Management Policies and Practices for Active Operations* of the *Sustainability Report*, we take our federal, state, and local stakeholders' concerns and feedback into consideration during the development of our growth projects and follow our construction and mitigative procedures that take into account plans to minimize impacts to nearby residents. This process helps address potential issues prior to the start of construction. During construction we also consult with stakeholders directly affected by our operations. This dialogue is intended to help us resolve issues as they arise or, better still, prevent issues from arising in the first place. Information about the additional ways we engage with stakeholders is described in *Section 16.1.1 Stakeholder Engagement and Consultation Mechanisms* of the *Sustainability Report*.

We participate in industry trade associations to further communicate the benefits of our customers' products and our services. We serve on communications committees where we assist in the development of communication materials that address topics such as:

- safety,
- construction,
- restoration activities,
- environmental considerations, and
- the social and economic benefits of the industry.

We are part of an industry and labor union group called "Natural Allies for a Clean Energy Future," whose goals include educating the general public on the benefits of clean and affordable natural gas.

For more information, see our Community Relations Policy at <u>https://www.kindermorgan.com/</u> <u>WWWKM/media/Safety-Environmental/documents/community\_relations\_policy.pdf</u>.

16.1.1 Stakeholder Engagement and Consultation Mechanisms (GRI 2-12, GRI 2-29)

We strive to build and maintain healthy relationships throughout the areas where we operate. Many of our Community Relations Policy commitments are accomplished through ongoing systematic stakeholder engagement and consultation.

We are committed to making stakeholder engagement a priority on our projects. For certain new projects, our Corporate Communications and Public Affairs department develops a project-specific outreach and stakeholder engagement plan and timeline to notify stakeholders early about the project and establish lines of communication. We respond to stakeholder feedback on each project and incorporate that feedback into the project planning process, including community engagement and community development planning.

We offer stakeholders a variety of ways to contact us about major growth projects, such as project specific:

- toll-free phone numbers,
- email addresses,
- websites,
- public meetings, and
- in-person meetings.

Throughout a project's timeline, our personnel may interact with a wide array of stakeholders, including:

- elected officials,
- environmental justice communities,
- Indigenous Peoples,
- landowners,
- local citizens groups,
- media outlets,
- protesters,
- regulatory agencies, and
- other members of the public.

We have systems in place for communicating with these different interest groups and training in place for project employees and contractors to prepare them for interactions with varying audiences. Initial project briefings and training sessions educate employees and contractors on communication procedures and resources. This training also provides:

- an overview of our company,
- an overview of the project, and
- the project's purpose and benefits.

The training reiterates the importance of our being a good neighbor in the communities where the project is located. We also provide instructions for accessing relevant project personnel when needed to respond to specific stakeholder questions.

A summary of the ways we regularly engage and consult with stakeholders is provided below, including in the stages before, during, and after the construction of projects.

Landowners	Community Members	Emergency Responders	Government and Regulators
Town halls and open houses	Town halls and open houses	In-person meetings	Regulatory filings
In-person meetings	In-person meetings	On-line emergency responder training	Public policy and legislative issue engagement
Home and site visits	Project websites or printed materials	Facility tours	Industry group involvement
Project websites	Social media	Emergency response tabletops and exercises	Facility tours
Social media	Community investment programs	The Responder E-newsletter	In-person meetings
Public awareness communications	Employee volunteer projects	Emergency Response Plans	
	Partnerships with local and regional organizations	Public awareness communications	

For certain projects, and particularly our larger projects, we create project-specific websites. We provide contact information on our webpage where stakeholders can obtain further information if they have a question or concern about a projects' development or operation. Depending upon the needs of a community and to make project information more accessible, information may be translated into different languages for posting on the project website and distribution through various methods, including meetings, town halls, open houses, site visits, and social media.

Our Community Engagement website details our community and stakeholder engagement efforts at <u>https://www.kindermorgan.com/Safety-Environment/Community-Engagement</u>.

# 16.1.1.1 Public Awareness Program

Keeping our communities safe is of utmost importance and we use our Public Awareness Program to keep local stakeholders informed about pipeline safety.

Our Public Awareness Program is designed to:

- create public awareness about pipelines in the areas where we operate,
- provide important safety information to people living and working near our pipelines,
- increase knowledge of the regulations for working around pipelines,
- prevent damage to our pipelines,
- educate first responders and the public on our emergency preparedness response activities, and
- enhance public safety.

Our program was developed under federal pipeline safety regulation consultation guidelines.<sup>22</sup> Our program is an example of our ongoing stakeholder consultations in which we engage with, provide information to, and receive feedback from our stakeholders.

As part of our outreach plans, we target communications to the following stakeholder groups:

- residents,
- business owners,

<sup>&</sup>lt;sup>22</sup> DOT-PHMSA. "Public Awareness Programs: API RP 1162." DOT-PHMSA, Dec 2003. 2021. <a href="https://primis.phmsa.dot.gov/comm/PublicAwareness/PARPI1162.htm">https://primis.phmsa.dot.gov/comm/PublicAwareness/PARPI1162.htm</a>.

- farmers and ranchers,
- schools,
- contractors, and
- government officials.

Our program advocates pipeline safety and safe digging practices to the public through multiple avenues, including:

- brochures;
- newsletters;
- newspaper, magazine, radio, and television advertisements;
- direct mail;
- social media;
- direct contact; and
- our website at <u>https://www.kindermorgan.com/Safety-Environment/Public-Awareness/Index</u>.

We tailor the type, language, and formatting of our communications to the target audience, message to be delivered, and best practices for the selected medium.

To manage our program's engagement strategy, we maintain a Public Awareness Program evaluation plan that includes measures for evaluating effectiveness. For example, we track our stakeholder engagement interactions and our responses to requests for information. Each year we receive on average over 300 requests for information about our assets. We also receive requests for training and safety information from emergency responders.

To assess the effectiveness of our program, we conduct public awareness surveys. We evaluate whether our public awareness actions are achieving the following intended goals and objectives:

- information is reaching the intended stakeholder audiences;
- audiences understand the messages being delivered;
- recipients are motivated to respond appropriately to the information provided; and
- the program is impacting the underlying intended results, such as reduction in the number of incidents caused by third-party damage.

We also conduct audits internally to identify program improvements.

We place a high value on public safety and seek to educate the public to increase their:

- awareness of pipeline locations,
- understanding of potential hazards from an unintentional release, and
- ability to identify and respond to a potential release.

In addition to our Public Awareness Program, our project-specific emergency response plans detail how to communicate with external stakeholders to more effectively resolve potential concerns quickly and safely.

For more information about our Public Awareness Program, see our website at <u>https://www.kindermorgan.com/Safety-Environment/Public-Awareness/Index</u>.

For more information about our Responder E-newsletter, see our website at <u>https://</u> www.kindermorgan.com/Safety-Environment/Public-Awareness/The-Responder.

# 16.1.1.2 Energy and Environmental Justice

## Energy Justice

Affordable, reliable energy is essential to human development. One aspect of energy justice is the equitable distribution of affordable energy. Moving the fuels of today and those of the future helps create a clean, reliable, affordable energy future for our customers and the communities they serve.

We maintain robust reliability plans that help prevent supply disruptions to our customers. Our pipeline integrity and maintenance efforts help our systems operate with the least disruption possible as described in greater detail in *Section 12.0 Operational Safety* of the *Sustainability Report*. Geopolitical issues, such as the war in Ukraine, make it more important than ever to keep domestic supplies and exports stable and dependable.

#### Environmental Justice

We recognize that marginalized communities can be at greater risk from the impacts of industrial activities. We are committed to the fair treatment and involvement of people affected by our projects regardless of race, color, national origin, Tribal affiliation, or income. This commitment helps us incorporate a more diverse set of views into our public engagement process.

We are committed to:

- engaging with communities, governments, and stakeholders in accordance with our core values of integrity, accountability, safety, and excellence;
- treating everyone with respect and striving to understand community concerns while also sharing our perspective;
- showing transparency in our interactions and being responsive to community questions and concerns;
- treating affected parties fairly;
- complying with applicable environmental justice laws and regulations; and
- seeking opportunities to partner with our stakeholders on environmental justice concerns.

In connection with certain projects and air permitting, we continue our engagement with marginalized communities or groups that serve them. Federal and state agencies are codifying rules, developing mapping tools, and implementing processes to address environmental justice matters within their respective jurisdictions. We are monitoring these new developments, as well as participating in the development of industry standards, and using agency tools to map environmental-justice-related data in an effort to increase our analysis and formalize our outreach during the planning and execution phases of projects and in connection with major air permits.

#### Environmental Justice Community Outreach

We are proud of our community engagement efforts to date. We expect our approach to environmental justice will continue to evolve based on our interactions with the communities in which we operate and the requirements of new government policies and regulations.

Our Corporate Communications and Public Affairs department serves as a central point of contact to develop and implement our community relations strategies for both our existing assets and new projects. That department, along with Land & Right-of-Way and local operations personnel, work with communities to foster transparent and collaborative relationships.

We recognize that every environmental justice community has its own unique historical experience, priorities, and needs, and we work to identify effective ways to engage these communities on a caseby-case basis rather than applying a one-size-fits all approach.

Some examples of our outreach efforts include:

- informed by county officials that area residents had limited internet access, we printed and distributed project materials instead of relying on a project website;
- hosting open house meetings in environmental justice communities neighboring our project areas to identify and address issues and concerns;
- going door to door to provide residents with project information and identify necessary special accommodations during construction; and
- hiring local, dedicated community liaisons to be on-site during construction activities to respond to residents' questions and concerns.

## Regulatory Agency Processes

Our existing interstate natural gas pipeline expansion projects follow the FERC traditional or voluntary pre-filing processes to engage affected stakeholders prior to submitting a formal project certificate application. Both processes typically include public meetings and consultations with elected officials, community leaders, and affected landowners. As part of these processes, we identify potential environmental justice communities. These communities are determined using FERC's current guidance for environmental justice to display demographic indicators in maps and reports. We often conduct local outreach to identify and engage with these communities. If impacts are identified, we take reasonable measures to mitigate impacts, where feasible. We are incorporating this guidance as part of our project development, certification, and permitting processes. The FERC continues to develop and implement guidance for identifying and engaging with environmental justice communities.

Other federal and state agencies are developing similar processes and we will adapt our program to incorporate their protocols when finalized.

#### 16.2 Social Investment Programs

(GRI 201-1/11.14.2/11.21.2, GRI 203-1/11.14.4, GRI 203-2/11.14.5)

We are committed to giving back to the communities in which we operate. We look for opportunities for our employees to get involved in community programs and strengthen their relationships with our stakeholders.

## Connect.Inspire.Give.

Our Connect.Inspire.Give. program offers volunteer opportunities in our local communities, including collection drives for school supplies, toys, pet food, and other community needs.

Our volunteer program schedule includes various events such as:

- fun runs benefiting non-profits,
- reading to elementary age students,
- packing and distributing food for a food pantry,
- · restoring parks and trails, and
- feeding the homeless community.

The goal of our program is to enable employees to connect with each other across various departments, learn more about their communities, improve morale, and develop new skills while working toward the common goal of improving peoples' lives. We hope that the organizations we support through these efforts inspire employees to give their time, talent, and donations.

Our Houston-based employees volunteered 453 hours in 2022 through Connect.Inspire.Give programs.

# Community Investments

We are committed to investing in the communities in which we operate. We budget funds annually to distribute to community organizations and initiatives across our business segments and operating regions. The community organizations receiving these contributions typically fit into one of the following categories:

- public safety and emergency response,
- children's educational or athletic programs, or
- environmental sustainability and education.

In addition to the community investments made on behalf of the business segments, we also make community investments in areas where major growth projects are proposed or under construction. Recipient organizations are identified in coordination with local stakeholders in the project area, including elected officials and local NGOs.

Below are some of the organizations to which we contributed in 2022:

- City of Norwalk, City of Tampa, City of Reno, St. Louis Public School Green Yards, Sacramento Tree Foundation, and Phoenix Parks and Conservation Foundation donated funds as part of each organization's tree planting program;
- Post Oak Association, Chicago, Illinois donated to community center improvements;
- Plaquemines Parish, Louisiana Sheriff's Department, Blanco County, Texas, Stonewall Texas Fire Department donated first responder equipment; and
- Chicago Sky Art, Chicago, Illinois sponsored art programs.

# Kinder Morgan Foundation

The Kinder Morgan Foundation's mission is to provide today's youth with opportunities to learn and grow in order to become tomorrow's leaders. The Foundation's primary goal is to help today's science, math, and music students become the engineers, educators, and musicians who could support our diverse communities for many years to come. The Foundation provides donations through four types of programs, including:

- Kinder Morgan Foundation grants,
- Employee gift matching,
- Disaster relief assistance, and
- United Way employee gift matching.

These programs are described in more detail below.

## Kinder Morgan Foundation Grant Program

The Kinder Morgan Foundation grant program focuses exclusively on academic education and the arts. These grants support programs that benefit under-served youth, with a focus on minorities and girls, and a majority of the contributions are directed to STEM programs. The Kinder Morgan

Foundation's target is to donate approximately 1 million to qualifying 501(c)(3) organizations in the U.S. each year.

In 2022, the Kinder Morgan Foundation issued grants to 36 organizations that provide educational, arts, and cultural programs. These organizations collectively serve nearly 981,000 students. The contributions provided by the Kinder Morgan Foundation are typically used to provide direct support to a specified number of students or as general funding for the organization to support activities throughout the donation year. Grants ranged from \$10,000 to \$50,000 per qualifying organization.

#### Employee Gift Matching Program

The Kinder Morgan Foundation also funds our Employee Matching Gift Program. This program matches gifts made to university foundations, kindergarten through 12th grade education foundations, non-profits that support arts and culture, and STEM education programs benefiting underserved youth, such as minorities and females, in primary and secondary schools. Our full-time employees are eligible to designate up to three employee matching grants to be donated to qualifying organizations, totaling a maximum of \$2,000 in matching gifts per individual per calendar year.

#### Disaster Relief Program

The Kinder Morgan Foundation provides disaster relief assistance to area organizations when natural disasters significantly impact our operations or employees. These funds are awarded based on the size and scale of the disaster and the needs assessed by local operations.

#### United Way Employee Gift Matching Program

The Kinder Morgan Foundation matches 50% of each employee's donation made during the company's annual United Way campaigns.

The Kinder Morgan Foundation donations, employee donations, and corporate and project-related community investments are provided below.

	Year Ended December 31,				
	 2020		2021		2022
		(In	thousands)		
Kinder Morgan Foundation donations					
Grants	\$ 782	\$	1,205	\$	1,000
Employee Matching(a)	\$ 114	\$	81	\$	41
Disaster Relief	\$ 326	\$	1,015	\$	0
United Way(a)	\$ 224	\$	82	\$	95
Subtotal	\$1,446		\$2,383		\$1,136
Community investments					
Donations made to Native American tribes(b)(c)	\$ 263	\$	531	\$	559
Other community investments(c)	\$ 1,698	\$	100	\$	252
Subtotal	\$1,961		\$631		\$811
Employee donations(d)(e)	\$ 562	\$	273	\$	250
Total donations and community investments	\$ 3,969	\$	3,287	\$	2,197

(a) These are donations made by the Kinder Morgan Foundation and do not include employee contributions.

(b) Scholarships made to Native American tribes are for the calendar year applicable, per the grant agreement.

- (c) Donations made to Native American tribes and other community investments for 2020 and 2021 were revised to recategorize these donations and investments. Donations made to Native American tribes in 2021 was also revised due to a 2022 donation being reported in 2021.
- (d) Employee donations include donations made through the employee matching program and to the United Way. 2020 does not include employee donations that were not matched by the employee matching program or United Way. Employees may make other donations that we do not track.
- (e) Employee donations for 2021 were revised to remove donations that were double counted.

#### 17.0 Human Rights and Rights of Indigenous Peoples

#### 17.1 Human Rights

(SASB Exploration & Production EM-EP-210a.3, GRI 408-1, GRI 409-1/11.12.2)

We conduct our business consistent with the human rights philosophy expressed in the International Labor Organization Declaration on Fundamental Principles. We believe supporting fundamental human rights to be a basic responsibility in conducting our business. We support the United Nations Global Compact Human Rights Principles, derived from the United Nations Universal Declaration of Human Rights, which are:

- Principle 1: businesses should support and respect the protection of internationally proclaimed human rights, and
- Principle 2: businesses should make sure they are not complicit in human rights abuses.

We prohibit the use of child labor or forced labor in our operations in the U.S., Canada, and Mexico. Our employees and contractors, with the exception of some interns, must be at least 18 years of age.

We also recognize and respect our employees' and suppliers' rights to join associations for the purpose of collective bargaining in a manner that is consistent with laws, rules, regulations, and customs.

Our employees, consultants, contractors, suppliers, vendors, and business partners are expected to:

- treat people with dignity,
- respect human rights,
- adhere to standards of conduct consistent with our Code of Conduct when conducting companyrelated business activities, and
- adhere to our Human Rights Statement.

Within the areas of our activity and influence, we are committed to:

- being attentive to concerns raised by stakeholders,
- working with stakeholders to support human rights, and
- providing remedies to correct negative human rights impacts.

For more information, see our Human Rights Statement at <u>https://www.kindermorgan.com/WWWKM/</u> <u>media/Documents/Human\_Rights\_Statement.pdf</u> and our Conflict Minerals Policy at <u>https://</u> <u>www.kindermorgan.com/getmedia/17206038-6546-4df3-8b06-534a4bc732a3/</u> <u>KM\_Conflict\_Minerals\_Policy.pdf</u>.

#### 17.2 Rights of Indigenous Peoples

(SASB Exploration & Production EM-EP-210a.3)

We respect the cultural diversity and unique history of Indigenous Peoples. We strive to build long-term relationships and commercial partnerships with Indigenous Peoples through meaningful engagement based

on mutual respect. In the course of our projects and operations, we conduct business with Indigenous Peoples consistent with our Code of Conduct and our Indigenous Peoples Policy. We recognize the legal and constitutional protected rights of Indigenous Peoples. We engage in good faith with community members while communicating and cooperating with affected Indigenous Peoples. We are committed to:

- participating in good faith engagement;
- continuing to partner with community members on suitable employment opportunities, as well as education, commercial, and community development opportunities;
- identifying opportunities to support youth, education, culture, and the environment; and
- negotiating in good faith with indigenous and government entities.

## Listening & Responding

We strive to operate and grow in a socially and environmentally responsible way. We work to establish positive interactive relationships with Indigenous Peoples who have, or claim to have, an ancestral interest in lands affected by our operations or projects. We communicate early and often with affected groups and National tribal experts. We listen to and engage with Indigenous Peoples through one-on-one, group, and public meetings.

## Right-of-way Renewals

We have a long history of working with Indigenous groups when renewing right-of-way grants, which occurs approximately every 20 years. We understand that the needs of Indigenous members and organizations change over time, so we begin our renegotiations for right-of-way renewals approximately 18 to 24 months in advance of expiration. During negotiations, we engage with:

- current Tribal Leaders,
- Tribal heads of Operations,
- Tribal Engineering,
- Tribal Finance,
- Tribal Legal,
- Bureau of Indian Affairs liaison, and
- other Tribal representatives a Tribe deems appropriate.

## Open Houses, Meetings, and Consultations

One of the primary ways we meet with and listen to communities, including Indigenous Peoples, that may be impacted by one of our projects, is by holding project open houses. Open houses are publicized locally, and we encourage individuals or groups with an interest in our projects to attend these meetings.

#### Walk the Route

During planning for certain projects, we invite the members of Indigenous groups, with interests in a specific project, to walk the project site or route with us to identify anything of special interest to their Indigenous group. For the interests identified, we have meaningful consultation with the affected Indigenous group to listen to the history and importance of the matters identified and agree on the best path forward. These matters may include:

- sacred sites, including stone formations;
- historical and cultural resources;
- animals, birds, and insects; and
- plants.

## Employment and Community Development

For our projects, we work to meet or exceed compliance with the respective Tribal Employment Rights Ordinances and Native American Preference law in offering Indigenous community members employment opportunities as available. We also meet with Tribal Leaders to discuss other possible educational, commercial, and community development opportunities.

Over the past three years, we have donated over \$1,359,000 to Native American tribes with whom we do business. These contributions include scholarships and donations to local fire departments. Our donation amounts to these tribes are included in *Section 16.2 Social Investment Programs* of the *Sustainability Report*.

## Maintaining Relationships

We maintain positive, long-term relationships even after a project is in service or right-of-way renewals have been finalized. We achieve this by:

- holding public awareness and first responder meetings in Indigenous communities,
- having Tribal representatives meet with our executives and visit our facilities,
- making presentations to Tribal classrooms on our business,
- participating in Tribal Feast Day events, and
- awarding scholarships as provided in right-of-way agreements.

# Public Participation in Indigenous Matters

Our employees participate in industry conferences, Bureau of Indian Affairs conferences, and Tribal Organization conferences. We not only attend these events, but also participate as speakers and panel members. We also consult regularly on matters affecting National Tribal law and practices.

For more information on how we build long-term relationships and commercial partnerships with Indigenous Peoples, see our Indigenous Peoples Policy. For an example of how we operationalize our Indigenous Peoples Policy, see our *Respecting Indigenous Peoples and Communities* case study video and fact sheet at <u>https://www.kindermorgan.com/Safety-Environment/ESG</u>. This policy and case study demonstrate our commitment to the social, economic, and cultural rights of Indigenous Peoples, reflecting the spirit of the International Labor Organization Convention 169 and the United Nations Declaration on the Rights of Indigenous Peoples.

Our disclosure follows the Financial Stability Board's TCFD recommended climate-related financial disclosures, which are structured around the four thematic areas shown below.<sup>23</sup>

# Core Elements of TCFD's Recommended Climate-Related Financial Disclosures<sup>24</sup>



#### Governance

The organization's governance around climate-related risks and opportunities

#### Strategy

The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

#### **Risk Management**

The processes used by the organization to identify, assess, and manage climate-related risks

#### **Metrics and Targets**

The metrics and targets used to assess and manage relevant climate-related risks and opportunities

In our sixth TCFD Report, we have updated our transition risk scenario assessment of our business strategy under the IEA's 2022 World Energy Outlook Announced Pledges Scenario, or APS.<sup>25</sup> The APS takes into account the climate commitments made by governments around the world, including the Paris Agreement's Nationally Determined Contributions, as well as longer term net zero emission targets, and assumes that they will be met in full and on time. The APS limits the temperature rise to 1.7 °C and is aligned with the Paris Agreement to hold the rise in global average temperature to well below 2 °C. In 2019, we completed a physical risk scenario assessment for our assets under the 4 °C scenario of the IPCC RCP 8.5.<sup>26</sup>

<sup>&</sup>lt;sup>23</sup> We regularly identify, assess, and manage a wide range of potential risks, opportunities, and related financial impacts, many of which fall within what TCFD identifies as "climate-related"; however, we do not regularly use the term "climate-related" in our internal discussions of these matters.

<sup>&</sup>lt;sup>24</sup> Task Force on Climate-related Financial Disclosures. "Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures, 15 Jun 2017: 27. 2021.

<sup>&</sup>lt;a href="https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf">https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf</a>>.

<sup>&</sup>lt;sup>25</sup> International Energy Agency. "World Energy Outlook 2022." International Energy Agency. October 2022. 2022. <a href="https://iea.blob.core.windows.net/assets/830fe099-5530-48f2-a7c1-11f35d510983/WorldEnergyOutlook2022.pdf">https://iea.blob.core.windows.net/assets/830fe099-5530-48f2-a7c1-11f35d510983/WorldEnergyOutlook2022.pdf</a>-

<sup>&</sup>lt;sup>26</sup> Intergovernmental Panel on Climate Change. "Climate Change 2014: Synthesis Report. Contributions of Working Group I, II, and III to the Fifth Assessment Report." Intergovernmental Panel on Climate Change, 2014. 2021.

<sup>&</sup>lt;https://ar5-syr.ipcc.ch/ipcc/ipcc/resources/pdf/IPCC\_SynthesisReport.pdf>.

## 1.1 Board Oversight

(SASB Midstream EM-MD-110a.2, SASB Exploration & Production EM-EP-110a.3, SASB Marine Transportation TR-MT-110a.2, GRI 2.9, GRI 2-12, GRI 2-13, GRI 2-14, GRI 2-17, GRI 12-13, CDP C1.1b, CDP CC1.1)

Our Board is responsible to our stockholders for the oversight of the company. We recognize that effective governance is critical to achieving our performance goals and maintaining the trust and confidence of our various stakeholders, including our:

- investors,
- lenders,
- customers,
- employees,
- business partners,
- regulatory agencies,
- underwriters, and
- other stakeholders.

As part of its responsibilities, our Board oversees the assessment of our major business risks and opportunities, including climate-related risks and opportunities, and the measures we take to address them. Our Board is briefed regularly by our CEO, President, CFO, COO, and General Counsel, and periodically by each business segment president, on various risks and opportunities which may include:

- business strategies,
- business risks and opportunities,
- major plans of action,
- annual budgets,
- business plans,
- performance objectives,
- potential goals and targets for addressing climate-related issues,
- · capital expenditures for major expansions, and
- acquisitions and divestitures.

When reviewing and providing guidance in each of these areas, our Board assesses our assets and longterm business strategy for resilience and adaptability to various risks and opportunities. We believe our Board's collective skill set is well-suited to identifying the key risks and opportunities we may face in the future. Our Board has members with significant experience in risk management, energy transition, and capital planning, all of which are essential to addressing our industry's potential disruptors. In addition, 43% of our directors have significant experience outside of energy or significant energy transition experience, and 43% have regulatory and EHS experience. Our Board members' backgrounds allow them to engage in healthy debate on climate-related topics, challenge management assumptions, and make thoughtful and informed decisions about these risks and opportunities.

While our Board is ultimately responsible for risk and opportunity oversight, various Board committees assist the Board in fulfilling its responsibilities by considering the risks and opportunities within their respective areas of expertise. Our EHS Committee assists our Board with oversight of EHS risk and opportunity management, which may include climate-related risks and opportunities. The EHS Committee consists of independent directors appointed by the Board. Board members with experience in

EHS and regulatory matters assist in confirming that we are operating consistent with prudent industry practices and that environmental and safety matters are properly considered in Board decisions. The EHS Committee meets at least semi-annually and reviews reports from our COO on ESG and EHS issues. Any Board member may elect to attend EHS Committee meetings. Our CEO, President, and other Board members, with few exceptions, attend and participate in the regularly scheduled EHS Committee meetings.

Through our EHS Committee, our Board also provides direction to management about ESG disclosures in conjunction with our ESG Disclosure Committee described in *Section 1.0 Introduction* of the *Sustainability Report*. The EHS Committee's oversight includes the review of the progress and results of the annual scenario analysis we conduct to test the resilience of our business strategy. Through the EHS Committee, our Board provides direction to our COO on ESG, sustainability, and climate-related issues. Our Board and EHS Committee also establish performance expectations with our CEO, President, and COO for the management of these issues.

#### 1.2 Management's Role

(SASB Midstream EM-MD-110a.2, SASB Exploration & Production EM-EP-110a.3, SASB Marine Transportation TR-MT-110a.2, GRI 2-12, GRI 2-13, GRI 2-14, CDP C1.1b, CDP C1.2)

Our business segment presidents, corporate function heads, and subject matter personnel are responsible for assessing and managing actual and potential risks and opportunities, including those related to climate. These individuals use various management systems to assist them with their responsibilities.

Our COO is responsible for overseeing our engagement with investors, regulators, employees, lenders, customers, and other stakeholders on ESG-related matters, including our risks and opportunities. Our COO provides strategic leadership for EHS matters, including matters related to climate change. Our COO is also responsible for implementing procedures and controls to track the data necessary for the preparation of our Report, and for reporting our results to other senior management and our Board's EHS Committee.

Our CEO and our President hold a series of regularly scheduled meetings to engage with our business segment presidents, corporate function heads, and subject matter personnel on issues related to our business. We use those meetings to monitor progress and performance and to discuss risks and opportunities, including, where appropriate, climate-related risks and opportunities and plans to address such risks and opportunities. The frequency of these meetings creates a cycle of ongoing assessment and improvement, as action plans relating to various aspects of our business are initiated and adjusted based on new information and past experience. The regular cadence and varied length of these meetings, from a few hours to most of a business day, permit extended discussion and regular follow-up on a wide range of action items. The meetings are typically scheduled one year in advance and are described in *Section 3.0 Risk and Opportunity Management* of the *TCFD Report*.

A wide range of professionals in our organization typically attend these recurring meetings. Participants include employees with subject matter knowledge applicable to managing risks and opportunities, including:

- business administration;
- business continuity planning;
- energy markets and marketing;
- engineering and earth sciences;
- environmental and energy policy, law, and compliance;

- finance, tax, and accounting;
- insurance;
- legal;
- public relations and corporate communications;
- strategic management; and
- technology development.

These meetings focus senior management's attention on near-, medium-, and long-term business risks and opportunities with substantial input from subject matter personnel. In addition, our senior management engages in ad hoc meetings on an as-needed basis to:

- review and approve new projects and acquisitions;
- review with industry consultants and other experts long-term trends, e.g., demand and supply, for the products we transport and handle; and
- identify and understand disruptive technologies or emerging policies.

The information our senior management gains from these meetings is presented to our Board regularly. Our Board, in turn, uses the work done at the management level to inform its decisions about the company's future direction.

# 2.0 Strategy

The fundamental principles of our business strategy are to:

- focus on stable, fee-based energy transportation and storage assets that are central to the energy infrastructure and energy transition of growing markets within North America or served by U.S. exports;
- increase utilization of our existing assets while controlling costs, operating safely, and employing environmentally sound operating practices;
- exercise discipline in capital allocation and in evaluating expansion projects and acquisition opportunities;
- leverage economies of scale from incremental acquisitions and expansions of assets that fit our strategy; and
- maintain a healthy financial profile and enhance and return value to our stockholders.

Our forward-looking strategies and financial decisions are driven primarily by market opportunities and corporate objectives and responsibilities. We make long-term strategic decisions with the intention of creating sustainable competitive advantages. To sustain and improve our market position, we project and plan for reasonably foreseeable changes, including changes to governmental regulations, that could potentially impact our business and the markets in which we operate. We respond to such changes as they occur. Market and policy responses to climate change can be and have been a factor in our forward-looking strategic and financial decision-making.

We modify our strategy as necessary to reflect changing economic conditions and other circumstances, including, among other factors, those related to identified or reasonably anticipated impacts of climate change. We invest in our assets to operate them safely and to protect our employees, the environment, and the communities in which we operate. We work collaboratively within our industry and with governments, environmental groups, Indigenous Peoples, and other communities to build our understanding of the issues around climate change and seek potential solutions.

In the U.S., we engage with policy makers from both major political parties at the federal, state, and local levels. For more information about this topic, see *Section 13.0 Management of Changes to the Legal and Regulatory Environment* of the *Sustainability Report*.

## 2.1 Potential Climate-Related Risks, Opportunities, and Impacts

(SASB Exploration & Production EM-EP-420a.4, GRI 201-2/11.2.2, GRI 203-1/11.14.4, CDP C2.1, CDP C2.3, CDP C2.3a, CDP C2.4, CDP C2.4a)

We primarily transport and store commodities for our customers, which include major oil and natural gas companies, energy producers and shippers, local distribution companies, and businesses across many industries. The impact of climate-related risks and opportunities on our customers often has an impact on our business.

Our customers have been increasingly setting climate targets and consequently, seeking to transport and store lower life-cycle emission products and products that are facilitating the energy evolution, including responsibly sourced natural gas, renewable natural gas, renewable diesel, and renewable feedstocks. While our principal business is the transport and storage of fossil fuels, we have been able to handle these renewable or lower emission products for our customers with our existing infrastructure and expect this infrastructure to remain essential in moving liquid and gaseous fuels in a lower carbon future. We also believe we have a competitive advantage in constructing and operating CO<sub>2</sub> pipelines, which could be beneficial in a CCUS market. While transporting and storing these lower carbon fuels may not reduce our own operational GHG emissions, our assets are critical in facilitating the end-use of these products, which we believe will help reduce global GHG emissions.

A breakdown of our largest customers by type is shown below.<sup>27</sup>



Our management system integrates the identification, assessment, and management of risks and opportunities across various time horizons. As discussed in *Section 1.2 Management's Role* of the *TCFD Report*, our management system includes holding a series of meetings to monitor our business performance and to identify, assess, and manage risks and opportunities over a variety of time horizons, including climate-related risks and opportunities where appropriate. Some examples include:

Timeframe	Management Process	Examples of Climate-related Risks	Examples of Climate-related Opportunities
Short-term – immediately to one year	<ul> <li>Weekly, monthly, and quarterly financial and operational reviews</li> <li>Annual budget reviews</li> </ul>	<ul> <li>Legislative and regulatory proposals and changes that are likely to affect our business or that of our customers</li> <li>Extreme weather events</li> <li>New emission control requirements</li> <li>Compliance costs</li> </ul>	<ul> <li>Energy efficiency and alternative sources of energy</li> <li>Responsibly sourced natural gas</li> <li>RNG transport and production</li> <li>Renewable fuels and feedstocks</li> <li>CCUS</li> <li>Additional renewable power generation at our locations</li> </ul>
Medium-term – one to five years	<ul> <li>Quarterly business reviews</li> <li>Long-range outlook</li> <li>Project approval meetings</li> </ul>	<ul> <li>Changes in demand for our services or in customer preferences</li> <li>Changes in our ability to obtain permits or other regulatory approval</li> <li>Public opposition due to climate concerns</li> </ul>	<ul> <li>Potential increases in the use of our existing assets</li> <li>Blending or transporting renewable and lower carbon fuels using our existing natural gas infrastructure</li> </ul>

<sup>&</sup>lt;sup>27</sup> Based on 2023 budgeted net revenue, a non-GAAP measure. Includes 237 customers with greater than \$5 million of revenue with us, which represent ~87% of our total budgeted net revenues. For additional information about our use of and calculation of budgeted net revenue, see the Kinder Morgan 2023 Investor Day presentation dated January 25, 2023, which is posted on our website at <a href="https://ir.kindermorgan.com/events-and-presentations/default.aspx">https://ir.kindermorgan.com/events-and-presentations/default.aspx</a>.

Timeframe	Management Process	Examples of Climate-related Risks	Examples of Climate-related Opportunities
Long-term – five to thirty or more years	<ul> <li>Quarterly business reviews</li> <li>Ad hoc meetings with experts</li> <li>2 °C scenario working group</li> <li>Macro research teams</li> </ul>	<ul> <li>Changes in long-term demand for the products we transport and store</li> <li>Changes in public policy that may affect growth opportunities in our traditional lines of business</li> </ul>	<ul> <li>Dedicated hydrogen or hydrogen carrier products infrastructure</li> <li>Potential lower emission product options or product replacements</li> </ul>

The TCFD divides climate-related risks into two categories: transitional and physical. Transitional risks are those risks related to the transition to a lower carbon economy, such as policy constraints on emissions, carbon taxes, and shifts in market demand and supply. The TCFD groups transitional risks into four categories:

- policy and legal risk,
- technology risk,
- market risk, and
- reputational risk.

Physical risks are associated with physical impacts from climate change that could affect assets and operations. Physical risks include either the disruption of operations or the destruction of property or both. The TCFD divides physical risk into acute and chronic risks. Acute risks include physical damage from variations in weather patterns, such as severe storms, wildfires, floods, and drought. Chronic risks include sea-level rise and desertification.

Both transitional and physical climate-related risks may affect our business. A variety of factors outside our control can cause delays in our construction projects. Public opposition may cause difficulties in obtaining rights-of-way, permits, and other regulatory approvals. Inclement weather and natural disasters can increase costs or cause construction delays. Significant cost overruns or lengthy delays can have a material adverse effect on our return on investment, results of operations, and cash flows. These factors can result in project cancellations or limit our ability to pursue other growth opportunities.

Some of our assets are located in areas susceptible to natural disasters such as:

- hurricanes,
- earthquakes,
- wildfires,
- tornadoes,
- flooding,
- extreme snow and ice, and
- other natural disasters.

Natural disasters can damage or destroy our assets or disrupt the supply of the products we transport or store. Natural disasters can similarly affect our customers' facilities. Circumstances could arise in which our losses could exceed our insurance coverage resulting in a material adverse impact to our assets, financial condition, or operating results.

If the scenarios contemplated in the IEA WEO APS or the IPCC RCP 8.5 are realized, a list of potential climate-related transitional and physical risks that could occur are set forth in the two tables below, in addition to the following:

- potential financial impacts related to such risks,
- available strategy and mitigation measures for such risks, and
- page numbers where the topics are discussed in our Report.

#### Potential Transitional Risks

	Potential Transitional Risks		
Potential Climate-Related Risk	Potential Financial Impact	Available Strategy and Mitigation Measures	Page
Policy & Legal			
<ul> <li>Increased climate change-related regulation and policies resulting in:</li> <li>higher emission fees and carbon taxes</li> <li>higher fuel prices</li> <li>additional emission reporting and reduction obligations</li> <li>mandates on and regulation of customers' products or our services</li> <li>mandated transition to renewables</li> <li>delays or denials of FERC certificates</li> </ul>	<ul> <li>Increased compliance and legal costs</li> <li>Increased fuel costs</li> <li>Reduced demand for our traditional services</li> <li>Increased project expansion costs</li> <li>Increased write offs</li> </ul>	<ul> <li>Engaging with regulators, industry organizations, NGOs, and communities</li> <li>Systematic monitoring of regulatory proposals and implementation of compliance programs, including increasing compliance staff</li> <li>Offsetting, reducing, and managing emissions</li> <li>Managing energy use and improving efficiency</li> <li>Developing new services</li> <li>Expanding current services and certifications, such as responsibly sourced natural gas</li> <li>Installing renewable energy or using green power purchase agreements</li> </ul>	- p <u>28</u> - p <u>63</u> - p <u>31</u> - p <u>28</u> - p <u>103</u> - p <u>28</u> - p <u>28</u>
Technology			
<ul> <li>Substitution of customers' existing products with lower emission options</li> <li>Lower potential demand for existing products due to greater energy efficiencies</li> </ul>	<ul> <li>Reduced demand for our traditional services</li> <li>Increased write-offs and earlier retirement of existing assets</li> <li>Increased customer credit risk, including bankruptcies</li> </ul>	<ul> <li>Negotiating contracts with longer terms, higher per-unit pricing, and for a greater percentage of our available capacity</li> <li>Changing focus to fossil-fuel markets expected to exist in APS</li> <li>Adjusting investment evaluation assumptions to assume lower uncontracted cash flows and terminal values</li> <li>Maintaining discipline in accounts receivable management and customer credit protections</li> <li>Developing new services</li> <li>Developing and expanding lower carbon business activities</li> </ul>	- p <u>101</u> - p <u>94</u> - p <u>103</u> - p <u>103</u>
Market			
<ul> <li>Changing consumer behavior reducing demand for customers' products</li> <li>Uncertainty in market signals</li> <li>Increased cost of raw materials</li> <li>Lower export demand due to geo- political issues in foreign markets</li> </ul>	<ul> <li>Reduced demand for our traditional services</li> <li>Increased operating costs due to higher energy prices</li> <li>Abrupt and unexpected shifts in energy prices and costs</li> <li>Repricing of oil field reserves</li> </ul>	<ul> <li>Adjusting investment evaluation assumptions</li> <li>Negotiating contracts with longer terms, higher per-unit pricing and for a greater percentage of our available capacity</li> <li>Managing energy use and improving efficiency</li> <li>Financial risk management and hedging programs</li> <li>Developing and expanding lower carbon business activities</li> </ul>	- p <u>101</u> - p <u>101</u> - p <u>28</u> - p <u>101</u> - p <u>103</u>
Reputation			
<ul> <li>Stigmatization of sector</li> <li>Increased stakeholder concern or negative stakeholder feedback</li> </ul>	<ul> <li>Increased cost of capital</li> <li>Decreased access to public capital markets</li> <li>Increased cost of public relations</li> <li>Decreased ability to attract and retain employees</li> <li>Decreased investment in industry sector</li> </ul>	<ul> <li>Expanding and developing lower carbon business activities</li> <li>Working to reduce our carbon footprint</li> <li>Adjusting ESG disclosure to be responsive to the financial sector by reporting per SASB, TCFD, and other reporting frameworks</li> <li>Increasing internal funding to reduce need to access capital markets</li> <li>Engaging with regulators, industry organizations, NGOs, and communities</li> </ul>	- p <u>103</u> - p <u>31</u> - p <u>11</u> - p <u>103</u> - p <u>101</u>

	Potential Physical Risks		
Potential Climate-Related Risk	Potential Financial Impact	Available Strategy and Mitigation Measures	Page
Acute			
<ul> <li>More frequent and severe weather events, including floods, droughts, extreme heat, extreme cold, extreme snow and ice, hurricanes, and tornadoes, leading to business interruption and damage across operations and supply chain</li> <li>Larger and more frequent wildfires</li> </ul>	<ul> <li>Reduced revenue as a result of business and supply chain interruptions</li> <li>Increased write-offs and costs for damaged property</li> <li>Increased insurance costs</li> </ul>	<ul> <li>Business continuity planning</li> <li>Maintaining necessary insurance</li> <li>Engineering controls</li> <li>Environmental assessments and management plans</li> <li>Operational procedures and plans to identify areas prone to severe weather events and wildfires</li> <li>Drill severe weather event and wildfire scenarios</li> <li>Monitoring weather patterns, storms, and wildfire events</li> <li>Implementing emergency shutdown procedures, followed by damage inspection and restart protocols</li> </ul>	- p <u>59</u> - p <u>101</u> - p <u>41</u> - p <u>59</u> - p <u>59</u> - p <u>59</u> - p <u>59</u>
		<ul> <li>Right-of-way maintenance</li> </ul>	– p <u>59</u>
Chronic			
<ul> <li>Long-term shifts in climate patterns, possibly resulting in new storm patterns, coastal flooding, and chronic heat waves</li> <li>Rising sea levels and tidal fluctuations</li> </ul>	<ul> <li>Reduced revenue as a result of business interruption or facility shutdown</li> <li>Increased costs for damaged property and facility improvements</li> </ul>	<ul> <li>Business continuity planning</li> <li>Engineering controls</li> <li>Pre-construction planning incorporating enhanced engineering standards</li> <li>Improving facilities to accommodate storm surge</li> </ul>	- p <u>59</u> - p <u>113</u> - p <u>41</u> - p <u>59</u>
		<ul> <li>Monitoring tide levels</li> </ul>	– p <u>59</u>

The TCFD recognizes that an organization's efforts to mitigate and adapt to climate change may also produce opportunities for the organization. The TCFD groups those opportunities into five categories:

- resource efficiency,
- energy source,
- products and services,
- markets, and
- resilience.

As an energy infrastructure company, we recognize and expect that future energy demand will continue to be met in part by a growing proportion of renewable energy sources. Today, the world still relies on traditional fuels for most of its energy and material needs. We expect this energy transition, like energy transitions in the past, to take considerable time. Past transitions have occurred not by eliminating existing sources of energy, but by adding new energy sources to meet growing demand. While delivering access to the secure energy the world requires in order to increase GDP and the standard of living for a growing population, we pursue opportunities that also benefit the global effort to address climate change. Specifically, we are:

- expanding our natural gas transmission and storage business to maintain energy reliability while facilitating greater renewable penetration in the power sector and supporting our LNG customers;
- pursuing opportunities internally and within the industry to reduce emissions by increasing efficiency along our and our customers' value chains; and
- exploring new lower carbon technologies and business models.

Our energy transition ventures group identifies, analyzes and pursues commercial opportunities emerging from the transition to lower carbon energy. This group focuses on customer outreach and business development activities in pursuit of those new ventures, including services like CCUS, RNG production, blue and green hydrogen production or transportation, renewable power generation, electric transmission, and renewable diesel production. As always, we will remain disciplined and focused on appropriate returns when evaluating investment opportunities in these new ventures.

The following table contains a brief listing of:

- potential opportunities,
- potential financial impacts,
- our strategy and enhancement measures, and
- page numbers where the topics are discussed in our Report.

#### **Potential Opportunities**

<b>Climate-related Opportunities</b>	Potential Financial Impact	Available Strategy and Enhancement Measures	Page
Resource Efficiency			
<ul> <li>Using more efficient equipment</li> <li>Using more efficient production and distribution processes</li> </ul>	<ul> <li>Reduced operating costs through efficiency gains and cost reductions</li> <li>Increased production capacity, resulting in increased revenues</li> </ul>	<ul> <li>Increasing use of our existing assets</li> <li>Leveraging economies of scale from incremental acquisitions and asset expansions</li> </ul>	- p <u>103</u> - p <u>94</u>
Energy Source			
<ul> <li>Using lower-emission sources of energy</li> <li>Using supportive policy incentives</li> <li>Using new technologies</li> <li>Participating in the carbon markets</li> <li>Shifting toward decentralized energy generation</li> </ul>	<ul> <li>Attractive returns on investment in lower carbon natural gas infrastructure</li> <li>Increased capital availability as more investors favor lower-emission products</li> <li>Reputational benefits resulting in increased demand for services</li> <li>Increased value of fixed assets</li> </ul>	<ul> <li>Allocating the largest portion of our expansion capital to lower carbon natural gas infrastructure</li> <li>Developing new services including storage / transportation of lower-emission energy sources</li> <li>Expanding and developing lower carbon business activities</li> </ul>	- p <u>103</u> - p <u>103</u> - p <u>103</u>
Products and Services			
<ul> <li>Developing or expanding lower emission goods and services</li> <li>Diversifying business activities</li> <li>Responding to shifting consumer preferences</li> </ul>	<ul> <li>Increased revenue through demand for lower emission products and services</li> <li>Increased revenue from our competitive position and asset flexibility to respond to shifting consumer preferences</li> </ul>	<ul> <li>Allocating the largest portion of our expansion capital to lower carbon natural gas infrastructure</li> <li>Developing new services</li> <li>Expanding and developing lower carbon business activities</li> </ul>	- p <u>103</u> - p <u>103</u> - p <u>103</u>
Markets			
<ul> <li>Increased demand for natural gas services</li> <li>Increased demand for natural gas storage and pipeline services to backstop intermittent renewable power supply</li> <li>Increased use of public-sector incentives for carbon transportation and sequestration</li> <li>Increased demand for reliable fuel for power generation</li> <li>Increased demand for reliable energy sources due to climate change policies and geopolitical issues in foreign markets</li> </ul>	<ul> <li>Increased revenue from rising demand for natural gas gathering, processing, transportation, storage, and distribution</li> <li>Increased revenue through access to new and emerging carbon transportation and sequestration markets</li> </ul>	<ul> <li>Allocating the largest portion of our expansion capital to lower carbon natural gas infrastructure, including for export</li> <li>Pursuing carbon sequestration opportunities</li> <li>Developing new services focused on deliverability and unconventional energy storage</li> </ul>	- p <u>103</u> - p <u>103</u> - p <u>103</u>
Resiliency			
<ul> <li>Responding quickly to market changes resulting from natural disasters</li> <li>Participating in renewable energy programs and adopting energy efficiency measures</li> </ul>	<ul> <li>Increased market valuation through resilience planning</li> <li>Increased reliability of supply chain and ability to operate under various conditions</li> </ul>	<ul> <li>Business continuity planning</li> <li>Continuing to innovate and improve our energy management programs</li> <li>Evaluating new ways to reduce our emissions by increasing equipment efficiency</li> </ul>	- p <u>59</u> - p <u>28</u> - p <u>25</u>

## 2.2 Financial Planning Considerations

(CDP C2.1, CDP C2.2d, CDP C2.3a, CDP C3.1, CDP C3.1c, CDP C3.1d, CDP C2.4a, CDP C2.5)

We identify a variety of risks and opportunities and develop plans for managing those risks and opportunities when allocating capital to our assets, establishing budgets for operating and capital projects, and developing our long-range outlook. Climate-related risks and opportunities typically manifest themselves indirectly through fundamental financial considerations. For example, embedded in our supply and demand projections are the expected effects of climate-related factors such as changing consumer behavior, increased energy efficiencies, and competing products and services. Operating and capital project budgets include expected costs for climate-related expenses, such as environmental permitting; emission monitoring, reporting, fees, and offsets; business continuity planning; and insurance, as applicable. When we anticipate increased opposition to our capital projects, including climate-related opposition, we adjust our project schedules and budgets for enhanced community relations activities.

We prioritize risks and opportunities based upon likelihood and significance. We typically give highest priority to potential risks and opportunities we consider more probable and most significant. When we assess capital allocation decisions, we may adjust our required levels and thresholds of one or more of the following criteria:

- rates of return on capital;
- payback periods;
- market demand projections;
- projected operating costs, including compliance costs;
- terminal value projections;
- customer contract durations;
- customer and equity partner creditworthiness and protections;
- customer and equity partner concentration;
- per-unit pricing;
- percentage of contracted capacity; or
- level of equity participation and partnership.

When potential climate-related risks are more likely, such as reduced demand for our customers' products as a result of changing consumer behavior, we may reduce estimated or projected revenue after initial contract expiration or adjust terminal value. For example, when evaluating expansion projects on our refined product pipelines, in some instances we have reduced estimated or projected revenue after expiration of the initial contract term or used a zero terminal value at the end of the period over which our customers have contracted for the additional services provided by the expansion. We also seek to repurpose our existing underutilized assets to provide solutions for our customers at attractive returns with reduced risk and less investment.

When we are less certain of a project's risks or opportunities, we may increase the minimum required rate of return, or hurdle rate, for investment in the project and reduce the terminal value expectations. In addition to a higher hurdle rate, our preference is for higher quality cash flow, meaning stable, more certain cash flows backstopped by long-term contracts from credit-worthy customers. We prioritize our expansion capital investments to projects where we have contracts with credit-worthy customers that allow us to recover our capital within the length of the contracts' terms. This approach reduces our exposure to medium- and long-term market risks, including climate-related risks. We accept that our disciplined focus on these types of opportunities sometimes restrains our pursuit of higher-risk projects.

We have a systematic, disciplined approach to managing counterparty credit risk through weekly and monthly reviews of accounts receivable, customer creditworthiness, and required credit protections. We also review any past due accounts receivable monthly. We continue to improve our established culture of thoughtful cost control.

# 2.3 Resilience of Our Strategy

(SASB Midstream EM-MD-110a.2, SASB Exploration & Production EM-EP-110a.3, SASB Marine Transportation TR-MT-110a.2, GRI 203-1/11.14.4, CDP C3.1, CDP C3.1d)

To better assess the resilience of our business strategy and understand the impact that climate change could have on our business, we perform high-level assessments of the impact of 1.5-2 °C global warming scenario, transition risk analysis, and 4 °C global warming scenario, physical risk analysis.

To update our transition risk analysis, we used the scenarios contemplated in the IEA's 2022 WEO, and we considered these scenarios relative to our existing asset base. The IEA 2022 WEO developed a scenario projecting a global temperature increase of 1.5-2 °C. The IEA's scenarios consider the future projected energy demand and supply mix from a variety of perspectives, including:

- electricity generation sources and availability,
- transportation fuels,
- GHG emissions, and
- required investment.

For our physical risk analysis, we used scenarios consistent with the RCP 8.5 4 °C Scenario presented in the IPCC's 2014 Fifth Assessment Report, which assumes that emissions continue to rise throughout the 21st century. In the 4 °C Scenario, the IPCC assumes that climate policy is less ambitious and GHG emissions remain high, which could lead to more severe physical risks, compared to a 1.5-2 °C Scenario.

We considered our potential exposures, mitigation measures, and vulnerabilities to the outcomes for the following variables:

- temperature,
- precipitation,
- drought,
- storm surges,
- wildfires,
- hurricanes,
- floods,
- sea level rise, and
- landslides.

If either of these Scenarios were to become reality, we could undertake strategies that change our asset base, for example, by entering into new lines of business. Shifts in our asset base could occur immediately, such as through acquisitions and divestitures, or more incrementally as we adapt to changes in circumstances. An acquisition or sale of material businesses or assets may be significant in size relative to our existing assets or operations.

Winter storm Uri in 2021 tested the ability of our assets to perform during extreme weather events and, because of our prior planning and preparedness, proved resilient. When winter storm Uri triggered widespread rolling blackouts across Texas and several other states, we were able to continue delivering energy to the market when many oil and gas producers and natural gas and electric utilities were shut

down. We also used our storage reserves to bring natural gas into the market as quickly as possible, regardless of price trend. Uri seriously impacted Texas and our industry, and we are committed to working within the industry to support an emphasis on preparedness to prevent future widespread power outages.

The IEA's and IPCC's scenarios are not a prediction of the future, but rather provide a common framework for comparing possible versions of the potential future global energy mix and impacts of climate change. The assumptions underpinning the IEA's and IPCC's scenarios may change over time as new information becomes available. Some of the primary underlying assumptions and indicators currently in the IEA's and IPCC's scenarios are included in *Appendix E – Summary of Scenarios and their Underlying Assumptions and Indicators*. There can be no assurance that any of the scenario analyses we perform for our businesses and assets are a reliable indicator of any actual impact of climate change on our businesses and assets.

It bears repeating that a variety of factors could cause actual results to differ significantly from those expressed in or implied by our forward-looking statements. Please see *Important Information about Policies, Procedures, Practices, and Forward-Looking Statements* for additional information. It is impossible to predict with certainty the timing, direction, and magnitude of climate-related risks and opportunities. As a result, it is extremely difficult to accurately predict how resilient we will be to climate-related changes.

# 2.3.1 Transition Risk Analysis

Our scenario analysis focused on the APS. APS policy assumes that all aspirational targets announced by governments are met on time and in full, including their long-term net zero and energy access goals, whether they relate to climate change, energy streams, or national pledges in other areas such as energy access. Trends in this scenario reveal the extent of the world's collective ambition, as it stands today, to tackle climate change and meet other sustainable development goals. These have collectively become more ambitious since the APS of IEA's 2021 World Energy Outlook as a result of new pledges and targets announced since then, notably in India and Indonesia. The global trends in this scenario represent the cumulative extent of the world's ambition, as of mid-2022, to address climate change.

Under the IEA's APS:

- global energy consumption peaks and then declines by 1% over the period from 2021-2050;
- crude oil and natural gas remain a significant portion of the energy mix, meeting 34% of global energy consumption in 2050, but down from 54% in 2021;
- global natural gas consumption falls from 16% in 2021 to 10% in 2050, a decrease of 38%; and
- global biofuels consumption increases by five times from 2021 to 2050 to comprise 15% of the liquid fuels market by 2050 versus 2% in 2021.

Despite an assumed 24% increase in population and 81% increase in average individual wealth, IEA projects that global energy consumption decreases by 1% over the 2021-2050 period and per person energy supply declines by 19%.<sup>28,29</sup> This decline in energy supply is primarily due to IEA's assumptions for substantial and rapidly occurring energy efficiencies, which are driven by wide-ranging and rapidly evolving global public policy. Throughout the scenario, IEA acknowledges that the lower demand

<sup>&</sup>lt;sup>28</sup> International Monetary Fund. "World Economic Outlook Database: Oct 2022," Oct 2022. 2022.

<sup>&</sup>lt;a href="https://www.imf.org/-/media/Files/Publications/WEO/WEO-Database/2022/WEOOct2022alla.ashx">https://www.imf.org/-/media/Files/Publications/WEO/WEO-Database/2022/WEOOct2022alla.ashx</a>>.

<sup>&</sup>lt;sup>29</sup> International Monetary Fund. "World Economic Outlook Database: October 2022," Oct 2022. 2022.

<sup>&</sup>lt; https://www.imf.org/-/media/Files/Publications/WEO/WEO-Database/2022/WEOOct2022all.ashx>.

assumption is critical to managing overall investment required and the projected declines in energy usage depend on the extent to which the energy efficiency and public policy assumptions are achieved.

Under the APS, IEA expects the global energy mix to become increasingly dependent on intermittent energy resources, such as solar and wind, increasing from 2% of the global energy supply in 2021 to 24% in 2050. Non-intermittent energy, e.g., natural gas and liquid and gaseous bioenergy, which comprised 98% of the global energy supply in 2021, is forecasted to decline to 76% by 2050.

The APS energy mix is enabled by various cost assumptions that increase the cost of hydrocarbons, like carbon taxes, and lower the cost of electrification and renewable power generation. For example, in the U.S., the APS predicts declining capital costs of 57% for solar PV, 60% for offshore wind, and 12% for onshore wind over the 2021-2050 period. This is coupled with a cumulative investment in North America of \$5 trillion in electricity networks and \$4 trillion in renewable power generation over the same period. Because clean energy technologies require a significant volume of minerals, the feasibility of achieving these cost reduction assumptions hinges on increased mineral availability and mining capacity necessary to meet rising mineral demand.

By 2050 under the APS, carbon taxes are assumed in nearly all countries, including some emerging markets and developing economies. In advanced economies with a net zero target, the assumed carbon taxes range from \$135-200 per metric ton. Because of carbon taxes implemented in advanced economies, IEA expects North America and Europe to lose 15% of the global natural gas production market share to regions with higher expected emission intensity such as the Middle East and Africa.

Optimistic assumptions around energy efficiencies, government policies, cost reductions, grid reliability, and mineral development help to modulate projected global average annual investment to \$4 trillion for the 2021-2050 period, which while likely a conservative estimate, is still more than double historical levels. Projected global average annual investment per total energy supply is \$6.9 billion per EJ in 2050 and \$3.4 billion per EJ for the 2016-2021 period. In summary, the APS scenario assumes a larger population and higher per capita income, but decreasing total energy demand in 2050 compared to 2030.

During our scenario analysis we also conducted a review of the IEA's 2022 World Energy Outlook NZE to determine whether there were additional climate-related risks or opportunities that were not already identified in our scenario analysis conducted against the IEA World Energy Outlook APS. We found the NZE scenario did not reveal additional climate-related risks for us; rather, it impacted the timing of risks or opportunities we had already identified.

## Transition Risk Analysis Results

As noted above, our business strategy is to focus on stable, fee-based energy transportation and storage assets and to operate them safely and in an environmentally sound manner. We allocate capital to our assets in a disciplined manner and typically operate under multi-year contracts with our customers. We seek to be proactive in adapting to changing circumstances. Thus far, our business strategy is proving effective in adapting to climate-related risks and opportunities.

The majority of our growth capital expenditures have been and are expected to continue to be allocated to assets that serve lower carbon fuels, such as conventional natural gas, responsibly sourced natural gas, RNG, LNG, renewable diesel, other biofuels, and biofuel feedstocks. As reflected in the following chart, we allocated approximately 69% of our 2022 discretionary capital to lower carbon fuels.



- (a) For additional information about our use of and calculation of discretionary capital, a non-GAAP financial measure, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Capital Expenditures" included in our 2022 Form 10-K, which is available through the SEC's EDGAR system at https://www.sec.gov and on our website at https://ir.kindermorgan.com/financials/annual-reports/default.aspx.
- (b) Acquisitions aligned with our strategy to invest in low-carbon energy and are part of our energy transition ventures group. See discussion of North American Natural Resources, Inc. and Mas Ranger in our Lower Carbon Fuels and CCUS section below.

#### Natural Gas

As a result of expansion projects, organic growth and acquisitions, our Natural Gas Pipelines business segment has grown significantly since 2009 and now comprises approximately 63% of Adjusted Segment EBDA, up from approximately 27% in 2009. Contributions by each of our business segments to Adjusted Segment EBDA are presented in the following chart.



(a) For additional information about our use of and calculation for Adjusted Segment EBDA, a non-GAAP financial measure, see Part II, Item 7 included in our 2022 Form 10-K annual report, which is available through the SEC's EDGAR system at <u>https://www.sec.gov</u> and on our website at <u>https://ir.kindermorgan.com/financials/annual-reports/default.aspx</u>.

We operate or own an interest in approximately 72,000 miles of natural gas pipelines that transport approximately 40% of the natural gas consumed domestically or exported as LNG. Natural gas in North America is plentiful, inexpensive, and cleaner burning relative to other fossil fuels. Partly due to the increased number of cleaner burning natural gas-fired power plants, CO<sub>2</sub> emissions from U.S. electric power sector energy consumption in 2021 were at 1980 levels and 36% below 2007 levels, where CO<sub>2</sub> emissions peaked, while the U.S. GDP grew about 45% from 2007. <sup>30,31,32</sup> Per the IEA WEO Stated Policies Scenario, if the world continues to replace coal-fired power plants with natural gas-fired plants, it could lead to a potential CO<sub>2</sub> emissions reduction of 26% by 2050.<sup>33</sup> Natural gas-fired power plants compared to coal-fired plants also have lower SO<sub>x</sub> emissions, which significantly reduces acid rain formation.

As the rate of renewables penetration increases, reliable and dispatchable natural gas-fired power plants will continue to provide electricity during demand peaks and will balance power to meet the variable load demand requirements of electric generation.<sup>34</sup> This need will become even more acute during the early

<sup>&</sup>lt;sup>30</sup> U.S. Energy Information Administration. "April 2023 Monthly Energy Review. Table 11.6" EIA, Apr 2023. <a href="https://www.eia.gov/totalenergy/data/monthly/pdf/mer.pdf">https://www.eia.gov/totalenergy/data/monthly/pdf/mer.pdf</a>>.

<sup>&</sup>lt;sup>31</sup> U.S. Census Bureau. "Historical National Population Estimates: July 1, 1900 to July 1, 1999." U.S. Census Bureau, Feb 2000. 2021. <a href="https://www2.census.gov/programs-surveys/popest/tables/1900-1980/national/totals/popclockest.txt">https://www2.census.gov/programs-surveys/popest/tables/1900-1980/national/totals/popclockest.txt</a>.

<sup>&</sup>lt;sup>32</sup> U.S. Census Bureau. "Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia and Puerto Rico: April 1, 2020 to July 1, 2022 (NST-EST2022-POP)" U.S. Census Bureau, 2023. <a href="https://www2.census.gov/programs-surveys/popest/tables/2020-2022/state/totals/NST-EST2022-POP.xlsx">https://www2.census.gov/programs-surveys/popest/tables/2020-2022/state/totals/NST-EST2022-POP.xlsx</a>.

 $<sup>^{33}</sup>$  We calculated using a coal emission intensity rate of 88 Million tonnes CO<sub>2</sub>/EJ and a natural gas emission intensity rate of 51 Million tonnes CO<sub>2</sub>/EJ.

<sup>&</sup>lt;sup>34</sup> Black & Veatch Management Consulting, LLC. "The Role of Natural Gas in the Transition to a Lower-Carbon Economy." INGAA, 7 May 2019: 2-4. 2021. <a href="https://www.ingaa.org/File.aspx?id=36501">https://www.ingaa.org/File.aspx?id=36501</a>.

part of the energy transition because baseload electricity generation from coal and natural gas is being removed faster than intermittent renewable generation from wind and solar is being added. This situation could be further exacerbated by inadequate energy storage as capacity additions of renewables accelerate.<sup>35</sup> For example, when comparing generation and demand from December 20-22, 2022, just before Texas winter storm Elliott, to December 23-25, 2022, the period during the storm, wind generation in Texas decreased by 37% while natural gas demand increased by 63%, which covered the loss of the wind generation as well as increased demand.<sup>36,37</sup> Without the deliverability and reliability of natural gas power generation, the Texas electric grid would have been unable to meet demand.<sup>38</sup> Each year, approximately 1 out of 112 natural gas customers may experience a planned or unplanned natural gas outage versus approximately one outage per year per electric distribution system customer.<sup>39</sup>

Growth in renewable-firming pipeline services and infrastructure, such as market-area gas storage, is increasingly needed to supplement the variable power supply from renewable generation.<sup>40</sup> We expect our expansive natural gas pipeline and storage footprint to provide continuing opportunities to competitively deliver customer-driven solutions in a lower carbon world. Greater natural gas pipeline deliverability, properly contracted and nominated, is proving critical to improving the reliability of electricity generated from renewable energy sources like wind and solar. We are expanding our service offerings to address these market needs by marketing the deliverability and reliability of natural gas from our transportation and storage network as a complement to renewable energy.

Outside of power generation, demand for natural gas in the industrial, residential, and commercial markets are expected to remain resilient for a long time. IEA's APS forecasts the consumption of natural gas in other sectors, such as industry, transport, and buildings, will remain flat globally through 2050, only declining by 1% compared to 2021. This will be driven by the high cost and logistical difficulty of electrifying certain forms of demand and the high-heat industrial processes that cannot be electrified today.<sup>41</sup>

Under the IEA's APS, global trade in LNG is expected to increase by over 21% from 2021 to 2030. Over the 2030-2050 period, North American natural gas production is expected to outstrip North American demand by approximately 16, 14, and 9 Bcf/d in 2030, 2040, and 2050, respectively, resulting in excess supply available for export. Our substantial natural gas transportation and storage infrastructure is connected to most major supply basins and demand markets in the U.S., including multiple LNG export facilities. As such, we believe there should be continued opportunities to use our assets to support this trade. As the U.S. adds more LNG export capacity, we expect continued growth in feedgas deliveries off our pipeline network to serve these export facilities.

<sup>&</sup>lt;sup>35</sup> ISO New England Inc. "2021 Economic Study: Future Grid Reliability Study Phase 1." July 29 2022. <a href="https://www.iso-ne.com/static-assets/documents/2022/07/2021\_economic\_study\_future\_grid\_reliability\_study\_phase\_1\_report.pdf">https://www.iso-ne.com/static-assets/documents/2022/07/2021\_economic\_study\_future\_grid\_reliability\_study\_phase\_1\_report.pdf</a>>.

<sup>&</sup>lt;sup>36</sup> Electric Reliability Council of Texas (ERCOT). "ERCOT\_2022\_Hourly\_WindSolar\_Output." ERCOT, Jan 18 2023. <a href="https://www.ercot.com/misdownload/servlets/mirDownload?doclookupId=890277261">https://www.ercot.com/misdownload/servlets/mirDownload?doclookupId=890277261</a>.

<sup>&</sup>lt;sup>37</sup> Electric Reliability Council of Texas (ERCOT). "Fuel Mix Report: 2022." ERCOT, Mar 7 2023. <a href="https://www.ercot.com/files/docs/2022/02/08/IntGenbyFuel2022.xlsx">https://www.ercot.com/files/docs/2022/02/08/IntGenbyFuel2022.xlsx</a>>.

<sup>&</sup>lt;sup>38</sup> Electric Reliability Council of Texas (ERCOT). "2022 ERCOT Hourly Load Data." ERCOT, 2023.

<sup>&</sup>lt;https://www.ercot.com/files/docs/2022/02/08/Native\_Load\_2022.zip>.

<sup>&</sup>lt;sup>39</sup> American Gas Association. "AGA 2023 Playbook." AGA, 2023. <a href="https://playbook.aga.org/reliable">https://playbook.aga.org/reliable</a>.

<sup>&</sup>lt;sup>40</sup> Black & Veatch Management Consulting, LLC. "The Role of Natural Gas in the Transition to a Lower-Carbon Economy." INGAA, 7 May 2019: 2-4. 2021. <a href="https://www.ingaa.org/File.aspx?id=36501">https://www.ingaa.org/File.aspx?id=36501</a>.

<sup>&</sup>lt;sup>41</sup> WoodMackenzie. "North America Gas 10-Year Investment Horizon Outlook Oct 2022." WoodMackenzie, Oct 2022. 2022. <a href="https://my.woodmac.com/document/544185">https://my.woodmac.com/document/544185</a>.
Because of the foregoing, and the fact that the majority of our assets and growth projects are dedicated to natural gas, we expect to maintain a sustainable economic position even in a carbon-constrained economy.

## Hydrocarbon Fuels

While natural gas has many advantages, other hydrocarbon fuels are generally affordable, dependable, plentiful, and, as a result of advancements in technology, increasingly more efficient. Hydrocarbon fuels are supported by an enormous, sophisticated, worldwide network of infrastructure. In addition, hydrocarbons are inputs to products society uses every day, not only for fuel, but also as raw materials for the production of synthetic fabrics, fertilizers, solvents, and industrial chemicals. We believe it will take decades and a substantial investment of resources for other technologies to supplant the existing hydrocarbon network, which we anticipate will occur gradually over time. Accordingly, we plan to continue to operate, develop, or acquire diversified energy infrastructure assets in each of our business segments, consistent with our commitment to deliver energy to improve lives and create a better world. While demand for the current services of some of our assets may decline as a result of an energy transition, many of our assets are well-positioned to transport, store, or handle lower carbon or transition-driven products, such as renewable fuels, hydrogen, and bulk mineral concentrates.

Our Products Pipelines and Terminals business segments are major transporters or handlers of gasoline, jet fuel, and other distillate products. The IEA's APS predicts that EV penetration will be rapid, with EVs accounting for 50% of car sales in 2030 in the U.S., primarily driven by the IRA. Additionally, the IRA and the Infrastructure and Jobs Act have earmarked nearly \$11 billion for the establishment of a network of EV chargers. If, as a result of the increased efficiency of gasoline powered vehicles and continued EV penetration, there is less domestic demand for gasoline, we would expect our liquids pipelines and many of our liquids terminals to handle lower carbon renewable fuels, including renewable diesel and sustainable aviation fuel, and a higher percentage of diesel for long-haul vehicles and jet fuel for aircraft.

To the extent the developing world transitions away from traditional transportation fuels at a slower pace than the U.S., we anticipate our terminals on the U.S. Gulf Coast, many of which are pipeline-connected to some of the most complex and cost-competitive refineries in the world, could benefit from increased exports of those products. We would also expect our natural gas pipeline and storage assets to benefit from the incremental electricity production required for EVs.

The estimated time for transitioning our assets from handling one carbon intensive material to a lower carbon material varies from immediately to roughly three years. For example, volumes of renewable diesel or RNG can be accommodated immediately with existing liquid and natural gas pipeline assets. A tank storing diesel would require minimal modifications to store renewable diesel. The time required to convert a tank to handle renewable fuels feedstocks typically ranges from three to six months depending on the condition of the tank and product handling requirements, i.e., adding heat tracing and insulation. Converting a transmission asset from higher carbon liquids to lower carbon natural gas could take two to three years.

## Lower Carbon Fuels and CCUS

The world has yet to identify fuels and technologies that are both completely carbon-free and more economical than those in use today. Additional research and development will be needed to accelerate the commercialization of these fuels and technologies. Lower carbon fuels such as RNG, responsibly sourced natural gas, renewable diesel, and hydrogen, as well as CCUS, are emerging as a few of the many potential solutions that could accelerate the world's progress along a path to limit the rise in global temperatures to less than 1.5 °C.

## RNG

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RNG is a pipeline-quality natural gas that is interchangeable with conventional natural gas and thus can be transported, stored, and used in the same applications as natural gas. RNG is essentially upgraded biogas, the gaseous product of the decomposition of organic matter that has been processed to purity standards. In addition to serving as a way to produce a lower carbon fuel, the RNG production process captures greenhouse gases that would otherwise be emitted to the atmosphere or flared. While the market for RNG has increased over time, it still represents a fraction of total natural gas consumption. WoodMackenzie estimates that the U.S. produced 395 MMcf/d of RNG in 2022, accounting for 0.4% of 2022 U.S. natural gas production. Between landfills, dairy farms, swine farms, and other RNG sources, WoodMackenzie estimates U.S. RNG production may increase to 3.6 Bcf/d by 2050.<sup>42</sup>

Since 2018, we have connected ten RNG sites to our pipeline systems that have a total takeaway capacity of approximately 36 MMcf/d of RNG, which, had we transported the full volume, would have accounted for nearly 9% of the RNG market share in 2022. The methane emissions from just one of these sites, which manages over 64 thousand cattle, is equivalent to approximately 1.4 MMcf/d of avoided methane emissions.

We expanded our RNG footprint in 2022 with our acquisitions of Mas Ranger and North American Natural Resources, Inc. These acquisitions, combined with the 2021 Kinetrex Energy acquisition, have RNG generation capacity of approximately 2.3 Bcf/yr with an additional 4.6 Bcf/yr in development. This equates to avoiding up to 3.9 million metric tons of CO<sub>2</sub>e annually. Each 1 MMcf/d of methane captured at an RNG facility equates to avoiding roughly 200 thousand metric tons of CO<sub>2</sub>e per year. This is equivalent to taking more than 44,500 cars off of the road each year.

We are a member of the Coalition for Renewable Natural Gas, or the RNG Coalition, that serves as the public policy advocate and education platform for the RNG industry in North America.

• Responsibly Sourced Natural Gas

Responsibly sourced natural gas, or certified natural gas, is conventional natural gas that has been certified as having met certain ESG standards. These standards typically focus on management practices for methane emissions, water usage, and community relations. As of March 2023, 38 natural gas producers were producing responsibly sourced natural gas, including members of ONE Future or producers obtaining MiQ, Equitable Origins, or Trustwell certifications. ONE Future's production segment members have a target methane emission intensity rate of 0.28% of production by 2025. In 2021, these members achieved an intensity of 0.15%. The potential volume of responsibly produced natural gas across the 38 companies averaged approximately 49 Bcf/d in the U.S. from October 2021 to September 2022, which represents about 45% of the current U.S. wellhead gas production. Given consumers' growing climate-related concerns, the market for responsibly sourced natural gas is expected to grow as natural gas consumers demand that their natural gas be responsibly produced and transported.

In July 2022, TGP received FERC approval for its responsibly sourced or producer certified natural gas pooling service. This service is designed to enable shippers on TGP to purchase and sell responsibly sourced natural gas at non-physical pooling locations, ultimately serving end-users such as utilities, power plants, and LNG facilities. Producers who have obtained certifications

<sup>&</sup>lt;sup>42</sup> WoodMackenzie. "North America Gas Market Strategic Planning Outlook." WoodMackenzie, Mar 2023. 2023. <a href="https://my.woodmac.com/document/150039051">https://my.woodmac.com/document/150039051</a>.

from qualified third-party organizations are supplying the gas for the pooling service and the supply is expected to grow.

• Ethanol

Ethanol is a renewable biofuel that can be made from various plant materials, including corn, barley, and sugar cane. It is often added to gasoline to oxygenate the fuel, which reduces air pollution. Ethanol is considered carbon neutral because the  $CO_2$  released when ethanol is combusted in vehicles is offset by the  $CO_2$  that is absorbed when the feedstock crops are grown to produce ethanol. On a life cycle analysis basis, GHG emissions are reduced on average by 40% with corn-based ethanol produced from dry mills compared with gasoline and diesel production and use.<sup>43</sup>

Our Terminals and Products Pipelines business segments handled nearly a third of the U.S. ethanol demand in 2022. Our Argo, Illinois Terminal serves as the nation's ethanol clearinghouse and trading hub. We have several terminals capable of ethanol train transloading and several truck racks where ethanol is blended with gasoline. These assets position us for growth in the event that regulatory changes require higher levels of ethanol blending by refiners or eliminate the renewable fuel standard exemption for small refiners, which would require them to begin blending ethanol into the gasoline they produce.

• *Renewable Diesel, Sustainable Aviation Fuel, and Renewable Fuel Feedstocks* Renewable diesel is a high-quality, non-petroleum, renewable fuel made from animal fats, plant oils, and used cooking oil. It is often referred to as an advanced biofuel or second-generation biofuel. Renewable diesel is often confused with traditional biodiesel, also known as Fatty Acid Methyl Ester, or FAME. While both are made from organic biomasses, they are different products with different production processes, cleanliness, and quality. Unlike biodiesel, which is subject to more stringent blending limitations, renewable diesel is chemically the same as petroleum diesel and can be handled by the vast network of existing liquids storage and transportation infrastructure.

The life cycle greenhouse gas emissions of renewable diesel and traditional biodiesel are typically 50-80% lower than conventional diesel. This makes both options attractive in a decarbonizing world as we work to meet environmental standards like the Low Carbon Fuel Standard in California and the U.S. Federal Renewable Fuel Standard.

Our Products Pipelines business segment has constructed new renewable diesel hubs in northern and southern California to serve the California diesel market. These hubs became fully operational in April 2023 and have a combined throughput of 38,000 bbls/d of renewable diesel.

Our Terminals business segment handles renewable diesel and sustainable aviation fuel at our facilities along the Houston Ship Channel and the lower Mississippi River. The Terminals business segment also handles the feedstocks to produce renewable diesel at various locations across our network. We are expanding our biofuels feedstock operations, including by repurposing and enhancing existing assets, at our facilities in Harvey and Geismar, Louisiana. The Harvey expansion, which was placed in-service in May 2023, serves as a hub where Neste, a leading provider of renewable diesel and sustainable aviation fuel, stores a variety of feedstocks such as

<sup>&</sup>lt;sup>43</sup> Argonne National Laboratory. "Life -Cycle Greenhouse Gas Emission Reductions of Ethanol with the GREET Model." Feb 17 2021. <a href="https://afdc.energy.gov/files/u/publication/ethanol-ghg-reduction-with-greet.pdf">https://afdc.energy.gov/files/u/publication/ethanol-ghg-reduction-with-greet.pdf</a>>.

used cooking oil. The Geismar River Terminal project includes the construction of multiple tanks totaling approximately 250,000 bbls as well as various infrastructure improvements to meet the growing feedstock requirement of a customer's nearby renewable diesel plant.

Although we are expanding our renewable fuel and feedstock business, our Products Pipelines and Terminals business segments continue to handle mostly fossil fuels.

## Hydrogen

Current estimates among many analysts suggest that hydrogen energy opportunities will start to develop around 2030, making modest inroads between now and then. The U.S. currently produces approximately 10 million metric tons/yr of hydrogen, with an energy equivalent of 3.35 Bcf/d of natural gas, which goes primarily into petroleum refining and ammonia production.<sup>44</sup> The hydrogen market is projected to grow by up to eight times by 2050 due to demand for low carbon hydrogen.<sup>45</sup>

Today's hydrogen production in the U.S. is mainly from the conversion of natural gas into what is referred to as gray hydrogen due to the associated  $CO_2$  emissions from the process. As the market for low carbon hydrogen grows, it is thought that CCUS will be used to abate the emissions from hydrogen production from natural gas, making blue hydrogen. In the near term, blue hydrogen could potentially be a cheaper form of low carbon hydrogen than green hydrogen, which is made by the electrolysis of water using renewable power. Blue hydrogen relies on existing and provenat-scale technologies, while electrolysis technology needs further development in order for green hydrogen to compete with blue hydrogen on a cost basis.

Transitioning to hydrogen could potentially integrate well with our natural gas business. However, currently there is no clear consensus on the level of hydrogen content that can be transported on existing natural gas infrastructure. Transporting hydrogen may require modification of existing assets, and likely increase integrity costs and downtime. Any asset considered for hydrogen blending would need to be assessed to determine its suitability for use with hydrogen and the economic viability of such activity given any such modifications, integrity cost, and downtime among other considerations.

As the demand for hydrogen grows and the hydrogen energy market develops further, we expect to continue to evaluate our ability and opportunity to construct new hydrogen pipelines or transport hydrogen within our existing pipelines to support this demand, as we believe pipelines will ultimately be the safest and most efficient mode of transportation for this fuel. We also continue to evaluate hydrogen storage opportunities.

In 2023, we finalized a limited self-funded study to identify the effects of transporting hydrogen through our existing pipelines. We are reviewing those results to help shape our path forward with regard to hydrogen. In addition, we are joining other industry studies to evaluate more broadly the feasibility of transporting hydrogen through existing natural gas infrastructure, including pipelines and compressor stations.

<sup>&</sup>lt;sup>44</sup> Office of Energy Efficiency & Renewable Energy. "Hydrogen Production." Office of Energy Efficiency & Renewable Energy, 2021. <a href="https://www.energy.gov/eere/fuelcells/hydrogen-production">https://www.energy.gov/eere/fuelcells/hydrogen-production</a>.

<sup>&</sup>lt;sup>45</sup> Hydrogen Council. "Hydrogen scaling up: A sustainable pathway for the global energy transition." Hydrogen Council, Nov 2017: 20. 2021. <a href="https://hydrogencouncil.com/wp-content/uploads/2017/11/Hydrogen-Scaling-up\_Hydrogen-Council\_2017.compressed.pdf">https://hydrogencouncil.com/wp-content/uploads/2017/11/Hydrogen-Scaling-up\_Hydrogen-Council\_2017.compressed.pdf</a>>.

• Synthetic Natural Gas and Electro Fuels (e-fuels)

Synthetic natural gas can be derived from coal or biomass. E-fuels are ultra-low carbon fuels, such as e-methane, e-diesel, e-gasoline, and e-kerosene, that use captured  $CO_2$  and renewable power from wind, solar, or hydroelectric sources to create a hydrogen-based alternative to fossil-based fuels. Depending on the energy source, synthetic natural gas and e-fuels could be a low-carbon or even carbon free substitute for fossil fuels. The benefit of these fuels is that they can be blended and mixed interchangeably with traditional fossil fuels, and transported, stored, and distributed using our existing pipelines, storage, and logistics infrastructure.

• CCUS

We also believe the potential increased need for CCUS technologies could be a future opportunity for us. Our  $CO_2$  business segment's extensive  $CO_2$  assets and expertise in processing, transporting, injecting, and managing  $CO_2$  should make us an attractive partner for CCUS initiatives. Rising demand for carbon capture and geologic sequestration may provide both incremental  $CO_2$  transportation revenues and downstream EOR and sequestration opportunities. Our Snyder Gas Plant captures  $CO_2$  from produced gas streams and re-injects it into producing reservoirs for EOR. Processing the produced gas and capturing  $CO_2$  helps to avoid gas flaring and vented emissions.

In the first quarter of 2023, we executed a detailed term sheet with Red Cedar Gathering Company, a joint venture between the Southern Ute Indian Tribe Growth Fund and KMI. This project will capture up to 400,000 metric tons/yr of  $CO_2$  from two Red Cedar natural gas treating facilities in Southern Colorado and deliver the captured  $CO_2$  to our Cortez pipeline, which will transport the  $CO_2$  to an existing Class II well in the Permian Basin for permanent sequestration. We have a pending application with the Railroad Commission of Texas to modify the Class II well permit to allow sequestration, and the required draft monitoring, reporting and verification plan is awaiting EPA approval.

The IRA could create additional opportunities or change the opportunities outlined in our transition risk analysis. In the IEA's APS, the IRA commits nearly \$370 billion to energy security and climate change provisions and the Infrastructure Investment and Jobs Act commits an additional \$190 billion for clean energy and mass transit. Furthermore, the IEA's APS predicts the IRA will incentivize additional private investment with tax credits for clean energy deployment. The APS predicts the low emissions hydrogen production tax credits could cover the upfront investment in hydrogen produced using solar PV or wind within the first year of investment when secured against the future tax credit revenues. If direct air capture projects recognize the full tax benefits, they could be in a similar situation by the end of this decade.

Anticipating a lower carbon economy, in addition to directing more of our capital investment toward our Natural Gas Pipelines business segment and renewable fuels and feedstocks, we are working to monitor and improve our processes and our perspectives on policies, activities, and trends related to the transition to a lower carbon economy and on the long-term supply and demand for the products we handle. At the end of 2022, we had a \$3.3 billion project backlog with 82% allocated to lower carbon investments, including conventional natural gas.

Our capital allocation philosophy is to fund our expansion capital needs internally, maintain a healthy balance sheet, and return excess cash to our shareholders through dividend increases or share repurchases. We believe this philosophy will help guide our participation in a lower carbon economy.

As a result of our 1.5-2.0 °C scenario analysis and our ESG reporting initiative, where appropriate, we:

- evaluate our longer-term views in light of the IEA's APS and NZE;
- coordinate energy market analysis across our business segments;
- monitor key climate-related market indicators, such as:
  - climate-related policy proposals and regulatory changes;
  - natural gas and renewable penetration into the power markets;
  - EV adoption rates, vehicle efficiency standards, and average miles driven;
  - biofuel and hydrogen markets; and
  - technological advancements and price signals for CCUS;
- expand our evaluation of the economics of emission reduction technologies over a range of potential carbon tax prices; and
- discuss these topics with our Board and its EHS Committee.

Further, in anticipation of a transition to a lower carbon economy, we also seek opportunities to:

- reduce our emissions,
- enhance our expertise in CCUS,
- store, produce, and transport renewable fuels and feedstocks,
- repurpose our assets,
- modify existing assets or develop assets for LNG export opportunities, and
- expand our natural gas deliverability.

We present and discuss these opportunities with our Board.

## 2.3.2 Physical Risk Analysis Results

Given the size and diversity of our asset footprint and the criticality of the infrastructure we operate, we maintain a forward-looking approach to potential impacts of climate change and incorporate fiscally responsible risk mitigation into our operations. Our most recent physical risk analysis, completed in 2019, consisted of the following:

- expansion of the table of potential physical risks and our mitigation measures in *Section 2.1 Potential Climate-Related Risks, Opportunities, and Impacts* of the *TCFD Report* to reflect the results of our 4 °C Scenario analysis;
- evaluation of our physical risk assessments and our mitigative measures and determined that acute risks such as hurricanes, wildfires, flooding, and heat waves were adequately addressed; and
- identification of opportunities for improvement in our mitigative measures for some chronic risks, projected by the 4 °C Scenario analysis, including rising sea levels and changes in tidal patterns.

As described in *Sections 2.2 Management System and 12.3 Business Continuity Planning and Emergency Preparedness* of the *Sustainability Report*, we work to improve our processes and procedures for mitigating acute physical climate change risks. We routinely drill scenarios that include these acute risks. Further, to address chronic risks identified through the 4 °C Scenario analysis, we evaluated which of our assets could likely be affected by the rising sea levels projected in a 4 °C Scenario. As a result of this analysis, we reviewed our engineering standards and made adjustments, where warranted, to address potential future risk due to rising sea levels, changes in tidal patterns, wildfires, hurricanes, and other extreme weather events.

## 3.0 Risk and Opportunity Management

(SASB Midstream EM-MD-110a.2, SASB Exploration & Production EM-EP-110a.3, Marine Transportation SASB TR-MT-110a.2, GRI 2-12, GRI 2-14, GRI 201-2/11.2.2, CDP C2.2, CDP C4.2, CDP C9.1)

Our management system is designed to help us monitor and assess various types of risks and opportunities, including those related to climate. We identify and evaluate risks and opportunities based on both actual and potential likelihood and significance. Depending on the nature of the risk or opportunity being considered, we evaluate consequences based on a variety of attributes such as:

- health and safety,
- financial,
- operational, and
- environmental.

Our management system is intended to promote continuous improvement and adjustment to changing conditions, including actual and potential risks and opportunities in the near-, medium-, and long-term. This integrated and comprehensive approach helps facilitate resiliency in our assets and business strategy.

Our management system establishes routine risk and opportunity management activities that are designed to achieve the following objectives:

- maintain financial and operational discipline;
- reveal and manage risks and opportunities, increasingly including climate-related risks and opportunities; and
- improve our performance and culture.

Our management system processes and procedures are performed through regular meetings and reports that establish a rhythm for our business as outlined in the following table.

Meeting and Topics Covered           Each topic is covered as warranted and is not covered at every meeting. Other topics, not listed below, are also periodically covered. There are also additional regular meetings not listed below.	Personnel Involved in Process
Weekly	
<ul> <li><u>Monday Management Meeting</u></li> <li>CEO, President, COO, business segment presidents, and corporate function heads meet each week for financial and operational review of:</li> <li>Actual and forecasted financial performance vs. budget, which includes costs of compliance, fuel, energy, production, and public relations</li> <li>Demand for our services</li> <li>Short-term business development opportunities and risks</li> <li>General business risks and opportunities</li> <li>EHS and pipeline encroachment incidents</li> </ul>	<ul> <li>CEO, President, COO, Business Segment and Operating Company Presidents, CFO, CAO, General Counsel, Corporate Department Management</li> </ul>

Customer credit risk changes and accounts receivable activity for non-investment grade customers

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- Impacts on business from weather, natural disasters, and other incidents

Capital project progress

Meeting and Topics Covered Each topic is covered as warranted and is not covered at every meeting. Other topics, not listed below, are also periodically covered. There are also additional regular meetings not listed below.

**Personnel Involved in Process** 

below.	
Monthly	
Business Segment Operations Meeting         - Progress toward reducing risks to potential high consequence assets and operations         - Internal and external incidents, near misses, and lessons learned         - Process improvements, efficiency, and productivity improvements         - Progress on expanding systems to cover more assets and operations, operations goals, and regulatory and other requirements         - Leading indicators and their meaning         - Significant results of internal and external audits, evaluations, and assessments, including status of corrective actions         - Stakeholder feedback         - Other key performance indicators	<ul> <li>Business Segment and Operating Company Presidents, Business Segment COOs, Operations and EHS VPs and Directors</li> </ul>
Earnings Meetings Review actual financial results for the month and the quarter.	<ul> <li>CEO, President, COO, Business Segment and Operating Company Presidents, CFO, General Counsel, Corporate and Business Segment Financial Planning</li> </ul>
<u>Accounts Receivable Review Meeting</u> Discuss collection status for past due accounts receivable balances.	<ul> <li>CFO, Controller, Corporate and Business Segment Accounting</li> </ul>
Quarterly	
Quarterly Business Review for each business segment         Respective business segment presidents, COOs, and function heads provide the CEO and         President with a "state of the business" presentation.         - Financial performance         Near., medium., and long-term         - strategies         - market dynamics and trends         - risks and opportunities         Progress and plans for reducing risks to potential high consequence assets and operations         Operational performance         Expansion project updates         - financial performance vs. forecast and budget         - forecasted project capital expenditures         - forecasted project capital expenditures         - milestone completion dates and projected in-service dates         - milestone completion dates and projected in-service dates         - safety         - quality         - regulation         - project opposition         - impacts from weather, natural disasters, and other incidents         - supply chain issues         The status and effectiveness of corrective actions resulting from previous management reviews         Regulatory and litigation updates         Thes trevers may also include a long-range outlook financial projection and a less comprehensive review on other subjects	<ul> <li>CEO, President, COO, Business Segment and Operating Company Presidents, CFO, CAO, General Counsel, Corporate Department Management, Business Segment COOs, Department VPs and Directors</li> </ul>
Operations Group Meeting         COO and Business segment COOs share knowledge and best practices across business segments and review progress on actions taken to improve safety and performance.         – Proposed best practices across business segments         – Conflicts in interpretations of regulatory requirements identified by the EHS or legal departments         – Proposed modifications to the OMS         – Updates from operations working groups         – Internal and external incident and near miss trends and lessons learned	<ul> <li>COO, Business Segment COOs, Working Group Leads</li> </ul>
Operational way of the final material material for the final way of the final	<ul> <li>Subject Matter Professionals, including Working Group Leads</li> </ul>

**Meeting and Topics Covered** 

Each topic is covered as warranted and is not covered at every meeting. Other topics, not listed below, are also periodically covered. There are also additional regular meetings not listed below.

**Personnel Involved in Process** 

Periodically							
<ul> <li>Long-Range Outlook Update</li> <li>Five-year projections of: <ul> <li>Revenue</li> <li>Capital expenditures</li> <li>Operating expenses</li> <li>Distributable cash flow, EBITDA, and segment EBDA</li> </ul> </li> <li>Adjust budget for projects, contract changes, etc.</li> <li>Translate to an annual plan</li> </ul>	<ul> <li>CEO, President, COO, Business Segment and Operating Company Presidents, Business Segment COOs, CFO, General Counsel, Corporate and Business Segment Financial Planning</li> </ul>						
Annually							
<ul> <li>Budget Review</li> <li>CEO, President, business segment presidents and corporate function heads review annual budgets and establish financial targets and operational metrics against which to evaluate performance in the coming year.</li> <li>Staffing, assets, systems, and other resources needed for business segments to operate in a safe, environmentally sound, and efficient manner</li> <li>revenue impacts</li> <li>compliance costs</li> <li>fuel costs</li> <li>production costs</li> <li>production costs</li> <li>Capital expenditures, operating expenditures, and margins</li> <li>Commercial developments, such as contract rate and volumetric changes</li> <li>Translate to a monthly plan</li> </ul>	– Nearly all manager level and above						
In addition to our management system, to address certain risks we maintain other risk management							

programs and processes, such as:

- Energy commodity price risk management and mitigation program,
- Process Safety Management/Risk Management Plans,
- IMP,
- Responsible Care®,
- Cyber Threat Response Plan, and
- Critical Facility Security Plans.

## 4.0 Metrics and Targets

## 4.1 Climate-Related Metrics

(SASB Midstream EM-MD-110a.1, SASB Exploration & Production EM-EP-110a.1, SASB Marine Transportation TR-MT-110a.1, GRI 2-12, GRI 201-2/11.2.2, CDP C6.1, CDP C6.2, CDP C6.3, CDP C6.5)

See Section 3.0 Greenhouse Gas Emissions of our Sustainability Report for our metric measuring climaterelated risk and opportunities.

## 4.2 Scope 1, Scope 2, and Scope 3 Emissions

(SASB Midstream EM-MD-110a.1, SASB Exploration & Production EM-EP-110a.1, GRI 305-1/GRI 11.1.5, GRI 305-2/GRI 11.1.6, GRI 305-3/GRI 11.1.7, CDP C6.1, CDP C6.3, CDP C6.5, CDP C7.3, CDP C7.6, CDP C7.9)

See Section 3.1 Gross Global Scope 1 and 2 Emissions, Percentage Methane, Percentage Covered under Emissions-Limiting Regulations of our Sustainability Report for our gross global Scope 1 and 2 emissions.

# 4.3 Climate-Related Targets

(CDP C4.1, CDP C4.1a, CDP C4.1b, CDP C4.2)

See Section 3.4.2 GHG Targets of our Sustainability Report for our climate-related targets.

		Year Ended Dece	erwise noted)		
	Unit	2020	2021	2022	
Air emissions for the following pollutants					
NO <sub>x</sub> (excluding N <sub>2</sub> O) <sup>↑</sup>	Thousand metric tons	52.2	50.6	50.0	
SO <sub>x</sub> †	Thousand metric tons	0.3	0.2	0.2	
VOCs↑	Thousand metric tons	12.7	12.0	12.3	
PM <sub>10</sub> <sup>↑</sup>	Thousand metric tons	1.4	1.3	1.2	
Water management					
$CO_2$ business segment – fresh water withdrawn <sup>†</sup>	Thousand cubic meters	1,208	1,361	1,459	
$\mathrm{CO}_2$ business segment – fresh water consumed <sup>†</sup>	Thousand cubic meters	1,208	1,361	1,459	
CO <sub>2</sub> business segment – fresh water withdrawn intensity†	Thousand cubic meters of fresh water consumed / BOE throughput	0.03	0.03	0.03	
Fresh water withdrawn for hydrostatic integrity testing <sup>†</sup>	Thousand cubic meters	57	159	69	
Fresh water reused for hydrostatic integrity testing	Thousand cubic meters	_	_	23	
Fresh water returned from hydrostatic integrity testing	Thousand cubic meters	_		32	
Fresh water recycled for hydrostatic integrity testing	Thousand cubic meters	_	_	0	
Fresh water disposed from hydrostatic integrity testing	Thousand cubic meters	_	_	13	
Non-fresh water withdrawn for hydrostatic integrity testing	Thousand cubic meters		_	24	
Ecological impacts					
Percentage of land operated within or near areas of protected conservation status or endangered species habitat	%	30 %	30 %	34 %	
Acreage disturbed	Acres	_	_	67	
Acreage restored	Acres		—	67	
Spills					
Hydrocarbon spills					
Number of hydrocarbon spills†	#	41	41	29	
Aggregate volume of hydrocarbon spills†	bbl	2,380	3,035	2,966	
Aggregate volume of hydrocarbon spills in Unusually Sensitive Areas <sup>+</sup>	bbl	1,398	869	2,644	
Hydrocarbon spill volume recovered <sup>†</sup>	bbl	1,769	1,827	2,900	
Percentage recovered <sup>+</sup>	%	74 %	60 %	98 %	
Marine transportation spills and releases to the environment					
Number of marine spills and releases to the environment	#	1	0	0	

		Yea	r Ended December 31, (unless otherw				noted)
	Unit	20	020		2021		2022
Aggregate volume of marine spills and releases to the environment	Cubic meters		0		0		C
Environmental fines and penalties paid <b>↑</b>	Thousands	\$	119	\$	475	\$	192
Employee and contractor health and safety – excluding self-reported COVID-19 cases							
Total recordable incident rate							
Employees	# Recordable incidents / 100 full-time workers		0.7		0.7		0.8
Target – employee TRIR industry three-year average	# Recordable incidents / 100 full-time workers		2.0		1.8		1.4
Target – employee TRIR three-year average	# Recordable incidents / 100 full-time workers		1.0		0.9		0.8
Contractors	# Recordable incidents / 100 full-time workers		0.4		0.2		0.2
Target – contractor TRIR industry three-year average	# Recordable lost time incidents / 100 full-time workers		_		_		1.0
Target – contractor TRIR three-year average	# Recordable lost time incidents / 100 full-time workers		_		_		0.4
Lost time incident rate							
Employees	# Recordable lost time incidents / 100 full-time workers		0.4		0.4		0.4
Contractors	# Recordable lost time incidents / 100 full-time workers		0.1		0.2		0.2
Fatalities							
Employees	#		0		0		(
Contractors	#		0		0		(
Marine lost time incident rate	# Lost time incidents / 1,000,000 hours worked		0.6		0.7		0.7
OSHA recordable incidents							
Number of recordable employee injuries/illnesses	#		81		73		84
Number of recordable contractor injuries/illnesses	#		19		1		1
Number of recordable employee lost time cases	#		41		47		40
Number of recordable contractor injuries/illnesses	#		19		1		

		Year Ended D	ise noted)		
	Unit	2020	2021		2022
Number of recordable contractor lost time cases	#	3	1		1
Number of recordable marine lost time cases	#	2	2		2
mployee and contractor health and safety – including self-reported COVID-19 cases					
Total recordable incident rate					
Employees†	# Recordable incidents / 100 full-time workers	1.4	1.8		1.9
Contractors†	# Recordable incidents / 100 full-time workers	0.4	0.2		0.2
Lost time incident rate					
Employees†	# Recordable lost time incidents / 100 full-time workers	1.0	1.5		1.4
Contractors†	# Recordable lost time incidents / 100 full-time workers	0.1	0.2		0.2
Fatalities					
Employees†	#	2	0		0
Contractors†	#	0	0		0
Marine lost time incident rate	# Recordable lost time incidents / 1,000,000 hours worked	0.6	0.7		0.7
OSHA recordable incidents					
Number of recordable employee injuries/illnesses*	#	164	193		206
Number of recordable contractor injuries/illnesses	• #	19	1		1
Number of recordable employee lost time cases†	#	116	163		156
Number of recordable contractor lost time cases <sup>+</sup>	#	3	1		1
Number of recordable marine lost time cases	#	2	2		2
verage hours of employee health, safety, and emergency response training <sup>↑</sup>	Hours / employee	13	12		13
upply chain management					
Supplier demographics					
Percentage of small business, diverse, and veteran- owned supplier procurement spend vs. total supplier procurement spend*	%	41 %	48 %	)	47 %
Total small business, diverse, and veteran-owned supplier procurement spend*	Millions	\$ 1,675	\$ 1,249	\$	1,511
Local procurement spend <sup>↑</sup>	Millions	\$ —	\$ —	\$	3,225
Service supplier monitoring					
Percentage of service suppliers subject to performance audits	%	100 %	100 %	)	100 %
Number of service suppliers audited	#	548	503		501
Percentage of service suppliers audited	%	16 %	15 %	, )	14 %

		Year Ended December 31, (unless o				therwise noted)		
	Unit		2020		2021		2022	
Waste management								
Hazardous waste								
Amount generated†	Metric tons		6,255		4,836		3,580	
Percentage recycled <sup>†</sup>	%		54 %		64 %		54 %	
Recycled business waste								
Recycled aluminum, cardboard, glass, paper, and plastic	Tons		46		72		72	
Competitive behavior and pricing integrity and transparency								
Total amount of monetary losses as a result of legal proceedings associated with federal pipeline and storage rate, access, and pricing regulations*	Millions	\$	1.3	\$	0	\$	0	
Legal or regulatory fines, settlements, or penalties associated with bribery and corruption <sup>†</sup>	Dollars	\$	0	\$	0	\$	0	
Operational safety								
Reportable pipeline incidents								
Number of reportable pipeline incidents <sup>↑</sup>	#		55		37		39	
Percentage of reportable pipeline incidents that are significant <sup>†</sup>	%		45 %		46 %		56 %	
Number of reportable RROG pipeline incidents <sup>↑</sup>	#		—		8		1	
Percentage of reportable RROG pipeline incidents that are significant*	%		—		13 %		18 %	
Natural gas and hazardous liquid pipelines inspection								
Percentage of natural gas pipelines inspected <sup>†</sup>	%		20 %		15 %		27 %	
Percentage of hazardous liquid pipelines inspected <sup>†</sup>	%		28 %		25 %		38 %	
Political contributions								
Contributions to political campaigns, candidates, and parties <sup>↑</sup>	Thousands	\$	0	\$	0	\$	0	
Payments to lobbying organizations*	Thousands	\$	197	\$	514	\$	846	
Trade association dues <sup>↑</sup>	Thousands	\$	2,477	\$	2,091	\$	2,139	
Non-deductible portion of trade association dues attributed to lobbying and political expenditures <sup>↑</sup>	Thousands	\$	222	\$	216	\$	170	
Payments made in relation to ballot measures*	Thousands	\$	0	\$	0	\$	0	
Income taxes paid(a)								
U.S. Federal <sup>†</sup>	Millions	\$	32	\$	48	\$	55	
U.S. State <sup>↑</sup>	Millions	\$	16	\$	19	\$	24	
Canada↑	Millions	\$	236	\$	(2)	\$	0	
Mexico↑	Millions	\$	5	\$	5	\$	4	
Total income taxes paid, net <sup>↑</sup>	Millions	\$	289	\$	70	\$	83	
Property taxes paid <b>*</b>	Millions	\$	576	\$	605	\$	608	
Royalties and duties paid <b>↑</b>	Millions	\$	47	\$	60	\$	81	
Employee demographics								
Part-time employees	#		7		9		8	
Temporary employees	#		2		2		4	
Employee age representation								
Average age	#		45		45		45	
Percentage under 18 years old	%		0 %		0.0/		0 %	
Percentage from 18 through 29 years old	%		10 %		0 % 10 %		10 %	

		Year Ended December 31, (unless otherwise noted)					
	Unit		2020		2021		2022
Percentage from 30 through 50 years old	%		53 %		54 %		54 %
Percentage over 50 years old	%		37 %		37 %		36 %
Female employee representation							
Percentage of workforce	%		16 %		16 %		16 %
Percentage of management	%		20 %		20 %		22 %
Percentage of senior management	%		21 %		21 %		22 %
Percentage of executive officers	%		25 %		25 %		23 %
Percentage of Board of Directors	%		13 %		13 %		13 %
Minority employee representation							
Percentage of workforce	%		30 %		30 %		31 %
Percentage of management	%		20 %		21 %		21 %
Percentage of senior management	%		21 %		22 %		22 %
Percentage of executive officers	%		17 %		17 %		15 %
Percentage of Board of Directors	%		7 %		7 %		7 %
Percentage of workforce with disabilities	%		4 %		6 %		6 %
Newly hired employees							
Number of newly hired employees <sup>↑</sup>	#		—		—		1,499
Percentage female <sup>↑</sup>	%		—		—		16 %
Employee turnover							
Involuntary employee turnover	%		6 %		3 %		2 %
Voluntary employee turnover	%		4 %		8 %		10 %
Total employee turnover	%		10 %		11 %		12 %
Participation in leadership training programs							
Percentage female	%		16 %		13 %		21 %
Percentage minority	%		28 %		28 %		26 %
Hours of employee development training*	Thousand hours		350		419		568
Total investment in employee training	Millions	\$	27	\$	30	\$	38
Kinder Morgan Foundation donations, employee donations, and corporate and project-related community investments <sup>†</sup>	Thousands	\$	3,969	\$	3,287	\$	2,197

(a) Includes cash taxes from the following unconsolidated C-corp joint ventures: Citrus LLC, Natural Gas Pipeline Company of America LLC, and Products (SE) Pipe Line Corporation.

 $<sup>\</sup>dagger$  An external third-party performed limited assurance procedures for the 2022 values of these metrics. See their report in *Appendix D* – *Third-Party Assurance Statement*.

<sup>\*</sup> Our Internal Audit group performed assurance procedures for the 2022 values of these metrics.

## Appendix A.2 – GHG Accounting Metrics

		Year	Ended December 31,	
	Unit	2020	2021	2022
Operational Control(a)				
Total gross global Scope 1 emissions†	Million metric tons CO <sub>2</sub> e	15.3	15.3	14.9
Percentage covered under emissions-limiting regulations†	%	0 %	0 %	0 %
Percentage methane†	%	27 %	22 %	19 %
Total gross global market-based Scope 2 emissions†	Million metric tons CO <sub>2</sub> e	3.1	3.1	3.2
Total gross global Scope 1 and market-based Scope 2 emissions <sup>†</sup>	Million metric tons CO <sub>2</sub> e	18.4	18.4	18.1
Company-wide BOE†	MMbbl/yr	5,100	5,400	5,600
Scope 1 and 2 emission intensity <sup>†</sup>	Metric tons CO <sub>2</sub> e per BOE throughput	0.004	0.003	0.003
Total gross global Scope 1 emissions by constituent				
$CO_2$ †	Million metric tons	11.1	11.9	12.0
$CH_4$ †	Million metric tons	0.1	0.1	0.1
N <sub>2</sub> O(b)†	Million metric tons	0.0	0.0	0.0
HFCs(b)†	Million metric tons	0.0	0.0	0.0
Total gross global location-based Scope 2 emissions†	Million metric tons CO <sub>2</sub> e	2.9	2.8	3.1

(a) See table in Section 3.1 Gross Global Scope 1 and 2 Emissions, Percentage Methane, Percentage Covered under Emissions-Limiting Regulations of the Sustainability Report for relevant footnotes.

(b)  $N_2O$  and HFCs are less than 50,000 metric tons.

		Year Ended December 31,				
	Unit	2020	2021	2022		
Scope 1 emissions reported under EPA's GHGRP(a)(b)†	Million metric tons CO <sub>2</sub> e	12.0	12.1	11.8		
Scope 1 emissions reported under EPA's GHGRP by constituent(a)						
CO <sub>2</sub> †	Million metric tons	9.0	10.0	10.1		
$CH_4$ †	Million metric tons	0.1	0.1	0.1		
N <sub>2</sub> O(b)†	Million metric tons	0.0	0.0	0.0		

(a) 2022 emissions reported under the EPA's GHGRP are as of March 31, 2023.

(b)  $N_2O$  emissions reported under the EPA's GHGRP were less than 50,000 metric tons.

		Ye	· 31,	
	Unit	2020	2021	2022
Equity Share				
Scope 1 emissions				
Total gross global equity share Scope 1 emissions(a)(b)(c)(d) <sup>†</sup>	Million metric tons CO <sub>2</sub> e	14.6	14.0	13.8
Scope 2 emissions				
Total gross global equity share market-based Scope 2 emissions(a)(b)(d)(e)†	Million metric tons CO <sub>2</sub> e	2.2	2.2	2.1
Total gross global equity share Scope 1 and market- based Scope 2 emissions(a)(b)(c)(d)(e)	Million metric tons CO <sub>2</sub> e	16.8	16.2	15.9
Equity share GHG emission intensity				
Adjusted EBITDA(f)	Millions	6,962	7,946	7,516
Total gross global equity share Scope 1 and 2 emissions per Adjusted EBITDA(d)(e)	Million metric tons CO <sub>2</sub> e per million dollars Adjusted EBITDA	0.0024	0.0020	0.0021

(a) GHG emissions were quantified per the SASB Midstream Standard and the ISO 14064-1:2006, *Greenhouse gases – Part 1: Specification with guidance at the organization level for the quantification and reporting of greenhouse gas emissions and removals.* Emissions are reported for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs from direct and indirect sources. The IPCC AR5 GWPs were used to convert CH<sub>4</sub> (28) and N<sub>2</sub>O (265) emissions to CO<sub>2</sub>e. The following GWPs were used for HFCs: R-410A: 1725, HFC-134A: 1300, HCFC-22: 1760, R-404A: 3260, R-407C: 1526, R-1234YF: 4, R-600A: 5, R-407C: 1526, HFC-32: 677, HFC-23: 12,400, CFC-12: 10,200, R-422D: 2,625, R-600: 5, R-600A: 5. Gross emissions are GHGs emitted to the atmosphere before accounting for offsets, credits, or other similar mechanisms that have reduced or compensated for emissions.

- (b) Equity share emissions include emissions from both operated and non-operated sources in which we have an interest. For operated sources, emissions were calculated by applying our ownership percentage to the entity's operating emissions. For the CO<sub>2</sub> business segment, total revenue interest was used as our ownership percentage for production locations and working interest was used as our ownership percentage for production locations and working interest was used as our ownership percentage for non-production locations. Emissions from leased assets (i.e., we are the lessee) are excluded from the equity share emissions calculations per the World Resources Institute GHG Protocol guidance. Emissions from certain assets that we lease to other companies (i.e. we are the lessor) are also excluded. For non-operated sources, emissions data was collected from third parties who generally provided emissions reported to the EPA's GHGRP. When only GHGRP emissions were provided, we added estimated non-GHGRP emissions to calculate total non-operated Scope 1 emissions. Market- and location-based Scope 2 emissions from non-operated facilities were assumed to be the same. Non-operated Scope 2 emissions were estimated when data was not available. Emissions from non-operated assets may also be reported publicly through other companies' reporting initiatives.
- (c) Excludes emissions from construction activities, wastewater treatment, fire suppression activities, chemical injection pumps, sulfur recovery units, refrigerants from mobile equipment where no fuel was purchased during the reporting year or not tracked in our fleet database, fugitive emissions from natural gas supply lines for the Terminals and Products Pipelines business segments, and insignificant emissions from small combustion activities. Also excludes Natural Gas Pipelines business segment LNG cold boxes, storage tanks at natural gas processing facilities, truck loading, and enclosed circuit breakers.
- (d) We identified immaterial calculation errors that overstated gross global equity share Scope 1 emissions for 2021 by 0.1 million metric tons of CO<sub>2</sub>e and overstated gross global equity share Scope 2 emissions for 2020 and 2021 by 0.1 and 0.2 million metric tons of CO<sub>2</sub>e, respectively. We have revised for comparability the 2021 total gross global equity share Scope 1 emissions, the 2020 and 2021 total gross global equity share Scope 2 emissions, and the 2021 total gross global equity share Scope 1 and 2 emissions per Adjusted EBITDA.
- (e) Scope 2 GHG emissions include indirect emissions from purchased electricity.
- (f) For additional information about our use of and calculation for Adjusted EBITDA, a non-GAAP financial measure, see Part II, Item 7 included in our 2020, 2021, and 2022 Form 10-K annual reports, which are available through the SEC's EDGAR system at <u>https://www.sec.gov</u> and on our website at <u>https://ir.kindermorgan.com/financials/annual-reports/default.aspx</u>.

		Year Ended December 31,				
	Unit	 2020		2021		2022
Research and development investments in GHG emissions and other climate change-related projects*	Thousands	\$ 251	\$	375	\$	775
Renewable energy consumed from the solar panels we operate <sup>↑</sup>	MWh	1,053		1,058		956
Electricity consumption						
Total electricity consumption from continuing operations†	GWh	6,984		7,335		7,886
Methane emission reductions						
Volume of voluntary methane emission reductions <sup>†</sup>	Bcf	5.9		6.6		6.6
Estimated value of natural gas saved <sup>†</sup>	Millions	\$ 21	\$	38	\$	45
Voluntary GHG emission reductions	Million metric tons CO <sub>2</sub> e - methane GWP of 25	2.8		3.2		3.2
GHG targets						
Methane emission intensity rate target	%	0.31 %		0.31 %		0.31 %
Methane emission intensity rate <sup>+</sup>	%	0.04 %		0.03 %		0.03 %
Target – GHG reductions	Million metric tons CO <sub>2</sub> e - methane GWP of 28	1.2		1.3		1.4
Voluntary GHG emission reductions†	Million metric tons CO <sub>2</sub> e - methane GWP of 28	3.2		3.6		3.5

 $\dagger$  An external third-party performed limited assurance procedures for the 2022 values of these metrics. See their report in *Appendix D* – *Third-Party Assurance Statement*.

\* Our Internal Audit group performed assurance procedures for the 2022 values of these metrics.

The U.S. Equal Employment Opportunity Commission's EEO-1 Component 1 data collection system is expected to open in the fall of 2023. We will add our 2022 EEO-1 Report to the 2022 Sustainability Data, Activity Metrics, and EIC Template after we file with the Commission.

### **Appendix B – Activity Metrics**

		Year Ended December 31, (unless otherwise noted)					
	Unit	2020	2021	2022			
Miles of pipeline operated(a)†	Thousands of miles	74	74	74			
<b>Operational control throughput</b>							
Company-wide BOE(b)†	MMbbl/yr	5,100	5,400	5,600			

(a) The miles of pipeline operated includes pipelines in the U.S, Canada, and Mexico under our operational control as of the third quarter of 2022. It excludes production and flow lines in the CO<sub>2</sub> business segment.

(b) ONE Future's definitions are used for annual throughput. If no ONE Future definition applies, throughput is generally defined as product receipt. Throughput was converted to MMBtu using product-specific heat content, obtained from the EIA, EPA, or business segment data. This is then converted to BOE by dividing by 5.8 MMBtu per bbl of crude oil. The CO<sub>2</sub> that we transport does not have a heating value, and therefore, has a BOE equal to zero.

		Year Ended December 31,				
	Unit	2020	2021	2022		
SASB Activity Metrics						
Number of full-time employees(a)	#	10,525	10,529	10,595		
Oil & Gas Exploration & Production						
Number of offshore sites (EM-EP-000.B)	#	0	0	0		
Number of oil terrestrial sites (EM-EP-000.C)(b)	#	1,227	1,190	1,220		
Number of CO <sub>2</sub> production terrestrial sites(b)	#	84	88	91		
Marine Transportation						
Number of shipboard employees (TR-MT-000.A)	#	921	877	890		
Total distance traveled by vessels (TR-MT-000.B)	Nautical miles	707,389	711,798	846,133		
Operating days (TR-MT-000.C)	Days	5,755	5,687	5,501		
Barrels transferred(c)	MMBbl		101	240		
Number of vessels in total shipping fleet (TR-MT-000.E)	#	16	16	16		
Number of vessel port calls (TR-MT-000.F)	#	801	777	910		
Twenty-foot equivalent unit capacity (TR-MT-000.G)(d)	TEU	0	0	0		

(a) The number of employees for calendar year 2022 is corrected from 10,525, which was erroneously reported in the KMI Form 10-K for 2022.

(b) Represents number of active and producing wells.

(c) Represents cargo barrels discharged.

(d) Twenty-foot equivalent unit capacity is a unit of cargo used to measure a ship's container carrying capacity. We do not operate marine vessels capable of carrying cargo containers.

<sup>†</sup> An external third-party performed assurance procedures for the 2022 values of these metrics. See their report in *Appendix D – Third-Party Assurance Statement.* 

# Appendix C – ESG Content Index

Торіс	Sustainability Policies and Accounting Metrics	SASB(a)	GRI (b)	CDP (c)(d)	SDGs	ESG Report Section Page or Reference to Kinder Morgan Published Document
	Organizational details		2-1			2022 ESG Report <u>A Message</u> from Our CEO 2023 Form 10-K <u>Cover Page</u> 2022 ESG Report Pg. <u>14</u> 2023 Form 10-K <u>Part I, Items</u> <u>1. and 2</u>
	Reporting period, frequency and contact point		2-3			2022 ESG Report Pg. <u>11</u>
	External assurance		2-5		1	2022 ESG Report Pg. <u>11</u>
	Activities, value chain and other business relationships		2-6			2022 ESG Report <u>A Message</u> from Our CEO 2022 ESG Report Pg. <u>14</u> 2023 Form 10-K <u>Part I, Items</u> <u>1. and 2</u>
	Governance structure and composition	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2	2-9	C1.1b	5 16	2022 ESG Report Pg. <u>11</u> 2022 ESG Report Pg. <u>15</u> 2022 ESG Report Pg. <u>91</u>
	Nomination and selection of the highest governance body		2-10		5 16	2023 Proxy Statement Pgs. <u>17-21</u>
	Chair of the highest governance body		2-11		16	2022 ESG Report Pg. <u>91</u>
General Disclosures	Role of the highest governance body in overseeing the management of impacts	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2	2-12	C1.1b C1.2 C4.2 C4.2a C4.2a C4.2b C9.1	7 12 16	2022 ESG Report Pg. <u>92</u> 2022 ESG Report Pg. <u>93</u> 2023 Proxy Statement Pg. <u>13</u> 2023 Proxy Statement Pgs. <u>17-20</u>
	Delegation of responsibility for managing impacts	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2	2-13	C1.1b	16	2022 ESG Report Pg. <u>11</u> 2022 ESG Report Pg. <u>15</u> 2022 ESG Report Pg. <u>92</u> 2023 Proxy Statement Pgs. <u>12-20</u>
	Role of the highest governance body in sustainability reporting	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2	2-14	C1.1b C1.2		2022 ESG Report Pg. <u>91</u>
	Conflicts of interest		2-15		5	2023 Proxy Statement Pgs. <u>8,</u> <u>12</u>
	Collective knowledge of the highest governance body	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2	2-17	C1.1b	16	Code of Conduct Pgs. <u>19-24</u> 2023 Proxy Statement Pgs. <u>22-24</u>
	Evaluation of the performance of the highest governance body		2-18		16	2022 ESG Report Pg. <u>22</u> 2022 ESG Report Pg. <u>91</u>
	Remuneration policies		2-19			2023 Proxy Statement Pg. <u>15-16</u>
	Process for determine remuneration		2-20			2022 ESG Report Pg. <u>91</u> 2023 Proxy Statement Pg. <u>15-16</u>

Торіс	Sustainability Policies and Accounting Metrics	SASB(a)	GRI (b)	CDP (c)(d)	SDGs	ESG Report Section Page or Reference to Kinder Morgan Published Document
	Statement on sustainable development strategy		2-22			2022 ESG Report Pg. <u>22</u> 2022 ESG Report Pg. <u>63</u>
	Policy commitments		2-23		16	2022 ESG Report <u>A Message</u> from Our CEO
	Mechanisms for seeking advice and raising concerns		2-26		16	2022 ESG Report Pg. <u>15</u>
	Membership associations		2-28			2022 ESG Report Pg. <u>22</u> 2022 ESG Report Pg. <u>41</u> 2022 ESG Report Pg. <u>85</u>
	Approach to stakeholder engagement Process to determine material topics		2-29		1 6 10 12 17	2022 ESG Report Pg. <u>11</u> 2022 ESG Report Pg. <u>81</u> 2022 ESG Report Pg. <u>91</u>
			3-1			2022 ESG Report Pg. <u>11</u>
	Stakeholder engagement and management of concerns related to tax		207-3/ 11.21.6			2022 ESG Report Pg. <u>68</u>
	Country-by-country reporting		207-4/ 11.21.7			2022 ESG Report Pg. Appendix A.1
	Incidents of discrimination and corrective actions taken		406-1/ 11.11.7			2022 ESG Report Pg. <u>15</u>
Economic Performance	Financial implications and other risks and opportunities due to climate change		201-2/ 11.2.2	C2.3		2022 ESG Report Pg. <u>95</u>
Indirect Economic Impacts	Infrastructure investments and services supported		203-1/ 11.14.4		6 9 11 14 15	2022 ESG Report <u>A Message</u> From Our CEO 2022 ESG Report Pg. <u>14</u> 2022 ESG Report Pg. <u>85</u> 2022 ESG Report Pg. <u>95</u> 2022 ESG Report Pg. <u>102</u>
	Significant indirect economic impacts		203-2/ 11.14.5		1 3 8	2022 ESG Report Pg. <u>85</u>

Торіс	Sustainability Policies and Accounting Metrics	SASB(a)	GRI (b)	CDP (c)(d)	SDGs	ESG Report Section Page or Reference to Kinder Morgan Published Document
	Electricity consumption		302-1/ 11.1.2	C8.2 C8.2a		2022 ESG Report Pg. <u>28</u>
	Energy intensity		302-3/ 11.1.4			2022 ESG Report Pg. <u>28</u>
	Reduction of energy consumption		302-4			2022 ESG Report Pg. <u>28</u>
	Gross global Scope 1 emissions, Gross direct Scope 1 emissions (equity approach), percentage methane, percentage covered under emissions-limiting regulations	EM-MD-110a.1 EM-EP-110a.1 TR-MT-110a.1	305-1/ 11.1.5	C6.1 C6.3 C6.4 C7.3 C7.6 C7.9 C8.1-8.2f		2022 ESG Report Pg. <u>19</u> 2022 ESG Report <u>Appendix</u> <u>A.2</u>
Greenhouse	Gross global Scope 2 emissions, Gross global market-based Scope 2 emissions (equity approach), energy indirect (Scope 2) GHG emissions		305-2/ 11.1.6	C6.1 C6.3 C7.3 C7.6 C7.9 C8.1-8.2f		2022 ESG Report Pg. <u>19</u>
Gas Emissions	Discussion of long-term and short-term strategy or plan to manage gross global Scope 1 and 2 emissions, emissions reduction targets, and an analysis of performance against those targets, and GHG reductions	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2	305-5/ 11.2.3	C3.1 C4.3 C6.2		2022 ESG Report Pg. 22 2022 ESG Report Pg. 28
	Other indirect (Scope 3) GHG emissions		305-3/ 11.1.7	C6.5		2022 ESG Report Pg. <u>30</u>
	GHG emissions intensity ratio per BOE throughput	EM-MD-110a.1 EM-EP-110a.1 TR-MT-110a.1	305-4/ 11.1.8	C4.1 C4.1b C4.2a C6.10 C-OG6.12 C9.1		2022 ESG Report Pg. <u>19</u> 2022 ESG Report Pg. <u>116</u>
	Organization strategy and/or financial planning influenced by climate-related risks and opportunities			C3.1		2022 ESG Report Pg. <u>22</u> 2022 ESG Report Pg. <u>101</u>
	Energy management			C8.2		2022 ESG Report Pg. 28
	GHG targets			C4.1		2022 ESG Report Pg. <u>31</u>
Air Quality	Air emissions for the following pollutants: NO <sub>x</sub> (excluding N <sub>2</sub> O), SO <sub>x</sub> , volatile organic compounds (VOCs) and particulate matter ( $PM_{10}$ )	EM-MD-120a.1 EM-EP-120a.1	305-7/ 11.3.2		3 11 12	2022 ESG Report Pg. <u>38</u>
	Water management & usage	EM-EP-140a.1	303-1/ 11.6.2 303-2/ 11.6.3	W1.1 W1.2 W6.1	6	2022 ESG Report Pg. <u>38</u>
	Water withdrawal	EM-EP-140a.1	303-3/ 11.6.4	W1.1 W1.2b W-OG1.2c W1.2d W1.2h	6	2022 ESG Report Pg. <u>39</u>
Water Usage	Water discharge		303-4/ 11.6.5		6	2022 ESG Report Pg. <u>39</u>
	Water consumption	EM-EP-140a.1	303-5/ 11.6.6	W1.1 W1.2b	6	2022 ESG Report Pg. <u>39</u>
	Water withdrawn intensity			W-OG1.3 W-OG1.3a	6	2022 ESG Report Pg. <u>39</u>
	Water recycled			W1.1 W1.2b	6	2022 ESG Report Pg. <u>39</u>
	Water reuse			W1.1 W1.2b	6	2022 ESG Report Pg. <u>39</u>

Торіс	Sustainability Policies and Accounting Metrics	SASB(a)	GRI (b)	CDP (c)(d)	SDGs	ESG Report Section Page or Reference to Kinder Morgan Published Document
	Percentage of land owned, leased, and/or operated within areas of protected conservation status or endangered species habitat, Operational sites owned, leased, managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas	EM-MD-160a.2	304-1/ 11.4.2		6 14 15	2022 ESG Report Pg. <u>44</u>
	Significant impacts of activities, products, and services on biodiversity		304-2/ 11.4.3		6 14 15	2022 ESG Report Pg. <u>41</u>
Ecological	Acreage disturbed and restored		304-3/ 11.4.4		6 14 15	2022 ESG Report Pg. <u>44</u>
Impacts	Habitats protected or restored		304-3/ 11.4.4		6 14 15	2022 ESG Report Pg. <u>44</u>
	Description of environmental management policies and practices for active operations	EM-MD-160a.1 EM-EP-160a.1			15	2022 ESG Report Pg. <u>41</u>
	Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume in Unusually Sensitive Areas (USAs), and volume recovered	EM-MD-160a.4 EM-EP-160a.2	306-3/ 11.8.2		6 15	2022 ESG Report Pg. <u>45</u>
	(1) Number and (2) aggregate volume of marine spills and releases to the environment	TR-MT-160a.3			6	2022 ESG Report Pg. <u>46</u>
Environ- mental Compliance	Environmental fines and penalties		2-27 307-1		12	2022 ESG Report Pg. <u>46</u>
X	Discussion of management systems used to integrate a culture of safety and emergency preparedness throughout the value chain and throughout project lifecycles	EM-MD-540a.4 EM-EP-320a.2	403-1/ 11.9.2 403-4/ 11.9.5 403-8/ 11.9.9		8	2022 ESG Report Pg. <u>47</u>
	Workers representation on formal joint management-worker health and safety committees		403-1/ 11.9.2		8	2022 ESG Report Pg. <u>47</u>
	Types of injury and rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities		403-2/ 11.9.3		8	2022 ESG Report Pg. <u>48</u>
	Occupational health services		403-3/ 11.9.4			2022 ESG Report Pg. <u>47</u> 2022 ESG Report Pg. <u>72</u>
Occupational Health and Safety, Emergency	Worker participation, consultation, and communication on occupational health and safety	EM-MD-540a.4 EM-EP-320a.2	403-4/ 11.9.5 403-9/ 11.9.10		8 16	2022 ESG Report Pg. <u>47</u>
Preparedness & Response	Worker training on occupational health and safety		403-5/ 11.9.6		8	2022 ESG Report Pg. <u>48</u>
	Promotion of worker health		403-6/ 11.9.7		3	2022 ESG Report Pg. <u>47</u>
	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		403-7/ 11.9.8		8	2022 ESG Report Pg. <u>48</u>
	<ol> <li>Total Recordable Incident Rate (TRIR);</li> <li>Lost Time Incident Rate (LTIR);</li> <li>Fatality Count;</li> <li>Average hours of Health, Safety, and Emergency Response Training for:         <ul> <li>(a) Employees and</li> <li>(b) Contractors</li> </ul> </li> </ol>	EM-MD-540a.1 EM-EP-320a.1 TR-MT-320a.1	403-9/ 11.9.10		3 8	2022 ESG Report Pg. <u>48</u>
	Work-related ill health		403-10/ 11.9.11			2022 ESG Report Pg. <u>72</u>

Торіс	Sustainability Policies and Accounting Metrics	SASB(a)	GRI (b)	CDP (c)(d)	SDGs	ESG Report Section Page or Reference to Kinder Morgan Published Document
Marine Accidents & Safety Management	Lost time incident rate (LTIR)	TR-MT-320a.1	403-9/ 11.9.10		8	2022 ESG Report Pg. <u>50</u>
	Waste generation and significant waste- related impacts		306-1/ 11.5.2			2022 ESG Report Pg. <u>54</u>
Hazardous Materials Management	Amount of hazardous waste generated, percentage recycled, and waste diverted from disposal		306-2/ 11.5.3 306-3/ 11.5.4 306-4/ 11.8.2/1 1.5.5		3	2022 ESG Report Pg. <u>54</u>
Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with federal pipeline and storage regulations	EM-MD-520a.1			16	2022 ESG Report Pg. <u>56</u>
	Operations assessed for risks related to corruption		205-1/ 11.20.2			2022 ESG Report Pg. <u>57</u>
Business Ethics & Anti-	Description of the management system for prevention of corruption and bribery throughout the value chain	EM-EP-510a.2	205-2/ 11.20.3		16	2022 ESG Report Pg. <u>57</u>
Corruption	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices		206-1/ 11.19.2		16	2022 ESG Report Pg. <u>56</u> Code of Conduct Pg. <u>38</u>
Operational	Number of reportable pipeline incidents, percentage significant	EM-MD-540a.1			6	2022 ESG Report Pg. <u>61</u>
Safety	Percentage of (1) natural gas and (2) hazardous liquid pipelines inspected	EM-MD-540a.2			12	2022 ESG Report Pg. <u>63</u>
Management	Tax transparency		201-1/ 11.14.2/ 11.21.2 201-4/ 11.21.3 207-1/ 11.21.4		1 8 10 17	2022 ESG Report Pg. <u>68</u>
of the Legal & Regulatory Environment	Tax governance, control, and risk management		207-2/ 11.21.5			2022 ESG Report Pg. <u>68</u>
Environment	Political contributions and payments made in relation to ballot measures		415-1/ 11.22.2		16	2022 ESG Report Pg. <u>65</u>
	Discussion of the corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	EM-EP-530a.1			16 17	2022 ESG Report Pg. <u>63</u>
Data Security	Description of approach to identifying and addressing data security risks	SV-PS-230a.1				2022 ESG Report Pg. <u>70</u>

Торіс	Sustainability Policies and Accounting Metrics	SASB(a)	GRI (b)	CDP (c)(d)	SDGs	ESG Report Section Page or Reference to Kinder Morgan Published Document
	Number of employees by: (1) full-time and part-time, (2) temporary, and (3) contract	SV-PS-000.A	2-7			2022 ESG Report Pg. <u>72</u>
	Newly hired employees		401-1/ 11.10.2			2022 ESG Report Pg. <u>72</u>
	(1) Voluntary and (2) involuntary turnover rate for employees	SV-PS-330a.2	401-1/ 11.10.2		5 8	2022 ESG Report Pg. <u>72</u>
Workforce Diversity & Engagement	Benefits provided to full-time employees that are not provided to temporary or part- time employees		401-2/ 11.10.3		8	2022 ESG Report Pg. 72 KMI Employee Stock Purchase Plan (filed as Exhibit 10.5 on Form 10-Q for the quarter ended March 31, 2011)
	Parental leave		401-3/ 11.10.4/ 11.11.2			2022 ESG Report Pg. <u>72</u>
	Percentage of gender and racial/ethnic group representation for (1) executive management, (2) non-executive management, (3) professionals, and (4) all other employees	FN-IB-330a.1	405-1/ 11.11.5		5 10	2022 ESG Report Pg. <u>72</u>
	Ratio of basic salary and remuneration		405-2/ 11.11.6			2023 Proxy Statement Pg. <u>47</u>
Supply	Proportion of spending on local suppliers		204-1/ 11.14.6			2022 ESG Report Pg. <u>51</u>
Chain	Supplier diversity		414-1/ 11.10.8/ 11.12.3		8 9	2022 ESG Report Pg. <u>51</u>
Freedom of Association and Collective Bargaining	Operations and suppliers in which the right to Freedom of Association and Collective Bargaining may be at risk		407-1/ 11.13.2		8	2022 ESG Report Pg. <u>51</u>
Employee Training & Development	Discussion of (1) average and total hours of training per year per employee (2) programs for upgrading employee skills and transition assistance programs (3) percentage of employees receiving regular performance and career development reviews		404-1/ 11.10.6/ 11.11.4 404-2/ 11.7.3/ 11.10.7		4	2022 ESG Report Pg. <u>78</u>
	Employee training costs				8 9	2022 ESG Report Pg. <u>78</u>
	Community investments		201-1/ 11.14.2/ 11.21.2		5 10	2022 ESG Report Pg. <u>85</u>
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests; impact assessments and development programs and operations with local community engagement	EM-EP-210b.1	413-1/ 11.15.2		1 8 9 11	2022 ESG Report Pg. <u>80</u>
Security, Human Rights & Rights of Indigenous Peoples	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict and operations and suppliers at significant risk for incidents of child labor, and forced or compulsory labor	EM-EP-210a.3	408-1 409-1/ 11.12.2		8 16	2022 ESG Report Pg. <u>88</u>
Reserves Valuation & Capital Expenditures	Discussion of how price and demand for hydrocarbons and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets	EM-EP-420a.4		C2.3		2022 ESG Report Pg. <u>95</u>

(a) Version 2018-10: SASB Extractives & Minerals Processing Sector Oil & Gas Midstream Standard EM-MD, SASB Extractives & Minerals Processing Sector Exploration & Production Standard EM-EP, SASB Transportation Sector Marine Transportation Standard

TR-MT, SASB Financials Sector – Investment Banking & Brokerage standard FN-IB, and SASB Services Sector – Professional & Commercial Services standard SV-PS.

- (b) GRI 1: Foundation 2021, GRI 2: General Disclosures 2021. GRI 3: Material Topics 2021, GRI 201 Economic Performance 2016, GRI 203 Indirect Economic Impacts 2016, GRI 205 Anti-Corruption 2016, GRI 206 Anti-competitive Behavior 2016, GRI 2017 Tax 2019, GRI 302 Energy 2016, GRI 303 Water and Effluents 2018, GRI 304 Biodiversity 2016, GRI 305 Emissions 2016, GRI 306 Effluents and Waste 2016, GRI 306 Waste 2020, GRI 401 Employment 2016, GRI 403 Occupational Health and Safety 2018, GRI 404 Training and Education 2016, GRI 405 Diversity and Equal Opportunity 2016, GRI 407 Freedom of Association and Collective Bargaining 2016, GRI 408 Child Labor 2016, GRI 409 Forced or Compulsory Labor 2016, GRI 413 Local Communities 2016, and GRI 415 Public Policy 2016. GRI 306-3 Significant Spills refers to GRI 306: Effluents and Waste 2016. GRI 306-3 Waste Generated refers to GRI 306: Waste 2020.
- (c) CDP Climate Change 2023 Questionnaire: CDP C1 Governance, CDP C2 Risks and Opportunities, CDP C3 Business Strategy, CDP C4 Targets and Performance, CDP C6 Emissions Data, CDP C7 Emissions Breakdown, CDP C8 Energy, CDP C9 Additional Metrics, CDP C11 Carbon Pricing.
- (d) CDP Water Security 2023 Questionnaire: CDP W1 Current State, and CDP W6 Governance.

TCFD Core Elements	TCFD Core Element Description	Recommended Disclosure	SASB(a)	GRI (b)	CDP(c)	SDGs	Section Page
Governance	Disclose the organization's governance around climate-related risks and opportunities	Describe the board's oversight of climate-related risk and opportunities	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2	2-9 2-12 2-13 2-14 2-17	C1.1b		2022 ESG Report Pg. 92
		Describe management's role in assessing and managing climate related risks and opportunities	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2	2-12 2-14	C1.2		2022 ESG Report Pg. <u>93</u>
	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses,	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term			C2.1 C2.3 C2.3a C2.4 C2.4a		2022 ESG Report Pg. <u>95</u>
Strategy	planning where such information is material	Describe the impact of climate- related risks and opportunities on the organization's businesses, strategy, and financial planning			C2.1 C2.2d C2.3a C3.1 C3.1c C3.1d C2.4a C2.5		2022 ESG Report Pg. <u>101</u>
		Describe the resilience of the organization's strategy, taking into consideration different climate- related scenarios, including a 2 °C or lower scenario	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2		C3.1 C3.1d		2022 ESG Report Pg. <u>102</u>
	Disclose how the organization identifies, assesses, and manages climate-related risks	Describe the organization's processes for identifying and assessing climate-related risks		201-2/ 11.2.1			2022 ESG Report Pg. <u>114</u>
Risk Management		Describe the organization's processes for managing climate- related risks	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2				2022 ESG Report Pg. <u>114</u>
Trianagement		Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	EM-MD-110a.2 EM-EP-110a.3 TR-MT-110a.2		C2.2		2022 ESG Report Pg. <u>114</u>
Metrics and Targets	Disclose the metrics and targets used to assess and manage relevant climate- related risks and opportunities where such	Disclose the metrics used by the organization to assess climate- related risks and opportunities in line with its strategy and risk management process		2-12	C9.1		2022 ESG Report Pg. <u>116</u>
	information is material	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	EM-MD-110a.1 EM-EP-110a.1 TR-MT-110a.1	2-12 201-2/ 11.2.2	C6.1 C6.2 C6.3 C6.5		2022 ESG Report Pg. <u>116</u>
		Describe the targets used by the organization to manage climate- related risks and opportunities and performance against targets			C4.1 C4.1a C4.1b C4.2		2022 ESG Report Pg. <u>117</u>

- (a) Version 2018-10: SASB Extractives & Minerals Processing Sector Oil & Gas Midstream Standard EM-MD, SASB Extractives & Minerals Processing Sector Exploration & Production Standard EM-EP, and SASB Transportation Sector Marine Transportation Standard TR-MT.
- (b) GRI 2: General Disclosures 2021, GRI 201 Economic Performance 2016.
- (c) CDP Climate Change 2023 Questionnaire: CDP C1 Governance, CDP C2 Risks and Opportunities, CDP C3 Business Strategy, CDP C4 Targets and Performance, CDP C6 Emissions Data, CDP C9 Additional Metrics.

## **Report of Independent Accountants**

To the Board of Directors of Kinder Morgan, Inc.

We have reviewed the accompanying management assertion of Kinder Morgan, Inc. ("Kinder Morgan") that the sustainability metrics, as of or for the year ended December 31, 2022 (unless otherwise noted in the assessment criteria) in management's assertion, are presented in accordance with the assessment criteria set forth in management's assertion. Kinder Morgan's management is responsible for its assertion and for the selection of the criteria, which management believes provide an objective basis for measuring and reporting on the sustainability metrics. Our responsibility is to express a conclusion on management's assertion based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA) in AT-C section 105, *Concepts Common to All Attestation Engagements*, and AT-C section 210, *Review Engagements*, and standards established by the International Auditing and Assurance Standards Board (IAASB) in International Standard on Assurance Engagements (ISAE) 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*. Those standards require that we plan and perform the review to obtain limited assurance about whether any material modifications should be made to management's assertion in order for it to be fairly stated. The procedures performed in a review vary in nature and timing from, and are substantially less in extent than, an examination, the objective of which is to obtain reasonable assurance about whether the engagement, we do not express such an opinion. Because of the limited nature of the engagement, the level of assurance obtained in a review is substantially lower than the assurance that would have been obtained had an examination been performed. We believe that the review evidence obtained is sufficient and appropriate to provide a reasonable basis for our conclusion.

We have complied with the independence and other ethical requirements of the *Code of Professional Conduct* established by the AICPA and the *International Code of Ethics for Professional Accountants (including International Independence Standards)* issued by the International Ethics Standards Board for Accountants (IESBA Code).

The firm applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The procedures we performed were based on our professional judgment. In performing our review, we performed inquiries; performed tests of mathematical accuracy of computations on a sample basis; read relevant policies to understand terms related to relevant information about the

specified sustainability metrics; reviewed supporting documentation in regard to the completeness and accuracy of the data in the specified sustainability metrics on a sample basis; and performed analytical procedures.

Greenhouse gas (GHG) emissions quantification is subject to inherent measurement uncertainty because of such things as GHG emissions factors that are used in mathematical models to calculate GHG emissions, and the inability of these models, due to incomplete scientific knowledge and other factors, to accurately measure under all circumstances the relationship between various inputs and the resultant GHG emissions. Environmental and energy use data used in GHG emissions calculations are subject to inherent limitations, given the nature and the methods used for measuring such data. The selection by management of different but acceptable measurement techniques could have resulted in materially different amounts or metrics being reported.

The preparation of the non-GHG emissions sustainability metrics requires management to establish the criteria, make determinations as to the relevancy of information to be included, and make assumptions that affect reported information. The selection by management of different but acceptable measurement techniques could have resulted in materially different amounts or metrics being reported.

As discussed in management's assertion, Kinder Morgan has estimated GHG emissions for certain emissions sources for which no primary usage data is available.

As discussed in management's assertion, in 2022, Kinder Morgan updated the methodology related to the fresh water withdrawn intensity and fresh water withdrawn for hydrostatic integrity testing metrics.

Based on our review, we are not aware of any material modifications that should be made to Kinder Morgan's management assertion in order for it to be fairly stated.

/s/ PricewaterhouseCoopers LLP

July 20, 2023

#### Kinder Morgan, Inc.'s Management Assertion As of or for the Year Ended December 31, 2022

With respect to the sustainability metrics for the reporting year 2022 (the metrics are as of or for the year ended December 31, 2022, unless otherwise noted in the assessment criteria) presented in the table below, management of Kinder Morgan, Inc. ("Kinder Morgan" or "KMI") asserts that the sustainability metrics are presented in conformity with the assessment criteria set forth below. Management is responsible for the completeness, accuracy, and validity of the sustainability metrics and for the selection of the criteria, which management believes provide an objective basis for measuring and reporting on the sustainability metrics. Management has primarily used the Sustainability Accounting Standards Board (SASB) Accounting Standards as an input to its consideration of what metrics and other sustainability disclosures to report, however, neither the Kinder Morgan, Inc. 2022 Environmental, Social, and Governance Report nor this management assertion related to certain sustainability metrics asserts that Kinder Morgan has complied with the SASB Accounting Standards.

The sustainability metrics, which are reported in the Kinder Morgan, Inc. 2022 Environmental, Social, and Governance Report Appendices A.1, A.2, and B, identified by the "†" tick mark, includes Kinder Morgan and its operated subsidiaries and its operated investees unless otherwise defined in the assessment criteria.

For the Greenhouse Gas Emission tables below:

**Organizational boundary:** In conformance with the SASB Oil & Gas – Midstream Standard (2018-10), the World Resources Institute (WRI) and the World Business Council for Sustainable Development's (WBCSD) Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard – Revised Edition (the "GHG Protocol"), other than the equity share Scope 1 and Scope 2 emissions, Scope 1 (direct) and Scope 2 (indirect) GHG emissions and emission intensity use the operational control approach and include emissions from assets KMI operates, even for those assets KMI does not own 100%.

The reported metric, total gross global equity share Scope 1 and Scope 2 emissions, includes the equity share of Scope 1 and Scope 2 emissions from operated and non-operated sources in which Kinder Morgan has an interest.

**Exclusions:** Excludes emissions from construction activities, wastewater treatment, fire suppression activities, chemical injection pumps, sulfur recovery units, refrigerants from mobile equipment where no fuel was purchased during the reporting year or not tracked in our fleet database, fugitive emissions from natural gas supply lines for the Terminals and Products Pipelines business segments, and insignificant emissions from small combustion activities. Also excludes Natural Gas Pipelines business segment LNG cold boxes, storage tanks at natural gas processing facilities, truck loading, and enclosed circuit breakers.

**Calculations:** Scope 1 and Scope 2 emissions for carbon dioxide equivalents, including methane, are primarily calculated using the principles and guidance outlined in the GHG Protocol. Carbon dioxide emissions and equivalents have been determined on the basis of measured or estimated fuel and electricity usage, multiplied by relevant, published carbon emission factors which are updated annually, where applicable. Base data utilized in the calculation of Scope 1 (direct) and Scope 2 (indirect) GHG emissions is obtained from direct measurements, third-party invoices, or estimates. Carbon dioxide equivalent emissions utilize Global Warming Potentials (GWPs) sourced from the Intergovernmental Panel on Climate Change Fifth Assessment Report (Assessment Report 5 – 100 year), unless otherwise noted.

**Estimations:** Estimated and actual data are used to calculate operational control and equity share Scope 1 and Scope 2 emissions and the methane emissions used in the Natural Gas Pipelines business segment's transmission and storage methane emission intensity rate. Data considered "actual" use some combination of direct measurements, leak surveys, actual component counts, actual operating data, published emission factors, or other similar data elements directly used in the GHG calculation. Data considered "estimated" uses assumptions to determine emissions where actual operating data, emission factors, component counts, or measurement data is not readily available as detailed in the table below. For the year ended 2022, estimates accounted for:

- approximately 10% of operational control Scope 1 emissions,
- less than 1% of market- and location-based operational control Scope 2 emissions,
- approximately 9% of equity share Scope 1 emissions,
- approximately 6% of market-based equity share Scope 2 emissions, and
- approximately 10% of the methane emissions that are used to calculate the Natural Gas Pipelines business segment's transmission and storage methane emissions intensity rate.

Estimates used in the Scope 1 and Scope 2 GHG metrics are included in the table footnotes below.

**Uncertainty:** GHG emissions quantification is subject to inherent measurement uncertainty because of such things as GHG emissions factors that are used in mathematical models to calculate GHG emissions, and the inability of these models, due to incomplete scientific knowledge and other factors, to accurately measure under all circumstances the relationship between various inputs and the resultant GHG emissions. Environmental and energy usage data used in GHG emissions calculations are subject to inherent limitations, given the nature and the methods used for measuring such data. The selection by management of different but acceptable measurement techniques could have resulted in materially different amounts or metrics being reported.

Greenhouse Gas Emissions - Operational Control	Year Ended December 31, 2022
Total gross global Scope 1 emissions (million metric tons CO <sub>2</sub> e) (a)(b)(c)	14.9
Total gross global Scope 1 emissions by constituent (million metric tons CO <sub>2</sub> e)	
CO <sub>2</sub>	12.0
CH <sub>4</sub>	0.1
N <sub>2</sub> O (d)	0.0
HFC (d)	0.0
Percentage of gross global Scope 1 emissions by emission type (e)	
Flared hydrocarbons (f)	3 %
Other combustion (g)(o)(p)	74 %
Process emissions (h)(q)	4 %
Other vented emissions (i)(r)	11 %
Fugitive emissions from operations (j)(s)	8 %
Total gross global Scope 1 emissions - percentage covered under emissions-limiting regulations (k)	0 %
Total gross global Scope 1 emissions - percentage methane (I)	19 %
Total gross global market-based Scope 2 emissions (million metric tons CO <sub>2</sub> e) (m)	3.2
Total gross global location-based Scope 2 emissions (million metric tons CO <sub>2</sub> e) (m)	3.1
Total gross global Scope 1 emissions and market-based Scope 2 emissions (million metric tons $CO_2e$ )	18.1
Company-wide BOE throughput (MMbbl/yr) (n)	5,600
Scope 1 and 2 emission intensity (metric tons $CO_2e$ / BOE throughput (BBbl/yr))	0.003
Scope 1 GHG emissions reported under EPA's GHGRP (million metric tons CO <sub>2</sub> e) (t)	11.8
Scope 1 GHG emissions reported under EPA's GHGRP by constituent (million metric tons) (t)	
CO <sub>2</sub>	10.1
CH <sub>4</sub>	0.1
N <sub>2</sub> O	0.0

(a) Standard: SASB: Extractives & Minerals Processing Sector: Oil & Gas - Midstream, EM-MD-110a.1

(b) Standard: SASB: Extractives & Minerals Processing Sector: Oil & Gas - Exploration and Production, EM-EP-110a.1

- (c) GHG emissions were quantified considering the SASB Midstream Standard and the ISO 14064-1:2006, Greenhouse gases - Part 1: Specification with guidance at the organization level for the quantification and reporting of greenhouse gas emissions and removals. Emissions are reported for carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and hydrofluorocarbons (HFCs) from direct and indirect sources. The Intergovernmental Panel on Climate Change (IPCC) Assessment Report (AR5) Global Warming Potentials (GWP) were used to convert CH<sub>4</sub> (28) and N<sub>2</sub>O (265) emissions to CO<sub>2</sub>e. The following GWPs were used for HFCs: R-410A: 1725, HFC-134A: 1300, HCFC-22: 1760, R-404A: 3260, R-407C: 1526, R-1234YF: 4, R-600A: 5, R-407C: 1526, HFC-32: 677, HFC-23: 12,400, CFC-12: 10,200, R-422D: 2,625, R-600: 5, R-600A: 5. Gross emissions are GHGs emitted to the atmosphere before accounting for offsets, credits, or other similar mechanisms that have reduced or compensated for emissions.
- (d) For the year ended 2022, emissions of  $N_2O$  and HFCs are less than 50,000 metric tons.
- (e) The Scope 1 by emission type was reported as a percentage of total Scope 1 emissions. This deviated from the SASB Accounting Standard, which specifies disclosing the amount of Scope 1 emissions per emission type.
- (f) Flared hydrocarbons include flaring emissions from processing, gathering activities, and other operations.
- (g) Other combustion includes combustion emissions from equipment including, but not limited to, engines and turbines, boilers and heaters, vapor combustion devices, generators, and stationary and fleet vehicle engines.
- (h) Process emissions include emissions from equipment used to process gas, including, but not limited to, dehydration units and gas sweetening units.

- (i) Other vented emissions includes emissions from the release of a mixture of gases containing GHGs from equipment including, but not limited to, compressors, compressor stations, and pipeline blowdowns, compressor starts, emergency releases, gas sampling and analysis, metering and pressurizing regulating station upsets, pig traps and drips, pneumatic devices, storage station venting, storage tanks and drain vessels, and well completions. Typically, vented emissions are known sources and are part of operations.
- (j) Fugitive emissions from operations include emissions from the release of a mixture of gases (including refrigerants) containing GHGs, including, but not limited to, equipment component leaks, compressor leaks, pipeline leaks, process equipment leaks, refrigerants, storage wellheads, and vapor handling systems.
- (k) Scope 1 percentage of emissions covered under emissions-limiting regulations is calculated as the CO<sub>2</sub>e emissions covered under emissions-limiting regulations divided by the total gross global Scope 1 emissions in metric tons of CO<sub>2</sub>e.
- (I) Scope 1 percentage of methane emissions is calculated as the methane emissions in metric tons of CO<sub>2</sub>e divided by the total gross global Scope 1 emissions in metric tons of CO<sub>2</sub>e.
- (m) Scope 2 (indirect) emissions are emissions from consumption of purchased electricity. If office electricity consumption was unavailable, Scope 2 GHG emissions were estimated based on a business unit specific electricity usage factor per facility. Emission factor sources used were U.S. EPA Emissions & Generation Resource Integrated Database ("eGRID") 2021, Energy supplier-specific emission factors (market-based), and 2021 Green-e® Residual Mix Emissions Rates (market-based).
- (n) The quantity in million metric tons of CO<sub>2</sub>e of Scope 1 and Scope 2 emissions was converted using the IPCC AR5 GWPs, divided by the company-wide barrel of oil equivalent (BOE). Standards and protocols used to calculate emissions intensity include the Our Nation's Energy Future (ONE Future) protocol, Natural Gas Sustainability Initiative Methane Intensity Protocol, GHG Protocol, and company specific definitions. ONE Future's definitions are used for annual throughput. If no ONE Future definition applies, throughput is generally defined as product receipt. Throughput was converted to (million British thermal units) MMBtu using product-specific heat content, obtained from the U.S. Energy Information Administration (EIA), EPA, or business segment data. This is then converted to BOE by dividing by 5.8 MMBtu per bbl of crude oil. The CO<sub>2</sub> that we transport does not have a heating value, and therefore, has a BOE equal to zero.
- (o) Emission factors utilized to calculate stationary source emissions are either KMI derived or are from the U.S. EPA Code of Federal Regulations (CFR) - Mandatory Greenhouse Gas Reporting, 40 CFR Part 98 (December 2016). Estimations and assumptions include the following:
  - If fuel usage or operating hours were not obtained from invoices, meters, business segment surveys, or
    operating hours, then consumption rates were either estimated based on the business segment surveys
    for facilities of similar size and operation, or maximum operating parameters (e.g. 8,760 hours of
    operation) were used to estimate GHG emissions.
  - For the Natural Gas Pipelines business segment, it was assumed that all catalytic heaters have a rating of 0.02 MMBtu/hour and operate for 5,000 hours/year.
  - For transmission pipeline assets, counts of telecom generators were estimated by state and pipeline entity using pipeline miles and average telecom generator counts per mile of pipeline. It was assumed that each unit operated for 20 hours/year, had an average horsepower rating of 40.96 and average fuel consumption of 8,000 Btu/horsepower-hour.
  - For emissions from cathodic protection on transmission pipeline assets, generator engines were assumed to operate 8,760 hours per year and have a fuel consumption rating of 8,000 Btu/horsepower-hour, Thermoelectric generators and microturbines were assumed to have a fuel consumption rating of 8.825 scf/hour and 0.44 MMBtu/hour, respectively.
  - When actual small combustion equipment data was not available (e.g. water heaters, furnace, etc.), a survey was completed for a sample of facilities within each business segment, and the average fuel consumption from these surveys were used to calculate emissions.
- (p) Other combustion emissions from mobile equipment includes emissions from onsite mobile equipment required for operations, and on-road mobile equipment used by personnel. Emission factors from the GHG Protocol Mobile Emission Factors (March 2017) are utilized in emission calculations. When actual mobile equipment data was not available, a survey was completed for a sample of facilities within each business segment, and the average mobile equipment count from these surveys were used to calculate emissions.

- (q) Emission factors from U.S. EPA Code of Federal Regulations (CFR) Mandatory Greenhouse Gas Reporting, 40 CFR Part 98 (December 2016), API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry (August 2009) are utilized to calculate emissions. For dehydrators where activity data was unavailable, emission calculations were estimated using emissions calculations from similar dehydrator units.
- (r) Emission factors from U.S. EPA Code of Federal Regulations (CFR) Mandatory Greenhouse Gas Reporting, 40 CFR Part 98 (December 2016), INGAA Greenhouse Gas Emission Estimations Guidelines for Natural Gas Transmission and Storage. Volume 1 GHG Emission Estimation Methodologies and Procedures, and Kinder Morgan site-specific emission factors are utilized in emission calculations. Assumes reciprocating compressors are air start and 80% of centrifugal compressor are natural gas start. When the number of gas sampling and analysis sources were unavailable for a pipeline, an average analyzer count/pipeline mile was used for emission calculations. When meter station counts were unavailable for a pipeline, an average meter count per mile, derived from pipelines with actual meter counts, were applied per U.S. state. When pneumatic device counts were unavailable for a facility, they were estimated using the average device counts at surveyed facilities which are similar in size and operation and if the type of pneumatic device was unknown, it was assumed to be air driven.
- (s) Emission factors from U.S. EPA Code of Federal Regulations (CFR) Mandatory Greenhouse Gas Reporting, 40 CFR Part 98 (December 2016), API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry (August 2009), GHG Protocol Hydrofluorocarbon Emission Factors (January 2005), and Kinder Morgan site-specific count and emission factors are utilized to calculate emissions. Estimations and assumptions include the following:
  - For the Natural Gas Pipelines business segment, for facilities without actual component leak counts available, emissions calculations from component leaks were based on an average component count per wellhead or facility.
  - For the Natural Gas Pipelines business segment, for facilities without a leak survey completed, emission calculations are based on an average leak count per facility.
  - If site-specific refrigerant counts were not available, emissions were calculated using comparable facilities based on surveys conducted within each business segment.
  - For mobile source refrigerant emissions, a 1.1 kilogram charge of R134a was assumed to be in fleet vehicles older than 2017 and 1.1 kilogram of R1234a charge in vehicles newer than 2017. Fleet vehicles were assumed to have a charge leak rate of 20% per year (API Compendium 2009).
- (t) GHG emissions reported to U.S. EPA's GHGRP. GWP's from the IPCC AR4 are used to convert CH<sub>4</sub> (25) and N<sub>2</sub>O (298) to CO<sub>2</sub>e per the U.S. EPA's GHGRP reporting requirements. For the year ended 2022, emissions reported under U.S. EPA's GHGRP are based on information as of March 31, 2023. For the year ended 2022, emissions of N<sub>2</sub>O emissions reported to the U.S. EPA's GHGRP were less than 50,000 metric tons.

Greenhouse Gas Emissions - Equity Share	Year Ended December 31, 2022
Total gross global equity share Scope 1 emissions (million metric tons $CO_2e$ ) (a)(b)	13.8
Total gross global equity share market-based Scope 2 emissions (million metric tons $CO_2e$ ) (b)(c)	2.1

- (a) See footnotes (a), (b), (c), (f), (g), (h), (i), and (j) in the Greenhouse Gas Emissions Operational Control table above for information on standards, protocols, exclusions, and estimates used in the Scope 1 GHG emission calculations.
- (b) Equity share emissions, includes emissions from both operated and non-operated sources in which we have an interest. For operated sources, emissions were calculated by applying our ownership percentage to the entity's operating emissions. For the CO<sub>2</sub> business segment, total revenue interest was used as our ownership percentage for production locations and working interest was used as our ownership percentage for non-production locations. Emissions from assets that we lease from other companies (i.e. we are the lessee) are excluded from the equity share emissions calculations per the World Resources Institute GHG Protocol guidance. Emissions from certain assets that we lease to other companies (i.e. we are the lessor) are also excluded. Estimations and assumptions include the following:

- Emissions data from assets we do not operate was collected from the operating partner of the joint venture (JV) who generally provided emissions reported to the U.S. EPA's GHGRP.
- To estimate total Scope 1 emissions from non-operated facilities, where only U.S. EPA GHGRP data was available or provided, a scaling factor was applied to U.S. EPA GHGRP reported emissions based on historical reported data from our Natural Gas Pipelines business segment.
- For non-operated locations that provided emissions data of less than 10,000 metric tons CO<sub>2</sub>e, one-half of the GHGRP reporting threshold of 25,000 metric tons CO<sub>2</sub>e was used (i.e. 12,500 metric tons CO<sub>2</sub>e) as the entity's Scope 1 emissions, if available.
- Data was estimated for non-operated locations when the operator did not provide data using either estimates based on prior year values, publically available data in EPA's Facility Level Information on Greenhouse Gases Tool, or using available data from similar operations.
- (c) See footnote (m) in the Greenhouse Gas Emissions Operational Control table above for information on standards, protocols, exclusions, and estimates used in the Scope 2 GHG emission calculations. For nonoperated locations that did not provide Scope 2 emissions, an estimation was applied using the reported Scope 2 emissions from another facility which is similar in size and operations or, if available, the prior year's numbers were utilized, and scaled by the business unit's year over year change. Emissions from non-operated assets may also be reported publicly through other companies' reporting initiatives.

Greenhouse Gas Emissions - Operational Control Natural Gas Pipelines Business Segment	 ear Ended nber 31, 2022
Methane emission reductions (a)(b)(c)(d)	
Voluntary GHG emission reductions (million metric tons CO <sub>2</sub> e)	3.5
Volume of voluntary methane emission reductions (bcf)	6.6
Estimated value of natural gas saved (millions) (e)	\$ 45
Natural Gas Pipelines business segment's transmission and storage assets methane emission intensity rate $(f)(g)$	0.03 %

- (a) Standard: Our Nation's Energy Future (ONE Future), U.S. EPA Natural Gas Methane Challenge program, and the shelved U.S. EPA Natural Gas STAR program.
- (b) Methane emission reductions are defined as emissions mitigated or avoided that would otherwise have been emitted.
- (c) Methane emission reductions include reductions from compressor station leak repairs, pipeline pumpdowns, gas turbine installations, electric motor installations, and alternative pipeline maintenance technologies that reduce the need for pipeline blowdowns.
- (d) The reported CO<sub>2</sub>e is based on a GWP of 28 if the methane were directly emitted to the atmosphere (GHGRP Subpart W, IPCC 2007). Calculation is from 40 CFR Part 98.233, Equation W-36: methane (scf) multiplied by 0.0192 kg/ft<sup>3</sup> (methane density) multiplied by 0.001 metric tons/kg (kg to metric tons conversion) multiplied by 28 metric tons CO<sub>2</sub>e per metric ton methane (GWP). Emission reduction values using a GWP of 25 for 2022 is 3.2 million metric tons CO<sub>2</sub>e. Methane content of pipeline quality natural gas is estimated at 95% per Methane Challenge Program guidance.
- (e) The estimated value of natural gas saved from methane emission reductions is based on EIA's U.S. natural gas annual average Citygate price. For 2022, this price was \$6.83 per thousand cubic feet.
- (f) Methane emissions are calculated for the Natural Gas Pipelines business segment's transmission and storage compressor stations, transmission pipelines, and underground natural gas storage facilities using the emission sources documented in ONE Future's Methane Emissions Estimation Protocol.
- (g) The emission intensity rate is calculated by dividing our natural gas transmission and storage total methane emissions by our natural gas transmission and storage throughput. Methane emissions are calculated using the procedures in 40 CFR 98 Subpart W. Throughput refers to the total volume of natural gas transported by the Natural Gas Pipelines business segment's transmission and storage pipelines. The throughputs submitted through the Pipelines and Hazardous Materials Safety Administration's (PHMSA) Form F 7100.2-1 is used to determine throughput at the transmission pipeline entity level.

Energy Management	Year Ended December 31, 2022
Total electricity consumption (Gigawatt hours) (a)(b)	7,886

(a) The quantity in gigawatt hours of electricity consumption from purchased electricity for operated assets.

(b) Electricity consumption is calculated using KM specific methodologies. See footnote (m) in the Greenhouse Gas Emissions - Operational Control table above for information on standards, protocols, exclusions, and estimates.

Operational Safety, Emergency Preparedness, & Response	Year Ended December 31, 2022
Percentage of natural gas pipelines inspected (a)(b)(c)	27 %
Percentage of hazardous liquid pipelines inspected (a)(b)(c)	38 %
Miles of pipeline operated (thousand) (a)(d)	74

(a) Standard: SASB: Extractives & Minerals Processing Sector: Oil & Gas - Midstream, EM-MD-540a.2

(b) The percentage of natural gas pipelines and hazardous liquid pipelines inspected through in-line inspections, pressure tests, direct assessments, or other technologies.

(c) For segments of pipe that are inspected more than once for the same types of anomalies during the same year, the mileage inspected that is used in this calculation is counted once. In the limited instances where multiple inspections for different types of anomalies are conducted on the same segment in the same year, the mileage for each inspection is counted separately.

(d) The miles of pipeline operated includes pipelines in the U.S, Canada, and Mexico under KMI operational control, as of third quarter of 2022. It excludes production and flow lines in the CO<sub>2</sub> business segment.

Workforce Health & Safety	Metric Quantity for the Reporting Year 2022
Employee	
Total Recordable Incident Rate (TRIR) (# Recordable incidents / 100 full-time workers) (a)(c)(d)(e)(f)	1.9
Number of recordable injuries and illness (a)(d)(f)(g)	206
Number of Fatalities (a)(f)(g)	0
Lost time incident rate (LTIR) (# Recordable incidents / 100 full-time workers) (b)(f)(h)(i)	1.4
Number of recordable lost time cases (b)(f)	156
Contractor	
Total Recordable Incident Rate (TRIR) (# Recordable incidents / 100 full-time workers) (a)(c)(f)(j)(k)(l)	0.2
Number of recordable injuries and illness (a)(f)(j)(k)	1
Number of Fatalities (a)(f)(g)	0
Lost time incident rate (LTIR) (# Recordable incidents / 100 full-time workers) (b)(f)(h)(k)(m)	0.2
Number of recordable lost time cases (b)(f)(k)	1

(a) Standard: SASB: Extractives & Minerals Processing Sector: Oil & Gas – Exploration & Production, EM-EP-320a.2

(b) Standard is company specific as defined in the footnote (h) below.

- (c) TRIR was calculated following the Occupational Safety and Health Administration (OSHA) methodology as follows: total number of recordable incidents multiplied by 200,000 divided by the number of employee (or contractor) hours actually worked. The 200,000 represents the hours 100 employees (or 100 contractors) worked per year. 100 employees (or 100 contractors) working 40 hours per week, 50 weeks per year is a standard base for calculating incident rates.
- (d) For 2022, employee rates and fatalities are calculated using incident classifications as of February 28, 2023. Injuries or illnesses may later be reclassified based on diagnosis.

- (e) Employee TRIR includes regular full-time, regular part-time, and temporary employees. It also includes Natural Gas Pipelines and Terminals business segment contractors KMI supervises on a day-to-day basis.
- (f) COVID-19 cases, classified as recordable incidents per OSHA guidance, are self-reported by employees and contractors. TRIR, the number of recordable injuries/illnesses, number of fatalities. LTIR, and number of recordable lost time cases for employees and contractors include recordable COVID-19 cases.
- (g) KMI reports the number of fatalities for employees, but does not report fatality rate or near miss frequency rate (NMFR).
- (h) LTIR was calculated following the Occupational Safety and Health Administration (OSHA) methodology as follows: total number of recordable lost time cases multiplied by 200,000 divided by the number of employee (or contractor) hours actually worked. The 200,000 represents the hours 100 employees (or 100 contractors) worked per year. 100 employees (or 100 contractors) working 40 hours per week, 50 weeks per year is a standard base for calculating incident rates.
- (i) Employee LTIR includes recordable lost time incidents or illnesses which resulted in an absence from work for regular full-time, regular part-time, and temporary employees. It also includes Natural Gas Pipelines and Terminals business segment contractors KMI supervises on a day-to-day basis.
- (j) For 2022, contractor rates and fatalities are calculated using incident classifications as of January 24, 2023. Injuries or illnesses may later be reclassified based on diagnosis.
- (k) Major projects are capital expansion projects that are active and meet a minimum total estimated project cost in the current year or prior years. If hours for a major project were not available, hours were estimated based on major project spend.
- (I) Contractor TRIR is based on incidents contractors incurred while doing work for KMI on a defined major project. Incidents for the contractor's employees operating our marine tankers are not included in the contractor rates, but are included in the marine LTIR.
- (m) Contractor LTIR includes recordable lost time contractor incidents or illnesses which resulted in an absence from work while the contractor was performing work for Kinder Morgan on a defined major project.

Ecological Impacts	Year Ended December 31, 2022
Number of hydrocarbon spills (a)(b)(c)	29
Aggregate volume of hydrocarbon spills (barrels) (a)(b)(c)	2,966
Hydrocarbon spill volume recovered (barrels) (a)(d)	2,900
Aggregate volume of hydrocarbon spills in Unusually Sensitive Areas (barrels) (a)(b)(c)(e)	2,644
Percentage recovered	98 %

(a) Standard: SASB: Extractives & Minerals Processing Sector: Oil & Gas - Midstream, EM-MD.160a.1-4

- (b) A spill is defined as greater than one barrel of hydrocarbon liquid released to surface water, soil, or groundwater, and ice covered surfaces. This excludes spills contained within impermeable or sufficiently impervious secondary containment. Impermeable or sufficiently impervious secondary containment includes containment with earthen berms that utilize liners (e.g. earthen berm with gunite lining).
- (c) KMI does not report the volume in the Arctic as KMI does not operate in the Arctic.
- (d) The volume of spills recovered is the amount of spilled hydrocarbons removed from the environment through short-term spill response activities, excluding amounts that were recovered during longer-term remediation at spill sites and amounts that evaporated, burned, or were dispersed. The volume recovered is reported for the year the associated spill occurred.
- (e) Unusually Sensitive Areas in the U.S. are as identified in the National Pipeline Mapping System (NPMS) by PHMSA. If the NPMS data was unavailable for a spill location, the protected conservation areas identified by the World Database on Protected Areas (WDPA) and the areas characterized as endangered species habitats by the USFWS were used as the basis for whether the spill occurred in an Unusually Sensitive Area.

Water Usage from our CO <sub>2</sub> business segment	Year Ended December 31, 2022
Fresh water withdrawn (thousand cubic meters) (a)(b)(c)	1,459
Fresh water consumed (thousand cubic meters) (a)(b)(d)	1,459
Fresh water withdrawn intensity (thousand cubic meters of fresh water consumed per BOE throughput (bbl/yr)) (a)(b)(e)(f)	0.03

(a) Standard: SASB: Extractives & Minerals Processing Sector: Oil & Gas – Exploration & Production, EM-EP-140a.1

(b) Fresh water usage for 2022 was updated from prior years to be limited to our SACROC operations, which was about 97% of total fresh water usage in 2021 and 2020 for the CO<sub>2</sub> business segment, and excludes all other CO<sub>2</sub> business segment facilities.

- (c) Fresh water withdrawn is defined as water obtained from underground wells and water utilities, and water that is purchased and delivered by trucks.
- (d) Fresh water consumed is defined as water that evaporated during withdrawal, usage, or discharge or is indirectly incorporated into the product or service. It is assumed that 100% of the fresh water withdrawn in the CO<sub>2</sub> business segment is consumed since the majority of fresh water used in the CO<sub>2</sub> business segment evaporates.
- (e) Fresh water withdrawn intensity is calculated by dividing CO<sub>2</sub> business segment fresh water withdrawn (thousand cubic meters) by CO<sub>2</sub> business segment BOE throughput in bbl/yr.

(f) The CO<sub>2</sub> business segment's BOE throughput methodology was updated in 2022 to incorporate produced gas, which aligns to the BOE throughput methodology used in other metrics. We have revised for comparability the 2020 and 2021 fresh water withdrawn intensity to reflect the updated methodology. For information regarding BOE throughput see footnote (n) of the Greenhouse Gas Emissions - Operational Control table.

Water Usage for Hydrostatic Integrity Testing	Year Ended December 31, 2022
Fresh water withdrawn for hydrostatic integrity testing (thousand cubic meters) (a)(b)(c)(d)	69

- (a) The standard is company specific.
- (b) Hydrostatic integrity testing is a process where water is injected into a pipeline or tank that is pressurized to a certain level to test the integrity of the pipeline or tank. The volume of water used for hydrostatic integrity testing includes our tanks and in-service PHMSA regulated pipelines.
- (c) Our methodology for reporting fresh water withdrawn for hydrostatic testing was updated in 2022 to use water usage forms which provide more precise data for volume of fresh water use and account for fresh water reuse and fresh water loss. For 2020 and 2021, volume of fresh water use for our pipelines was calculated using the dimensions of the pipeline tested and did not account for fresh water reuse or fresh water loss. For 2020 and 2021, volume of fresh water reuse or fresh water loss. For 2020 and 2021, volume of fresh water use for our tanks was calculated using tank strapping tables in accordance with API Manual of Petroleum Measurement Standards, 14.10, 2nd Edition, 2.2D. The values for 2020 and 2021 were not revised because fresh water use, water reuse, and water loss were not captured at that time. Under the previous estimation methodology, fresh water withdrawn for hydrostatic integrity testing would be 76 thousand cubic meters for 2022.
- (d) Fresh water is from groundwater, surface water, and municipal water, including purchased and non-purchased volumes.

Hazardous Materials Management	Year Ended December 31, 2022
Amount of hazardous waste generated (metric tons) (a)(b)(c)	3,580
Percentage recycled (a)(d)	54 %

(a) Standard: SASB: Extractives & Minerals Processing Sector: Oil & Gas - Refining & Marketing, EM-RM-150a.1

- (b) For the year ended 2022, waste values are based on information as of April 2023. Hazardous waste weights are reported in the year the waste was shipped. KMI only reports hazardous waste generated for U.S. operated assets during the time they are under KMI operational control. Universal hazardous waste is excluded. Hazardous waste generated from Mexico assets and U.S. non-operated assets are excluded.
- (c) States must follow U.S. EPA hazardous waste classifications although they may create regulations for additional state specific hazardous waste. The hazardous waste only includes waste classified by the U.S. EPA as hazardous. Consequently, waste with only state hazardous waste codes, but no U.S. EPA hazardous waste code, is excluded.
- (d) Hazardous waste recycled from U.S. operations includes shipments with the reclamation and recovery handling type and the handling codes H010, H020, H039, H050, and H061, as defined by the U.S. EPA's Hazardous Waste Report Instructions and Forms (EPA Form 8700-13 A/B).

## IEA's 2022 World Energy Outlook

### Key Economic Assumptions

	Ba	ase Year	Proje	ectio	ons	Percent vs	. 2021
Metric		2021	2030		2050	2030	2050
Global population (in billions)(a)		7.84	8.51		9.69	9 %	24 %
China		1.41	1.44		1.38	2 %	(2)%
India		1.39	1.50		1.64	8 %	18 %
Africa		1.33	1.69		2.49	27 %	87 %
U.S.		0.33	0.35		0.38	6 %	15 %
Global GDP (in billions)(b)(c)(d)(e)	\$	146,608	\$ 196,363	\$	328,101	34 %	124 %
China	\$	27,206	\$ 41,132	\$	71,457	51 %	163 %
India	\$	10,193	\$ 19,057	\$	45,088	87 %	342 %
Africa	\$	7,430	\$ 10,667	\$	24,288	44 %	227 %
U.S.	\$	22,996	\$ 27,482	\$	40,837	20 %	78 %
Global GDP per capita(a)(b)(c)(d)(e)	\$	18,712	\$ 23,083	\$	33,853	23 %	81 %
China	\$	19,268	\$ 28,505	\$	51,668	48 %	168 %
India	\$	7,317	\$ 12,671	\$	27,510	73 %	276 %
Africa	\$	5,586	\$ 6,327	\$	9,766	13 %	75 %
U.S.	\$	69,265	\$ 78,075	\$	107,185	13 %	55 %

(a) Global population per IEA World Energy Model Documentation, October 2021.

(b) International Monetary Fund. "World Economic Outlook Database: Oct 2022," Oct 2022. 2022.

<a href="https://www.imf.org/-/media/Files/Publications/WEO/WEO-Database/2022/WEOOct2022alla.ashx">https://www.imf.org/-/media/Files/Publications/WEO/WEO-Database/2022/WEOOct2022alla.ashx</a>>.

(c) International Monetary Fund. "World Economic Outlook Database: October 2022," Oct 2022. 2022. <a href="https://www.imf.org/-/media/Files/Publications/WEO/WEO-Database/2022/WEOOct2022all.ashx">https://www.imf.org/-/media/Files/Publications/WEO/WEO-Database/2022/WEOOct2022all.ashx</a>>.

(d) Calculated based on GDP expressed in year 2021 dollars in PPP terms, international dollars.

(e) Forecasted GDP was calculated using the forecasted GDP growth assumptions provided in the IEA World Energy Outlook 2022 and the 2021 PPP GDP per the October 2022 International Monetary Fund database.

## CO<sub>2</sub> Emissions by APS and NZE Scenario

	<b>Base Year</b>	Base Year Announced Pledges Scenario				Net Zero Emissions by			
Metric (a)	2021	2030	2040	2050	2030	2040	2050		
		(In billions tons, except percentages)							
Global CO <sub>2</sub> emissions	37	32	21	12	23	6	0		
Percent change from 2021		(14)%	(44)%	(66)%	(38)%	(84)%	(100)%		

(a) Includes CO<sub>2</sub> emissions from combustion of fossil fuels and non-renewable wastes, from industrial and fuel transformation processes (process emissions) as well as CO<sub>2</sub> removal. Three types of CO<sub>2</sub> removals are presented: Captured and stored emissions from the combustion of bioenergy and renewable wastes. Captured and stored process emissions from biofuels production. Captured and stored CO<sub>2</sub> from the atmosphere, which is reported as direct air capture. The first two entries are often reported as bioenergy with carbon capture and storage. Note that some of the CO<sub>2</sub> captured from biofuels production and direct air capture is used to produce synthetic fuels, which is not included as CO<sub>2</sub> removal. Total CO<sub>2</sub> captured includes the carbon dioxide captured from CCUS facilities (such as electricity generation or industry) and atmospheric CO<sub>2</sub> captured through direct air capture, but excludes that captured and used for urea production.

## CO<sub>2</sub> Emissions by STEPS Scenario

	<b>Base Year</b>		<b>Stated Policies Scenari</b>	0	
Metric (a)	2021	2030	2040	2050	
Global CO <sub>2</sub> emissions	37	36	34	32	
Percent change from 2021		(1)9	% (7)%	(13)%	
CO <sub>2</sub> emissions from Coal Combustion	15	14	12	10	
Percent change from 2021		(9)9	× <sub>0</sub> (23)%	(34)%	

(a) Includes CO<sub>2</sub> emissions from combustion of fossil fuels and non-renewable wastes, from industrial and fuel transformation processes (process emissions) as well as CO<sub>2</sub> removal. Three types of CO<sub>2</sub> removals are presented: Captured and stored emissions from the combustion of bioenergy and renewable wastes. Captured and stored process emissions from biofuels production. Captured and stored CO<sub>2</sub> from the atmosphere, which is reported as direct air capture. The first two entries are often reported as bioenergy with carbon capture and storage. Note that some of the CO<sub>2</sub> captured from biofuels production and direct air capture is used to produce synthetic fuels, which is not included as CO<sub>2</sub> removal. Total CO<sub>2</sub> captured includes the carbon dioxide captured from CCUS facilities (such as electricity generation or industry) and atmospheric CO<sub>2</sub> captured through direct air capture, but excludes that captured and used for urea production.

### Key Energy Supply Indicators by Scenario

Base Year Announced		ed Pledges Sc	enario	Net Zero	Emissions by	y 2050	
Metric	2021	2030	2040	2050	2030	2040	2050
Global total energy supply (EJ)	624	636	626	629	561	524	532
Percent change from 2021		2 %	0 %	1 %	(10)%	(16)%	(15)%
Percent from solar, wind (a)	2 %	7 %	16 %	24 %	11 %	29 %	39 %
Percent from oil & natural gas	53 %	49 %	40 %	32 %	46 %	25 %	15 %
Percent from natural gas	23 %	21 %	17 %	15 %	20 %	10 %	8 %
Global energy supply intensity of GDP (EJ per billions of dollars, PPP) (b)	0.0043	0.0032	_	0.0019	0.0029	_	0.0016
Percent change from 2021		(24)%	_	(55)%	(33)%	_	(62)%
Global energy supply intensity (EJ per billion people) (c)	80	75	—	65	66	—	55
Percent change from 2021		(6)%	_	(19)%	(17)%	_	(31)%
U.S. total energy supply (EJ)	91	83	74	69			
Percent change from 2021		(9)%	(19)%	(24)%			
U.S. energy intensity (EJ per billion people)	275	236		181			
Percent change from 2021		(14)%		(34)%			
Global oil supply (MMBbl/d)	90	88	69	53	71	37	20
Percent change from 2021		(2)%	(24)%	(41)%	(22)%	(59)%	(78)%
U.S. oil supply (MMBbl/d)	16	13	7	4			
Percent change from 2021		(15)%	(53)%	(74)%			
Global biofuels supply (MMBbl/d) (d)	2	5	9	9	6	7	6
Global natural gas supply (Bcf/d) (e)	380	346	282	239	294	141	105
Percent change from 2021		(9)%	(26)%	(37)%	(23)%	(63)%	(72)%

(a) Includes geothermal, solar PV, concentrating solar power, and wind energy for electricity and heat generation.

(b) Total Energy Supply (EJ) / GDP (billions of dollars).

(c) Total Energy Supply (EJ) / Population (billions of people).

(d) Liquid fuels derived from biomass or waste feedstock, including ethanol and biodiesel. Expressed in energy-equivalent volumes of gasoline and diesel.

(e) IEA forecast converted into Bcf/d using 35.3147 cubic feet per cubic meter and 365 days/yr.

# Key Energy Demand Indicators by Scenario

	Base Year	Announced Pledges Scenario			Net Zero	Emissions by	y 2050
Metric	2021	2030	2040	2050	2030	2040	2050
Global total energy consumption (EJ)	439	451	439	433	398	356	337
Percent change from 2021		3 %	0 %	(1)%	(9)%	(19)%	(23)%
Percent from crude oil and natural gas	54 %	51 %	42 %	34 %	47 %	29 %	16 %
Percent from natural gas	16 %	15 %	13 %	10 %	14 %	9 %	5 %
Percent from liquids fuels	39 %	39 %	34 %	29 %	37 %	25 %	17 %
Global energy consumption intensity (EJ per billion people)	56	53	_	45	47	_	35
Percent change from 2021		(5)%		(20)%	(16)%		(38)%
Global total liquids fuels market (EJ)	170	177	149	125	146	91	59
Percent from biofuels	2 %	6 %	12 %	15 %	8 %	16 %	20 %
Percent from crude oil	98 %	94 %	87 %	81 %	92 %	80 %	66 %
U.S. natural gas demand (Bcf/d)	81	67	36	24			
Percent change from 2021		(18)%	(56)%	(71)%			
Global gaseous bioenergy (Bcf/d)	3	12	22	32	19	31	38
Percent change from 2021		256 %	572 %	881 %	476 %	870 %	1069 %

# Key Electricity Indicators by Scenario

	Base Year	Announce	ed Pledges So	enario	Net Zero Emissions by 2050			
Metric	2021	2030	2040	2050	2030	2040	2050	
Global electricity generation (terawatt-hours)	28,334	35,878	48,654	61,268	37,723	57,924	73,231	
Percent change from 2021		27 %	72 %		33 %	104 %	158 %	
Percent from wind and solar	10 %	30 %	49 %	59 %	41 %	65 %	69 %	
Percent from natural gas	23 %	17 %	10 %	6 %	13 %	1 %	1 %	
Total Capacity (gigawatt)	8,185	12,932	20,258	26,541	15,306	26,870	33,878	
Renewables	3,278	7,744	14,510	20,290	10,349	21,398	27,304	
Solar PV	892	3,498	7,471	11,065	5,052	11,620	15,468	
Wind	832	2,251	4,246	5,727	3,072	6,435	7,795	
Hydro	1,358	1,609	1,988	2,325	1,782	2,349	2,685	
Bioenergy	173	307	529	707	320	585	744	
Nuclear	413	487	622	716	535	777	871	
Fossil Fuel with CCUS	0	18	192	288	62	266	335	
Unabated Fossil Fuels	4,462	4,223	3,506	2,729	3,389	1,476	932	
Percent change from 2021		58 %	147 %	224 %	87 %	228 %	314 %	
Percent from wind and solar	21 %	44 %	58 %	63 %	53 %	67 %	69 %	
Percent from natural gas	23 %	15 %	9 %	6 %	11 %	4 %	2 %	

## Natural Gas by Region

	<b>Base Year</b>	<b>Announced Pledges Scenario</b>		cenario	2050 Marketshare
Metric (a)	2021	2030	2040	2050	(%)
			(In Bcf/d)		
World Natural Gas Production	401	375	304	257	100 %
North America	115	106	67	47	18 %
Europe	23	17	9	6	2 %
Africa	26	27	24	23	9 %
Middle East	64	77	75	67	26 %
World Natural Gas Demand	408	375	304	257	100 %
North America	107	90	53	38	15 %

(a) IEA forecast converted into Bcf/d using 35.3147 cubic feet per cubic meter and 365 days/yr.

#### World Trade

	<b>Base Year</b>	Anno	enario	
Metric	2021	2030	2040	2050
		(In B	cf/d)	
World trade of LNG (a)	44	53	45	31

(a) IEA forecast converted into Bcf/d using 35.3147 cubic feet per cubic meter and 365 days/yr.

### Global Average Annual Investment

	Reference			Announced Pled	ges Scenario		
Metric	2016-2021	2022-2030		2031-2040	2041-2050		2022-2050
		Ave	erage	e Annual Investme	ent		
Global investments (billion dollars)	\$ 2,103	\$ 3,183	\$	4,107 \$	4,331	\$	3,897
Global power investments (billion dollars) (a)	\$ 858	\$ 1,285	\$	1,737 \$	1,839	\$	1,632
Percent change from 2016-2021		50 %	6	102 %	114	%	90 %
In electricity networks	\$ 308	\$ 472	\$	775 \$	871	\$	714
In renewable power generation	\$ 377	\$ 643	\$	757 \$	745	\$	717
In battery storage	\$ 5	\$ 37	\$	72 \$	94	\$	69
In nuclear and fossil power generation (b)(c)	\$ 168	\$ 130	\$	130 \$	127	\$	129
Global average annual investment per total energy supply (billion dollar / EJ)	3.4	5.0		6.6	6.9		6.2
Percent change from 2016-2021		49 %	6	95 %	104	%	84 %

(a) Expressed in year 2021 dollars in PPP.

(b) Includes unabated coal and unabated gas.

(c) Includes fossil fuels with CCUS.

## Capital Cost

	Announc	Announced Pledges Scenario			Net Zero Emissions by 2050		
	2021	2030	2050	2021	2030	2050	
			(In \$/kilo	watt)			
United States of America							
Solar PV	1,090	680	470	1,090	620	430	
Wind onshore	1,380	1,290	1,220	1,380	1,270	1,190	
Wind offshore	4,040	2,360	1,620	4,040	2,200	1,500	

## CO<sub>2</sub> Prices for Electricity, Industry, and Energy Production

	<b>Announced Pledges Scenario</b>			Net Zero Emissions by 2050		
-	2030	2040	2050	2030	2040	2050
			(In \$ per ton	of CO <sub>2</sub> )		
Advanced economies with net zero pledges (a)	135	175	200	140	205	250
Emerging market and developing economies with net zero pledges (b)	40	110	160	90	160	200
Other emerging market and developing economies		17	47	25	85	180

(a) Includes all Organisation for Economic Co-operation and Development countries except Mexico.

(b) Includes China, India, Indonesia, Brazil and South Africa.

# IPCC 2014 Fifth Assessment Report (AR5) RCP 8.5 4 °C Scenario

	2046-2065	2081-2100 (i.e., end of the 21st Century)		
	Mean (Likely Range)	Mean (Likely Range)		
Global Mean Surface Temperature Increase (°C)	2.0 (1.4 to 2.6)	4.4 (3.3 to 5.7)		
Global Mean Sea-level Rise (meters) relative to 1985-2005	0.32 (0.23 to 0.40)	0.71 (0.51 to 0.92)		