



2022 performance data

for complete reporting, visit chevron.com/sustainability

performance data

increasing transparency by reporting metrics and performance data annually*

Chevron is working with peers, stakeholders and voluntary framework developers to foster increasingly consistent and comparable information for investors and other stakeholders.

We consider reporting guidelines, indicators and terminology in the frameworks of Sustainability Accounting Standards Board (SASB), Task Force for Climate-related Financial Disclosures (TCFD), the *Sustainability Reporting Guidance for the Oil & Gas Industry (2020)* by Ipeca, the International Association of Oil and Gas Producers (IOGP) and the American Petroleum Institute (API), as well as other reporting frameworks, to determine which data to include in our tables.

To promote comparability, we map our reporting data to the relevant SASB and Ipeca frameworks to help provide information for investors and other stakeholders. Please

note that the references in the index columns are based solely on Chevron's interpretation and judgment and do not indicate the application of definitions, metrics, measurements, standards or approaches set forth by third-party groups, including the SASB and Ipeca frameworks.

The data tables within this section compile sustainability-related metrics in alignment with several reporting standards. The tables present our greenhouse gas (GHG) emissions and other operated-basis metrics for environmental performance, employee and supplier diversity, and workforce health and safety. Following the quantitative metrics are qualitative metrics and links to other Chevron reports.

The table below tracks annual progress toward our 2028 GHG emissions intensity targets.

GHG reporting equity metrics and targets

	2016	2017	2018	2019	2020	2021	2022	2028 target
Portfolio carbon intensity (grams CO₂e/megajoule)¹	74.9	73.8	73.4	72.7	71.4	71.3	71.0	71.0
Upstream carbon intensity²								
Oil intensity (kilograms CO ₂ e/boe)	41.9	36.8	37.0	33.3	28.2	28.6	25.2	24.0
Gas intensity (kilograms CO ₂ e/boe)	32.6	35.0	34.7	30.4	26.8	28.6	27.5	24.0
Methane intensity (kilograms CO ₂ e/boe)	4.5	3.3	2.8	2.4	2.0	2.1	1.9	2.0
Flaring intensity (kilograms CO ₂ e/boe)	8.7	7.2	6.3	4.7	3.8	4.3	3.5	3.0
Refining carbon intensity (kilograms CO₂e/boe)³	36.6	34.5	34.9	35.9	38.6	37.9	37.0	36.0

* Unless otherwise noted, this section reflects 2022 data collected as of April 11, 2023. All data are reported on an operated basis unless otherwise noted. Data from Renewable Energy Group, Inc. are included in this section unless otherwise noted. Operated GHG emissions, environmental performance, and workforce health and safety tables include data from Tengizchevroil LLP and the Partitioned Zone between Saudi Arabia and Kuwait (SAPZ). Although Chevron has traditionally included Tengizchevroil LLP data as if operated in this report, Chevron does not own a controlling interest in, does not operate and does not have the authority to force implementation of Chevron management systems within Tengizchevroil LLP. Tengizchevroil LLP is a separate legal entity operated under the direction of a partnership council that Chevron does not control. Inclusion of SAPZ data within the operational data is a reflection of alignment to OE reporting and not reflective of the underlying legal structure or governance practices. All restatements are restated against the May 2022 release of the *Corporate Sustainability Report (2021)*. Variations year-on-year or across multiple years of performance data may result from a variety of causes such as methodology updates, portfolio changes, economic conditions, and business performance and initiatives. Performance data are not a guarantee of future performance nor intended to be a demonstration of linear progress against aspirations, targets or objectives. See Forward-Looking Statements Warning on [page 2](#) of this PDF. Numbers in table may not sum due to rounding.

improving our data quality

The accuracy of the information we report is important to us. We conduct independent third-party assurance for Chevron's GHG emissions and the processes used to create the 2022 *Corporate Sustainability Report*. For our most recent ESG assurance statement, visit chevron.com/ESGassurance.

In our 2022 reporting, we're proud to announce that we have increased the assurance level for GHG emissions from limited to reasonable. As of March 24, 2023, Chevron is the first oil and gas major† to report achievement of reasonable assurance of its GHG emissions from both operated and nonoperated assets. The scope of the assurance for 2022, the year for which this new reasonable assurance milestone was achieved, is on both an equity share and operational control basis, and excludes Chevron Phillips Chemical Company, LLC and Renewable Energy Group, Inc. For our most recent GHG assurance statements, visit chevron.com/GHGassurance.

We have also obtained verification that our environmental and safety management system, Operational Excellence Management System (OEMS), meets international standards and specifications and has obtained a Certificate of Approval for alignment with ISO 14001:2015 and 45001:2018. For our most recent certificate, visit chevron.com/oemISOcertification.

We are continuing to progress our internal systems to further advance data quality and metric reporting.



To create customized charts and tables using our performance data, visit chevron.com/chart-generator

† Compared to BP, ConocoPhillips, Eni, ExxonMobil, Shell and TotalEnergies.

forward-looking statements warning

CAUTIONARY STATEMENTS RELEVANT TO FORWARD-LOOKING INFORMATION FOR THE PURPOSE OF "SAFE HARBOR" PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This report of Chevron Corporation contains forward-looking statements relating to Chevron's operations and energy transition plans that are based on management's current expectations, estimates and projections about the petroleum, chemicals and other energy-related industries. Words or phrases such as "anticipates," "expects," "intends," "plans," "targets," "advances," "commits," "designs," "drives," "aims," "forecasts," "projects," "believes," "approaches," "seeks," "schedules," "estimates," "positions," "pursues," "progress," "may," "can," "could," "should," "will," "budgets," "outlook," "trends," "guidance," "focus," "on track," "goals," "objectives," "strategies," "opportunities," "poised," "potential," "ambitions," "aspires" and similar expressions are intended to identify such forward-looking statements.

These statements are not guarantees of future performance and are subject to certain risks, uncertainties and other factors, many of which are beyond the company's control and are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements. The reader should not place undue reliance on these forward-looking statements, which speak only as of the date of this report. Unless legally required, Chevron undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise. Standards of measurement and performance made in reference to our environmental, social, governance and other sustainability plans and goals may be based on protocols, processes and assumptions that continue to evolve and are subject to change in the future, including due to the impact of future regulations.

Among the important factors that could cause actual results to differ materially from those in the forward-looking statements are: changing crude oil and natural gas prices and demand for the company's products, and production curtailments due to market conditions; crude oil production quotas or other actions that might be imposed by the Organization of Petroleum Exporting Countries and other producing countries; technological advancements; changes to government policies in the countries in which the company operates; public health crises, such as pandemics (including coronavirus [COVID-19]) and epidemics, and any related government policies and actions; disruptions in the company's global supply chain, including supply chain constraints and escalation of the cost of goods and services; changing economic, regulatory and political environments in the various countries in which the company operates; general domestic and international economic and political conditions, including the military conflict between Russia and Ukraine and the global response to such conflict; changing refining, marketing and chemicals margins; actions of competitors or regulators; timing of exploration expenses; timing of crude oil liftings; the competitiveness of alternate-energy sources or product substitutes; development of large carbon capture and offset markets; the results of operations and financial condition of the company's suppliers, vendors, partners and equity affiliates, particularly during the COVID-19 pandemic; the inability or failure of the company's joint-venture partners to fund their share of operations and development activities; the potential failure to achieve expected net production from existing and future crude oil and natural gas development projects; potential delays in the development, construction or start-up of planned projects; the potential disruption or interruption of the company's operations due to war, accidents, political events, civil unrest, severe weather, cyber threats, terrorist acts, or other natural or human causes beyond the company's control; the potential liability for remedial actions or assessments under existing or future environmental regulations and litigation; significant operational, investment or product changes undertaken or required by existing or future environmental statutes and regulations, including international agreements and national or regional legislation and regulatory measures to limit or reduce greenhouse gas emissions; the potential liability resulting from pending or future litigation; the company's future acquisitions or dispositions of assets or shares or the delay or failure of such transactions to close based on required closing conditions; the potential for gains and losses from asset dispositions or impairments; government mandated sales, divestitures, recapitalizations, taxes and tax audits, tariffs, sanctions, changes in fiscal terms, or restrictions on scope of company operations; foreign currency movements compared with the U.S. dollar; higher inflation and related impacts; material reductions in corporate liquidity and access to debt markets; the receipt of required Board authorizations to implement capital allocation strategies, including future stock repurchase programs and dividend payments; the effects of changed accounting rules under generally accepted accounting principles promulgated by rule-setting bodies; the company's ability to identify and mitigate the risks and hazards inherent in operating in the global energy industry; and the factors set forth under the heading "Risk Factors" on pages 20 through 26 of the company's 2022 Annual Report on Form 10-K and in subsequent filings with the U.S. Securities and Exchange Commission. Other unpredictable or unknown factors not discussed in this report could also have material adverse effects on forward-looking statements.

equity emissions

	2018	2019	2020	2021	2022	SASB	ipieca
portfolio carbon intensity (grams CO₂e/megajoule)¹	73.4	72.7	71.4	71.3	71.0		CCE4: C4
Upstream carbon intensity²							CCE4: C4
Oil intensity (kilograms CO ₂ e/boe)	37.0	33.3	28.2	28.6	25.2		
Gas intensity (kilograms CO ₂ e/boe)	34.7	30.4	26.8	28.6	27.5		
Methane intensity (kilograms CO ₂ e/boe)	2.8	2.4	2.0	2.1	1.9		
Flaring intensity (kilograms CO ₂ e/boe)	6.3	4.7	3.8	4.3	3.5		
refining carbon intensity (kilograms CO₂e/boe)³	34.9	35.9	38.6	37.9	37.0		CCE4: C4
enabled reductions (million tonnes CO₂e)⁴	6	5	5	17	18		
direct GHG emissions (scope 1)^{5,6,7,8}							
direct GHG emissions (scope 1) – all GHGs (million tonnes CO₂e)	66	62	54	57	53		CCE4: C1/A1
Upstream – all GHGs (million tonnes CO₂e)⁹	28	27	23	23	18	EM-EP-110a.1	CCE4: C3
CO ₂ (million tonnes)	25	24	21	20	16		
CH ₄ (million tonnes CH ₄) ¹⁰	0.10	0.10	0.08	0.08	0.07		
CH ₄ (million tonnes CO ₂ e) ¹⁰	2.5	2.4	2.1	2.1	1.8		
Other GHGs (million tonnes CO ₂ e)	0.1	0.1	0.1	0.1	0.1		
Upstream flaring (subset of Scope 1) – all GHGs (million tonnes CO₂e)	5	5	4	4	3	EM-EP-110a.2	CCE7: C4
CO ₂ (million tonnes)	5	4	3	4	3		
CH ₄ (million tonnes CH ₄) ¹⁰	0.02	0.01	0.01	0.01	0.01		
CH ₄ (million tonnes CO ₂ e) ¹⁰	0.5	0.4	0.3	0.3	0.2		
Other GHGs (million tonnes CO ₂ e)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
Volume of flares (mmscf) ¹¹	70,000	60,000	50,000	50,000	40,000		CCE7: A1
Midstream – all GHGs (million tonnes CO₂e)	2	1	1	1	1	EM-MD-110a.1	CCE4: C3
CO ₂ (million tonnes)	2	1	1	1	1		
CH ₄ (million tonnes CH ₄) ¹⁰	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
CH ₄ (million tonnes CO ₂ e) ¹⁰	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
Other GHGs (million tonnes CO ₂ e)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
Downstream – all GHGs (million tonnes CO₂e)¹²	20	19	18	20	20	EM-RM-110a.1	CCE4: C3
CO ₂ (million tonnes)	20	19	18	19	19		
CH ₄ and other GHGs (million tonnes CO ₂ e)	0.1	0.1	0.1	0.2	0.2		
Liquefied Natural Gas (LNG) – all GHGs (million tonnes CO₂e)	9	8	7	8	9	EM-EP-110a.2	CCE4: C3
CO ₂ (million tonnes)	9	8	7	8	8		
CH ₄ and other GHGs (million tonnes CO ₂ e)	0.5	0.3	0.2	0.3	0.3		

equity emissions table continues on [page 4](#)

equity emissions, cont.

	2018	2019	2020	2021	2022	SASB	ipieca
direct GHG emissions (scope 1) – all GHGs (million tonnes CO₂e), cont.							
Chemicals – all GHGs (million tonnes CO₂e)^{13,14}	5	5	4	4	4		CCE4: C3
CO ₂ (million tonnes)	5	5	4	4	4		
CH ₄ and other GHGs (million tonnes CO ₂ e)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
Other – all GHGs (million tonnes CO₂e)¹⁵	2	1	1	1	1		CCE4: C3
CO ₂ (million tonnes)	2	1	1	1	1		
CH ₄ and other GHGs (million tonnes CO ₂ e)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
emissions associated with exported electricity and steam – all GHGs (million tonnes CO₂e)¹⁶	1	1	1	1	< 1		CCE4: C3/A6
Upstream – all GHGs (million tonnes CO ₂ e) ⁹	< 1	< 1	< 1	< 1	< 1		
Midstream – all GHGs (million tonnes CO ₂ e)	0	0	0	0	0		
Downstream – all GHGs (million tonnes CO ₂ e) ¹²	< 1	< 1	< 1	< 1	< 1		
LNG – all GHGs (million tonnes CO ₂ e)	0	0	0	0	0		
Chemicals – all GHGs (million tonnes CO ₂ e) ^{13,14}	0	0	0	0	0		
Other – all GHGs (million tonnes CO ₂ e) ¹⁵	1	1	< 1	1	< 1		
indirect GHG emissions from imported energy (scope 2)^{5,7,8,17}							
indirect GHG emissions from imported energy (scope 2) – all GHGs (million tonnes CO₂e)	3	2	4	4	4		CCE4: C2/C3
Upstream – all GHGs (million tonnes CO ₂ e) ⁹	1	1	1	1	1		
Midstream – all GHGs (million tonnes CO ₂ e)	< 1	< 1	< 1	< 1	< 1		
Downstream – all GHGs (million tonnes CO ₂ e) ¹²	1	1	1	1	1		
LNG – all GHGs (million tonnes CO ₂ e)	0	0	0	0	0		
Chemicals – all GHGs (million tonnes CO ₂ e) ^{13,14}	< 1	< 1	1	1	1		
Other – all GHGs (million tonnes CO ₂ e) ¹⁵	< 1	< 1	< 1	< 1	< 1		
indirect GHG emissions (scope 3)¹⁸							CCE4: A2
Category 11 use of sold products – production method – all GHGs (million tonnes CO ₂ e)	396	412	412	408	391		
Category 11 use of sold products – throughput method – all GHGs (million tonnes CO ₂ e)	380	382	372	389	391		
Category 11 use of sold products – sales method – all GHGs (million tonnes CO ₂ e)	628	639	583	611	668		
third-party verification¹⁹							
Assurance level	Limited	Limited	Limited	Limited	Reasonable		
Assurance provider	ERM CVS	ERM CVS	ERM CVS	DNV	DNV		

operated emissions

	2018	2019	2020	2021	2022	SASB	ipieca
direct GHG emissions (scope 1)^{5,6,7}							
direct GHG emissions (scope 1) – all GHGs (million tonnes CO₂e)	68	63	56	57	53		CCE4: C1/A1
Upstream – all GHGs (million tonnes CO₂e)	35	34	30	29	24	EM-EP-110a.1	CCE4: C3
CO ₂ (million tonnes)	32	31	28	26	22		
CH ₄ (million tonnes CH ₄) ¹⁰	0.14	0.12	0.11	0.11	0.09		
CH ₄ (million tonnes CO ₂ e) ¹⁰	3.5	3.0	2.7	2.7	2.3		
Other GHGs (million tonnes CO ₂ e)	0.1	0.1	0.1	0.1	0.1		
Upstream flaring (subset of Scope 1) – all GHGs (million tonnes CO₂e)	9	8	6	7	4	EM-EP-110a.2	CCE7: C4
CO ₂ (million metric tons)	8	7	5	6	4		
CH ₄ (million tonnes CH ₄) ¹⁰	0.03	0.02	0.02	0.02	0.01		
CH ₄ (million tonnes CO ₂ e) ¹⁰	0.8	0.6	0.4	0.5	0.3		
Other GHGs (million tonnes CO ₂ e)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
Volume of flares (mmscf) ¹¹	130,000	100,000	90,000	100,000	60,000		CCE7: A1
Midstream – all GHGs (million tonnes CO₂e)	2	1	1	1	1	EM-MD-110a.1	CCE4: C3
CO ₂ (million tonnes)	2	1	1	1	1		
CH ₄ (million tonnes CH ₄) ¹⁰	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
CH ₄ (million tonnes CO ₂ e) ¹⁰	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
Other GHGs (million tonnes CO ₂ e)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
Downstream – all GHGs (million tonnes CO₂e)¹²	15	14	14	15	14	EM-RM-110a.1	CCE4: C3
CO ₂ (million tonnes)	15	14	14	14	14		
CH ₄ and other GHGs (million tonnes CO ₂ e)	0.1	0.1	0.1	0.2	0.2		
LNG – all GHGs (million tonnes CO₂e)	13	11	9	11	12	EM-EP-110a.2	CCE4: C3
CO ₂ (million tonnes)	12	11	9	11	12		
CH ₄ and other GHGs (million tonnes CO ₂ e)	0.8	0.4	0.3	0.5	0.5		
Chemicals – all GHGs (million tonnes CO₂e)¹⁵	< 1		CCE4: C3				
CO ₂ (million tonnes)	< 1	< 1	< 1	< 1	< 1		
CH ₄ and other GHGs (million tonnes CO ₂ e)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
Other – all GHGs (million tonnes CO₂e)¹⁵	2	1	1	1	1		CCE4: C3
CO ₂ (million tonnes)	2	1	1	1	1		
CH ₄ and other GHGs (million tonnes CO ₂ e)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		

Indicates restatement of data.

operated emissions table continues on [page 6](#)

operated emissions, cont.

	2018	2019	2020	2021	2022	SASB	ipieca
emissions associated with exported electricity and steam (subset of scope 1) – all GHGs (million tonnes CO₂e)¹⁶	1	1	1	1	< 1		CCE4: C3/A6
Upstream – all GHGs (million tonnes CO ₂ e)	< 1	< 1	< 1	< 1	< 1		
Midstream – all GHGs (million tonnes CO ₂ e)	0	0	0	0	0		
Downstream – all GHGs (million tonnes CO ₂ e) ¹²	< 1	< 1	< 1	< 1	< 1		
LNG – all GHGs (million tonnes CO ₂ e)	0	0	0	0	0		
Chemicals – all GHGs (million tonnes CO ₂ e) ¹³	0	0	0	0	0		
Other – all GHGs (million tonnes CO ₂ e) ¹⁵	1	1	< 1	1	< 1		
indirect GHG emissions from imported energy (scope 2)^{5,7,17}							
indirect GHG emissions from imported energy (scope 2) – all GHGs (million tonnes CO₂e)	2	1	1	2	1		CCE4: C2/C3
Upstream – all GHGs (million tonnes CO ₂ e)	1	1	1	1	1		
Midstream – all GHGs (million tonnes CO ₂ e)	< 1	< 1	< 1	< 1	< 1		
Downstream – all GHGs (million tonnes CO ₂ e) ¹²	1	< 1	< 1	1	1		
LNG – all GHGs (million tonnes CO ₂ e)	0	0	0	0	0		
Chemicals – all GHGs (million tonnes CO ₂ e) ¹³	< 1	< 1	< 1	< 1	< 1		
Other – all GHGs (million tonnes CO ₂ e) ¹⁵	< 1	< 1	< 1	< 1	< 1		
indirect GHG emissions (scope 3)¹⁸							CCE4: A2
Category 11 use of sold products – production method – all GHGs (million tonnes CO ₂ e)	617	622	588	621	592		
Category 11 use of sold products – throughput method – all GHGs (million tonnes CO ₂ e)	406	411	392	450	442		
GHG mitigation							
Carbon capture, utilization and storage (CCUS) – all GHGs (million tonnes CO ₂ e) ²⁰	< 1	1	3	1	1		CCE3: A6
Renewable Energy Credits (RECs for indirect emissions) – all GHGs (million tonnes CO ₂ e) ²¹	0	< 1	< 1	< 1	< 1		CCE3: A7
Offsets – all GHGs (million tonnes CO ₂ e) ²²	3	1	2	13	10		

environmental performance

	2018	2019	2020	2021	2022	SASB	ipieca
energy efficiency							CCE6
Total energy consumption, operated assets and nonoperated joint-venture refineries (trillion BTUs)²³	940	916	851	859	784		CCE6: C1
Total energy consumption, operated assets and nonoperated joint-venture refineries (million gigajoules) ²³	992	967	898	906	828		CCE6: C1
Total energy consumption, operated assets (trillion BTUs)²³	778	758	701	703	626		CCE6: C1
Total energy consumption, operated assets (million gigajoules) ²³	821	800	739	741	661		CCE6: C1
Manufacturing Energy Index (Refining)²⁴	85	85	88	88	92		CCE6: A4
Upstream Energy Intensity (thousand BTUs per barrel of oil-equivalent)²⁵	358	362	341	306	255		CCE6: A2
Pipeline Energy Intensity (BTUs per barrel of oil-equivalent-mile)²⁶	10	8	10	10	10		CCE6: A2
Shipping Energy Intensity (BTUs per metric ton-mile)	75	70	69	60	58		CCE6: A2
Non-Manufacturing Energy Index²⁷	74	67	71	65	67		CCE6: A3
air quality²⁸							ENV5
Total volatile organic compounds (VOCs) emitted (thousand metric tons)²⁹	115	102	81	91	63	EM-EP-120a.1 EM-MD-120a.1 EM-RM-120a.1	ENV5: C1
Total sulfur oxides (SO_x) emitted (thousand metric tons)²⁹	40	36	41	87	70	EM-EP-120a.1 EM-MD-120a.1 EM-RM-120a.1	ENV5: C1
Total nitrogen oxides (NO_x) emitted (thousand metric tons)²⁹	141	130	112	113	106	EM-EP-120a.1 EM-MD-120a.1 EM-RM-120a.1	ENV5: C1
water management³⁰							
water withdrawn³¹							ENV1
Fresh water withdrawn (million cubic meters)	71	70	63	67	63		ENV1: C1
Upstream	31	33	28	27	26	EM-EP-140a.1	
Refining ³²	37	34	33	37	35	EM-RM-140a.1	
Other ³³	3	3	2	2	3		
Nonfresh water withdrawn (million cubic meters)	39	45	34	33	33		ENV1: A4
Upstream	21	27	17	15	14		
Refining ³²	16	17	17	17	18		
Other ³³	2	1	< 1	1	1		

Indicates restatement of data.

environmental performance table continues on [page 8](#)

environmental performance, cont.

	2018	2019	2020	2021	2022	SASB	ipieca
water withdrawn,³¹ cont.							
Fresh water withdrawn intensity							
Upstream (barrel of water per barrel of oil-equivalent) ³⁴	0.12	0.14	0.11	0.10	0.11		ENV1: A2
Refining (barrel of water per barrel of oil-equivalent as feedstock) ³⁵	0.55	0.53	0.57	0.56	0.56		ENV1: A2
Fresh water consumed (million cubic meters)	70	69	62	66	62	EM-EP-140a.1	ENV1: C2
Fresh water withdrawn in regions with high or extremely high baseline water stress (%)^{36,37}	—	—	—	19	24	EM-EP-140a.1 EM-RM-140a.1	ENV1: C4
Fresh water consumed in regions with high or extremely high baseline water stress (%)^{36,37}	—	—	—	19	25	EM-EP-140a.1 EM-RM-140a.1	ENV1: C4
wastewater^{30,38}							ENV2
Average oil concentration in discharges to surface water (parts per million)							
Upstream	7	8	7	6	9	EM-EP-140a.2	ENV2: C1
Refining ³²	1	1	1	2	2		ENV2: C2
Total amount of oil discharged to surface water (thousand metric tons)							
Upstream	0.7	0.7	0.5	0.4	0.3	EM-EP-140a.2	ENV2: C1
Refining ³²	0.03	0.03	0.03	0.05	0.05		ENV2: C2
accidental release prevention and response³⁹							ENV6
Petroleum spills to land and water (volume in thousand barrels)	1.02	0.79	0.94	12.27	1.93	EM-EP-160a.2 EM-MD-160a.4	ENV6: C2
Total volume recovered	0.84	0.64	0.60	0.83	1.42	EM-EP-160a.2 EM-MD-160a.4	ENV6: A1
Petroleum spills to land and water (number of spills)	60	51	45	81	71	EM-EP-160a.2 EM-MD-160a.4	ENV6: C2
waste⁴⁰							ENV7
Hazardous waste generated (million metric tons)	0.4	0.4	0.2	0.3	0.3	EM-RM-150a.1	ENV7: C3
Hazardous waste disposed of (million metric tons)	0.3	0.2	0.1	0.2	0.2		ENV7: C3
Hazardous waste recycled, reused or recovered (million metric tons)	0.2	0.2	0.1	0.1	0.1	EM-RM-150a.1	ENV7: C3
finances and settlements⁴¹							
Number of environmental, health and safety fines paid and settlements entered into, equity basis	64	104	45	57	58		
Cost of environmental, health and safety fines paid and settlements entered into, equity basis (millions of dollars)	\$9.1	\$16.1	\$3.0	\$3.6	\$2.1		

Indicates restatement of data.

U.S. equal employment opportunity commission statistics⁴²

	2018	2019	2020	2021	2022	SASB	ipieca
Total employees: women (%)	31	30	30	30	30		SOC5: C2
Total employees: ethnic minorities (%)	41	41	41	42	43		SOC5: C2
Caucasian	59	59	59	58	57		SOC5: C2
Women	15	14	14	14	14		SOC5: C2
Men	45	45	45	44	43		SOC5: C2
Asian	14	14	14	14	13		SOC5: C2
Women	5	5	5	5	5		SOC5: C2
Men	9	9	9	9	8		SOC5: C2
Latino	16	16	16	17	18		SOC5: C2
Women	6	6	6	7	7		SOC5: C2
Men	9	10	10	10	11		SOC5: C2
Black	8	8	8	8	8		SOC5: C2
Women	4	4	3	3	3		SOC5: C2
Men	5	5	5	5	5		SOC5: C2
Other ethnicities ⁴³	3	3	3	3	4		SOC5: C2
Women	1	1	1	1	1		SOC5: C2
Men	2	2	2	2	3		SOC5: C2
Executives and senior managers: women (%)	22	24	26	27	29		SOC5: C2
Executives and senior managers: ethnic minorities (%)	19	22	24	26	27		SOC5: C2
Caucasian	81	78	76	75	73		SOC5: C2
Women	16	17	19	19	19		SOC5: C2
Men	65	61	57	56	53		SOC5: C2
Asian	9	10	12	11	12		SOC5: C2
Women	3	3	4	4	4		SOC5: C2
Men	6	7	8	7	8		SOC5: C2
Latino	6	6	8	8	9		SOC5: C2
Women	1	2	2	2	3		SOC5: C2
Men	5	4	6	6	6		SOC5: C2
Black	3	4	4	5	5		SOC5: C2
Women	1	2	2	2	2		SOC5: C2
Men	2	2	2	3	3		SOC5: C2

U.S. equal employment opportunity commission statistics table continues on [page 10](#)

U.S. equal employment opportunity commission statistics,⁴² cont.

	2018	2019	2020	2021	2022	SASB	ipieca
Executives and senior managers: ethnic minorities (%), cont.							
Other ethnicities ⁴³	1	1	1	1	1		SOC5: C2
Women	0	0	0	0	0		SOC5: C2
Men	1	1	0	1	1		SOC5: C2
First- and mid-level managers: women (%)	30	31	30	31	30		SOC5: C2
First- and mid-level managers: ethnic minorities (%)	33	34	35	36	35		SOC5: C2
Caucasian	67	66	65	64	65		SOC5: C2
Women	16	16	16	15	16		SOC5: C2
Men	50	50	50	49	49		SOC5: C2
Asian	12	12	12	12	12		SOC5: C2
Women	5	5	5	5	5		SOC5: C2
Men	8	7	7	7	7		SOC5: C2
Latino	12	12	14	14	14		SOC5: C2
Women	6	6	6	7	6		SOC5: C2
Men	7	7	8	7	8		SOC5: C2
Black	7	8	7	7	7		SOC5: C2
Women	3	3	3	3	3		SOC5: C2
Men	4	4	4	4	4		SOC5: C2
Other ethnicities ⁴³	1	2	2	2	3		SOC5: C2
Women	1	1	1	1	1		SOC5: C2
Men	1	1	1	1	2		SOC5: C2
Professionals: women (%)	33	33	34	33	33		SOC5: C2
Professionals: ethnic minorities (%)	36	38	39	39	39		SOC5: C2
Caucasian	64	62	61	61	61		SOC5: C2
Women	18	18	18	18	18		SOC5: C2
Men	46	45	43	43	43		SOC5: C2
Asian	16	16	17	17	16		SOC5: C2
Women	7	7	7	7	7		SOC5: C2
Men	9	9	10	10	10		SOC5: C2
Latino	11	12	12	13	13		SOC5: C2
Women	4	4	4	5	5		SOC5: C2
Men	7	8	8	8	8		SOC5: C2

U.S. equal employment opportunity commission statistics table continues on [page 11](#)

U.S. equal employment opportunity commission statistics,⁴² cont.

	2018	2019	2020	2021	2022	SASB	ipieca
Professionals: ethnic minorities (%), cont.							
Black	7	7	7	7	7		SOC5: C2
Women	4	4	4	3	3		SOC5: C2
Men	4	4	4	4	4		SOC5: C2
Other ethnicities ⁴³	2	2	3	3	3		SOC5: C2
Women	1	1	1	1	1		SOC5: C2
Men	1	2	2	2	2		SOC5: C2

global employee diversity⁴²

	2018	2019	2020	2021	2022	SASB	ipieca
Total employees	45,047	44,679	42,628	37,498	38,258		SOC5: C2
Women	—	—	10,858	10,034	10,371		SOC5: C2
Men	—	—	31,616	27,363	27,794		SOC5: C2
Gender data not available	—	—	154	101	93		SOC5: C2
U.S.	21,465	22,165	20,814	19,627	19,975		SOC5: C2
Women	—	—	5,413	5,090	5,343		SOC5: C2
Men	—	—	15,372	14,512	14,609		SOC5: C2
Gender data not available	—	—	29	25	23		SOC5: C2
Other Americas	—	—	3,411	3,446	3,562		SOC5: C2
Women	—	—	894	925	1,005		SOC5: C2
Men	—	—	2,484	2,484	2,536		SOC5: C2
Gender data not available	—	—	33	37	21		SOC5: C2
Africa	—	—	4,228	3,606	3,862		SOC5: C2
Women	—	—	715	612	613		SOC5: C2
Men	—	—	3,507	2,991	3,246		SOC5: C2
Gender data not available	—	—	6	3	3		SOC5: C2
Asia	—	—	10,128	7,145	7,127		SOC5: C2
Women	—	—	2,846	2,493	2,420		SOC5: C2
Men	—	—	7,202	4,621	4,675		SOC5: C2
Gender data not available	—	—	80	31	32		SOC5: C2

global employee diversity table continues on [page 12](#)

global employee diversity,⁴² cont.

	2018	2019	2020	2021	2022	SASB	ipieca
Australia	—	—	2,411	2,170	2,189		SOC5: C2
Women	—	—	580	533	557		SOC5: C2
Men	—	—	1,825	1,634	1,629		SOC5: C2
Gender data not available	—	—	6	3	3		SOC5: C2
Europe	—	—	1,636	1,504	1,543		SOC5: C2
Women	—	—	410	381	433		SOC5: C2
Men	—	—	1,226	1,121	1,099		SOC5: C2
Gender data not available	—	—	—	2	11		SOC5: C2
Service station employees	3,591	3,476	5,108	5,097	5,588		SOC5: C2
Women	—	—	2,521	2,170	2,121		SOC5: C2
Men	—	—	2,125	1,732	1,675		SOC5: C2
Gender data not available	—	—	462	1,195	1,792		SOC5: C2
Union-represented U.S. employees (%)	11	11	12	12	12		SOC5: C2
Total employees – women (%)	25	25	25	27	27		SOC5: C2
Mid-level management – women (%)	19	20	22	23	24		SOC5: C3
Senior leadership – women (%)	19	19	20	21	22		SOC5: C3
Executive leadership – women (%)	16	15	16	17	17		SOC5: C3

supply chain⁴⁴

	2018	2019	2020	2021	2022	SASB	ipieca
Total goods and services spending (billions of dollars)	\$25.1	\$27.1	\$20.9	\$18.1	\$22.0		
Total goods and services spending with U.S.-based businesses (billions of dollars)	\$11.6	\$13.2	\$11.0	\$9.8	\$13.2		SOC14: A1
Total goods and services spending with U.S.-based small businesses (billions of dollars)	\$1.7	\$1.7	\$1.3	\$1.1	\$1.5		SOC14: A1
Total goods and services spending with U.S.-based woman- and minority-owned businesses (billions of dollars)	\$0.7	\$0.6	\$0.4	\$0.4	\$0.5		SOC14: A1

workforce health and safety⁴⁵

	2018	2019	2020	2021	2022	SASB	ipieca
Total Recordable Incident Rate (incidents per 200,000 work-hours)						EM-EP-320a.1 EM-RM-320a.1	SHS3: C1
Workforce (excluding COVID-19)	0.13	0.15	0.13	0.20	0.21		
Employees (excluding COVID-19)	0.07	0.13	0.11	0.17	0.18	EM-EP-320a.1 EM-RM-320a.1	
Contractors (excluding COVID-19)	0.15	0.16	0.14	0.20	0.22	EM-EP-320a.1 EM-RM-320a.1	
Workforce (including COVID-19)	N/A	N/A	0.37	0.44	0.36		
Employees (including COVID-19)	N/A	N/A	0.42	0.42	0.39		
Contractors (including COVID-19)	N/A	N/A	0.35	0.44	0.35		
Lost-Time Incident Frequency (Days Away From Work incidents and fatalities per million work-hours)							SHS3: C1
Workforce (excluding COVID-19)	0.08	0.10	0.13	0.16	0.16		
Employees (excluding COVID-19)	0.07	0.17	0.13	0.27	0.23		
Contractors (excluding COVID-19)	0.08	0.08	0.13	0.12	0.13		
Workforce (including COVID-19)	N/A	N/A	1.27	0.81	0.79		
Employees (including COVID-19)	N/A	N/A	1.66	1.05	1.16		
Contractors (including COVID-19)	N/A	N/A	1.11	0.73	0.67		
Days Away From Work Rate (incidents per 200,000 work-hours)							SHS3: C1
Workforce (excluding COVID-19)	0.016	0.019	0.025	0.031	0.029		
Employees (excluding COVID-19)	0.013	0.033	0.023	0.055	0.047		
Contractors (excluding COVID-19)	0.017	0.014	0.026	0.023	0.023		
Workforce (including COVID-19)	N/A	N/A	0.253	0.160	0.155		
Employees (including COVID-19)	N/A	N/A	0.330	0.210	0.232		
Contractors (including COVID-19)	N/A	N/A	0.223	0.144	0.130		
Number of serious injuries⁴⁶							
Workforce	35	13	13	21	20		
Employees	3	2	3	3	3		
Contractors	32	11	10	18	17		
Number of work-related fatalities						EM-EP-320a.1 EM-RM-320a.1	SHS3: C1
Workforce	0	2	1	2	5		
Employees	0	0	1	0	0	EM-EP-320a.1 EM-RM-320a.1	
Contractors	0	2	0	2	5	EM-EP-320a.1 EM-RM-320a.1	

N/A = not applicable

workforce health and safety table continues on [page 14](#)

workforce health and safety,⁴⁵ cont.

	2018	2019	2020	2021	2022	SASB	ipieca
Work-related fatal accident rate (work-related employee or contractor fatalities per 100 million work-hours)						EM-EP-320a.1 EM-RM-320a.1	SHS3: C1
Workforce	0.00	0.43	0.29	0.59	1.50		
Employees	0.00	0.00	1.05	0.00	0.00	EM-EP-320a.1 EM-RM-320a.1	
Contractors	0.00	0.56	0.00	0.78	1.98	EM-EP-320a.1 EM-RM-320a.1	
Work-related fatal incident rate (work-related incidents with employee or contractor fatalities per 100 million work-hours)	0.00	0.43	0.29	0.59	1.20	EM-EP-320a.1 EM-RM-320a.1	SHS3: C1
Motor Vehicle Crash Rate (workforce vehicle incidents per million miles driven)⁴⁷	0.02	0.02	0.02	0.03	0.04		
Number of Process Safety Tier 1 events (ANSI/API Recommended Practice 754 guidance)⁴⁸	16	15	15	34	22	EM-EP-540a.1	SHS6: C1
Upstream	9	10	7	19	13		
Downstream & Chemicals	6	4	7	10	6		
Midstream	1	1	1	5	2		

Indicates restatement of data.

ESG qualitative metrics

environment	chevron resources	SASB	ipieca
Greenhouse gas emissions Discuss the company's GHG emissions strategy, performance and capital allocation related to addressing GHG emissions, including methane and flaring.	chevron.com/climatechangersilience2021 chevron.com/methanereport chevron.com/lowercarbon	EM-EP-110a.3 EM-MD-110a.2 EM-RM-110a.2	CC1: C1 CC1: C2 CC1: C3 CC1: C4 CC2: C1 CC2: C2 CC2: C3 CC5: C2 CC7: C3
Biodiversity Description of environmental management policies and practices for active sites.	chevron.co/biodiversity	EM-EP-160a.1 EM-MD-160a.1	
Emergency preparedness Describe strategies and policies for preventing accidental releases of hydrocarbons and other materials to the environment.	chevron.co/OEMSoverview chevron.com/emergencypreparedness		ENV6: C1 ENV6: C4

ESG qualitative metrics table continues on [page 15](#)

ESG qualitative metrics, cont.

social	chevron resources	SASB	ipieca
<p>Safety and health</p> <p>Describe the company's approach to health and safety for employees and contractors, transport safety, and systems to incorporate a culture of safety throughout the company.</p>	<p>chevron.com/OEMS chevron.com/OEMSoverview</p>	<p>EM-EP-320a.2 EM-EP-540a.2 EM-MD-540a.4 EM-RM-320a.2</p>	<p>SHS1: C2 SHS1: C3 SHS4: A1</p>
<p>Human rights</p> <p>Discussion of the company's human rights policy, engagement processes, due diligence practices, remedy mechanisms and supplier communications, with respect to human rights, Indigenous rights and security.</p>	<p>chevron.com/aboutourhumanrightspolicy chevron.com/humanrights chevron.com/supplierletter</p>	<p>EM-EP-210a.3</p>	<p>SOC1: C1 SOC1: C2 SOC2: C1 SOC3: C1</p>
<p>Diversity and inclusion</p> <p>Describe policies, programs and procedures related to human capital management and to promoting diversity, inclusion and nondiscrimination.</p>	<p>chevron.com/diversityandinclusion chevron.com/proxystatement</p>		<p>SOC5: C1</p>
<p>Community relations</p> <p>Describe the company's social investment strategies, programs, community and stakeholder grievance mechanisms, and policies for addressing nonretaliation and nondiscrimination when regarding grievances.</p>	<p>chevron.com/sustainability/social chevron.com/grievancemechanism</p>	<p>EM-EP-210b.1</p>	<p>SOC8: C1 SOC12: C1 SOC13: C1</p>
governance	chevron resources	SASB	ipieca
<p>Governance strategy</p> <p>Discussion of the company's purpose, governance policies, the Board of Directors' oversight of ESG issues, and how ESG risks and opportunities are identified and assessed.</p>	<p>chevron.com/proxystatement chevron.com/annualreport chevron.com/thechevronway chevron.com/corporate-governance</p>		<p>GOV1: C1 GOV1: C3 GOV1: C5</p>
<p>Business conduct</p> <p>Description of the company's Code of Conduct, values, principles, and anti-corruption and bribery policies for the company and its suppliers, and processes for reporting unethical or unlawful behavior.</p>	<p>chevron.com/code chevron.com/suppliersbusinessconduct</p>	<p>EM-EP-510a.2</p>	<p>GOV3: C1 GOV3: C3</p>
<p>Lobbying and political contributions</p> <p>Description of the company's approach to advocacy and lobbying, political contributions reporting, and discussion of positions related to ESG issues.</p>	<p>chevron.com/lobbyingandtrade chevron.com/climatelobbyingreport2020</p>	<p>EM-EP-530a.1 EM-RM-530a.1</p>	<p>GOV5: C1 GOV5: C2</p>
<p>Cybersecurity</p> <p>Description of the company's approach to managing cybersecurity issues.</p>	<p>chevron.com/cybersecurity</p>		<p>SHS7: C3</p>

notes to pages 1 through 14

- 1 See Equations, Portfolio Carbon Intensity, [pages 18–19](#).
- 2 See Equations, Upstream Carbon Intensity, [page 20](#).
- 3 See Equations, Refining Carbon Intensity, [page 21](#).
- 4 See Equations, Enabled Reductions, [page 21](#). Variability in Enabled Reductions may occur due to Chevron's current practice of reporting offsets in the calendar year in which they were retired. See endnote 22 for more information on offsets.
- 5 Unless otherwise noted, Scope 1 and Scope 2 data collected as of February 9, 2023. Data include estimates.
- 6 Scope 1 includes direct emissions. For reporting, Chevron may include indirect sources of GHG emissions within Scope 1 that are outside of the traditional Scope 1 definition such as GHG emissions from processes like drilling and completions, and tolling agreements up to the point of third-party custody transfer of the oil or gas product. Direct GHG emissions related to production of energy in the form of electricity or steam exported or sold to a third party are included in the reported Scope 1 emissions to align with Ipieca's *Sustainability Reporting Guidance for the Oil & Gas Industry* (2020). Chevron's Scope 1 includes emissions of six Kyoto GHGs – carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride, perfluorocarbons and hydrofluorocarbons, as well as nitrogen trifluoride (NF₃).
- 7 Calculation methods for Scope 1 and Scope 2 GHG emissions are based on the American Petroleum Institute's *Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry* (2021) or, where relevant, local regulatory reporting methodologies.
- 8 When a nonoperated joint venture (NOJV) provides consolidated emissions data, Chevron seeks to allocate its equity share of those emissions to the most representative scope and GHG based on best available knowledge of the NOJV's operations.
- 9 Consistent with our financial accounting, Venezuela NOJV emissions are not included for 2022 emissions reporting.
- 10 We provide methane emissions data and intensity performance as a mass of methane as well as its conversion under the *Intergovernmental Panel on Climate Change Fourth Assessment Report* (AR4) 100-year global warming potential (GWP) to a CO₂e. Although we strive to provide consistent data from our operated and nonoperated assets, some nonoperated assets may provide their data only on a CO₂e basis. Given the common industry practice of using the AR4 100-year GWP, we have assumed that nonoperated assets that did not provide methane mass data use a 100-year GWP of 25. We continue to work with our joint-venture partners to provide information on a standardized basis to increase transparency.
- 11 Where flaring emissions are calculated based on mass or reported in aggregate, volumes are not included.
- 12 Downstream includes emissions from refineries, terminals, marketing and distribution, including renewable fuels. Chemical and base oil facilities located within refineries are included in refinery emissions.
- 13 Chemicals includes emissions from stand-alone chemical, additive and lubricant facilities.
- 14 Chevron Phillips Chemical Company ([CPChem.com](#)) LLC data received April 4, 2023.
- 15 Other emissions include GHG emissions from Corporate Aviation, Chevron Environmental Management and Real Estate Company, energy management and power from Chevron Pipeline and Power, and the North American Data Center.
- 16 Exported emissions are direct GHG emissions related to production of energy in the form of electricity or steam that are exported or sold to a third party. Direct GHG emissions related to production of energy in the form of electricity or steam exported or sold to a third party are included in the reported Scope 1 emissions for each segment.
- 17 Scope 2 includes indirect emissions from imported electricity and steam. CO₂, CH₄ and N₂O are accounted for in Chevron's Scope 2 emissions. Scope 2 emissions are accounted for using the market-based approach as described in the World Resources Institute's *GHG Protocol Scope 2 Guidance* (2015), including calculating Scope 2 emissions net of contractual instruments such as renewable energy credits (RECs).
- 18 Chevron calculates emissions from third-party use of sold products in alignment with methods in Category 11 of Ipieca's *Estimating Petroleum Industry Value Chain (Scope 3) Greenhouse Gas Emissions* (2016). Emissions are based on aggregate production, throughput and sales numbers that include renewable fuels.
- 19 For assurance statements, visit [chevron.co/GHGAssurance-library](#). Figures in assurance statements may vary from figures reported in each subsequent Corporate Sustainability Report due to restatements and assurance scope. 2022 assurance excludes Renewable Energy Group, Inc. and Chevron Phillips Chemical Company, LLC data.
- 20 Carbon capture, utilization and storage includes both CO₂ sold to third parties and CO₂ (and other gas) injected for carbon storage.
- 21 RECs are credits generated from renewable electricity generation within the United States that are retired by Chevron. Reported Scope 2 emissions are net of contractual instruments such as RECs.
- 22 Offsets are credits generated from the avoidance or reduction of GHG emissions or the removal of GHGs from the atmosphere that are retired by Chevron, excluding RECs. Includes offsets retired in compliance programs. For programs with multiyear compliance periods, offsets are reported in the calendar year they are retired.
- 23 Total Energy Consumption includes energy generated from Chevron's operations and imported energy. Exported energy is not subtracted from the total.
- 24 Manufacturing Energy Index (MEI) (Refining) is an analysis of Chevron's refining energy performance based on the Solomon Energy Intensity Index methodology. Chevron's MEI includes the refining assets at Chevron's operated and nonoperated joint-venture refineries. Energy Consumption from Renewable Energy Group, Inc. is not included in this metric.
- 25 2022 Upstream Energy Intensity reflects continued updates to Chevron's calculation methodology.
- 26 Pipeline Energy Intensity covers assets operated by Chevron Pipe Line Company.
- 27 Chevron's Non-Manufacturing Energy Index includes operations from Chevron's chemicals and additives, products and services, and lubricants businesses. It reflects the energy required to produce Chevron's products compared with the energy that would have been required to produce the same products in 1992 (the index's base year). Energy Consumption from Renewable Energy Group, Inc. is not included in this metric.
- 28 For compiling and reporting air emissions data, Chevron follows regulatory definitions of VOC. SO_x emissions include SO₂ and SO₃, reported as SO₂-equivalent. NO_x emissions include NO and NO₂ (reported as NO₂-equivalent) and exclude N₂O.
- 29 Emissions decreased in 2022 relative to 2021 due to divestments, concession returns, operatorship transfers, and sour gas flaring reductions resulting from improved reliability and decreased well development.
- 30 Renewable Energy Group, Inc. data are not included in water management or wastewater metrics.
- 31 Fresh water withdrawn from the environment is defined per local legal definitions. If no local definition exists, fresh water is defined as water extracted, directly or indirectly, from surface water, groundwater or rainwater that has a total dissolved solids concentration of less than or equal to 2,000 mg/L. Fresh water withdrawn does not include effluent or recycled/reclaimed water from municipal or other industrial wastewater treatment systems, as this water is reported under nonfresh water withdrawn. Nonfresh water withdrawn could include: seawater; brackish groundwater or surface water; reclaimed wastewater from another municipal or industrial facility; desalinated water; or remediated groundwater used for industrial purposes. Produced water is excluded from fresh water withdrawn, fresh water consumed and nonfresh water withdrawn. Water quantities may be determined using direct measurement techniques or engineering estimation methods.

- 32** Refining includes data from refineries, including chemical and base oil facilities located within refineries.
- 33** Other includes, but is not limited to, chemical and lubricant facilities, as well as Chevron Environmental Management and Real Estate Company.
- 34** Chevron calculates fresh water withdrawn intensity for upstream using gross operated production.
- 35** Chevron calculates fresh water withdrawn intensity for refining using total refinery inputs, which comprise all feeds into the refinery. This includes purchased crudes for crude units and third-party feeds for other processing units.
- 36** Chevron reports fresh water withdrawn and consumed in water-stressed regions according to the World Resources Institute's definition and categorization of "baseline water stress." Baseline water stress measures the ratio of total water withdrawals to available renewable surface and groundwater supplies. Water withdrawals include domestic, industrial, irrigation and livestock consumptive and nonconsumptive uses. Available renewable water supplies include the impact of upstream consumptive water users and large dams on downstream water availability. Higher values indicate more competition among users.
- Chevron's fresh water withdrawn and consumed in high and extremely high water stress areas excludes Chevron's Fuels and Lubricants businesses and Chevron Environmental Management Company. Freshwater withdrawals for the Fuels and Lubricants businesses and Chevron Environmental Management Company are minimal (1% of the total) compared with the overall use in the corporation. For purposes of this reporting, Chevron categorizes all of the water withdrawn and consumed by Chevron's Mid-Continent business unit as being in a high-stress or extremely high-stress region.
- 37** Freshwater use in water-stressed areas increased in 2022 due to completion activity increases.
- 38** Oil concentration is determined by the sampling of effluent streams, using methods required or recommended by regulatory agencies or authorities, where applicable. Chevron reports the total cumulative amount of oil discharged to surface water excluding spills, which are reported separately.
- 39** Chevron reports petroleum spills to land and water to conform to the 2020 Ipieca *Reporting Guidance*. Spills to land and water that are greater than or equal to one barrel are included. Spills to secondary containment, chemical spills and spills due to sabotage are excluded. Renewable Energy Group, Inc. data are not included in accidental release prevention and response metrics.
- 40** To conform to 2015 and 2020 Ipieca *Reporting Guidance*, and where appropriate information and data exist, our hazardous waste numbers starting in 2015 exclude remediation waste generated; disposed of; and recycled, reused or recovered. Hazardous waste amounts are quantified using methods required or recommended by regulatory agencies or authorities, where applicable. In other instances, similar methods are used, including direct measurement onsite or at the point of shipping, engineering estimates and process knowledge. Chevron follows the regulatory definitions of hazardous waste applicable to the jurisdictions in which we operate, including *de minimis* specifications (below which hazardous waste quantities do not need to be reported). Renewable Energy Group, Inc. data are not included in waste metrics.
- 41** The 2022 data are based on information received from government entities and recorded internally as of March 10, 2023. Renewable Energy Group, Inc. data are not included in fines and settlements metrics.
- 42** Diversity percentages have been rounded to the nearest whole number. Data for each year are measured in December. We do not have sufficient information on gender identities other than men/women to meet data thresholds for reporting. Our most recently filed Federal Employer Information Report EEO-1 is available for download at [chevron.com/eoo-1](https://www.chevron.com/eoo-1). EEO-1/EEOC counts differ slightly from those in the Global Employee Diversity table due to differences in methodologies. These data may not include a small number of employees from recent acquisitions.
- 43** Ethnicities with representation of less than 2% (Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, and Two or More Races).
- 44** Data collected for year 2022 on February 7, 2023. For year 2021, data collected as of February 7, 2022. For year 2020, data collected as of February 24, 2021. For year 2019, data collected as of January 23, 2020. For years 2017-2018, data collected as of February 20, 2019. Renewable Energy Group, Inc. data are not included in supply chain metrics.
- 45** This section reflects Chevron data collected as of March 21, 2023. Health and safety performance rates include both injury- and illness-related incidents. Renewable Energy Group, Inc. data are not included in workforce health and safety metrics.
- 46** Serious injuries are injuries that result in significant disfigurement or typically result in permanent or long-term impairment of an internal organ, body function or body part.
- 47** Data include catastrophic and major incidents only, as defined in the International Association of Oil and Gas Producers (IOGP) *Land Transportation Safety Report 365*.
- 48** Process Safety Tier 1 loss-of-primary-containment (LOPC) events are unplanned or uncontrolled releases resulting in consequences equivalent to those specified by the American National Standards Institute/American Petroleum Institute (ANSI/API) Recommended Practice (RP) 754 and *IOGP Report 456: Process Safety Recommended Practice on Key Performance Indicators*.

equations

portfolio carbon intensity

grams CO₂e/megajoule

$$\frac{\sum_i [(GHG\ intensity)_i * (Energy)_i] - \sum_j (Net\ GHG\ removals)_j}{\sum (Energy)_i}$$

Where: (GHG intensity)_i is the simplified value chain GHG intensity of marketed product_i, (Net GHG removals)_j is the net volume of GHG emissions stored, or offset, and (Energy)_i is the energy of the marketed product_i.

portfolio carbon intensity methodology note

Introduction: The portfolio carbon intensity (PCI) methodology is designed to facilitate carbon intensity accounting of a company's portfolio. It uses a representative value chain that includes emissions associated with bringing products to market, including the Scope 3 emissions from their use. The PCI methodology facilitates transparency in calculations and data with information taken from financial statements and emissions disclosures. This approach enables comparison of companies that may participate in different parts of the value chain and the use of real data.

Intent: The PCI methodology provides a framework for transparent and consistent comparisons of the mix of energy products provided by a company, inclusive of elements of Scope 1, 2 and 3 emissions. The methodology is broadly applicable to oil and gas companies involved in exploration and production, refining, or marketing activities.

PCI definition: Estimated energy-weighted average GHG emissions intensity from a simplified value chain from the production, refinement, distribution and end use of marketed energy products per unit of energy delivered.

Units: Grams of carbon dioxide-equivalent GHG emissions per megajoule of energy delivered (g CO₂e/MJ) on a higher-heating-value basis to align with prior frameworks on gas value chain emissions and with heating values commonly used in commercial contracts.†

Scope: The PCI is calculated on an annual basis as the weighted-average GHG intensity of energy delivered across gas, natural gas liquid (NGL), oil, biofuel, hydrogen and lower carbon power products. Carbon removals are deducted from total lifecycle emissions estimates.

† Several prior product-intensity frameworks have used lower heating value for intensity calculations.

The following energy products (i) are included in the PCI methodology:

- **Gas:** piped gas, LNG and third party-traded volumes
- **Natural gas liquids:** NGLs from upstream, refining and third party-traded volumes
- **Oil:** crude oil, refined products (gasoline, diesel, jet fuel, fuel oil and other petroleum products) and third party-traded volumes
- **Biofuels:** ethanol, renewable diesel, biodiesel, sustainable aviation fuel and renewable natural gas
- **Hydrogen:** gray hydrogen, blue hydrogen and green hydrogen that are externally marketed
- **Lower carbon power:** external sales of wind, solar and geothermal power

The following removals (j) are included in the PCI methodology calculation:

- **Carbon capture, utilization and storage (CCUS)** removes CO₂ either directly from the atmosphere or from streams that would be released to the atmosphere. It does not include CO₂ produced from naturally occurring reservoirs that is used for enhanced oil recovery.
- **High-integrity offsets** include nature-based solutions.

For traditional hydrocarbon products (gas, NGL and oil), marketed volumes are based on the business segment (production, refined products or marketing) with the largest overall commodity volume, inclusive of all traded volumes.

Chemicals and other business lines that do not primarily supply energy products are excluded from this calculation.

methodology and data sources

Traditional hydrocarbon products: The intent of the framework is to capture value chain emissions associated with the maximum hydrocarbon product volume for a company among its production, refining and marketing activities. For all products that a company produces or refines, the PCI methodology uses the company’s equity GHG emissions and corresponding GHG intensity. To estimate the emissions for marketed products that the company does not produce or refine, the PCI methodology uses industry-average segment factors from the International Energy Agency’s *World Energy Outlook*. Hydrocarbon transportation emissions are estimated in the PCI using IEA *World Energy Outlook* estimates for transportation emissions from oil and gas. Emissions associated with end use of marketed products are based on industry-standard combustion factors and assume all sold energy products are combusted, although this is not the case (e.g., plastics and lubricants). The graphic below is a depiction of the value chain approach for the refined-product value chain.

Biofuels, hydrogen and lower carbon power: GHG emissions are calculated based on third-party lifecycle assessments and the energy provided by Chevron in the most recent year. Lifecycle assessment data sources include California Air Resources Board (CARB) Low Carbon Fuel Standard (LCFS) Pathway Certified Carbon Intensities for similar feedstocks and pathways, a Hydrogen Council report on a lifecycle assessment for hydrogen pathways, and harmonized lifecycle assessments of electricity generation from the National Renewable Energy Laboratory and the Intergovernmental Panel on Climate Change Working Group 1.

The model does not adjust for the energy efficiency gains associated with some applications of electricity and hydrogen relative to existing hydrocarbon infrastructure. For example, CARB estimates that energy provided as electricity to an electric vehicle is 3.4 times more efficient than energy provided by gasoline to an internal combustion engine. Model updates could be made in the future, if supported by the end use of electricity or hydrogen products.

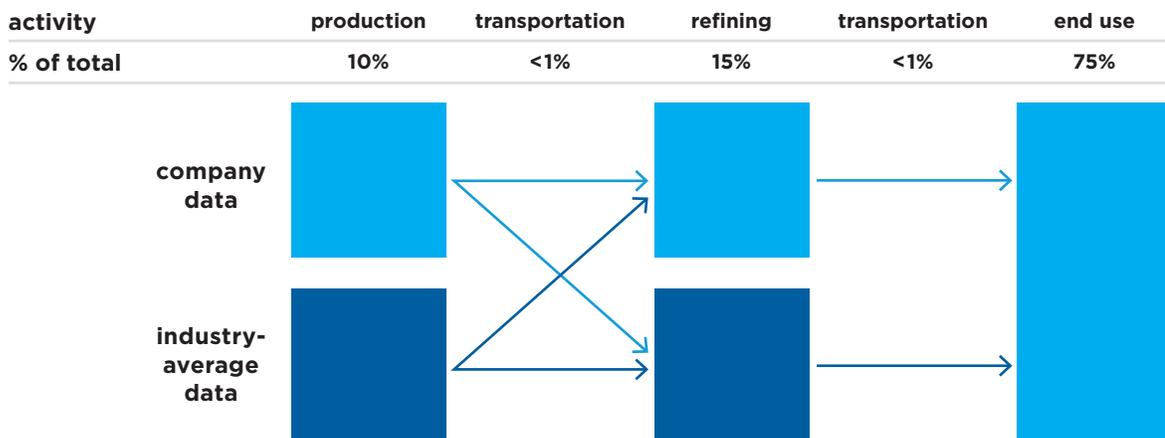
Inputs are collected from financial disclosures and public GHG reporting, with the exception of the biofuels component. Biofuel volumes are based on purchase data for ethanol, renewable diesel, sustainable aviation fuel, and biodiesel and production volumes for renewable natural gas in the United States, Hong Kong, Malaysia, Philippines, Thailand and Australia. Volumes from international GS Caltex operations in South Korea are assumed to be zero. For 2016–2022, aggregate biofuel volumes used in the PCI calculation are 60,000, 61,000, 62,000, 68,000, 61,000, 70,000 and 105,000 barrels of oil-equivalent per day, respectively. Biofuel carbon intensity values are based on CARB LCFS default pathway values. For 2016–2022, the weighted-average biofuel carbon intensity values used in the PCI calculation were 52, 52, 51, 50, 48, 47 and 38 grams carbon dioxide-equivalent GHG emissions per megajoule, respectively.

CCUS: Net GHG removal emissions associated with CCUS represent the volume of emissions that would be permanently sequestered underground or utilized in other products with a deduction for supply chain emissions associated with capture, transport or storage. CCUS projects that reduce Scope 1 and 2 emissions would reduce the production, refining or other sectoral intensity and would not be double-counted as removals; for example, CO₂ captured by an integrated CCS plant would already be accounted for in the facility’s Scope 1 emissions intensity.

Offsets: Offsets that are retired by the company or on behalf of customers for use of product provided by the company are deducted from the total emissions in the metric.

Improvements over time: Methodologies and emissions factors may be updated in future years to reflect additional information or data that become available. For example, updates may include updated industry averages, primary data from third-party producers/refiners and adjustments to energy efficiency assumptions, if warranted, based on the end-use applications for volumes of energy marketed by the company.

the graphic below depicts the PCI approach for the refined-product value chain



Percentages shown are based on data from IEA, *World Energy Outlook 2018*, November 2018, iea.org/reports/world-energy-outlook-2018.

upstream carbon intensity

kilograms CO₂e/boe

upstream oil intensity

$$\frac{\left(\begin{array}{l} \text{Direct emissions} \\ \text{(Scope 1)} \end{array} + \begin{array}{l} \text{Indirect emissions associated} \\ \text{with imported electricity} \\ \text{and steam (Scope 2)} \end{array} - \begin{array}{l} \text{Emissions associated} \\ \text{with exported electricity} \\ \text{and steam} \end{array} \right)}{\text{Net production of liquids}} \leftarrow \text{Allocated to liquids} \\ \text{on a production} \\ \text{basis (boe)}$$

upstream gas intensity

$$\frac{\left(\begin{array}{l} \text{Direct emissions} \\ \text{(Scope 1)} \end{array} + \begin{array}{l} \text{Indirect emissions associated} \\ \text{with imported electricity} \\ \text{and steam (Scope 2)} \end{array} - \begin{array}{l} \text{Emissions associated} \\ \text{with exported electricity} \\ \text{and steam} \end{array} \right)}{\text{Net production of gas (including LNG and GTL)}} \leftarrow \text{Allocated to gas} \\ \text{on a production} \\ \text{basis (boe)}$$

upstream flaring intensity

Direct flaring emissions as CO₂e (Scope 1)

Net production of gas and liquids (including LNG and GTL)

upstream methane intensity

Direct methane emissions as CO₂e (Scope 1)

Net production of gas and liquids (including LNG and GTL)

Emissions reported are net (Scope 1 and 2). The emissions included in the metrics generally represent Chevron's equity share of emissions from upstream, including LNG, which are emissions from operated and nonoperated joint-venture assets based on Chevron's financial interest. For reporting, Chevron may include indirect sources of GHG emissions within Scope 1 that are outside of the traditional Scope 1 definition, such as GHG emissions from processes like drilling and completions, and tolling agreements up to the point of third-party custody transfer of the oil or gas product. For oil and gas production intensity metrics, production is aligned with net production values reported in the *Chevron Corporation Supplement to the Annual Report*, which represent the company's equity share of total production after deducting both royalties paid to landowners and a government's agreed-upon share of production under a Production Sharing Agreement. Chevron's equity-share emissions include emissions associated with these excluded royalty barrels in accordance with the *Ipieca Guidance*. Also in accordance with the *Ipieca Guidance*, Chevron's equity-share emissions do not include emissions associated with royalty payments received by the company. Allocation of emissions between oil and gas is based on the fraction of production represented by liquids or gas. Flaring and methane intensities use the total of liquids and gas production. Oil and gas production intensities use liquids production and natural gas production, respectively.

refining carbon intensity

kilograms CO₂e/boe

$$\left(\begin{array}{l} \text{Refinery direct} \\ \text{GHG emissions} \\ \text{(Scope 1)} \end{array} + \begin{array}{l} \text{Refinery indirect GHG emissions} \\ \text{associated with imported} \\ \text{electricity and steam (Scope 2)} \end{array} + \begin{array}{l} \text{Third-party processing emissions} \\ \text{associated with imported} \\ \text{feedstocks* (a type of Scope 3)} \end{array} - \begin{array}{l} \text{Emissions associated} \\ \text{with exported electricity and} \\ \text{steam (a type of Scope 3)} \end{array} \right)$$

Crude + Other feedstocks, including bio-based feedstocks

The refining carbon intensity (RCI) metric provides a measure of GHG released during the transformation of raw materials into refined products.

The RCI is throughput-based and includes GHG emissions from Chevron's own refining operations and estimates of emissions associated with third-party processing of imported feedstocks such as hydrogen.*†

The metric is on an equity basis.

*Emissions from third-party processing of imported feedstocks are estimated using information including supplier data, industry segment averages and engineering estimates. Emissions included in the calculation represent refinery processing only and do not include terminals or chemical, additive, base oil and lubricant facilities not integrated into a refinery. Feedstocks include hydrogen and intermediate products that will be further refined or used in conversion units. Feedstocks do not include natural gas used as fuel or products intended solely for blending into finished products. Feedstocks are assessed on a net basis (imports minus exports).

†Emissions associated with the production of hydrogen can account for 25% of total refinery emissions, and more than half of the hydrogen used in U.S. refining is imported from a third party. ("Available and emerging technologies for reducing greenhouse gas emissions from the petroleum refinery industry," US EPA Office of Air and Radiation 2010 and U.S. Energy Information Administration, *EIA-820 Annual Refinery Report* and *EIA-810 Refinery and Blender Net Input*).

enabled reductions

million tonnes CO₂e/year

$$\sum_i [(GHG\ intensity)_{fossil\ fuel} - (GHG\ intensity)_i] * (Energy)_i + \sum_j (Net\ GHG\ removals)_j$$

Where: (GHG Intensity)_{fossil fuel} is the average intensity of displaced fossil fuel that is calculated in the PCI methodology, (GHG intensity)_i is the simplified lifecycle GHG intensity of energy product_i, (Energy)_i is the energy of the marketed low-carbon product_i (e.g., biofuels, hydrogen), and (Net GHG removals)_j is the net volume of GHG emissions stored.

enabled emissions reductions methodology note

Enabled emissions reductions are the estimated avoided emissions relative to fossil fuel use primarily associated with biofuels, hydrogen, CCUS and offsets that the company has marketed in the most recent calendar year, regardless of whether the company retained rights to the emissions reduction attributes.

Over time, new energy products may be added to the calculation, along with associated volume information. Avoided emissions associated with natural gas-fired power generation via co-generation or coal-fired power generation displacement are excluded from this calculation for purposes of simplicity.

For biofuels and hydrogen products, the enabled emissions reductions are calculated based on the lifecycle GHG savings relative to the same amount of energy provided by diesel fuel. Where appropriate, energy efficiency factors are used to calculate the volumes of displaced fossil fuels. More details on emissions factors and calculation assumptions are available in the PCI methodology note (see [pages 18-19](#)).

Net GHG removal emissions associated with CCUS and offsets represent the volume of emissions that would be sequestered or utilized in other products. GHG emissions associated with CCUS or offset value chains would be netted from the reductions associated with the activity.

glossary

definition of selected energy terms

Barrels of oil-equivalent (boe) A unit of measure to quantify crude oil, natural gas liquids and natural gas amounts using the same basis. Natural gas volumes are converted to barrels on the basis of energy content.

Carbon intensity The amount of carbon dioxide or carbon dioxide-equivalent (CO₂e) per unit of measure.

Carbon capture, utilization and storage (CCUS) is the process of capturing carbon dioxide emissions and either using them as a feedstock (utilization) or permanently storing them in geological formations deep underground (storage).

Gas-to-liquids (GTL) A process that converts natural gas into high-quality liquid transportation fuels and other products.

Hydrogen Chevron's approach to hydrogen for new lower carbon businesses envisions the use of green, blue and gray hydrogen. Chevron believes the use of blue and green hydrogen as a fuel source can help reduce the amount of greenhouse gas emissions entering the atmosphere. While gray hydrogen is viewed as not directly supporting decarbonization of the energy sector, Chevron believes that early-use cases of gray hydrogen can provide key opportunities to de-risk technology, enable development of supporting infrastructure, including fueling stations, and contribute to learning.

Liquefied natural gas (LNG) Natural gas that is liquefied under extremely cold temperatures to facilitate storage or transportation in specially designed vessels.

Lower carbon energy includes a variety of existing and emerging energy solutions and services, including traditional energy sources linked with renewables or abatement technologies or measures, carbon capture and sequestration, offsets, blue and green hydrogen, geothermal and nuclear.

Lower carbon intensity oil, products and natural gas includes oil, natural gas and hydrocarbon-based products that are produced and sold to customers with a carbon intensity below that of traditional oil, natural gas and hydrocarbon-based products.

Nature-based solutions, according to the International Energy Agency (IEA), include afforestation and reforestation. These involve the repurposing of land use by growing forests where there was none before (afforestation) or reestablishing a forest where there was one in the past (reforestation). Other nature-based solutions include restoration of coastal and marine habitats to ensure they continue to draw CO₂ from the air.

Net positive impact Defined by Ipieca as a target for project outcomes in which the impacts on biodiversity (i.e., the variety of ecosystems and living things) caused by the project are outweighed by the actions taken to avoid and reduce such impacts, rehabilitate affected species/landscapes and offset any residual impacts.

Net zero upstream aspiration (Scope 1 and 2) Chevron aspires to reach net zero upstream emissions (Scope 1 and 2) by 2050. Accomplishing this aspiration depends on continuing progress on commercially viable technology, government policy, successful negotiations for carbon capture and storage and nature-based projects, availability of cost-effective, verifiable offsets in the global market, and granting of necessary permits by governing authorities.

Portfolio carbon intensity (PCI) represents the estimated energy weighted-average greenhouse gas emissions intensity from a simplified value chain from the production, refinement, distribution and end use of marketed energy products per unit of energy delivered.

definition of selected units and terms

American Petroleum Institute (API) Trade association representing all segments of the oil and gas industry in the United States.

International Association of Oil and Gas Producers (IOGP) Global forum of oil and gas producers.

Ipieca Global not-for-profit oil and gas industry association for environmental and social issues.

mbd Thousands of barrels per day.

mmbtu/d Millions of British thermal units per day.

mmtpa Millions of tonnes per annum.

mtpa Thousands of tonnes per annum.

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