



CORPORATE SUSTAINABILITY TEAR SHEET 2022-2023



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2022-2023 REPORT HIGHLIGHTS

ENVIRONMENTAL STEWARDSHIP



We continue to make progress with our goal of Net Zero Scope 1 and Scope 2 GHG Emissions by 2025

through continued GHG emissions reduction efforts, including the purchasing and contracting of carbon credits across a diverse set of high-quality projects



Range completed the MIQ certification process and earned an "A" grade

for the company's Southwest Pennsylvania (SWPA) production and operations



Ranked second lowest CO₂e emissions

intensity in a group of 11 peers as a result of our investments in emissions management and advantageous position relative to other operating regions



Recycled 142% of produced water

and flowback volume through our water reuse and sharing program



Reduced methane emissions intensity by 67% since 2019

COMMUNITY IMPACT



Contributed over 1,480 employee volunteer hours

in support of charitable and community organizations



Invested \$764,000 into our communities

including over \$155,000 donated to first responders through Range's Good Neighbors Fund



Paid over \$4.5 billion

in impact fees, royalty and lease payments, and charitable contributions benefiting Pennsylvanians and Pennsylvania communities through 2022

SAFETY LEADERSHIP



Range employees completed more than 3,100 hours of safety-related training



0.00 Days Away, Restricted or Transferred (DART) rate

HUMAN CAPITAL MANAGEMENT



Employees completed 14.5 hours of training on average



Introduced new Lyra mental health benefit to support employee well-being

RESPONSIBLE GOVERNANCE



Recognized as one of *JUST Capital's* Most JUST Companies



Named to *Newsweek Magazine's* 2023 America's Most Responsible Companies List

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PERFORMANCE INDICATORS

In 2020, Range Resources completed the sale of our North Louisiana and conventional assets. To enable benchmarking of data for this and future reports, 2020 environmental data excludes data from these assets. Prior year data has not been restated and reflects ownership of the assets.

Emissions**

	2022	2021	2020	2019
Total Direct GHG Emissions (metric tons CO ₂ e)	193,449	206,535 †	182,118	366,280
GHG Emissions Intensity (metric tons CO ₂ e / MMcfe)	0.25	0.27 †	0.23	0.44
Greenhouse Gas Emissions by Gas Type				
CO2 Emissions (metric tons)	148,178	153,361 †	142,680	213,890
CH4 Emissions (metric tons CO ₂ e)	45,095	52,992 †	39,270	152,063
N2O Emissions (metric tons CO ₂ e)	176	182 †	168	327
CH4 Emissions (metric tons)	1,804	2,120 †	1,571	6,083
CH4 Emissions intensity (as % from total gas production from wells)	0.0147%	0.0169% †	0.0124%	0.0398%
Greenhouse Gas Emissions by Source (CO₂e)				
Energy / Combustion Emissions	133,771	136,265 †	125,493	181,892
Other Vented Emissions	22,891	31,525	21,443	76,055
Fugitive Emissions	5,633	5,084	4,707	47,843
Emissions from Flared Hydrocarbons	18,194	21,320	20,863	33,054
Process Emissions	12,960	12,340	9,612	27,436
Indirect Emissions (Scope 2) (metric tons CO ₂ e)	2,097	1,258	2,807	2,276
Sources of Flared Hydrocarbons				

Emissions**

	2022	2021	2020	2019
Volume of Hydrocarbon Flared in PA (MMcfe)	231.35	274.51	277.53	253.64
Volume of Hydrocarbon Flared in LA (MMcfe)	N/A	N/A	N/A	82.82
Total Quantity of Hydrocarbon Gas Flared (MMcfe)	231.35	274.51	277.53	336.46
GHG Emissions due to Flaring (MT CO ₂ e)	18,194	21,320	20,863	33,054
Contribution to Overall GHG Emissions	9%	11%	11%	9%
Other Air Pollutants				
NOx Emissions (metric tons)	1,602	1,767 †	1,335	3,327
VOC Emissions (metric tons)	566	620 †	1,327	3,182
PM10 Emissions (metric tons)	19.6	20.8 †	18.8	65.6
SOx Emissions (metric tons)	1.7	2.1 †	2.1	10.0

Historical Production Emissions and Production Intensity

	2022	2021	2020	2019
Net Production (MMcfe)	773,304	777,205	776,786	833,354
Production-only Emissions (MT CO ₂ e) (excluding boosting and gathering)	190,698	203,855 †	179,656	329,799
Production GHG Intensity (MT CO ₂ e/MMcfe)	0.25	0.27	0.23	0.40
Total GHG Emissions (including boosting and gathering)*	193,449	206,535 †	182,118	366,280

Water

All figures expressed in cubic meters (m3)	2022	2021	2020	2019
Fresh Water Withdrawn				
Pennsylvania	983,550	1,577,846	1,725,173	3,068,615
Louisiana	N/A	N/A	N/A	338,709
Total Fresh Water Withdrawn	983,550	1,577,846	1,725,173	3,407,324
Fresh Water Withdrawn by Source				
Pennsylvania – Surface Water	337,828	438,408	630,665	1,743,463

Water

All figures expressed in cubic meters (m3)	2022	2021	2020	2019
Pennsylvania – Municipal Water	645,722	1,139,438	1,094,508	1,325,152
Pennsylvania – Rainwater	0	0	0	0
Louisiana – Surface Water	N/A	N/A	N/A	338,709
Reuse Water (including from other operators)				
Pennsylvania	2,347,085	2,585,908	2,627,738	2,440,094
Louisiana	N/A	N/A	N/A	0
Total Water Used	3,330,635	4,163,754	4,352,911	5,847,418
Pennsylvania Water Recycling Program				
PA Flowback and Produced Water Generated	1,653,955	1,758,940	1,775,265	1,658,132
Range-Generated PA Flowback Water Reused	1,650,345	1,756,087	1,771,784	1,644,561
Percentage of Range-Generated PA Flowback Reused	99.78%	99.84%	99.80%	99.20%
Total Reuse Water (including other operators)	2,347,085	2,585,908	2,627,738	2,440,094
Total Reuse Water as Percentage of Total Water Used	70%	62%	60%	42%

Spills

	2022	2021	2020	2019
Number of Hydrocarbon Releases \geq 1 bbl	1	3	1	7
Volume of Hydrocarbon Releases \geq 1 bbl (in bbl)	1.4	8.5	2.0	44.5
Number of Non-Hydrocarbon Releases \geq 1 bbl	4	3	3	13
Volume of Non-Hydrocarbon Releases \geq 1 bbl (in bbl)	11.9	20.8	6.4	229.8
Number of Total Spills Resulting in Release \geq 1 bbl	5	6	4	20
Volume Total Spills Resulting in Release \geq 1 bbl (in bbl)	13.3	29.3	8.4	274.3

Waste

	2022	2021	2020	2019
Hazardous Waste (tons)	0	0	0	0
Non-Hazardous Waste				
Reuse Water (m ³)	2,347,085	2,585,908	2,627,738	2,440,094
Recycled	0	0	0	0
Recovered	0	0	0	0
Composting	0	0	0	0
Incineration	0	0	0	0
Landfill (tons)	89,684	99,341	103,278	210,000
On-site Storage	0	0	0	0

Health and Safety

	2022	2021	2020	2019 ¹
Range Employees Total Recordable Injury Rate	0.17	0.18	0.30	0.62
Range Employees Days Away, Restricted, or Transferred	0.00	0.00	0.30	0.00
Employee Fatalities	0	0	0	0
Number of Contractor Reportable Incidents	8	17	5	25
Contractor Fatalities	0	0	0	0
Recordable Preventable Vehicle Incident Rate	3.88	2.48	1.79	3.50
Contractor Total Recordable Injury Rate	0.60	1.46	0.40	1.44
Contractor Days Away, Restricted, or Transferred	0.15	0.34	0.24	0.40

¹2019 Contractor Total Recordable Injury Rate and Contractor Days Away, Restricted, or Transferred updated to reflect data revision

Economic

	2022	2021	2020	2019
Total Revenues and Other Income	\$4.1 billion	\$2.9 billion	\$2.0 billion	\$2.8 billion
Production				
Natural Gas (MMcf)	539,443	541,021	574,529	548,085
Natural Gas Liquids (MBbls)	36,392	36,373	37,492	38,850
Crude Oil and Condensate (MBbls)	2,716	3,044	2,829	3,690
Total (MMcfe) ⁱ	774,089	777,523	816,456	833,354
Average Sales Price (excluding derivative settlements)				
Natural Gas (per Mcf)	\$6.24	\$ 3.50	\$ 1.64	\$ 2.40
Natural Gas Liquids (per bbl)	\$35.96	\$ 31.23	\$ 15.43	\$ 17.53
Crude Oil and Condensate (per bbl)	\$87.79	\$ 60.11	\$ 30.22	\$ 50.26
Total (per Mcfe) ⁱ	\$6.34	\$ 4.13	\$ 1.97	\$ 2.71
Proved Reserves				
Natural Gas (MMcf) (total)	11,797,972	11,452,081	11,148,560	12,114,977
Developed	7,230,313	6,809,849	6,486,211	6,486,211
Undeveloped	4,567,659	4,642,232	4,798,503	5,628,766
NGLs (MBbls) (total)	1,003,958	1,001,305	951,466	938,236
Developed	594,931	577,507	550,771	535,007
Undeveloped	409,027	423,798	400,695	403,229
Oil (MBbls) (total)	42,656	52,596	57,626	74,532
Developed	22,213	23,834	22,976	34,369
Undeveloped	20,443	28,762	34,650	40,163
Proved Reserve Value (PV-10) ⁱⁱ	\$29.6 billion	\$14.9 billion	0	0

* 2020 production and average sales prices include the results of our North Louisiana assets, which were sold in August 2020.

** Emissions are calculated in accordance with U.S. EPA's GHG reporting program protocols.

ⁱ Oil and NGLs volumes are converted at the rate of one barrel equals six Mcf based upon the approximate relative energy content of oil to natural gas, which is not indicative of the relationship between oil and natural gas prices.

ⁱⁱ PV-10 is considered a non-GAAP financial measure as defined by the U.S. Securities and Exchange Commission (the "SEC"). We believe that the presentation of PV10 is relevant and useful to our investors as supplemental disclosure to the standardized measure, or after-tax amount, because it presents the discounted future net cash flows attributable to our proved reserves before taking into account future corporate income taxes and our current tax structure. While the standardized measure is dependent on the unique tax situation of each company, PV-10 is based on prices and discount factors that are consistent for all companies. Because of this, PV-10 can be used within the industry and by creditors and security analysts to evaluate estimated net cash flows from proved reserves on a more comparable basis. The difference between the standardized measure and the PV-10 amount is the discounted estimated future income tax of \$5.0 billion at December 31, 2022. PV-10 for December 31, 2022 was determined using NYMEX benchmark prices of \$6.36 per mcf for natural gas and \$94.13 per bbl for oil.

† Of note, the above performance data reflects corrected 2021 emissions combustion data. The corrected combustion data represents an increase in combustion emissions of 5,742 metric tons CO₂e compared to the original value reported in our 2021-2022 sustainability report. The change results in a 4.3 percent and 2.8 percent increase in Energy/Combustion Emissions and Total Direct GHG Emissions respectively. While we do not feel this change significantly changes how we have characterized our emissions performance, we feel this correction is important as accuracy and transparency are central to our reporting. All values indicated with † represent values affected by the correction to our 2021 combustion emissions data.

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ALTERNATIVE CALCULATIONS

The table below compares how Range Resources calculates Scope 1 emissions by source with an alternative calculation method.

For purposes of this report, we use the AXPC's definition of "flaring," which is the flaring of wellhead gas from the primary separator at assets operated by Range Resources. This definition of flaring specifically does not include:

- i. combustion of low-pressure gas volumes from crude oil/condensate and produced water storage vessels or other low-pressure separators for the purpose of controlling emissions, or
- ii. flaring from drilling and/or well completion, which are either:
 - a. exempt from reporting to the EPA process emissions. (e.g., flaring gas during the drill-out phase of completing a well), or
 - b. disclosed in our EPA emissions inventory reports under emissions from other sources (e.g., flaring associated with the operation of VDUs is captured under combustion emissions, and flaring associated with the operation of glycol dehydrators is captured under process emissions). For further discussion of our venting and flaring practices, see Flaring.

Emissions

	2022 As Displayed in Report	2022 Alternate Calculation	2021 As Displayed in Report	2021 Alternate Calculation
Total Direct GHG Emissions (metric tons CO ₂ e)	193,449	193,449	206,535 †	206,535 †
GHG Emissions Intensity (metric tons CO ₂ e/Mmcfe)	0.25	0.25	0.27 †	0.27 †
Greenhouse Gas Emissions by Source (CO₂e)				
Energy/Combustion Emissions	133,771	144,052	136,265 †	148,946 †
Other Vented Emissions	22,891	22,891	31,525	31,525
Fugitive Emissions	5,633	5,633	5,084	5,084
Emissions from Flared Hydrocarbons	18,194	0	18,194	0
Process Emissions	12,960	20,873	12,340	20,981

† All values indicated with † represent values which have changed due to the correction to our 2021 combustion emissions data.



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