



## 2022 Environmental, Social & Governance Report



**We make modern life possible through the products we manufacture.**

## **Mission & Values**

We are driven by our Mission and core Values, which define the way we do business every day. We put **Safety** first, care for our **Environment** and require high business ethics and **Integrity** consistent with our Code of Ethics & Business Conduct. We embrace **Corporate Citizenship** as proud members of and good neighbors to the communities where we operate. We believe in **Continuous Improvement** for individuals to achieve their maximum potential through teamwork, diversity and personal development. And we know that it is our people who provide the energy to achieve excellence for all stakeholders, including our communities, employees and our investment community.

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### **About CVR Energy, Inc.**

CVR Energy, Inc., is a diversified holding Company primarily engaged in the renewable fuels, petroleum refining and marketing business through its interest in CVR Refining and in the nitrogen fertilizer manufacturing business through its interest in CVR Partners, LP. Headquartered in Sugar Land, Texas, our operating footprint is mainly located in the mid-continent and corn belt regions of the United States.

### **About CVR Refining**

CVR Refining is an independent, downstream renewable fuels and petroleum refiner with two refineries, located in Coffeyville, Kansas, and Wynnewood, Oklahoma, as well as related logistics assets.

### **About CVR Partners, LP**

CVR Partners, LP is focused on the production, marketing and distribution of nitrogen-based fertilizer products. It owns and operates two fertilizer manufacturing facilities, located in Coffeyville, Kansas, and East Dubuque, Illinois. It primarily produces urea ammonium nitrate (UAN) and ammonia, which are predominantly used by farmers to improve the yield and quality of their crops.



# A MESSAGE FROM OUR CEO & EXECUTIVE CHAIRMAN

As a provider of affordable transportation fuels and sustainable nitrogen fertilizer, we are proud to meet the needs of a growing population by adhering to our Mission of being a top-tier North American renewable fuels, petroleum refining and nitrogen-based fertilizer Company as measured by safe and reliable operations, superior financial performance and profitable growth. Our core Values define the way we do business every day. We put Safety first, care for our Environment and require high business ethics and Integrity consistent with our Code of Ethics & Business Conduct. We embrace Corporate Citizenship as proud members of and good neighbors to the communities where we operate. We also believe in Continuous Improvement for individuals to achieve their maximum potential through teamwork, diversity and personal development. Our people provide the energy to achieve excellence for all stakeholders, including our communities, employees and our investment community.

We are proud to share our 2022 Environmental, Social & Governance Report with you, which benchmarks our performance for the year against certain Sustainability Accounting Standards Board (SASB) metrics. As you will read in this report, beyond our products bettering human lives, we contribute to the economic wellbeing of our employees, families and communities while protecting the environment and the health and safety of our employees, contractors and the communities we serve.

Thank you for your interest in our Company and for taking the time to read our ESG report as we continue our sustainable journey. Additional information about the Company can be found on our websites at [www.cvrenergy.com](http://www.cvrenergy.com) and [www.cvrpartners.com](http://www.cvrpartners.com).

Have a safe day.



**Dave Lamp**

President & Chief Executive Officer  
CVR Energy, Inc.

Executive Chairman  
CVR GP, LLC, the General Partner of CVR Partners, LP



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## OUR ESG PRIORITIES

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### Environmental, Health & Safety

- Environmental Stewardship
  - Health & Safety
  - Emergency Management
- 

### Social

- Community Impact
  - Employee Welfare & Engagement
  - Diversity & Inclusion
- 

### Governance

- Commitment to Compliance & Governance
- Pay-for-Performance
- Cybersecurity

# ENVIRONMENTAL, HEALTH & SAFETY

**84%**

**Reduction**

in employee total  
recordable incident  
rate (TRIR)<sup>1</sup>

**75%**

**Reduction**

in process safety tier 1  
event rate (PSE1)<sup>1</sup>

**72%**

**Reduction**

in environmental  
events<sup>1</sup>

**31%**

**Reduction**

in carbon dioxide  
equivalent (CO<sub>2</sub>e)<sup>1</sup>

## Environmental Stewardship

We are committed to minimizing the environmental impacts from our operations and are participating in the energy transition through the production of renewable fuels and the reduction of our operations' carbon footprint. One of our recent environmental projects is the renewable diesel unit (RDU) at our Wynnewood refinery, which began production of low-carbon-intensity renewable diesel fuel made from soybean oil and inedible corn oil feedstocks in April 2022. Our RDU is capable of producing nearly 100 million gallons per year of clean-burning renewable diesel fuel to meet growing demands and reduce greenhouse gas (GHG) emissions. Renewable diesel is 100 percent compatible with existing infrastructure and engines and offers GHG lifecycle emissions that are 50 percent to 80 percent lower than conventional diesel. The Wynnewood refinery also will have the ability to process lower-carbon intensity feedstocks for its RDU with the mechanical completion of its pre-treatment unit (PTU) in late 2023.

CVR Partners' fertilizer facility in Coffeyville continues to capture and sequester carbon dioxide (CO<sub>2</sub>) that is utilized for enhanced oil recovery, helping to reduce the site's GHG emissions by approximately 683,000 metric tons in 2022. The reduced GHG emissions through the sequestration of CO<sub>2</sub> allows CVR Partners to qualify for the production of "blue" hydrogen, ammonia and urea ammonium nitrate (UAN). These efforts support our core Values of Environment and Continuous Improvement by producing nitrogen fertilizer that feeds the world's growing population in an environmentally responsible way.

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**Core Value: Environment.**  
We care for our environment.

<sup>1</sup> 2022 compared to the baseline year of 2017.

## GREENHOUSE GASES

The Company's overall Scope 1 GHG emissions were reduced by 31 percent, or 1.3 million metric tons of CO<sub>2</sub>e, in 2022 compared to our baseline year.

Highlights of reductions in 2022 compared to our baseline include:

- A 17 percent reduction in GHG intensity in our Petroleum Segment
- A 28 percent reduction in GHG intensity in our Fertilizer Segment

CVR Partners continues to generate carbon offset credits related to the Company's voluntary nitrous oxide (N<sub>2</sub>O) abatement efforts by operating three N<sub>2</sub>O abatement units at our Coffeyville and East Dubuque fertilizer facilities. The system installed for the Coffeyville facility was designed to abate 94 percent of all N<sub>2</sub>O in the unit while preventing the release of approximately 450,000 metric tons of CO<sub>2</sub>e on an annualized basis. The Coffeyville fertilizer facility has accounted for 65 percent of the Companywide reductions in GHG emissions since our baseline and is pursuing additional reductions by starting preliminary engineering design work for N<sub>2</sub>O controls on the fourth nitric acid unit.

## CRITERIA POLLUTANTS

Since our baseline year, CVR Energy has reduced criteria pollutant (CP) emissions, including nitrogen oxides, carbon monoxide, particulate matter, sulfur dioxide and volatile organic compounds by 29 percent, or 2,011 tons. Most of these reductions – 1,733 tons – were reduced in our Petroleum Segment, with an additional reduction of 278 tons in our Fertilizer Segment.

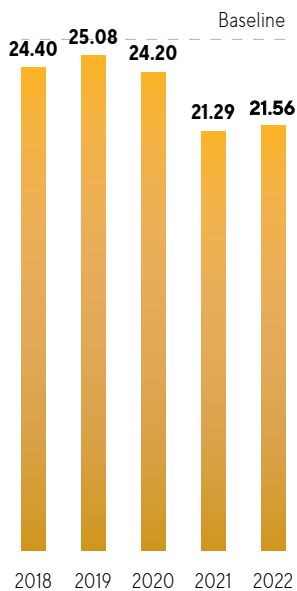
Highlights of reductions in 2022 compared to our baseline include:

- A 29 percent reduction in CP intensity in our Petroleum Segment
- A 5 percent reduction in CP intensity in our Fertilizer Segment

### PETROLEUM SEGMENT

#### Scope 1 GHG Intensity

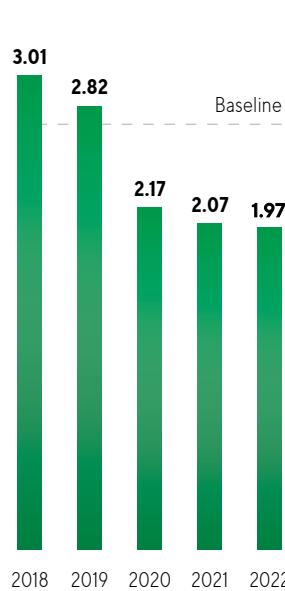
Metric tons CO<sub>2</sub>e /  
1,000 barrels total throughput



### FERTILIZER SEGMENT

#### Scope 1 GHG Intensity

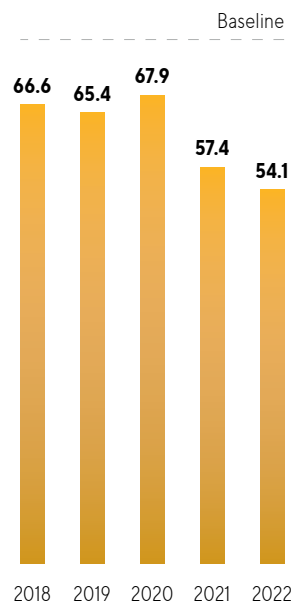
Metric tons CO<sub>2</sub>e /  
ton NH<sub>3</sub> production



### PETROLEUM SEGMENT

#### Criteria Pollutant (CP) Intensity

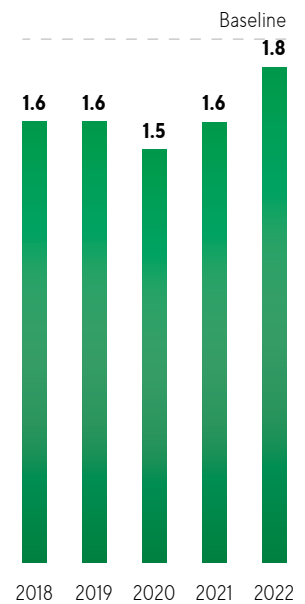
Tons / million barrels total  
throughput



### FERTILIZER SEGMENT

#### Criteria Pollutant (CP) Intensity

1,000 tons / ton gross  
ammonia production



## Health & Safety

Our unwavering commitment to safety above all else helps protect our employees, contractors and communities. We seek to adhere to the Occupational Safety & Health Administration's occupational and process safety management standards, the Environmental Protection Agency's Risk Management Plan regulations, as well as other government and industry safety standards, including those of the American Petroleum Institute (API).

### OCCUPATIONAL SAFETY

Our commitment to safe work is demonstrated by our employees, who helped reduce our Companywide TRIR to 0.3 in 2022, an 84 percent reduction from our baseline.

Our facilities actively participate in industry-wide Advancing Process Safety initiatives sponsored through the American Fuels & Petrochemical Manufacturers (AFPM) association and API. These include regional process safety networks where information is shared in the spirit of collaboration to help reduce process safety incidents across the industry.

Safety awards the Company received for 2022 included:

- AFPM Safety Achievement awards for the Coffeyville and Wynnewood refineries
- Iowa-Illinois Safety Council award for hazard recognition at East Dubuque Nitrogen Fertilizers
- Oklahoma Trucking Association 1st Place Fleet Safety Performance award for our crude transportation business based on product and miles hauled

### CONTRACTOR SAFETY

We require a commitment to safety excellence from our contractors, which were required to meet our high expectations for safety, environment, security and quality during the four successful major maintenance turnarounds performed by the Company in 2022. Of these turnarounds, three were incident free, while the fourth experienced one minor contractor injury. The turnarounds were completed utilizing more than 3,500 contract personnel and more than 1 million hours of work.

### PROCESS SAFETY

Our process safety program provides critical framework for safe, reliable operations. Our PSE1 was 0.1 in 2022, a 75 percent reduction from our baseline of 0.4. Key drivers for this continuous improvement have been an increased focus on risk identification, analysis and control measures, which have resulted in risk-reduction projects as well as improvements in existing maintenance, inspection and testing processes. Our metrics are monitored through process safety Key Performance Indicators (KPIs) that are reported at the highest level of the company.

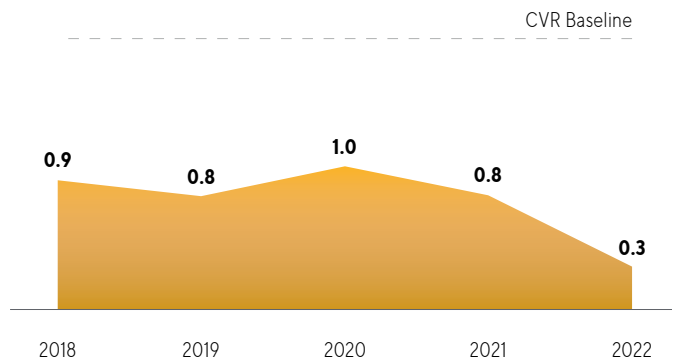
### TRUCKING SAFETY

Our trucking business continued its mission of safe and reliable transportation while experiencing growth and maintaining exceptional safety performance year-over-year from 2021 to 2022. Our owned and contracted fleet operated in Oklahoma, Kansas, Texas, Nebraska and Missouri, traveled more than 9.4 million miles and delivered more than 33 million barrels of crude oil.

**Core Value: Safety.**  
We always put Safety first.

### Total Recordable Injury Rate (TRIR)

Companywide Employee TRIR



2022 highlights included:

- ~25% increase in crude barrels transported
- 71% increase in volume transported via our liquefied gas clean products fleet
- 2 DOT accidents for the year with no injuries and no releases of hazardous materials
- 1.7 DOT violations per million miles driven

**PIPELINE SITE RESTORATION**

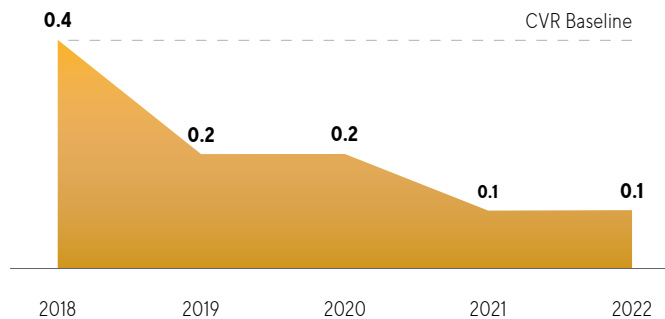
In 2022, we completed tank demolition and site restoration projects to help minimize our environmental footprint from out-of-service aboveground storage tanks. These projects encompassed a total of 15 separate facilities across Kansas, Nebraska and Oklahoma, which included demolition of 28 petroleum storage tanks that ranged in size from approximately 22 feet to 117 feet in diameter. The demolition and restoration projects recycled approximately 3,100 tons of carbon steel and restored approximately 60 acres of land.

**Emergency Management**

Preparedness to respond in the unlikely event of an emergency is demonstrated by our highly trained emergency response teams (ERT) and response equipment. More than 100 employees who are prepared for hazardous material response, fire, rescue and medical emergencies comprise our ERTs. Periodic drills and exercises are conducted with community responders and resources, including fire departments and law enforcement.

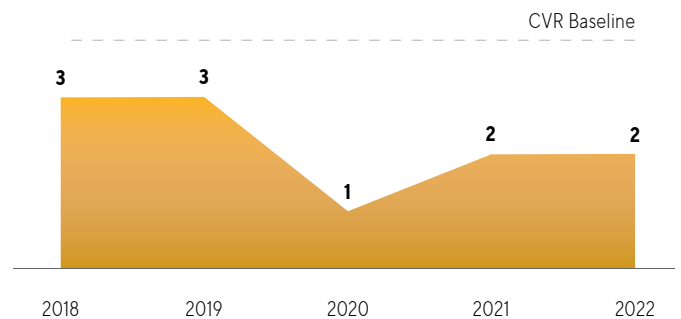
**PSM Tier 1 Event Rate (PSE1)**

Companywide PSE 1



**DOT Accidents**

Trucking accidents



# SOCIAL



## DE&I<sup>2</sup> Committee

enhances our work environment,  
fosters innovative actions and  
promotes inclusiveness

## Charitable Giving

Annual charitable giving  
budget of \$2.45 million supports  
our key focus areas of Youth,  
Education, Health & Human  
Services, Environment and Culture

## Volunteerism Policy

provides employees Paid Time Off  
to give back to their communities

## Community Impact

As proud members of the communities where we operate, we seek to make a positive economic and social impact through our financial donations and the contributions of time, knowledge and talent from our employees to the places where they live and work. Our Community Impact Committees are comprised of employees in each of our geographical areas who are actively engaged with their communities and recommend both financial contributions and employee volunteer opportunities as aligned with our community impact areas of: Youth, Education, Health & Human Services, Environment and Culture. In 2022, we were pleased to make donations to social services, emergency response organizations, scholarship funds and conservation efforts. We also helped sponsor schools, youth sports, fairs and rodeos during the year.

We are committed to maintaining meaningful relationships in our communities, such as through our Community Advisory Panels. Members include civic leaders, educators, neighbors, business owners and Company representatives. We also actively engage with our communities prior to major scheduled turn-arounds and projects to encourage open dialogue and provide helpful information, including quick and easy ways to contact us during these events.

## Employee Welfare & Engagement

We promote employee accountability through a performance-driven culture through the encouragement of creative thinking, teamwork, diversity, personal development and continuous improvement. We accomplish this by providing a safe and healthy working environment that helps employees achieve their maximum potential.

As of Dec. 31, 2022, CVR Energy, CVR Partners and their subsidiaries had 1,471 employees, all who were located in the United States. Of these employees, 590 – or approximately 40 percent of our workforce – were covered by collective bargaining agreements with various labor unions. We are committed to promoting respectful, effective, fair and professional relationships between our unions, their members and the Company, and our employee handbook expressly recognizes our commitment to respecting employees' rights under the National Labor Relations Act. We also are committed to being consistent in our actions and training leaders on our union agreements.

<sup>2</sup> Diversity, Equity & Inclusion



# Core Value: Corporate Citizenship.

We are proud members of the communities where we operate.

Our market-based, pay-for-performance compensation philosophy offers employees base pay, bonuses and long-term incentive awards that exceed the national living wage and are aligned with the refining and fertilizer manufacturing industries. Employees are eligible for bonuses based on the achievement of Company and individual performance measures. Employees goals focus on health, safety and environmental performance, operational excellence and the disciplined use of capital. We also are pleased to offer a spot-bonus program to help reward eligible employees for going above and beyond in demonstrating our Mission & Values.

We provide our employees annual Total Rewards Statements to demonstrate the entirety of our employee benefits, which include medical, dental and vision coverage, health savings accounts, life insurance, disability, tuition reimbursement, short- and long-term disability, an Employee Assistance Plan and retirement savings.

The Company offers a Remote Work Policy that allows eligible employees greater flexibility to work from a remote location. In alignment with our core Value of Corporate Citizenship, we also are proud to offer employees a Volunteerism Policy to encourage and help facilitate community involvement.

## Diversity & Inclusion

Our goal is to provide a work environment where employees are valued for their unique and diverse perspectives, skills and talents, are treated respectfully, can communicate openly and are encouraged to develop to their full potential as a contributor to the success of the Company and the communities we serve. We are committed to our policy on Equal Employment Opportunities and are dedicated to providing a workplace that is free from workplace discrimination on the grounds of race, nationality, ethnicity, gender and disability.

We also strive to foster a diverse recruiting strategy by ensuring our hiring practices are free from biases for or against any individual or group of candidates. We continue to plan to build on our inclusive culture by expanding our recruitment efforts to include veteran recruitment and apprenticeship programs, recruiting interns at diverse colleges and promoting diverse representation within our workforce.

### Female Representation at CVR Energy - As of Dec. 31, 2022



### Female Representation at CVR Partners - As of Dec. 31, 2022



### New Hires at CVR Energy - As of Dec. 31, 2022



### Retention Rates of All Employees - As of Dec. 31, 2022



### New Hires at CVR Partners - As of Dec. 31, 2022



### Minority Workforce at CVR Energy - As of Dec. 31, 2022



### Minority Workforce at CVR Partners - As of Dec. 31, 2022



# GOVERNANCE

## Independent Directors

meet regularly in executive session

## Annual Board & Committee

self-evaluations

## CVR Ethics Hotline

enhanced to include anonymous mobile reporting

**Core Value: Integrity.** We require high business ethics.

We believe that good corporate governance benefits all of our stakeholders and is a critical component to driving long-term stockholder value. We regularly review our corporate governance policies and practices in light of the rules, regulations and standards of the U.S. Securities and Exchange Commission and the New York Stock Exchange, industry best practices and input from our Boards of Directors, their committees and our stockholders.

## Commitment to Compliance

Compliance with all laws and regulations in the areas where we operate is a top priority. Our commitment to compliance includes a three-pronged approach: risk monitoring, policy program management and assurance. Our Corporate Compliance Program is led by our Compliance Officer and involves a broad cross section of committees and employees from across our organization, with oversight by our Boards and applicable Board-level committees.

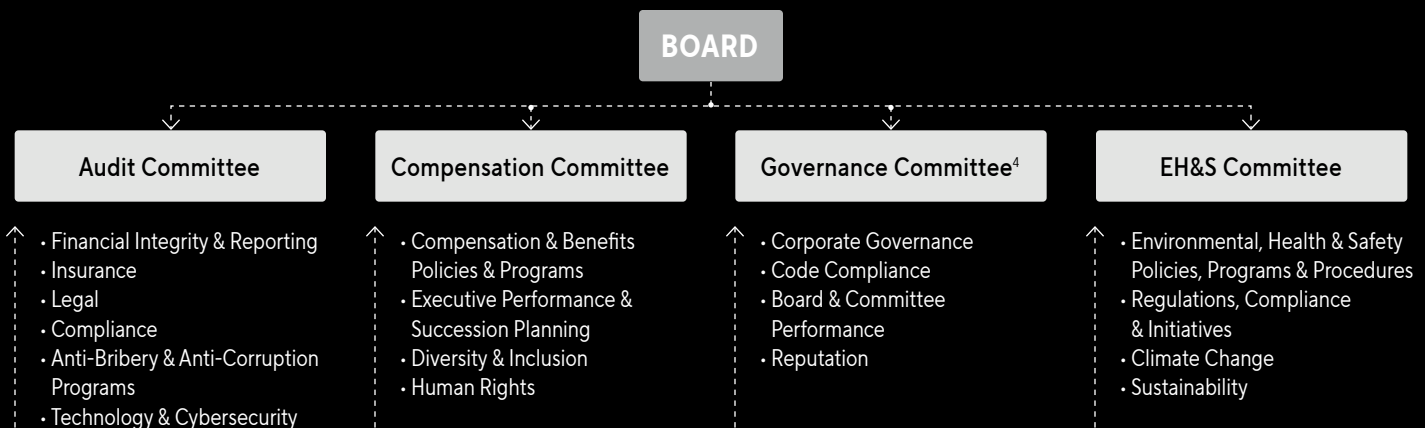
## Board Governance Highlights

Our Boards of Directors oversee the business of the Company and perform a number of specific functions, either directly or through their committees. While the Boards have overall responsibility for oversight of Company risks, including ESG, the Boards delegate responsibility for managing certain risks to their committees.

### BOARD OF DIRECTORS PROFILE - 2022

AS OF DEC. 31, 2022	INDEPENDENT	NON-EMPLOYEE <sup>3</sup>	AVERAGE TENURE
CVR Energy, Inc.	50%	83%	<6 years
CVR Partners, LP	50%	67%	<9 years

Evaluation and oversight of ESG risks are embedded in the Boards' overall responsibility and delegation to their committees. The committees provide periodic updates to the Boards regarding the status and progress of their delegated responsibilities.



<sup>3</sup> For purposes of this Report, non-employee directors are directors who are not employees of CVR Energy, Inc. or its subsidiaries and include directors that are employees of our controlling stockholder, Icahn Enterprises L.P.

<sup>4</sup> CVR Partners does not have a Governance Committee. The Governance Committee assigned risks in the above table are the responsibility of CVR Partners' Audit Committee.

Our Boards seek a diverse group of directors who have attributes necessary to create a cohesive and effective Board, including high personal and professional ethics, integrity and values, vision and long-term strategic perspectives, experience in similar industries, practical judgment, the ability to devote significant time to serve on our Boards and their committees, and a commitment to representing the long-term interests of all our stockholders. For more information on the composition, independence and structure of our Boards of Directors and their committees, including skills and experience, please refer to CVR Energy's 2023 Proxy Statement, available on the Investor Relations section of our website at [www.cvrenergy.com](http://www.cvrenergy.com), and CVR Partners' 2022 Annual Report on Form 10-K, available on the Investor Relations section of our website at [www.cvrpartners.com](http://www.cvrpartners.com).

## Pay-For-Performance (Executive Compensation)

Our performance-driven compensation structure encourages continuous accountability by aligning some elements of executive pay with the Company's success and achievement of set goals, including environmental and safety performance and our stock price.

## Ethics & Business Conduct

We understand that the success of our Company is driven by the ability to perform our jobs with integrity – and our Codes of Ethics & Business Conduct identify important behaviors to accomplish that goal. Our Codes apply to all our directors, officers and employees, and also include portions specifically applicable to our Chief Executive Officers, Chief Financial Officer, Principal Accounting Officer and others, including our contractors and consultants. Our employees and directors reaffirm their commitments to our Codes of Ethics & Business Conduct each year through annual certifications. Copies of our Codes as well as our Corporate Governance Guidelines are posted on the Investor Relations sections of our websites at [www.cvrenergy.com](http://www.cvrenergy.com) and [www.cvrpartners.com](http://www.cvrpartners.com). Among other topics, our Codes describe our standards for conduct and include important priorities, such as:

- Our policy against bribery, kickbacks, corruption and real or apparent conflicts of interest, including limitations on the giving or receiving of gifts by employees; and,
- Our commitment to Human Rights, including prohibition against the Company, its suppliers and contractors from taking any acts in support of human trafficking or human rights abuses.

### **CVR ETHICS HOTLINE**

We always encourage employees to voice comments, concerns and complaints to management in an open, constructive and respectful manner. We have a strict non-retaliation policy for good-faith reporting and offer multiple ways for employees to speak up, including our CVR Ethics Hotline, which offers 24/7, anonymous support. The Chairpersons of the Audit Committees have direct access to all reports submitted via the CVR Ethics Hotline and status updates are provided to the Audit Committees on a quarterly basis. In connection with our core Value of

Continuous Improvement, we expanded our reporting capabilities in the fall of 2022 to include mobile QR code reporting capabilities and a mechanism for follow-up communications with anonymous reporters.

During 2022, 50 percent of reporters voluntarily disclosed their identities. In addition, the Company circulates a semi-annual Risk & Compliance Questionnaire to middle-level management as an additional opportunity to raise anonymous concerns to the Compliance Officer.

### **INTEGRITY WEEK**

To emphasize our commitment to our core Value of Integrity, we designate one week each year as "Integrity Week," where we focus on specific ethics and compliance topics. Each day of Integrity Week provides an opportunity for employees to learn about specific topics while acknowledging Company policies and completing annual training. Past topics have included: ethics and business conduct, insider trading, conflicts of interest, harassment and discrimination prevention, drug and alcohol abuse, IT security and cybersecurity awareness and confidentiality. We rolled out training on four topics and five policy acknowledgements during our 2022 Integrity Week: Stay Cool With Integrity.

In addition, our Compliance Officer provides annual training to targeted employee groups throughout the year on topics such as anti-bribery, anti-corruption and Regulation Fair Disclosure to help keep our workforce updated on the most relevant information while also providing in-person guidance.

## Cybersecurity

We depend on internal and third-party information technology systems to manage and support our operations.

To protect our people, facilities and systems against and mitigate cyber risk, we have implemented several programs, including externally performed cyber risk monitoring, audits and penetration testing and an information security training program. We have implemented additional protections as recommended by the Cybersecurity & Infrastructure Security Agency security standard guidelines and we continue to stay abreast as new recommendations are published. On an as-needed basis, but no less than quarterly, we brief the Audit Committees of our Boards of Directors on information security matters.

## Shareholder Engagement

We continue to increase our participation in investor conferences and virtually host our Annual Meeting of Stockholders. We recently launched new external websites with fresh content, including improved aesthetics and functionality, to better inform our stockholders about our Company and operations.

## Advocacy Activity

We continue to passionately pursue reform of the Renewable Fuel Standard program. Our activities include conversations with members of Congress, the Department of Energy and the Environmental Protection Agency, among others.

# SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB) INDEX

The following is a consolidated overview of Companywide metrics for the years ending 2020, 2021 and 2022 against applicable SASB standards for Oil & Gas – Refining & Marketing and Chemicals.

TOPIC	ACCOUNTING METRIC	SASB CODE	UNIT OF MEASURE	CVR ENERGY, INC. DISCLOSURES		
				2020	2021	2022
<b>Greenhouse Gas Emissions</b>	Gross global Scope 1 emissions <sup>15</sup>	EM-RM-110a.1 RT-CH-110a.1	Million metric tons (t) CO <sub>2</sub> e	3.43	3.36	2.97
	Percentage covered under emissions-limiting regulations <sup>2</sup>	EM-RM-110a.1 RT-CH-110a.1	Percentage (%)	24	29	32
	Gross global Scope 2 emissions <sup>5</sup>	-3	Million metric tons (t) CO <sub>2</sub> e	0.60	0.62	0.65
<b>Air Quality</b>	Air emissions of: Nitrogen Oxides (NO <sub>x</sub> )	EM-RM-120a.1 RT-CH-120a.1	Tons (ST)	1,366	1,352	1,203
	Sulphur Dioxide (SO <sub>2</sub> )	EM-RM-120a.1 RT-CH-120a.1	Tons (ST)	344	333	446
	Particulate Matter (PM <sub>10</sub> )	EM-RM-120a.1	Tons (ST)	261	253	243
	Volatile Organic Compounds (VOCs)	EM-RM-120a.1 RT-CH-120a.1	Tons (ST)	1,888	1,767	1,503
	Number of refineries in or near areas of dense population	EM-RM-120a.2	Number	0	0	0
<b>Energy Management</b>	Total energy consumed	RT-CH-130a.1	Million BTU	61,012,277	63,466,969	60,116,681
<b>Water Management</b>	Total freshwater withdrawn	EM-RM-140a.1 RT-CH-140a.1	Million Gallons	3,778	3,750	3,798
	Total freshwater percentage recycled	EM-RM-140a.1	Percentage (%)	3	3	3
	Total freshwater percentage in regions with High or Extremely High Baseline Water Stress	EM-RM-140a.1 RT-CH-140a.1	Percentage (%)	0	0	0
	Number of incidents of non-compliance associated with water quality permits, standards and regulations	EM-RM-140a.2 RT-CH-140a.2	Number	6	4	3
<b>Hazardous Materials Management</b>	Amount of hazardous waste generated	EM-RM-150a.1 RT-CH-150a.1	Tons (ST)	3,231	3,603	5,933
	Amount of hazardous waste percentage recycled	EM-RM-150a.1 RT-CH-150a.1	Percentage (%)	0	0	0
	Number of underground storage tanks (USTs)	EM-RM-150a.2	Number	0	0	0
	Number of underground storage tanks releases requiring cleanup	EM-RM-150a.2	Number	0	0	0
	Percentage in states with underground storage tanks financial assurance funds	EM-RM-150a.2	Percentage (%)	0	0	0



TOPIC	ACCOUNTING METRIC	SASB CODE	UNITS OF MEASURE	CVR ENERGY, INC. DISCLOSURES		
				2020	2021	2022
<b>Community Relations</b>	Discussion of engagement processes to manage risks and opportunities associated with community interests	RT-CH-210a.1	-	See Narratives		
<b>Workforce Health &amp; Safety</b>	Total full-time employees recordable incident rate (TRIR)	EM-RM-320a.1 RT-CH-320a.1	Rate	1.0	0.8	0.3
	Total contract employees recordable incident rate (TRIR)	EM-RM-320a.1 RT-CH-320a.1	Rate	0.1	1.2	0.8
	Total full-time employees fatality rate	EM-RM-320a.1 RT-CH-320a.1	Rate	0.0	0.0	0.0
	Total contract employees fatality rate	EM-RM-320a.1 RT-CH-320a.1	Rate	0.0	0.0	0.0
	Discussion of management systems used to integrate a culture of safety	EM-RM-320a.2	-	See Narratives		
<b>Critical Incident Risk Management</b>	Tier 1 Process Safety Event (PSE) rate	EM-RM-540a.1	Rate	0.2	0.1	0.1
	Tier 2 Process Safety Event (PSE) rate	EM-RM-540a.1	Rate	0.4	0.1	0.2
	Tier 3 Challenges to Safety Systems rate	EM-RM-540a.2	Rate	13.3	15.3	17.4
<b>Operational Safety, Emergency Preparedness &amp; Response</b>	Process Safety Incident Count (PSIC)	RT-CH-540a.1	Number	5	2	3
	Number of transport incidents	RT-CH-540a.2	Number	0	0	0
<b>Activity Metrics</b>	Refining throughput of crude oil and other feedstocks	EM-RM-000.A	Million barrels/year	67	76	76
	Refining operating capacity <sup>4</sup>	EM-RM-000.B	Barrels per calendar day (BPD)	206,500	206,500	206,500
	Gross annual ammonia (NH <sub>3</sub> ) produced	RT-CH-000.A	Tons (ST)	851,512	806,822	700,886

<sup>1</sup> Scope 1 GHG emissions include all reportable emissions to the US EPA under 40 CFR Part 98.

<sup>2</sup> Carbon emissions are limited for the Coffeyville refinery under a Federal PSD permit.

<sup>3</sup> GHG Scope 2 emissions are not part of the SASB standard.

<sup>4</sup> Refining operating capacity is expressed in barrels per calendar day (BPD) of crude oil only.

<sup>5</sup> GHG Scope 1 and 2 emissions were verified by an independent third party, Lloyd's Register Quality Assurance Inc. (LRQA). A copy of the assurance statement provided by LRQA follows this report.



2277 Plaza Drive  
Suite 500  
Sugar Land, TX 77479



# LRQA Independent Assurance Statement

Relating to CVR Energy's Greenhouse Gas Inventory for the 2022 Calendar Year

This Assurance Statement has been prepared for CVR Energy in accordance with our contract.

## Terms of engagement

LRQA was commissioned by CVR Energy (CVR) to provide independent assurance of its greenhouse gas (GHG) emissions inventory (the Report) for the 2022 calendar year (CY) against the assurance criteria below to a limited level of assurance and materiality of the professional judgement of the verifier using LRQA's verification procedure and ISO 14064 - Part 3 for greenhouse gas emissions. LRQA's verification procedure is based on current best practise and is in accordance with ISAE 3000 and ISAE 3410.

Our assurance engagement covered CVR's operations in the United States under its operational control and specifically the following requirements:

- Verifying conformance with:
  - CVR's emission calculation and reporting methodologies; and
  - World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol: A corporate accounting and reporting standard, revised edition (otherwise referred to as the WRI/WBCSD Protocol) for the GHG data<sup>1</sup>.
- Evaluating the accuracy and reliability of data and information for only the selected indicators listed below:
  - Direct (Scope 1) and Energy Indirect (Scope 2) GHG emissions.

LRQA's responsibility is only to CVR. LRQA disclaims any liability or responsibility to others as explained in the end footnote. CVR's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the Report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the Report has been approved by, and remains the responsibility of CVR.

## LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that CVR has not, in all material respects:

- Met the requirements the criteria listed above; and
- Disclosed accurate and reliable performance data and information as summarized in Table 1 below.

The opinion expressed is formed on the basis of a limited level<sup>2</sup> of assurance and at the materiality of the professional judgement of the verifier.

<sup>1</sup> <http://www.ghgprotocol.org/>

<sup>2</sup> *The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.*



**Table 1. Summary of CVR’s Key Data for Calendar Year 2022:**

Scope	Quantity	Units
Scope 1 GHG Emissions	2.968	million tonnes CO <sub>2</sub> e
Scope 2 GHG Emissions – Location Based	0.646	million tonnes CO <sub>2</sub> e
Scope 2 GHG Emissions – Market Based	0.654	million tonnes CO <sub>2</sub> e
Note: Scope 2, Location-based and Scope 2, Market-based are defined in the GHG Protocol Scope 2 Guidance, 2015.		

**LRQA’s approach**

LRQA’s assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- interviewing relevant staff of the organization responsible for managing GHG data and records;
- assessing CVR’s data management systems to confirm they are designed to prevent significant errors, omissions or mis-statements in the Report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal quality control; and
- verifying historical GHG emissions data and records at an aggregated level for the CY 2022.

**LRQA’s standards and competence**

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition and ISO/IEC 17021 Conformity assessment – Requirements for bodies providing audit and certification of management systems that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

Signed

Dated: 29 December 2023

Marisol Bacong  
LRQA Lead Verifier  
On behalf of LRQA,  
12101 Citywest Blvd, Houston, TX 77042  
LRQA reference: UQA00002429

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