



ANNUAL SUSTAINABILITY REPORT 2022



Table of Contents

A LETTER FROM ANDREW J. LITTLEFAIR, PRESIDENT AND CEO	3	SOCIAL: BUILDING THE WORKFORCE OF THE FUTURE	30
INTRODUCTION	5	Social Goals	31
About Clean Energy.....	6	Employee Recruitment, Retention, and Engagement.....	32
About Renewable Natural Gas (RNG)	7	Diversity, Equity, and Inclusion.....	33
Our Products & Services	8	Actions for Good.....	34
Corporate Governance	12	Employee and Contractor Safety	35
Our Sustainability Strategy	13	GOVERNANCE: SMART POLICIES FOR SYSTEM TRANSITION TO RENEWABLE FUELS	37
2022 HIGHLIGHTS	15	Governance Goals	38
2022 Highlights	16	Stakeholder Engagement, Advocacy, and Lobbying.....	39
Customer Impacts	17	Business Ethics, Executive Compensation, and Incentives	41
2022 Success Stories	18	2022 EMISSIONS DATA	42
ENVIRONMENT: FUELING THE TRANSITION TO RENEWABLE ENERGY IN TRANSPORTATION	20	Clean Energy’s 2022 Greenhouse Gas Inventory.....	43
Environmental Goals.....	21	Performance: Company Emissions Within the Scopes	44
Environmental Benefits of Dairy RNG	22	DATA AND ADDITIONAL INFORMATION	48
Environmental Benefits of Landfill RNG	23	About this Report.....	49
Addressing Methane Leaks	24	Forward-Looking Statements Disclaimer	51
Operational Energy Efficiency.....	25	A Note on Materiality.....	51
Environmental Stewardship.....	26	GRI Index	52
Climate-Transition Risk.....	28		

A letter from **Andrew J. Littlefair,** **PRESIDENT AND CEO**

As we look at Clean Energy's sustainability progress during 2022, I'd like to take the opportunity to also highlight a few other milestones that took place during the year, including Clean Energy's 25th anniversary of being in business.

In 1997, I moved to Southern California and opened Clean Energy's door for the first time. My aim was to offer a solution to the state's ongoing effort to "clean up the air" that plagued local communities. Fortunately, I had the backing and support of my co-founder and legendary energy expert, Boone Pickens, who shared a vision of using a domestic, cleaner transportation fuel more broadly.

We began working with companies and municipalities to transition their fleets of city buses, refuse trucks, and airport shuttles away from diesel—a leading cause of the smog and pollution that leads to poor health—and move toward natural gas, a cleaner-burning fuel. Today, most of the vehicles in those categories in California operate with natural-gas engines, along with a growing number of heavy-duty trucks. With the success of helping to make the skies in California cleaner, we expanded throughout the rest of the country and into Canada with a fueling infrastructure that stands at 590 stations today.

I'm proud of the role that Clean Energy played in those early days of alternative fueling, as well as our continued leadership in the effort to address serious

environmental issues. Initially, our focus was on the pollutants that cause dirty and unhealthy air, like nitrogen oxides, but in recent years it has broadened to address greenhouse-gas emissions, a major contributor to global climate change.

With that challenge in front of the world, our trailblazing instincts kicked in again. In 2013, we introduced a new fuel type that significantly reduces carbon emissions: renewable natural gas (RNG).

RNG is a unique and remarkable fuel because it's the only alternative that starts by capturing fugitive methane emissions found in places like dairies. By turning that methane into RNG fuel and then using it to replace diesel in large vehicles, we lower both tailpipe emissions and methane emissions on the farm. That's why RNG receives a negative carbon-intensity rating by the California Air Resources Board and, on average, a better rating than other alternatives, including electric.

With the ability to easily drop RNG into our existing national fueling infrastructure, sales grew from 13 million gallons in 2013 to reach 198 million gallons in 2022, which was 46% of the total fuel we sold. But we're not stopping there and are on track to achieve our goal to have RNG as the only transportation fuel we sell at our stations by 2025.



Our association with Amazon hit a significant milestone in 2022 with the opening of the Groveport, Ohio, station, the first of 19 RNG stations to be built around the country under the contract between the two companies. The Groveport, Ohio, station was christened by federal, state, and local officials, as well as Amazon and Clean Energy executives in September, and immediately began fueling over 100 Amazon heavy-duty trucks every day. It is also open to the public so that other fleets can purchase the clean fuel. Over the next several months, we opened another handful of stations around the country for our anchor customer, Amazon, with additional openings planned throughout 2023.

The environmental benefits of fueling with natural gas is not only for the over-the-road market. Clean Energy was honored to be chosen in 2022 to supply fuel for a new container ship owned by Pasha Hawaii. The MV George III is the first of three Pasha ships that are forgoing very dirty bunker fuel to instead operate on cleaner-burning liquified natural gas (LNG). By operating on the anticipated 105 million gallons of LNG over the next five years, this ship will achieve 99.9% reduction in particulate matter and sulfur oxide emissions, 90% less nitrogen oxides, and a 25% reduction in carbon dioxide.

We kicked off 2022 by presenting to Wall Street and others our strategy to secure a steady supply of the lowest-carbon RNG possible through making considerable investments into its production. Later in the year, we broke ground for a new RNG digester at Del Rio Dairy in Texas, marking our inaugural production project. After Del Rio, we were off to the races and started construction on other

dairy-digester projects around the country. The RNG produced from these efforts will eventually flow into our network of fueling stations and into the tanks of tens of thousands of city buses, refuse trucks, shuttles, and heavy-duty trucks.

We have important financial partners in our expansion into RNG production with TotalEnergies and bp, two of the world's largest energy companies. But they are not the only important players that are decarbonizing their portfolios with investment into RNG. Other large energy companies, utilities, pipeline companies, and Wall Street firms are all making moves into the RNG space. As the largest supplier of RNG to the transportation market, this is not only a great confirmation of our strategy, but on a tactical level, it will mean a more reliable stream of the ultra-clean fuel for Clean Energy.

I will close by reporting that one thing has not changed since we opened the doors at Clean Energy 25 years ago, and that is our dedication to provide the cleanest fuel available to some of the hardest segments of the transportation market to decarbonize. We made great progress in 2022, but we've only just started.

Sincerely,



Andrew J. Littlefair
President and CEO



INTRODUCTION

Renewable Natural Gas



Clean Energy



About Clean Energy

Clean Energy Fuels Corp. is the country's largest provider of renewable natural gas (RNG), both in number of stations and gallons delivered per year.

Our mission is to decarbonize transportation through the development and delivery of RNG, a sustainable fuel derived from organic waste.

Clean Energy allows thousands of large vehicles to reduce their climate-harming greenhouse-gas emissions, from airport shuttles and city buses to refuse and heavy-duty trucks.

HEADQUARTERS

 **Newport Beach**
California

STOCK SYMBOL

 **CLNE**
NASDAQ

ESTABLISHED

 **1997**

NUMBER OF EMPLOYEES

 **495**

NUMBER OF STATIONS

 **590**
US and Canada

TOTAL FUEL SOLD IN 2022

 **428.4M GGE**
CNG and LNG, including RNG

RNG SALES GROWTH

13M  **198.2M**
GGE in 2013 GGE in 2022

RNG MARKET SHARE

 **48%** **54%**
US California

FLEET CUSTOMERS

 **1000+**

FUELING VEHICLES

 **50,000+**

as of Dec. 31, 2022



About Renewable Natural Gas (RNG)

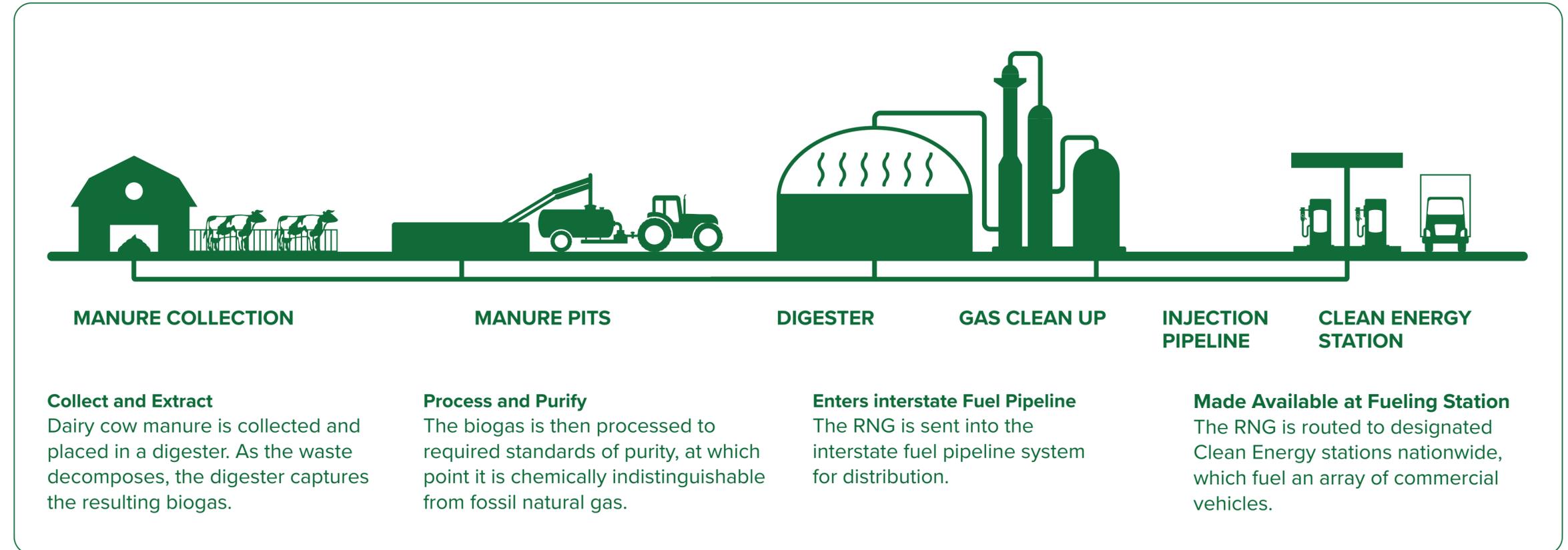
WHAT IS RNG?

Renewable natural gas (RNG) is a low-carbon transportation fuel for heavy-duty trucks, buses, refuse fleets, and other large vehicles. Because it is made entirely from organic waste, it is not a fossil fuel and does not involve drilling or fracking. RNG is a mature and proven solution that replaces diesel and gasoline, reducing smog-forming NO_x emissions by 90% versus diesel, and carbon emissions by up to 300%. No other alternative-fuel technology comes close. RNG shares the same chemical composition as conventional natural gas, allowing it to seamlessly drop into the existing natural gas distribution infrastructure and into all natural-gas vehicles.

HOW IS RNG MADE?

When organic matter decomposes, it naturally releases methane, a highly potent greenhouse gas with a global warming impact 28 times greater than that of carbon dioxide.¹ Natural gas is comprised of 97% methane, so by capturing waste methane from sources like landfills, dairy farms, and wastewater facilities, we can then process and purify it into RNG, an eco-friendly alternative to traditional transportation fossil fuels.

According to the California Air Resources Board (CARB), RNG surpasses even fully renewable electric options derived from solar and wind, thanks to its ability to prevent fugitive methane emissions from escaping into the atmosphere. By significantly reducing greenhouse-gas emissions, RNG is a powerful solution that combats climate change.



OTHER BENEFITS OF RNG²

Stable, domestic energy source. RNG can be produced and stored locally, decreasing the potential for supply disruptions due to geopolitical events, climate change, or price fluctuations in global markets.

Sustainable waste management. RNG converts waste into a usable product and diverts organic waste from landfills.

Improved air quality. Covering manure lagoons at dairy farms prevents the release of harmful pollutants into the air that affect human health and our environment.

Decarbonization of natural gas infrastructure. RNG drops into the existing natural-gas infrastructure, replacing fossil natural gas and reducing the need for fracking and extraction.

¹IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. In Press

² [Alternative Fuels Data Center: Natural Gas Benefits \(energy.gov\)](#)

Our Products & Services

At Clean Energy, we're committed to providing our on-road vehicle customers with 100% RNG by 2025.

CLEAN ENERGY RNG

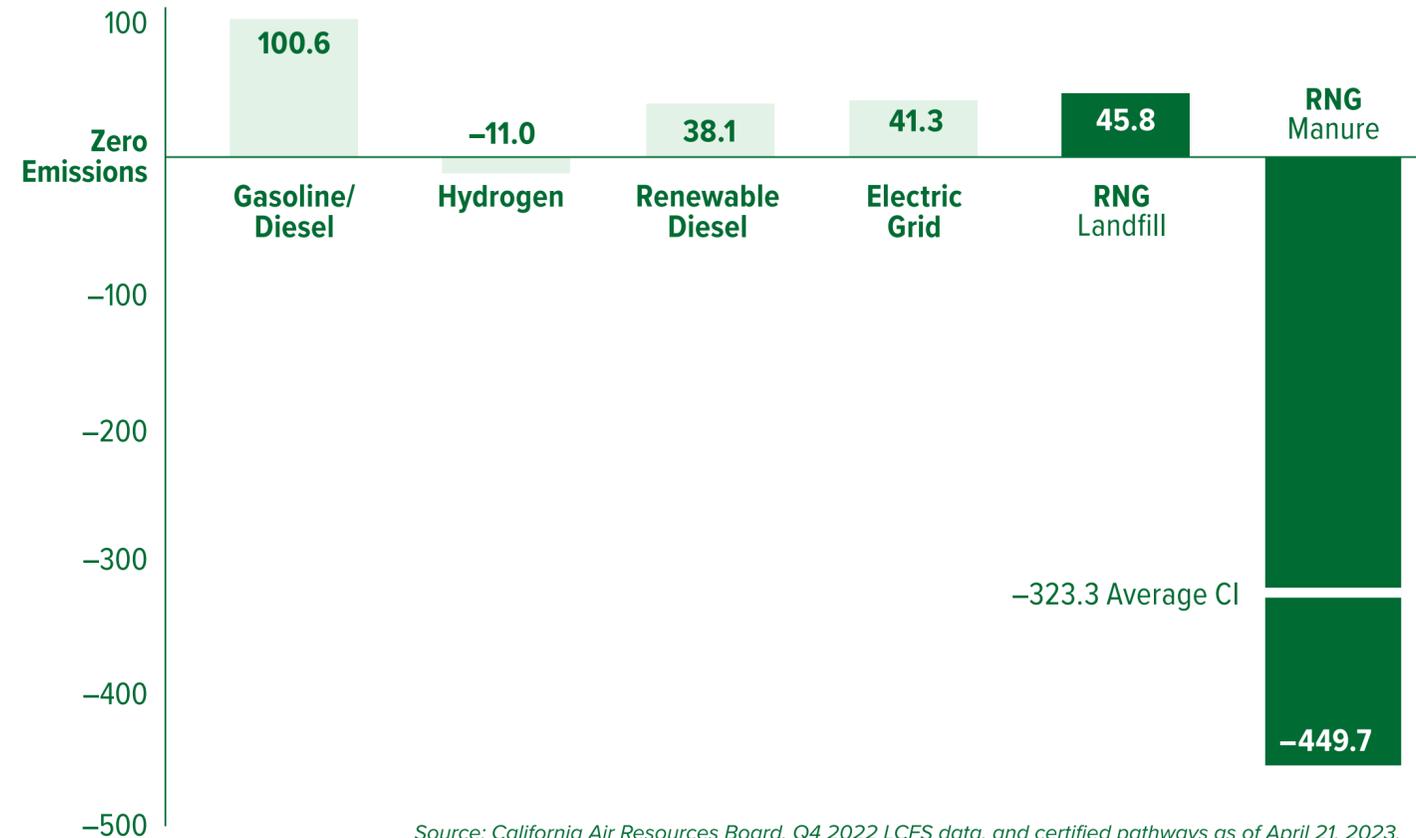
We're also continuing to source more negative-CI fuels to bring the carbon intensity of our overall fuel portfolio as low as possible.

In 2022, Clean Energy's weighted-average portfolio carbon intensity for RNG was -77.21 gCO₂e/MJ.

We achieved our goal of having our aggregate fuel carbon-intensity at or below zero,³ four years before our initial target date of 2025. The net effect of this is a benefit to the environment and a reduction of greenhouse gases that will help us get closer to our commitment to become climate neutral. Decreasing the carbon intensity of our RNG is more imperative than ever, considering that methane levels in the atmosphere are now more than two and a half times their pre-industrial level.⁴

Today, only fuels delivered in California, Washington, and Oregon have a calculated CI, based on the Low Carbon Fuel Standard and Clean Fuels Programs of these respective states.

CARBON INTENSITY [GCO₂e/MJ]



Source: California Air Resources Board, Q4 2022 LCFS data, and certified pathways as of April 21, 2023.

WHAT IS CARBON INTENSITY?

Carbon intensity, or CI value, is a calculation of the total greenhouse-gas emissions generated throughout a fuel's entire lifecycle, from fuel production, refinement, and transportation, to combustion in an engine. By considering these lifecycle emissions, we can understand the fuel's environmental impact from "well-to-wheel." A fuel with a higher carbon-intensity value generates more carbon dioxide-equivalent emissions over its lifetime.

RNG from dairy manure, on the other hand, has deeply negative carbon-intensity values under California's LCFS, due to the capture of methane emissions from uncovered lagoons.

A negative carbon-intensity rating means that the fuel avoids more carbon dioxide-equivalent emissions during its lifecycle than it generates.

³ This weighted-average portfolio carbon intensity only accounts for fuel dispensed to on-road customers with a verified carbon intensity value under the California Low Carbon Fuel Standard.

⁴ [Greenhouse gases continued to increase rapidly in 2022 | National Oceanic and Atmospheric Administration \(noaa.gov\)](https://www.noaa.gov/news/greenhouse-gases-continued-to-increase-rapidly-in-2022/)

RNG PRODUCTION

Clean Energy has traditionally procured our fuel supply through contracts with third-party suppliers, but we have been working towards establishing our own projects as producers of RNG. Clean Energy has entered partnerships with bp and TotalEnergies to take advantage of these opportunities.

Our partnership with bp started in 2020 and has seen \$300 million committed for RNG project development. We are currently constructing five dairy-RNG projects with bp, which will be completed by the end of 2023 and are estimated to produce up to 11.2 million GGEs of RNG annually.

Since 2021, our partnership with TotalEnergies has committed up to \$400 million to produce negative-carbon-intensity RNG and build supporting infrastructure for the distribution value chain. The first joint venture dairy project at Del Rio Dairy in Friona, Texas is expected to begin flowing RNG in 2023.

RNG reduces GHG emissions and delivers immediate air-pollution benefits, offering relief to our most populated transit corridors.

DEL RIO DAIRY

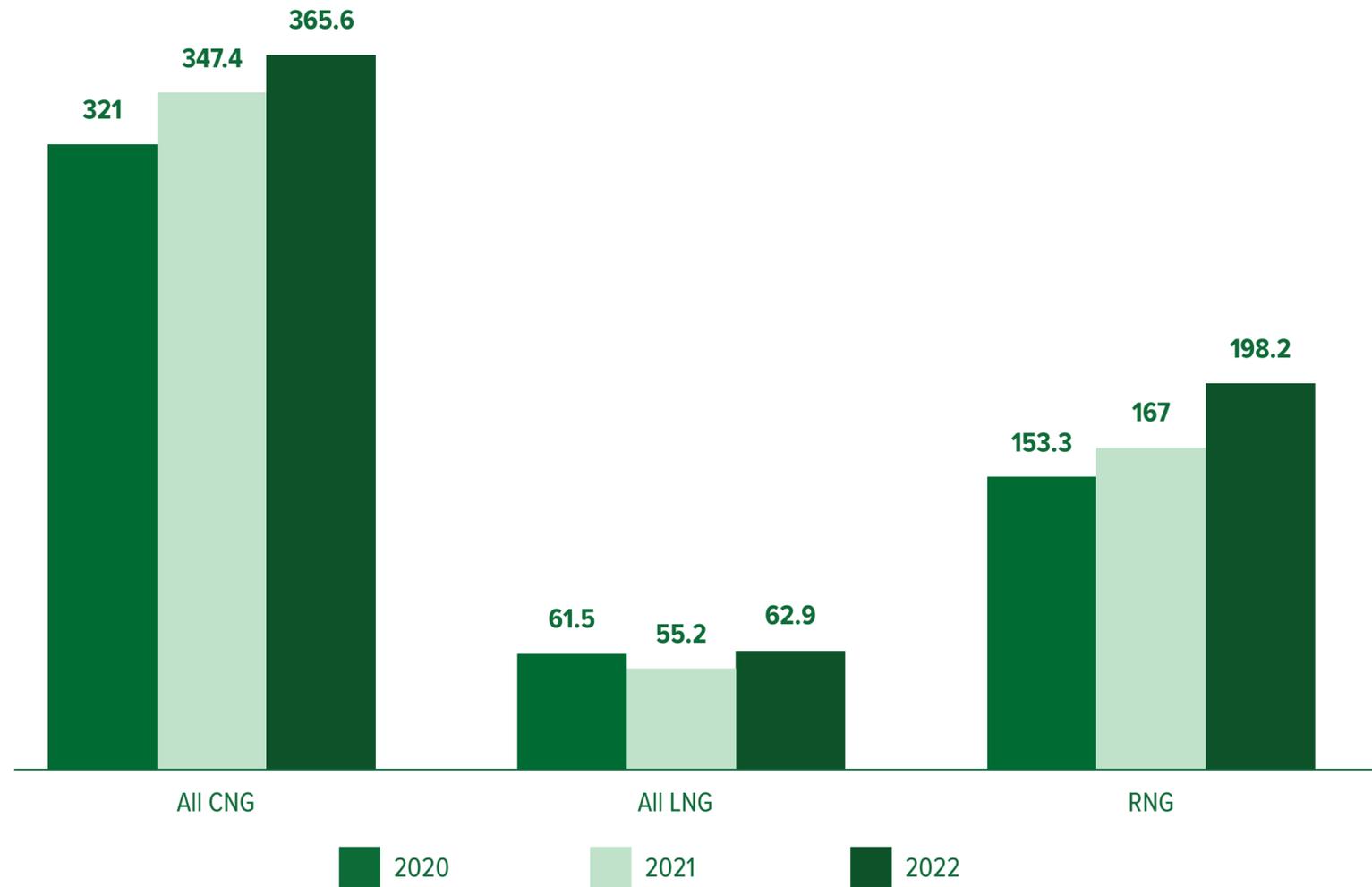
Anticipated to be completed in 2023, the Del Rio Dairy digester project will begin operations and efficiently harness methane-emitting waste from over 7,500 milking cows. Through this process, we will capture the resulting biogas and generate an estimated annual output of 1.1 million gallons of RNG.

The Del Rio Dairy, a family-owned and -operated establishment, will serve as a source of RNG fuel that enters Clean Energy's extensive network of RNG stations nationwide. This partnership not only brings us closer to our goal of supplying 100% RNG to our on-road vehicle customers by 2025 but also plays a significant role in continuously reducing the carbon intensity of our RNG portfolio.



GALLONS OF FUEL SOLD

(in millions, GGE)



CNG refers to all compressed natural gas, whether of conventional or renewable origin.
 LNG refers to all liquefied natural gas, whether of conventional or renewable origin.
 RNG refers to all renewable natural gas sold, both in compressed and liquefied forms.

FORMS OF NATURAL GAS

Compressed Natural Gas (CNG)

CNG is a fuel option derived from RNG or conventional natural gas, compressed and dispensed in its gaseous form. Our company specializes in providing RNG as CNG for vehicles, delivering it directly to fueling stations where it can be easily accessed and used. We offer flexible sales options, including contracts with customers and convenient public-access options at our fuel stations.

Liquefied Natural Gas (LNG)

LNG is a fuel choice derived from RNG or conventional natural gas that goes through a process to cool the gas to -260°F at our liquefaction facilities.

Clean Energy has two LNG facilities: one in Boron, California, and our Pickens Plant near Houston, Texas. These facilities represent a production capacity of 56.0 million gallons and 28.0 million gallons of LNG per year. In 2022, we produced 94.8% of our LNG supply within our plants, sourcing the remaining balance from third-party suppliers.

Our fleet of 74 tanker trailers transport LNG safely and efficiently to our extensive network of fueling stations, where it is stored and later dispensed in its liquid form, ready to power vehicles or non-vehicle applications, such as rocket propulsion, oil fields, utilities, industrial, marine, and rail usage.



RNG DISTRIBUTION

Environmental Credits

To ensure that our RNG production sources are seamlessly connected to dispensing stations and end customers, our renewables distribution team applies for and manages certified alternative fuel pathways with government programs such as the California Low Carbon Fuel Standard (LCFS), the Oregon Clean Fuels Program (CFP), the Washington Clean Fuel Standard (CFS), and the federal US Renewable Fuel Standard (RFS2). These pathways allow for chain of custody models with mixing, which means that the environmental and economic benefits of RNG as a vehicle fuel can be given to Clean Energy and/or our customers. As our RNG volume grows, so does the amount of these environmental credits, making it a win-win situation and solution for everyone involved.



In 2022, Clean Energy successfully certified 19 of these low-carbon fuel pathways for landfill and dairy projects, and initiated fuel pathway work on more than 29 projects.

Station Construction and O&M Services

With a track record dating back to 2008, we have successfully built over 450 stations, proving ourselves as experts in the industry. Whether acting as the general contractor or supervising third-party contractors, we consistently uphold the highest standards throughout the construction process. In 2022, we constructed 22 new station projects.

We perform or offer O&M (operation and maintenance) services at Clean Energy–owned and customer-owned fueling stations. Our maintenance program is backed by more than 200 company-employed service technicians and support personnel who work around the clock to keep our stations running smoothly. We also have an in-house 24/7 remote monitoring center, technician-training center, and computerized maintenance-management system to ensure that we are always on top of any issues that may arise. We charge a fixed fee, or a fee based on the volume of fuel dispensed at the station for our maintenance services. Our O&M services branch also includes inventory warehouses throughout the United States and Canada.

HYDROGEN FUELING WITH Foothill TRANSIT

In 2021 Foothill Transit awarded Clean Energy a contract to design, construct, and maintain a hydrogen station and supply liquid-hydrogen fuel for Foothill Transit, an environmentally friendly bus service in Southern California that averages 14 million rides a year to over 12 million customers. This contract further shows Clean Energy’s ability to move to alternative fuels as our customers expand to other technologies, as RNG is 33.3% of the hydrogen feedstock for Foothill Transit buses. This hydrogen station is Clean Energy’s fourth, adding to the company’s long history of evaluating and exploring hydrogen technology.

Foothill Transit has been a 20-year partner with Clean Energy and is currently running over 300 of their buses with renewable natural gas (RNG) at two stations built by Clean Energy. This hydrogen station—their first—is in Pomona, CA and will begin operation in June 2023 by fueling 33 hydrogen-fuel-cell electric buses, with more expected in the future.

GRANT PROGRAMS

We go above and beyond to support our customers by actively pursuing and securing grant programs at the federal, state, and local levels in the regions where we operate. These programs provide funding opportunities for various purposes, including vehicle purchases, fueling station construction and upgrades, technological advancements, and RNG projects. With an impressive track record, our department boasts a remarkable 90% success rate in securing grants. In 2022, Clean Energy requested an 11-year high of \$75.8 million in grant funding and has been awarded \$566 million in funding to date. By choosing to partner with us, our customers gain an advantage in accessing substantial financial resources to fuel their growth and sustainability initiatives.



Corporate Governance

Clean Energy's [Board of Directors](#) upholds ethical corporate governance principles to serve and provide independent oversight of, but not limited to, our financial, operational, and economic issues and policies. The Board is dedicated to transparency and integrity when updating guidelines for the best interests of Clean Energy or as required by applicable laws and regulations.

Our Board adopts an annual [Conflict Minerals Policy](#) and a [Human Rights Policy](#), highlighting our commitment to minimize the adverse effect our infrastructure or operations may have on people and communities.

Clean Energy and all our business units are expected to be ethical, respectful, and strong community partners, forming positive relationships whenever we do business as emerging sustainability leaders in the renewable-energy space. Moving forward, we are working internally to incorporate and integrate ESG strategies into our overall business strategy, risk management, and governance structure.

Clean Energy maintains open dialogues with our shareholders on governance, financial, and environmental topics provided in our Securities and Exchange Commission filings, to include our Annual Report on Form 10-K and our Proxy Statement, and this and future Corporate Sustainability Reports, which can all be found on our [website](#).



STEPHEN SCULLY
Chairman of the Board



ANDREW J. LITTLEFAIR
President and CEO



LIZABETH ARDISANA



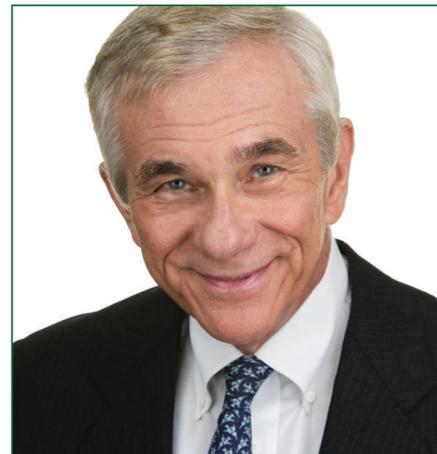
KARINE BOISSY-ROUSSEAU



JAMES C. MILLER III



LORRAINE PASKETT



KENNETH M. SOCHA



VINCENT C. TAORMINA



PARKER A. WEIL



LAURENT WOLFFSHEIM

Our Sustainability Strategy

At the heart of our environmental sustainability strategy is a two-pronged approach: to decarbonize transportation by capturing waste-methane emissions.

In the US, livestock manure and landfills account for 23% of methane emissions, and transportation industry is responsible for 35% of all greenhouse gases. RNG elegantly solves both.

Our vision is to deliver renewable transportation fuels today, for a cleaner, safer, more-equitable tomorrow.

In 2022, we continued to focus on strong partnerships with our stakeholders. Together, we're making progress toward our goals and improving our operations to align with our sustainability initiatives. We understand that our environmental impact goes beyond just our products, which is why we're working to foster a culture of sustainability in everything we do. Each of the three pillars of our sustainability strategy incorporates elements of our own business operations, so that our progress in sustainability is aligned both inside and outside of our organization.

MATERIALITY

Clean Energy conducted a materiality assessment in 2020 with Business for Social Responsibility (BSR) to decide which sustainability issues were most material (important) to the company and its stakeholders. A sustainability-materiality assessment considers a wide range of environmental, social, governance, and economic issues important to Clean Energy's business, employees, and external stakeholders. Our materiality assessment is a critical input to Clean Energy's sustainability strategy because it ensures that sustainability issues are identified, prioritized, managed, and communicated appropriately.

Clean Energy's materiality matrix highlights key nonfinancial ESG risks and opportunities that are most important to the company, based on the Global Reporting Initiative's [definition of materiality](#). The materiality assessment is a critical part of Clean Energy's sustainability strategy and goals. Materiality assessment is key in showing which environmental, social, and governance issues are the most relevant to our business to aid in developing our sustainability strategy and goals.

Our vision for progress centers around our three materiality pillars: fueling the transition to renewable energy in transportation, building the workforce for the future, and advancing smart policies for systemic transition to renewable fuels.

The materiality assessment from 2020 continues to be relevant to our 2022 operations, and therefore is still applicable to this report. We plan to conduct further iterations of this materiality assessment in future years to continue informing our sustainability strategy. For more information on the 2020 materiality assessment, please refer to our [2020 Sustainability Report](#).

MATERIALITY MATRIX: PRIORITIES

ENVIRONMENT



Greenhouse Gas (GHG) and Air Emissions

Environmental and Social Impacts of Natural Gas Extraction, Processing, and Transport

Enabling Renewable Energy for Transportation

Climate-Transition Risk

Water Stewardship

Operational Energy Efficiency

Supplier Social and Environmental Performance

Biodiversity and Land Use

Waste

SOCIAL



Employee Recruitment, Retention, and Engagement

Disproportionate Air-Quality Impacts in Low-Income Communities

Employee and Contractor Safety

Diversity, Equity, and Inclusion

Human Rights

Labor Standards and Employment Conditions

GOVERNANCE



Policy Advocacy and Lobbying

Internal Governance Structures

Disaster Preparedness and Response

Infrastructure Safety and Security

Business Ethics, Executive Compensation, and Incentives

Policy Advocacy

UNITED NATIONS SUSTAINABILITY GOALS

Our materiality pillars were inspired by and partly based on the [United Nations' Sustainable Development Goals \("SDGs"\)](#). We understand our obligation to play a part in promoting sustainability and following the principles of sustainable development.



FUELING THE TRANSITION TO RENEWABLE ENERGY IN TRANSPORTATION



Innovation

Our Contributions: Leading the transformation of the transportation sector to decarbonize our energy infrastructure and ensure access to reliable and sustainable renewable energy for all.

Responsible Production

Our Contributions: Resilient fuel-dispensing infrastructure and RNG project development that uses waste or manure for sustainable waste management while decreasing greenhouse-gas emissions.

Stewardship

Our Contributions: Reducing our own and our customers' carbon footprints by using RNG and decreasing our reliance on fossil fuels and natural resources that result in further environmental damage.

BUILDING THE WORKFORCE OF THE FUTURE



Thriving Workforce

Our Contributions: We strive to build the workforce for the future of renewable energy while supporting a trained and diverse staff of employees.

Ensure Inclusivity

Our Contributions: We acknowledge the lack of diversity in the energy sector and strive to be part of the solution by working with external stakeholders to ensure we are recruiting diverse top talent.

Safety

Our Contributions: The safety of our employees, contractors, and customers is our top priority so we strive to keep a zero-incident workplace by keeping our staff trained with up-to-date methods or technologies.

SMART POLICIES FOR SYSTEM TRANSITION TO RENEWABLE FUELS



Systemic Change

Our Contributions: Investing in the green-energy transition and providing lasting benefits to society by working to ensure the adoption of state and federal policies that accelerate the transition to low-carbon fuels.

Collaboration

Our Contributions: We are committed to contributing to sustainable economic development by working with local suppliers and dairy farmers when we can in our operations.

Community

Our Contributions: We are also committed to expanding our businesses while considering new risks associated with climate change and not placing undue burden on small businesses or underrepresented communities.

2022 HIGHLIGHTS



2022 Highlights



Celebrated 25 years as a business



15

Years publicly traded on Nasdaq



-77.2g
CO₂e/MJ

Carbon intensity of our RNG (weighted-average portfolio)



924,897
MT of CO₂e

Total carbon reduction of all Clean Energy customers



40+

New RNG sources



19

Low-carbon fuel pathways certified



22

New stations built



198.2M

GGE of RNG sold



75.8M

Grant funding requested



24%

Women in workforce



39.4%

People of color in workforce



80.7%

Scope 1 reduction at our Boron plant

Customer Impacts

When we actively reduce greenhouse-gas emissions through our RNG solution, our fueling customers share in that positive impact.

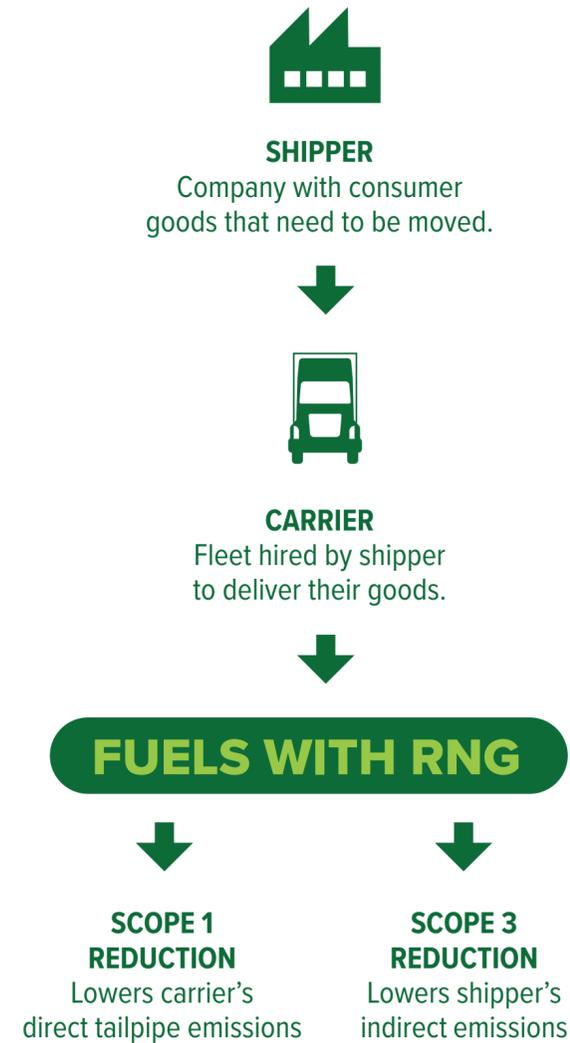
By using RNG instead of fossil fuels, Clean Energy customers can reduce their carbon footprint and meet their sustainability goals.

Under the GHG Protocol, the greenhouse gas inventory reduction of RNG can either appear as Scope 1 or Scope 3. Customers who fuel their own vehicle fleets with RNG reduce their Scope 1 emissions, because these emissions are tied directly to the company's operations. Companies that hire third-party RNG fleets can report lower Scope 3 emissions, which are indirect emissions that occur because of a company's activities.

In 2022, Clean Energy expanded fueling capabilities to service a variety of new and current customers in the transportation sector, allowing them to reduce local air pollutants and greenhouse-gas emissions.

Our RNG customers include some of the largest heavy-duty fleets in the world such as Amazon, United Parcel Service (UPS), Republic Services, and Los Angeles County Metropolitan Transportation Authority (LA Metro), with demand growing each day.

A MUTUAL BENEFIT TO RNG



2022 Success Stories



LOGISTICS AND DELIVERY FLEETS

Clean Energy, in partnership with Union Energy Solutions Limited Partnership, provides CNG to UPS Canada delivery-fleet vehicles at its station in London, Ontario. The station is expected to supply 2 million liters of CNG in a multi-year agreement, reducing greenhouse-gas emissions by approximately 700 metric tons compared to fossil diesel. UPS Canada has already converted 25 of their delivery vans to run on CNG, and with this partnership, they'll be able to expand their clean natural-gas fleet in Canada even further.



PUBLIC TRANSIT FLEETS

We renewed or started contacts with multiple public transit agencies and municipalities in California to supply more than 150 million gallons of RNG in 2022. The RNG will be used to power and fuel transit and municipal buses, maintenance vehicles, and refuse trucks for various agencies, including: LA County Metro, Los Angeles County Sanitation Districts, San Diego's North County Transit District (NCTD), Santa Monica, Morongo Basin Transit Authority (MBTA), and Gold Coast Transit District. We expect to continue to meet the growing demand for RNG as an alternative sustainable-transportation fuel for our customers in the public sector.



TRUCKING FLEETS

Trucking fleets are especially affected by legislative calls to decarbonize their fleets and to do their part to reduce local air pollution. California Transportation Dynamics (CTD) in Commerce, CA, a leading trucking company for 25 years, signed a fueling agreement with Clean Energy for an approximate 1.2 million gallons of RNG (about twice the volume of an Olympic-size swimming pool) for the length of the contract. CTD is migrating forty diesel trucks to units powered by RNG.

NGL Logistics in Gardena, CA added six new natural-gas trucks to its fleet that will replace diesel trucks and will fuel with an expected 260,000 gallons of RNG. "This is our first time deploying RNG trucks and they are running extremely well for our operations," said J.J. Lee, president of NGL Logistics. "NGL Logistics is proud that we can help reduce carbon emissions and improve air quality. We understand that this is a necessary environmental change and with our RNG-powered trucks we are closer to achieving that goal for our industry."



MARITIME

Clean Energy supplied over 300,000 gallons of LNG for the first bunkering of Pasha Hawaii's new container ship, MV George III, on the West Coast. MV George III is the first of three LNG-powered ships that Pasha is putting into service, with an expected consumption of 105 million gallons of LNG fuel over the next five years. LNG-powered ships achieve 99.9 percent reduction in diesel particulate matter and sulfur oxide emissions, 90 percent less nitrogen oxides, and a 25 percent reduction in carbon dioxide compared to ships running on traditional fuels. The move to add ships that run on LNG is a significant action to improve air quality around the Ports of Long Beach and Los Angeles.



GROVEPORT STATION OPENING

The opening of our Groveport, Ohio, station marks the first of 19 stations to be constructed in an agreement between Clean Energy and Amazon. The public station provides one of the largest fleets in North America with guaranteed access to low-carbon RNG. “Large fleets fueling with RNG have the ability to realize immediate and significant carbon reduction, especially in the heavy-duty truck sector which could be many years away from meaningful electrification,” says our president and CEO, Andrew J. Littlefair. “The opening of our station in Ohio is exciting because it’s the first of many more to come throughout the US and will help efforts to reduce greenhouse-gas emissions and reduce climate change.”



REFUSE

Clean Energy partnered with the Centre County Recycling and Refuse Authority (CCRRA) in Pennsylvania to provide RNG to support a shift to cleaner, low-carbon fuels from organic waste. Our CCRRA station is one of the first on the East Coast to transition to RNG and will supply fuel to CCRRA vehicles and other fleets, with an estimated 500,000 gallons of RNG expected to be dispensed annually. CCRRA has also collaborated with WM affiliates to provide RNG as fuel for eight new CNG tractor-trailer units hauling over 4,300 loads of waste annually. This will support WM in meeting its goals of fleet conversion from diesel to RNG. The move to RNG is part of CCRRA’s efforts to promote a circular economy, which they believe is economically and environmentally beneficial.



ENVIRONMENT

Fueling the transition to renewable energy in transportation





Environmental Goals

Clean Energy is committed to becoming climate neutral by 2035.

We are acutely aware of the pressing issue of climate change and the profound impact it has on our planet and all its inhabitants. That is why we have pledged to become climate neutral by 2035, and we've identified seven key targets to help us reach this goal.

FUELING THE TRANSITION TO RENEWABLE ENERGY IN TRANSPORTATION

Target ⁵	Progress	2022 Update
100% of fuel we deliver to on-road vehicle customers will be RNG by 2025 .	+2%	In 2022, approximately 80% of the fuel we delivered to on-road vehicle customers was RNG, an increase from 78% in 2021. This is an ambitious goal which we are striving to accomplish in part through increased investments into RNG procurement and development.
In aggregate, the carbon intensity (CI) of all on-road vehicle fuel we deliver to customers will be zero by 2025 .		In 2022, we continued to deliver RNG with a weighted-average portfolio carbon-intensity of -77.21 g CO ₂ e/MJ. We met and surpassed our goal in 2021.
Reduce Clean Energy's carbon footprint ⁶ by 25% by 2025 , over a 2017 baseline.	-23%	Our total Scope 1, 2, and 3 emissions in 2022 were 3% lower than 2021 levels, and 23% lower than 2017 levels. We are on track to achieve the 25% reduction by 2025 and plan to include additional near-term emissions targets soon.
Reduce Scope 3 emissions by 25% by 2025 over a 2017 baseline.	-25%	In 2022, we met our target; Clean Energy's Scope 3 emissions were 25% lower than the reported Scope 3 emissions for 2017. We achieved year-over-year emissions reductions of 1% for our Scope 3 emissions from 2021 to 2022.
Continue to procure our replacement maintenance fleet with natural-gas or other alternative-fuel vehicles as the market allows. ⁷		In 2022, we continued to procure our replacement fleet with vans and trucks equipped with natural-gas or other alternative-fuel vehicles, increasing our fleet's usage of RNG.
Institute Leak Detection and Repair (LDAR) Program at 100% of Clean Energy-owned stations ⁸ by 2025 .		By December 31, 2022, 88 Clean Energy-owned stations had LDAR programs in place, an increase from 78 in 2021. This will allow us to continue to better track station fugitive emissions going forward.
Up to 75% of our third-party tanker fleets in California will run on CNG by 2025. ⁹		In 2022, 84% of our third-party tanker fleets in California used CNG.

⁵ In 2022, we removed the target, "Include a fugitive-emissions reduction goal for Scope 1 and Scope 2 emissions by 2022", due to continuing internal research to establish a concrete target.

⁶ Our carbon footprint refers to the collective sum of Scope 1, 2, and 3 emissions.

⁷ In 2022, we updated our target from, "Procure natural-gas or other alternative-fuel vehicles for all Clean Energy maintenance fleets vehicles by 2022", due to the changing vehicle market that effects our ability to procure replacement vehicles.

⁸ Referring to stations owned by Clean Energy only, as these indicate where we have feasible ability to institute these programs.

⁹ In 2022, we updated our target from, "Up to 75% of our third-party tanker fleets will run on CNG by 2025", due to us not having complete access to data to third-party tanker fleets that are outside of California.

Environmental Benefits of Dairy RNG

THE CLIMATE IMPACT OF MANURE

In the United States, dairies are one of the largest emitters of methane, with manure management from livestock responsible for 8% of all US methane emissions.¹⁰ According to the [US Methane Emissions Reduction Action Plan](#), adoption of alternative manure-management systems, such as digesters, is a key tactic to help the United States achieve its methane-reduction goals.¹¹ In the year since the major Global Methane Pledge, in which signatory countries including the United States pledged to reduce methane emissions by 30% between 2020 and 2030, pathways and policies to drive methane reductions in key methane-emitting sectors has gathered momentum.

California has already gone above and beyond to establish methane-emission targets through Senate Bill (SB) 1383, including a reduction target for the dairy and livestock sector of 40% below 2013 levels by 2030.¹² RNG project development at dairy farms puts methane-mitigation plans into action to reduce greenhouse gases and criteria pollutants and improve air quality.

HOW RNG BENEFITS FARMS

Enhance sustainable manure-management practices through anaerobic digestion, the breakdown of manure in the absence of oxygen, which creates biogas for RNG.

Promote circularity with waste; materials separated from manure in the RNG process result in nutrient-rich digestate that can be used for fertilizers, along with fiber-rich livestock bedding.

Generate an added revenue stream for farmers and local, oftentimes-rural communities.

Do not compete with food, so crops are prioritized for consumption and excess fertilizer is not needed to grow crops for fuel.

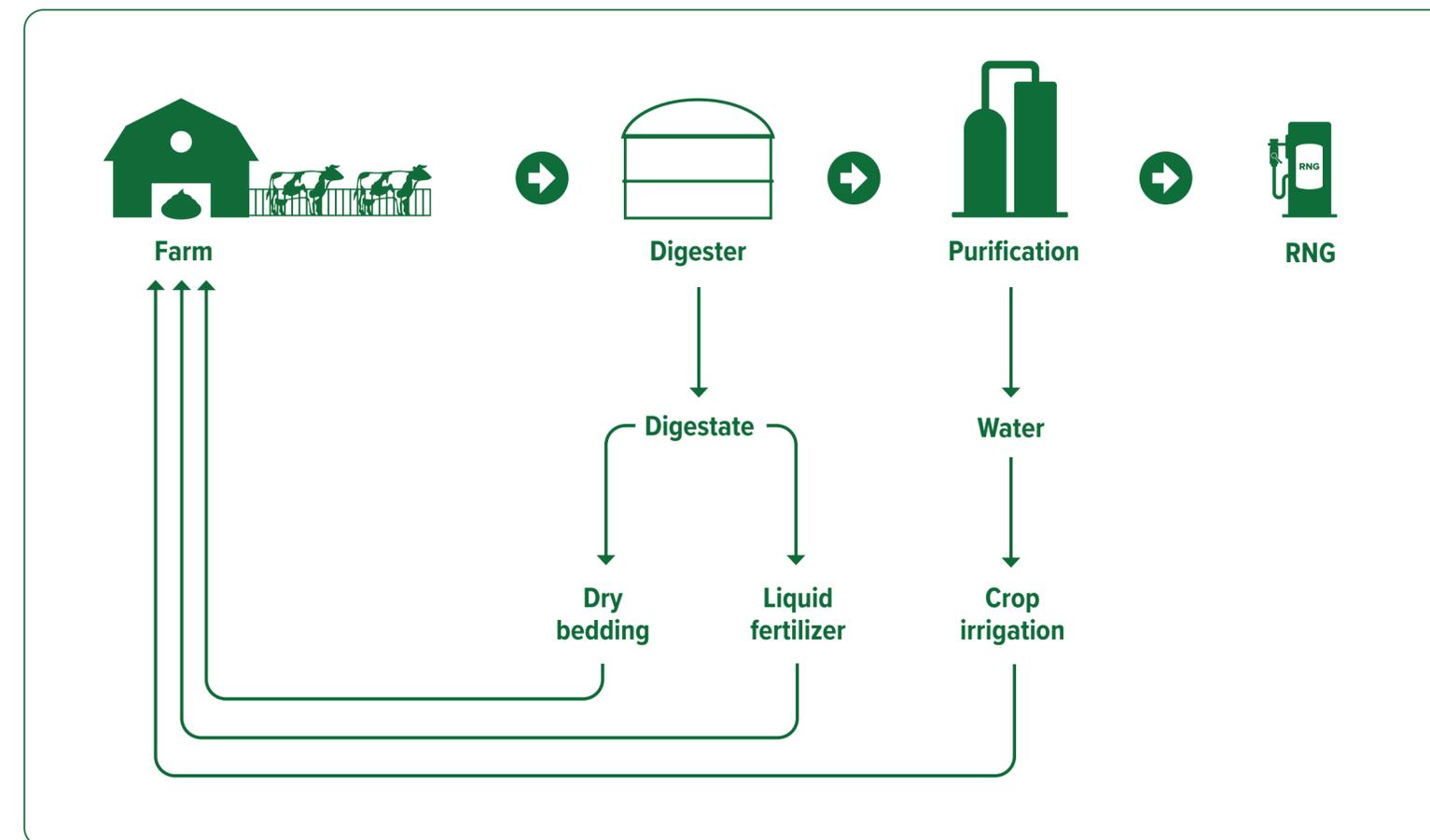
Do not require deforestation of land.

Reduce risk of spillage or surface-water contamination from unmanaged or uncovered manure lagoons in areas at risk of storms or floods.

¹⁰ [Inventory of U.S. Greenhouse Gas Emissions and Sinks | US EPA](#)

¹¹ [U.S. Methane Emissions Reduction Action Plan \(whitehouse.gov\)](#)

¹² [California Legislative Information: Senate Bill No. 1383, Chapter 395](#)



CIRCULARITY OF DAIRY GAS

Anaerobic Digester Gas (ADG) is produced inside an airtight tank or covered manure lagoon used to breakdown organic matter such as dairy manure waste, which is why it's also called dairy gas. Raw ADG prior to pipeline injection is processed and

refined to meet compliance by local utilities. The composition of raw ADG includes methane, carbon dioxide, nitrogen, hydrogen sulfide, and oxygen, along with water. Some of these elements can be repurposed after the raw gas has gone through the purification process.

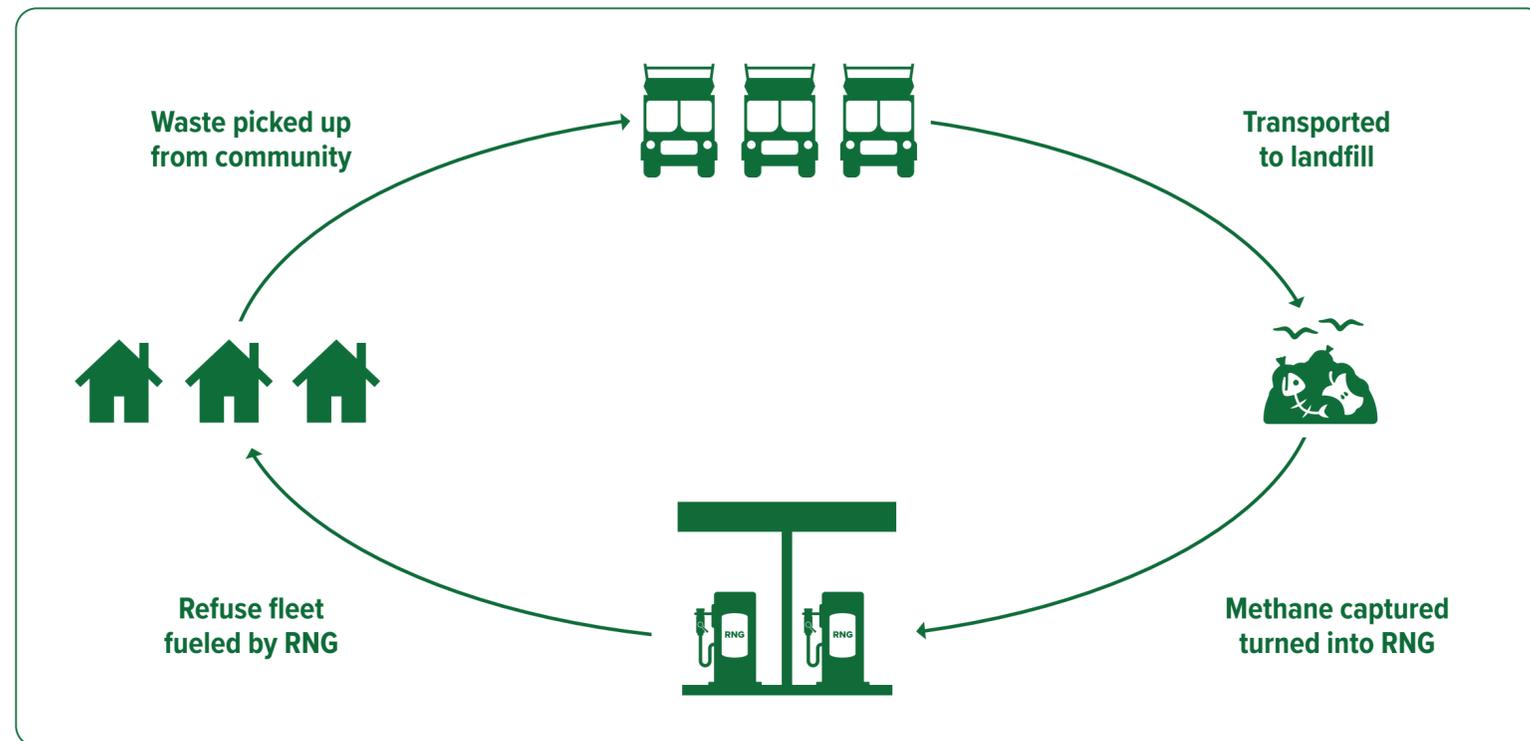
Environmental Benefits of Landfill RNG

CIRCULARITY OF LANDFILL GAS

In addition to RNG from dairy manure, a key source of the RNG that Clean Energy supplies is from landfill gas. Landfills are a considerable source of methane emissions, accounting for 15% of the total methane emissions in the United States in 2021.¹³ The Methane Emissions Reduction Plan updated in 2022 from 2021 to include a national goal of 70% methane-emissions capture for all landfills. Methane is produced in landfills through a natural decay process when food scraps and other organic waste decompose in a low-oxygen environment.

By converting landfill gas into RNG, we are not only reducing methane emissions at the source, but also supplying a sustainable fuel choice for our refuse customers, whose trucks are fueled by the same waste they collect.

This innovative approach to waste management and fuel production supports a more circular economy, where waste products are repurposed and used to create renewable energy.



¹³ Basic Information about Landfill Gas - EPA

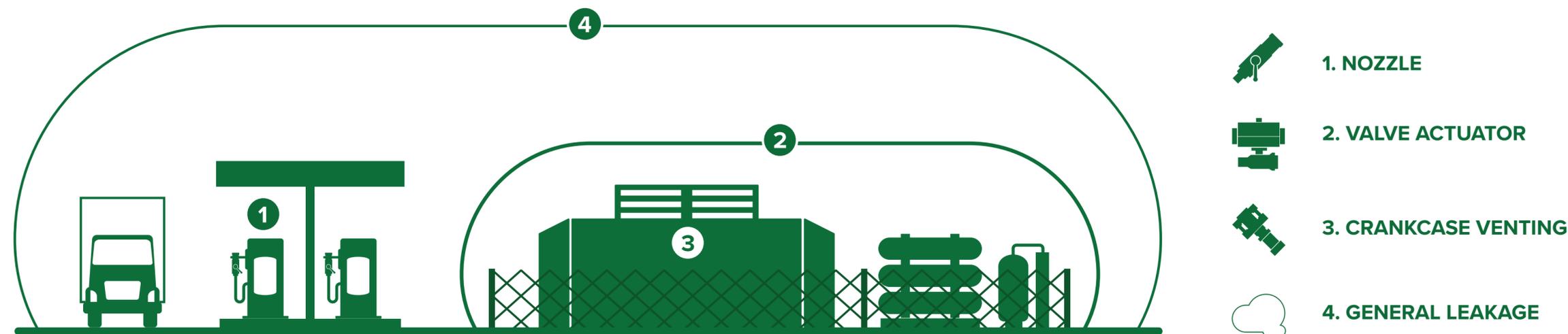


Addressing Methane Leaks

Clean Energy acknowledges the detrimental environmental consequences of methane, the main constituent of natural gas, escaping into the atmosphere from various applications, since it contributes to climate change. These leaks can occur during production, transportation, distribution, or storage stages when containment practices fall short. Besides increasing greenhouse-gas emissions, these leaks squander valuable fuel that could have been used and may also pose safety hazards if left unaddressed. Therefore, it is crucial from safety, environmental, and economic standpoints to promptly address and rectify leaks upon detection. This involves finding the root cause and implementing corrective measures to prevent their recurrence.

ENVIRONMENTAL AND SOCIAL IMPACTS OF NATURAL-GAS EXTRACTION, PROCESSING, AND TRANSPORT

Clean Energy is committed to transforming the transportation industry and meeting our target of being able to supply 100% RNG for all our on-road vehicle customers by 2025. This ambitious goal allows us to significantly reduce the environmental impact associated with conventional natural-gas development and avoid the unintended methane leaks associated with drilling and fracking. Moreover, it presents a tremendous opportunity for economic growth and job creation within the communities where RNG projects are planned to be developed.



LEAK DETECTION AND REPAIR

To ensure the utmost safety and environmental responsibility, Clean Energy has implemented a Leak Detection and Repair (LDAR) Program. This program is designed to effectively manage, reduce, and control fugitive methane emissions resulting from gas leakage. We are dedicated to achieving 100% implementation of this program at all our stations by the year 2025.

By prioritizing the LDAR Program, we are taking decisive steps to find and rectify methane leaks promptly. Our goal is to not only exceed industry standards but set up best practices in the management of fugitive methane emissions, while tentatively setting reduction targets. Through this comprehensive approach, we are proving our commitment to safety, sustainability, and minimizing our carbon footprint. We understand the importance of continuously improving our operations to protect the environment and ensure the well-being of our communities.

FUGITIVE EMISSIONS

Clean Energy tracks fugitive emissions using systems like LDAR, mentioned above.

There are several locations where fugitive emissions at a station could occur, and Clean Energy has categorized them into four main categories: the nozzle, the actuator, the crankcase, and a catch-all for all other reported leaks. For nozzle venting, it is assumed some gas is lost due to imperfect end-user dispensing practices. Fugitive methane emissions also occur each time a compressor is used for dispensing CNG at a station. These compressors have actuators that use natural gas dispensed from the pipeline to engage the flow of CNG into a vehicle. Clean Energy is committed to switching these actuators to be pneumatically operated by air instead of natural gas to prevent these emissions. In 2021 we began requiring all new Clean Energy-owned stations to be built with compressors operated by air instead of natural gas, and we will continue to systematically transition to air actuators and compressors.

Clean Energy also seeks to reduce fugitive emissions from crankcase venting. This occurs as gas is pressurized at the station to 3600 psi from the local utility line. The crankcase is under ambient pressure and includes packing between the cylinders to prevent slippage. By replacing the packing on a quicker time scale, we can help to prevent this slippage as the packing wears down. As natural gas flows from production to dispersion, other reasons for leaks do sometimes appear. Clean Energy responds to all leaks promptly when repairs are needed at our stations.¹⁴

¹⁴ In 2022, we removed the verbiage referencing that we are in line with the EPA's voluntary 15-day repair guideline because it only applies to natural-gas manufacturing facilities. There are currently no official guidelines for when to repair leaks at natural gas fueling stations.

Operational Energy Efficiency

HYBRID ELECTRIC AND LEED-CERTIFIED CORPORATE HEADQUARTERS

Our corporate headquarters in Southern California operates in a LEED® Platinum & ENERGY STAR® certified building. Recognized by the US Green Building Council, the LEED designation is reserved for the highest performing, most sustainable structures. The building also carries the prestigious UL Verified Healthy Building mark, ensuring optimal indoor air quality for the well-being and productivity of all who step inside.



Our occupancy building is also part of the Hybrid Building Electric Collection. Our headquarters benefits from an advanced energy-storage system that slashes peak energy demand by an impressive 25% and drives down overall energy costs by up to 10%. The Hybrid Building Collection reduces power demand by 10 megawatts, enough to serve 10,000 homes during peak hours. With on-site energy-storage systems, the building aims to reduce reliance on local utilities, alleviate strain on power plants, and even supply reliable backup power during grid outages. By embracing this hybrid electric approach, we cut the need to run fossil natural-gas power plants during peak demand hours.



RENEWABLE ENERGY FOR OUR STATIONS

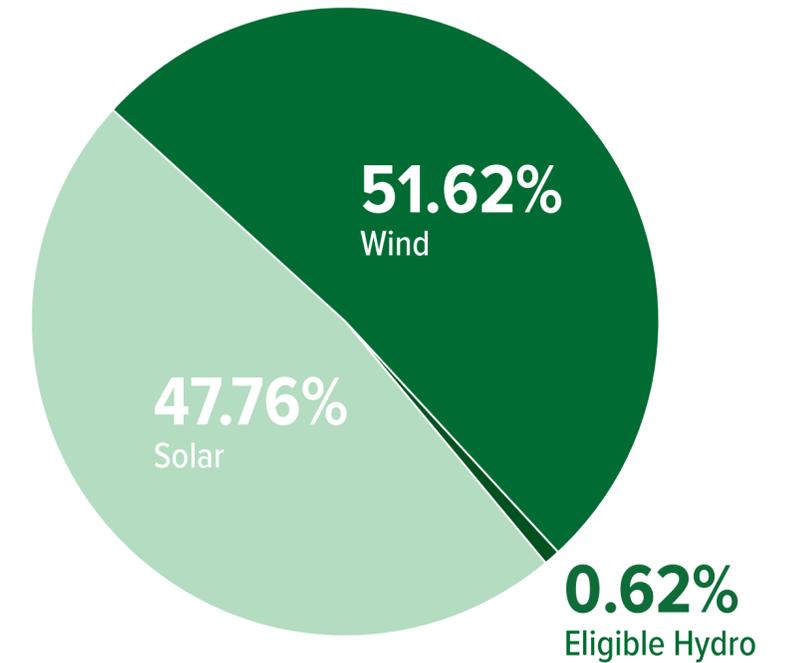
Clean Energy’s stations use electricity to compress natural gas so that it can be dispensed as a vehicle fuel. By signing up our stations to be powered by renewable energy sources like solar and wind, Clean Energy is poised to propel our stations into a new era. This strategic move will not only reduce emissions in the regions where we obtain electricity, but it will also significantly reduce our Scope 2 emissions. By reducing our reliance on fossil fuels, we actively contribute to cleaner air, a healthier environment, and a more sustainable energy infrastructure.

Community Solar Farm Project: In 2021, Clean Energy secured a subscription for solar-energy procurement from a community solar-farm project in El Mirage, California that will begin operations in 2023 and generate approximately 3.8 MWdc of renewable energy for more than 200 residential and commercial customers.

Wind Power in Texas: In 2020, we secured a partnership to obtain wind energy. This agreement will supply over 3 million kilowatt-hours of clean electricity per year. In 2022 alone, we obtained 3.1 million kilowatt-hours of wind energy for our Texas stations.

Renewable Energy Procurement in California: In 2022, Clean Energy continued to work with Community Choice Aggregation (CCA) programs in California to get 100% renewable energy for an additional 2.6-million kilowatt-hours used to power stations. In addition, we receive a mix of wind, solar, and eligible hydro for one of our stations through Desert Community Energy in Palm Springs and one of our stations in Irvine through Orange County Power Authority.

OUR RENEWABLE ENERGY PORTFOLIO



See more about our Scope 2 emissions: [Renewable Energy for Stations](#)

ENERGY-EFFICIENT FUELING

One of the benefits of CNG is the ability to take advantage of off-peak energy prices. When working with customers, we recommend fueling at night during non-peak times, which reduces our energy footprint and impact on the grid while decreasing costs for our customers. When possible, we control the amount of time our compressors start and stop during the day to minimize fueling during peak hours. Our team also consults and recommends ways for our customers to reduce electricity consumption at their fueling stations.

Environmental Stewardship

WATER

Environmental responsibility goes beyond minimizing our carbon footprint; it's also important to protect local watersheds and ensure the preservation of water quality. By using modern production processes, we can provide our customers with high-quality RNG without the water use associated with hydraulic fracking. This allows us to deliver clean energy while preserving water resources.

To ensure we protect water throughout our operations we also take part in:



Stringent Compliance: We strictly adhere to all regulatory requirements governing stormwater management, wastewater discharge, and hazardous-waste storage. By following these regulations, we guarantee that our operations have minimal impact on the environment.



Water Conservation: We understand the importance of water as a precious resource. To minimize water usage in our industrial processes, we actively implement water-recycling programs whenever possible. This not only reduces our water consumption but also promotes sustainable practices.



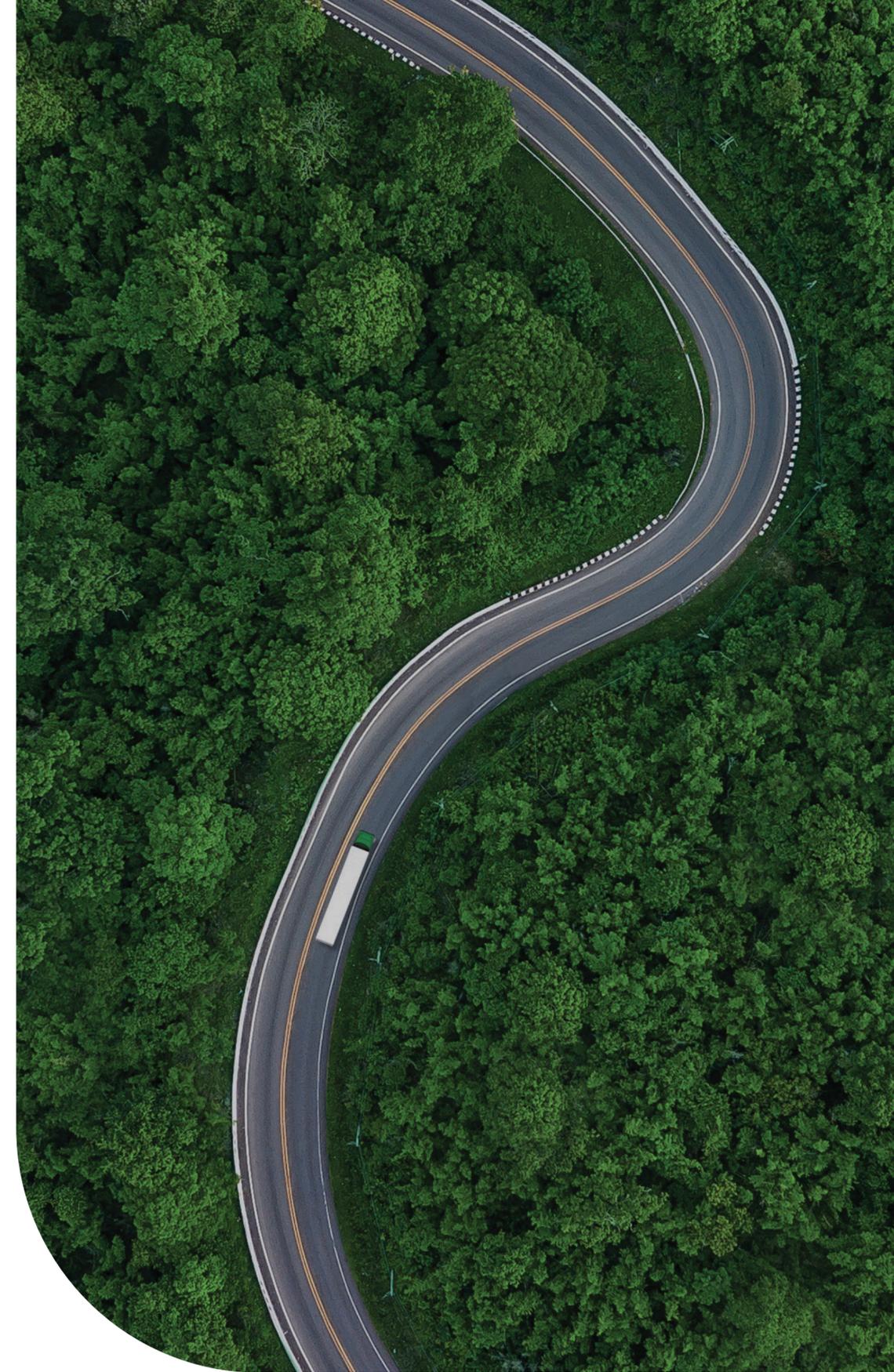
Thoughtful Facility Design: To minimize our impact on water resources, we incorporate drought-tolerant landscaping or hardscape features at all Clean Energy-owned stations. Additionally, we ensure that any water used on-site is captured and treated by requiring all vendors hired to power-wash our stations to follow strict guidelines. This includes removing all hazardous waste and disposing of it per local regulations.



Rigorous Planning and Assessment: Before setting up any new facilities, we conduct a thorough assessment of water quality during the station design phase. By collaborating closely with local regulators, we address any potential concerns related to water quality or environmental impacts. This collaborative approach guides our decision-making process, ensuring we choose locations that are environmentally sustainable.



Best-Practice Control Measures: We take a proactive approach to mitigate non-stormwater discharge. By implementing best-practice control measures suited to local topography, we minimize any potential environmental impacts. Our goal is to ensure that our operations have the least possible effect on local watersheds.



WATER RECLAMATION AT OUR BORON PLANT

At our Boron Plant, we pride ourselves on our innovative approach to water management where we use dedicated water wells managed next to Boron, separate from the local desert-region water utility. This ensures a pristine water source for our operations in Boron without compromising water availability to the local desert community watershed, and meets regulatory discharge requirements.

Starting from the wells, the water is carefully collected and stored in a tank, found right next to our Boron LNG plant. Using a water pump, the water is delivered to Boron's cooling tower after passing through a water softener.

Quality is paramount, and our water undergoes rigorous testing and treatment. We use advanced water treatment chemicals as needed to prevent mineral buildup, ensuring best performance throughout our plant. The water circulates at a rate of approximately 4000 gallons per minute, cycling through the plant's cooling water pumps.

Even after three passes around the plant, our commitment to sustainability stays unwavering. A pump returns the water next door, keeping a flow rate of approximately 30 gallons per minute. This water, having served its purpose, is then channeled into our neighbor's mining process, also playing a vital role in separate operations from Boron. Once the operations are completed, the water is carefully directed to an evaporation pond, minimizing waste and impact on the surrounding desert ecosystem.

BIODIVERSITY AND LAND USE

Clean Energy takes all necessary steps to understand the potential impacts of our operations on sensitive and protected areas. We avoid operation in or near sensitive environments and mitigate all potential impacts on biodiversity. We continue to check our land impact and will address it in the future if needed. Currently, all sites are developed in existing industrial locations.

CONFLICT MINERALS POLICY

Clean Energy has [Conflict Minerals Policy](#) where we have set guidelines and practices to ensure that specific conflict minerals that could possibly be used in our products or supply chain do not contribute to armed conflict, human rights abuses, or environmental damage in certain regions of the world. We are committed to sourcing our products responsibly and expect our suppliers to follow accordingly by doing our due diligence and having them fill out surveys about the origin of products as considered necessary.

RECYCLING

Clean Energy is committed to having a low environmental impact in all areas of our operations. We follow all federal, state, and local laws on recycling and disposing of materials. We continually seek ways for us to reduce our waste before we implement recycling procedures.

In 2022, 11,574 pounds of paper used by Clean Energy have been recycled by our downstream vendor. The result is equivalent to preserving 139 trees.¹⁵

¹⁵ The original data was sourced from the Paper Calculator™ and additional calculations were conducted by our third-party paper vendor to determine equivalencies.



Climate-Transition Risk

As the world pushes towards a net-zero future, Clean Energy acknowledges the possible risks and opportunities associated with climate change. Our 2020 Annual Sustainability Report was the first time that Clean Energy formally considered climate-transition risk as part of our strategy. In 2021 and beyond, we will continue to assess the major areas of climate-transition risk for the company, industry, and we will plan accordingly for mitigating these risks. We will refer to the [Task Force on Climate Related Financial Disclosures \(TCFD\)](#) as we develop our approach.

PHYSICAL RISKS

One effect of global climate change is the increase in frequency and severity of weather events, and the losses resulting from these events could have a material adverse effect on our business and the markets in which we operate. We cannot predict whether, or to what extent, natural disasters may occur or increase. We acknowledge that the increased frequency or severity of these events could directly impact on our business and understand that we need to be prepared. Our ability to supply negative-carbon-intensity RNG relies on the stability of the dairy farms from which the biogas is sourced. Any impacts of climate change such as droughts, floods, and other natural disasters which affect dairy agriculture could also impact negative-carbon-intensity RNG supply. In addition, information on our strategy for mitigating natural-disaster risk in our operations and data resiliency is outlined to the side.

Disaster Preparedness and Response

Clean Energy has a formal Emergency Preparedness and Response Plan to safely operate through emergency conditions at every station. We are prepared for natural disasters so that we can ensure that natural gas is transported securely, mitigating the impacts from severe weather events.

Transporting CNG

CNG is transported via underground pipelines consisting of a 2.2-million-mile delivery system. Our fueling structure is underground, so we are less affected by severe weather events aboveground. As we work toward supplying our on-road vehicle customers with 100% RNG by 2025, we expect being able to use the same underground-delivery systems to help decarbonize our national natural-gas infrastructure.

Transporting LNG

Clean Energy delivers LNG via contracted third-party haulers who transport Clean Energy's 74 tanker trailers to fueling stations, where it is stored and then dispensed in liquid form into vehicles. The transportation of our fuel by highway and roads presents inherent risks related to extreme weather events. To address this, we weatherize our vehicles and transport fuel only when road conditions are safe.



REGULATORY AND COMPLIANCE RISK

In addition to better understanding the physical risks that climate change poses to our company, we also looked at the potential risks associated with rapidly transitioning to a low-carbon-emission economy, such as extensive policy, legal, technology, and market changes. Clean Energy and the renewable-natural-gas industry will be impacted by pricing fluctuations in LCFS credit or RIN prices, regulatory amendments, new compliance standards for RNG feedstock projects such as landfills and dairies, and other risks. To mitigate these risks, we have a dedicated policy team who provide expertise in these fields, keeping our teams informed of upcoming proposals or changes and actively participating in policy advocacy and development.

ALTERNATIVE-FUEL COMPETITION RISK

Just as with any product, RNG is subject to risk associated with the performance of competitors. RNG is not the only renewable alternative fuel in the heavy-duty transportation market, and there is competition from electric vehicles, hydrogen, renewable diesel, and other technologies. Currently, there are significant financial, technological, and operational challenges associated with some other alternative fuels. Nonetheless, Clean Energy believes that negative-carbon-intensity RNG is the most cost-effective solution to reducing short-lived climate pollutants and overall GHGs from transportation today. In addition, Clean Energy is poised to be able to offer hydrogen fuel produced from RNG to our customers

in the future, which helps us diversify and further mitigate this risk. Given there is a pathway to use RNG to create electricity, there is also the ability to use RNG to power electric vehicles, which addresses one of the largest technological competitors in the renewable-fuel space today. Clean Energy has invested in a company, BTR Energy, which has developed software that will allow electric vehicles to track the electric molecules produced from RNG.

ESG-REPORTING RISK

The ESG reporting landscape is rapidly evolving to meet stakeholders' demands for transparency, accuracy, completeness, and accountability. Given the myriad of frameworks, standards, and protocols for reporting emissions and climate metrics, the environmental impact and resulting effect of RNG on our customers' sustainability goals and reporting may be subject to the type of reporting framework chosen. To mitigate this risk, Clean Energy is actively taking part in workstreams to not only stay informed with the latest developments in the ESG-reporting space but also provide our industry expertise and feedback where needed on developing reporting-framework guidelines. It is our goal to ensure that the full environmental benefit of RNG can be accurately and transparently communicated in our customers' ESG reporting.



SOCIAL

Building the workforce of the future





Social Goals

Clean Energy acknowledges the lack of diversity in the renewable-energy sector and strives to be part of the solution.

It's important that we support a diverse and inclusive workforce and supplier base that is reflective of the communities in which we operate. That's why we are working to increase the number of women and people of color in our workforce.

BUILDING THE WORKFORCE OF THE FUTURE¹⁶

In 2022, we continued to make strides in creating a more diverse and inclusive workforce.

24% In 2022, our workforce consisted of 24% women, an increase from 23% in 2021.

39.4% In 2022, 39.4% of our workforce were people of color, an increase from 32.6% in 2021.

17.2% In 2022, out of 29 positions that are VP level and above, five positions (17.2%) are held by people of color.



We pledge to maintain gender and racial pay equity across our workforce and levels of management. Our goal is to increase opportunities for traditionally underrepresented individuals and groups through recruiting and advancement of qualified minorities, women, persons with disabilities and covered veterans. We do this through training programs, outreach efforts, targeted recruiting programs and campaigns. We use external salary data and disparate impact reports to be sure we are providing a fair and equitable wage to all employees.



We aim to make a portion of our annual spend with suppliers owned by people of color, women, and veterans wherever such suppliers are available. In addition, we work with local suppliers, vendors, and contractors where possible.

18.9% We aim to maintain a voluntary turnover rate below 20% for our workforce each year. In 2022, we had a voluntary turnover rate of 18.9% in our workforce.



We strive to achieve year-over-year improvement in employee satisfaction and engagement scores through 2025, measured by an annual employee survey administered that began in 2021.¹⁷ Our engagement score was defined as best in class compared to the top 25th percentile of companies being measured in 2022, as provided by our employee-survey consultant.

¹⁶ Targets for workforce and VP level positions have been updated from the previous report.

¹⁷ In 2022, we updated the target verbiage from, "Achieve year over year improvement in employee satisfaction and engagement scores through 2025, measured by an annual employee survey administered beginning in 2022."

Employee Recruitment, Retention, and Engagement

Clean Energy strives to be the employer of choice in the alternative-transportation-fuels sector. We understand that we are only as successful as our workforce and have made ample investments in recruitment, retention, and employee engagement. Our human resources department is highly organized and functions within six centers of excellence that incorporates leadership, best practices, research, employee support, and training. We also place a strong emphasis on mentorship and empower our management teams to be effective leaders. Additionally, we have a detailed onboarding process that gives new employees the time and space to learn about Clean Energy’s business strategy in detail so they can become effective team members in little time.

INVESTING IN RELATIONSHIPS

Clean Energy understands that strong relationships between management and their employees are crucial for running a successful business, which

is why we offer considerable opportunities for team-building activities both inside and outside the office including annual companywide walking challenges, and we encourage our employees to take advantage of our in-house personal trainers. Our employees are also reminded that we pride ourselves on having an open-door policy, where they can always reach out to their immediate supervisors for questions or concerns.

To succeed in a competitive labor market, we have developed progressive recruitment and retention strategies. These include competitive salary structures, bonus-compensation programs, and competitive benefits policies that include paid time off for vacations, sick leave, and holidays. We also offer short-term disability coverage, life insurance, and various retirement savings and incentive plans. As a company, we also support freedom of association and do not have any policies that would prohibit our employees’ activities in this respect.

Training Over 2,200 training courses were offered.
100% of employees completed at least one training course in 2022.

Recruiting Filled 148 open positions from a pool of over 500+ qualified candidates.
25% of new hires were women.
47% of new hires were people of color.

Retention Total employee turnover of 18.9% (89% voluntary and 11% involuntary).
Promotions were awarded to 40 employees, 7 of whom are female.



Diversity, Equity, and Inclusion

Having a representation of all genders, races, ethnicities, national origins, ages, and sexual orientations plays a significant role in creating the thriving culture of inclusivity we strive for.

At Clean Energy, our maintenance program is backed by 200+ company-employed service technicians and support personnel who work around the clock to keep our stations running smoothly. They make up approximately 50% of our workforce, filling these traditionally male-dominated jobs

We acknowledge the challenges in our industry and strive to include efforts to ensure equal opportunity, fair recruitment, and equal remuneration, and we deploy recruitment strategies that are accessible and reach diverse candidate pools. This also includes supplier diversity.

OUR RECRUITMENT PARTNERS

Clean Energy partners with Circa to recruit employees from underserved communities and diverse populations. Through our partnership with Circa, we're able to ensure increased exposure of our job opportunities through thousands of organizations, associations, and civic and community groups to increase the number of qualified and diverse candidates. Examples of these groups are Texas Veterans Commission, Step Up Women's

Network, Marine for Life—Nashville, 100 Black Men of Long Beach, Inc., Disability Community Resource Center, and U.S. Vets—Inglewood.

To further our recruitment reach, we post all our job descriptions on Indeed, which reaches a diverse audience of over 250 million candidates. To ensure our recruiting practices are equitable, we also post hiring advertisements on our company vehicles for increased visibility among potential candidates that don't have access to the internet.

FOSTERING A DIVERSE WORKFORCE

In 2022, we had 100% participation in company-wide training. Diversity, Equity & Inclusion training is an annual training course we provide for our employees. Each year, we choose a topic relating to Diversity, Equity, and Inclusion (DEI) and provide our employees with an opportunity to deepen their understanding of these topics to build a more inclusive culture. To further support our goal of improving the diversity of employees, Clean Energy has also invested in coaching sessions for hiring managers to help them in selecting candidates.

During the calendar year 2022, there were over 2,000 various training courses offered in which our employees took part. The trainings offered in 2022 included, but are not limited to, Preventing Discrimination Harassment, A Manager's Guide to Diversity, Inclusion and Accommodation, Emotional Intelligence, The Successful Managers Handbook, and 8 Examples of Unconscious Bias in Hiring. Technical training was also offered, including Service Technician 101, Preventative Maintenance Procedures, and Safety in the Workplace.

OUR WORKFORCE IN 2022

In United States	76% are male
	24% are female
	39.4% are people of color
In leadership roles of VP and above (29 positions, including C-level Officers)	3.4% are female
	17.2% are people of color
Our employees broken down by Service Technician roles	30.9% are Service-Technician employees
	69.1% are not Service-Technician employees
In 2021, 13.1% of our workforce were active, former, or retired military members	In 2022, 12.1% of our workforce were active, former, or retired military members

WORKFORCE DEMOGRAPHICS

10.1%
Asian

5.5%
Black or African American

14.3%
Hispanic or Latino

5.9%
Not specified

3.4%
Two or more races

60.6%
White

Actions for Good

HOW WE COMBAT DISPROPORTIONATE AIR-QUALITY IMPACTS IN LOW-INCOME COMMUNITIES

We recognize that the detrimental effects of air pollution and climate change disproportionately affect certain communities and demographics. Our mission is clear: to enhance local air quality in the areas where our trucks run, thereby mitigating the associated risk.

RNG not only addresses the urgent need to reduce potent greenhouse gases during production but also plays a crucial role in minimizing criteria air pollutants that directly affect the health and well-being of communities where natural-gas-powered vehicles are deployed. Our efforts include:

Work alongside NGOs like the Coalition for Clean Air to promote clean air for everyone. Clean Energy informs our employees annually about California Clean Air Day and encourages them to read and take the Clean Air Pledge.

Reduce nitrogen oxides (NO_x), a harmful criteria pollutant that contributes to acid rain, smog, and respiratory issues in humans.¹⁸ The link between diesel tailpipe emissions and significant health impacts resulting from high NO_x levels is well documented.¹⁹

Adopt-a-Port program with Chevron at the Ports of Los Angeles and Long Beach (communities surrounding the port often bear the brunt of the nation's worst air pollution) since 2020 committing a total of \$28 million of financing to transition to RNG-powered trucks and providing fueling services for qualified truck operators who play a vital role in supporting the ports' Clean Trucks Program and Clean Air Action Plan.

By using natural gas as a transportation fuel, we enable vehicles to produce up to 90% lower tailpipe NO_x emissions compared to diesel or gasoline.

EARTH DAY BEACH CLEAN-UP

At our headquarters, our passionate employees are leading the way towards a cleaner future. On Earth Day, a group of our employees dedicated valuable time out of their busy schedules to come together and make a meaningful impact and organized a beach-cleanup event at the Santa Ana River Jetties.

They embarked on a mission to protect and restore the natural beauty of our coastlines by removing debris and waste that threatens the delicate marine ecosystem. Together, they showed that the preservation of our planet is a shared responsibility, sparking inspiration among employees.

TIS' THE SEASON OF GIVING!

We teamed up with Mater Dei's Monarchs for Marines program to donate books and toys to children this Christmas. The mission of Monarchs for Marines is to provide tangible support and encouragement to the Marines serving in Iraq and their families living on or near Camp Pendleton.

This heartwarming collaboration aligns with our commitment to social responsibility. Through this partnership, we show that sustainability is not just about environmental consciousness; it encompasses the well-being and happiness of our communities as well.

¹⁸ Environmental Protection Agency. Basic Information about NO₂. EPA.

¹⁹ Learn About Impacts of Diesel Exhaust and the Diesel Emissions Reduction Act (DERA) | US EPA



Employee and Contractor Safety

Clean Energy prioritizes the health and safety of our staff, contractors we work with, and the environment. We believe that safety begins with a foundation of strong policies and procedures which set up Clean Energy's tone and expectations on health and safety. We promote employee engagement through training and mentoring programs essential to cultivating a positive safety culture. Use of risk-based methodologies, tools, and other technologies allow us to address workplace hazards and keep a safe and healthy work environment for our employees.

By extension, we incorporate our EHS standards into our contractor selection and vetting process to ensure that our Contractors share the same commitment to the environment, health, and safety. Key safety metrics can be found under "Safety" on [page 50](#).

Process Safety: Begins with sound engineering and design principles, as well as good operating and maintenance practices to address the management of hazards. We have a proactive approach to process safety by focusing on the detection and resolution of potential issues to ensure, to the extent possible, that risks are mitigated before incidents occur.

Zero-Incident Workplace: We aim to do this with a strong safety culture consisting of established policies and procedures, employee engagement through robust training and mentorship programs, and having open communication between employees and the management team.

Driver Safety: Our Driver Safety Program is essential to supporting a safe roadway for our employees and fellow drivers. Our training program focuses on improving defensive driving techniques and to promote safe-driving practices. All field employees are assigned driver-safety training at the time of hire and take part

in a biennial refresher course. Vehicles are equipped with onboard cameras and monitoring software. These systems are paramount to increasing event visibility, improved driver safety, and vehicle tracking.

HUMAN RIGHTS

In 2022, our Board of Directors released a [Human Rights Policy](#), highlighting our unwavering dedication to being ethical, respectful, and strong community partners in all our business endeavors. We are deeply mindful of the heightened risks aligned with individuals from certain groups or populations, and this policy solidifies our commitment to upholding and respecting human rights throughout our operations. Our foremost goal is to conduct business in a manner that minimizes any adverse effects our infrastructure or operations may have on people and communities. To achieve this, we will:

- Conduct periodic human-rights assessments.
- Make efforts to avoid causing or contributing to human-rights violations.
- Mitigate and/or remediate adverse human-rights impacts of our operations where possible.
- Prohibit the use of child labor or forced labor in company operations.
- Promote a formal grievance mechanism.
- Be transparent in our efforts, successes, and challenges.

Our unwavering dedication to human rights is also clear in our internal Code of Ethics and Whistleblower policies, which reinforce our commitment to upholding the highest ethical standards within our organization. Our approach to human rights is also consistent with the goals of the United Nations' (UN) Guiding Principles on Business and Human Rights.



SUPPLIER SOCIAL AND ENVIRONMENTAL PERFORMANCE

We aim to include social and environmental performance indicators in our criteria for new suppliers in the future. These performance indicators include diversity, equity, and inclusion metrics, emissions-reporting evaluations, and sustainability commitments. We recognize that our responsibility as a company extends beyond our direct operations and encompasses the positive impact we can have throughout our supply chain.

INFRASTRUCTURE SAFETY AND SECURITY

Clean Energy is committed to providing a safe and secure space wherever we conduct business. All stations are built to the strictest standards to ensure a safe fueling experience for our customers. Key station systems and equipment are secured within locked compounds to prevent tampering. Additionally, our stations are equipped with cameras which use the latest in AI and edge computing to uncover actionable insights in real time.

DATA-SECURITY RESILIENCY

Clean Energy has invested significantly in cloud-based systems to ensure all company data is protected and to offer more resiliency when compared to storing information on-site in case of a natural disaster. We've also invested in extensive data-backup systems and have kept a 99.999% network uptime with 0% data loss in 2022.

In addition, Clean Energy maintains a Data Disaster and Response plan that safeguards our information systems in case of a natural disaster. This plan is continuously updated as technologies evolve, and our team also performs annual disaster drills to confirm connectivity of Tier 1 applications in case of an outage.



GOVERNANCE

Smart policies for system transition to renewable fuels





Governance Goals

We work across all our markets and engage with stakeholders to advocate for strategic policies that advance RNG as a strategy for fighting the climate-change impacts of transportation.

At Clean Energy, we are dedicated to fostering meaningful connections with our valued stakeholders, including customers, employees, business partners, nonprofit organizations, local communities, and government bodies. We recognize the vital role these stakeholders play in our growth, and we actively engage with them to address any pertinent concerns related to our energy development and distribution business segments. Our unwavering commitment to these local communities, where natural gas is developed or heavy-duty vehicles operate, drives our mission to work with stakeholders to deliver innovative transportation solutions while minimizing environmental impact.

As advocates for RNG, we collaborate with international standard-setting organizations, such as the World Business Council for Sustainable Development (WBCSD), to ensure that RNG’s benefits are recognized industry-wide. In 2022, we worked with WBCSD and industry stakeholders to aid in the development of an eagerly anticipated avoided-emissions guidance, slated for release in 2023. This groundbreaking guidance will equip companies with a method to accurately report the environmental advantages of RNG in their sustainability reporting, further bolstering its significance in the energy landscape.

By strengthening our relationships, championing renewable solutions, and actively shaping industry standards, Clean Energy stands at the forefront of sustainable energy transformation, delivering effective outcomes for our stakeholders.

SMART POLICIES FOR SYSTEM TRANSITION TO RENEWABLE FUELS

Target²⁰

We commit to disclosing all our political contributions in a publicly accessible and transparent way.

Updates

Clean Energy is 100% compliant with all state and federal regulations for reporting political contributions and will continue to be compliant in the future.

²⁰ In 2022, we removed our target, “Affirm that 100% of industry association (lobbying positions) align with Clean Energy’s sustainability goals by EOY 2022,” due to lack of data to track target.

OUR LEGISLATIVE GOALS:



Adopt clean fuel standards.



Incentivize the adoption of low NO_x trucks.



Incorporate RNG into mass-transit-authority mandates and vehicle-fleet regulations.



Enable the production of more RNG supply.

Stakeholder Engagement, Advocacy, and Lobbying

Stakeholder	Examples of Engagement	Key Topics
Employees	Intranet, Employee Recognition Programs, Fitness Programs, Charitable Programs, Events, Meetings, Training Sessions	Company News, Employee Resources, Safety, Health & Wellness, Career Development, Benefits, Charitable Opportunities, Diversity, Labor Relations
Customers	Surveys, Growth Strategies, Account Management, Station-Maintenance Trainings, Customer Onboarding	Product Information & Safety, Affordability, Reliability, Air Quality, Operations & Maintenance
Shareholders	Annual Report, Quarterly/Annual Disclosures, Investor Relations, Shareholder Meetings	Financial Statements, Risk Management, Sustainability, Governance Practices, Policy Engagement
Local Communities	Engagement Program, Community Events, Sponsorships	Air Quality, Economic Development
Government / Regulatory Agencies	Inspections, Facility Audits, Performance Disclosures	Environmental Impact, Taxes, Lobbying Efforts
Non-Governmental & Nonprofit Organizations	Sustainability-Framework Setting, Community Meetings	Carbon Accounting, Avoided Emissions, Climate Change, Environmental Impact, Air Quality
Partners	Executive Briefings, Quarterly/Annual Disclosures	Profit, Government Policy, Sustainability, Natural-Gas Technology
Suppliers	Written Updates, Support Supplier-Innovation Activities	Industry Issues and Concerns, Product Quality, New Product Innovation
Media	Press Releases, Social Media	Company News, Sustainability

ASSOCIATIONS

Clean Energy collaborates with a wide range of trade and industry associations to participate as a stakeholder engaged with energy-industry trends and to address challenges. We pride ourselves on being at the forefront of organizations dedicated to advancing the adoption and accessibility of RNG as a leading sustainable transportation fuel. Highlights of our organizational involvement include:

American Association of Airport Executives	Harbor Association of Industry & Commerce
American Biogas Council	Harbor Truckers Association
Association of Washington Businesses	Los Angeles Transportation Club
Bioenergy Association of California	National Ready Mixed Concrete Association
California Renewable Transportation Alliance	National Star Route Motor Carriers Association
California Refuse & Recycling Council	Natural Gas Vehicles for America
California Transit Association	Nevada Trucking Association
Canadian Natural Gas Vehicle Association	Propeller Club
Clean Cities (Local and State)	Trucking Associations Various States
Coalition for Clean Air	Washington Refuse & Recycling Association
Coalition for Renewable Natural Gas	Washington Refuse & Recycling Association
FuturePorts	CNGVP

**POLICY ENGAGEMENT:
ADVOCACY AND LOBBYING**

Clean Energy has an active Public Policy and Regulatory Affairs Team that leads policy advocacy and lobbying efforts on the federal and state levels. We work hard internally to affirm that our advocacy efforts are supported with the most up-to-date information from our sales force, and to provide legislative updates to our senior executive management team as political support for RNG grows and evolves.

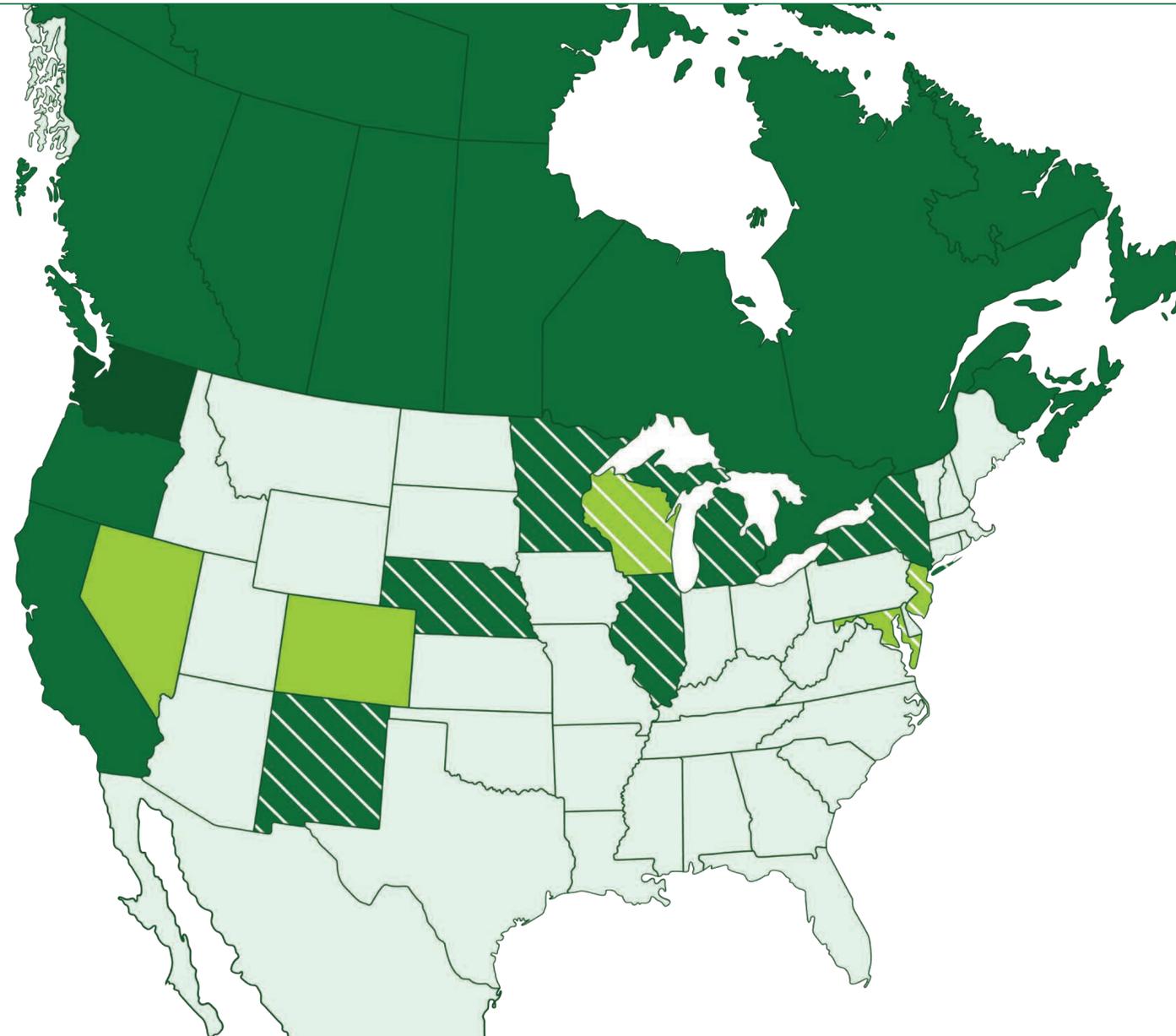
Clean Energy’s main policy goals are to bolster the passing of Clean Fuel Standards in other states so they can benefit from similar state programs in California, Oregon, and Washington. The programs highly incentivize low-carbon-intensity fuels, thus promoting more production of alternative fuels and technologies.

POLITICAL CONTRIBUTIONS

Clean Energy makes political contributions to elected officials that show an interest in tackling clean-air issues by implementing practical solutions. We make contributions at the state and local level and the budget for contributions varies based on election versus non-election years. Contribution amounts are also based on state and local rule limits and can be influenced by a member’s seniority, committee assignment, and relationship with the company, or by our business strategy. We do not give any political contributions outside of the United States, and all our contributions are publicly reported based on state and local rules. We are committed to continuously affirming that 100% of all industry association and lobbying positions align with Clean Energy’s sustainability goals.

**CLEAN FUEL
STANDARDS BEING
CONSIDERED IN
OTHER STATES:**

-  **Adopted & in effect:**
British Columbia, California, Canada Federal, and Oregon
-  **Approved**
Washington State;
effective January 1, 2023
-  **Legislation likely introduced in 2023:**
Illinois, Michigan, Minnesota, Nebraska, New Mexico, and New York
-  **Under study/regulatory development:**
Colorado and Nevada
-  **Other States targeted:**
Maryland, New Jersey, and Wisconsin



Business Ethics, Executive Compensation, and Incentives

As a publicly traded company, Clean Energy recognizes and respects our responsibility to our shareholders for the stewardship of company assets and resources. Clean Energy complies with all laws and regulations and has corporate structures in place to ensure that all employees and company representatives conduct themselves responsibly.

Clean Energy has a board of directors that provides independent oversight of our affairs, including financial, operational, and economic issues. The board is dedicated to transparent communication on corporate citizenship topics, and we strive to maintain a diverse board that brings a wealth of expertise and experience across all lines of business.

CODE OF ETHICS

Clean Energy is subject to regulations both in the United States and abroad, and we require that all employees, officers, and directors of the company comply fully with both the spirit and the letter of all laws, rules, and regulations that apply. Clean Energy employees also receive training on our corporate policies, which include our Code of Ethics, Anti-Corruption Policy, Insider Trading Policy, Political Activities Compliance Policy, Social Media Guidelines, and Whistleblower Policy.

ANTI-CORRUPTION POLICY

Our Anti-Corruption Policy explicitly prohibits engagement in bribery or corruption in any form. Clean Energy policy requires compliance with all applicable global anti-corruption laws, including the United States Foreign Corrupt Practices Act (FCPA).

EXECUTIVE COMPENSATION

The compensation committee of our board of directors oversees the design and administration of our executive-compensation program. The primary objectives of our executive officer compensation program are to attract, retain, and motivate talented and dedicated executive officers; to reward individual performance and achievement of key corporate objectives, including the objectives set forth in our annual strategic plan, without promoting excessive or unnecessary risk-taking; to align the interests of our executives with those of our stakeholders; and to provide compensation that we believe is fair in light of an executive officer's experience, responsibilities, performance and tenure with our company, and in relation to the compensation provided to other executives of our company and comparable executives at certain peer companies.

In the third quarter of 2021, the compensation committee instructed Semler Brossy Consulting Group, LLC ("Semler Brossy") to complete a full review of our executive-compensation programs within the context of the competitive market, including comparing our executive-compensation components and levels with a group of selected peer companies. The compensation committee referenced some of the information provided by Semler Brossy and other third-party data in making 2022 compensation decisions.

We seek to actively engage with our stockholders to discuss various compensation and governance matters and consider their feedback in determining named executive officer compensation. Our stockholders can cast an advisory vote on executive compensation, or a "say-on-pay" vote, once every year. At our annual meeting of stockholders held in 2023, our executive compensation received a favorable advisory vote from over 89% of the votes cast on the proposal at the meeting (which excludes abstentions and broker non-votes). We believe the high degree of support on our 2023 say-on-pay proposal demonstrates that stockholders support our executive-compensation program.



2022 EMISSIONS DATA



Clean Energy's 2022 Greenhouse Gas Inventory

At Clean Energy, we're excited to share with you our latest emissions data, which includes Scope 1, 2, and 3 emissions, and continues to be our comprehensive data since our reporting changes in 2021. To ensure accuracy and transparency, we continue to separate biogenic emissions from the end use of our RNG product. These emissions are reported separately from our Scope 1, 2, and 3 categories, per the Greenhouse Gas Protocol Corporate Standard.

It's important to acknowledge that these changes have made the data reported after 2021 not directly comparable to previous years. However, the increased reporting accuracy provides confidence in the completeness and accuracy of this year's emissions data. We are committed to continuous improvement in our reporting and disclosure of ESG metrics. In future reports, we plan to recalculate relevant data from 2020 to enable exact historical comparisons as we set up new baselines for our emissions targets.

2022 GHG EMISSIONS	GREENHOUSE GASES (values in metric tons)				POLLUTANTS (values in metric tons)	
	CO ₂	CH ₄	N ₂ O	CO ₂ e	NO _x	SO _x
Scope 1²¹	3,314.2	480.8	0.1	16,979.9	0.3	0.0
CEF Fleet ²²	1,315.0	3.0	0.1	1,423.8	0.3	0.0
CE-Owned Stations ²³ Fugitive Emissions	—	156.7	—	4,387.9	—	—
LNG Plant Flaring	1,999.2	0.0	0.0	2,001.3	—	—
LNG Plant Fugitive Emissions ²⁴	—	321.0	—	9,166.8	—	—
Scope 2 (Market-Based)	64,261.5	2.4	0.3	64,411.4	14.3	11.3
Purchased Electricity: LNG Plants ²⁵	43,731.3	1.2	0.1	43,801.4	5.8	8.0
Purchased Heating: LNG Plants	8,083.3	0.2	0.0	8,091.6	—	—
Purchased Electricity: Stations	9,472.1	0.7	0.1	9,518.4	6.7	2.7
Purchased Electricity: Facilities	2,974.8	0.4	0.0	2,999.9	1.8	0.6
Scope 3²¹	1,404,183.1	9,557.4	1.7	1,672,557.9	1,524.4	31.3
Use of Sold Product (Tailpipe Emissions)	1,217,645.5	9,511.1	1.0	1,484,210.4	1,488.5	11.0
Transportation and Distribution of LNG	2,523.3	7.9	0.0	3,048.7	1.6	0.0
Non-CE Owned Stations Fugitive Emissions ²⁶	—	32.1	—	897.5	—	—
Purchased Electricity from Customer Owned Stations	52,595.2	3.9	0.5	52,847.2	34.3	20.3
LNG Plant Return Gas Combustion	131,419.1	2.5	0.2	131,554.1	—	—
TOTAL	1,471,758.8	10,040.6	2.1	1,753,949.2	1,539.1	42.6

²¹ Following the Greenhouse Gas Protocol Corporate Standard, biogenic carbon-dioxide emissions from the use of RNG in our own fleet are reported separately from the Scopes.

²² Methodology to calculate fleet emissions using GREET modeling was updated to reflect emissions factors from 2020–2021 for several different vehicle types.

²³ This value is derived from actuator, nozzle, crankcase, and LDAR-detected leaks.

²⁴ In 2022, only Boron fugitive emissions were calculated and reported.

²⁵ Scope 2 NO_x and SO_x emissions from purchased electricity for our LNG plants only includes NO_x and SO_x emissions from the grid electricity used by the Pickens Plant.

²⁶ This value is derived from actuator, nozzle, crankcase, and LDAR-detected leaks.

Performance:

Company Emissions Within the Scopes

OPERATIONAL ENERGY EFFICIENCY

Our dedication to lowering Scope 1 and 2 emissions is exemplified through the implementation of energy-efficiency measures throughout our operations. We consistently invest in the acquisition of the most cutting-edge and energy-efficient equipment, and our team continuously explores innovative approaches to enhance and improve our energy footprint.

LNG PLANT EMISSIONS

Clean Energy currently operates two LNG plants: The Boron Plant in California and the Pickens Plant in Texas. These two plants use electricity to upgrade and supercool natural gas, which creates liquefied natural gas (LNG). LNG fuel has various transportation applications including on-road, maritime, and aerospace. Though LNG is a versatile fuel, its production contributes significantly to the company's carbon footprint in Scope 2 electricity use and Scope 3 off-site combustion of gas for electricity production.

Clean Energy will continue to look for ways to increase operational energy efficiency and decrease fugitive methane emissions at our LNG plants. In addition, we look to source renewable energy and/or responsible sourced gas (RSG) for these locations to reduce our emissions impact and power the plant operations more sustainably.

BORON PLANT EFFICIENCY METRICS

In 2022, efficiency improvements resulted in less down time at our Boron facility, which decreased Scope 1 fugitive emissions. The amount of kilowatt hours of electricity used per LNG gallon slightly increased to 1.10 kWh/LNG gallon in 2022 from 0.99 kWh/ LNG gallon in 2021. Our production efficiency dramatically improved after 2020 (see Boron Plant Emission and Production table below). These efficiency improvements included optimizing our LNG blend to be less energy-intensive to develop due to modern engine requirements.

Thanks largely to a reduction in fugitive emissions at our Boron Plant, Clean Energy achieved a 71% reduction in Scope 1 emissions in 2022 versus 2021.

Fugitive emissions at the Boron Plant were cut by over 80% from 2021 to 2022, from 3.07% gas loss in 2021 to 0.58% in 2022, resulting in a significant reduction of over 38,000 metric tons of Scope 1 emissions.

BORON PLANT EMISSIONS AND PRODUCTION

	2020	2021	2022
Boron Scope 1 Fugitive Emissions (MT CO ₂ e)	96,308	47,529	9,167
Boron Scope 1 Flaring Emissions (MT CO ₂ e)	5,493	1,988	2,001
Boron Scope 2 Emissions from Electricity and Heating (MT CO ₂ e)	39,856	31,746	36,799
Boron Scope 3 Emissions from waste gas used to make electricity (MT CO ₂ e)	143,875	110,584	131,554
Actual Gas Loss	5.85%	3.07%	0.58%
Boron Total kWh Usage		41,051,000	48,346,000
LNG Production (LNG Gal)	41,318,646	41,428,932	43,794,671
Production Efficiency (kWh/LNG gal)	1.28	0.99	1.10

BIOGENIC EMISSIONS

	2021	2022
Scope 1 Biogenic CO ₂ Emissions (Metric tons)	994	361
Scope 3 Biogenic CO ₂ Emissions (Metric tons)	752,632	925,186

STATION FUGITIVE EMISSIONS

After LNG production plants, natural gas leakage at stations is the second-largest source of Scope 1 emissions for the company. 2021 marked the first year in which Clean Energy calculated greenhouse-gas emissions impact from fugitive emissions at select stations. See “Addressing Methane Leaks” ([page 25](#)) for more details.

Crankcase venting continues to have the highest volume of leaks of the four fugitive-emissions categories for stations, and is one of the key areas to research on options for reducing Clean Energy’s station-emission impact. In 2022, the LDAR inspections performed at 88 Clean Energy–owned stations (an increase from 78 in 2021) showed the following aggregated volume of leakage for each of the four categories with an overall total decrease in station fugitive emissions compared to 2021.

RENEWABLE ENERGY FOR STATIONS

Clean Energy’s stations use electricity to compress natural gas so that it can be dispensed as a vehicle fuel. We recognize the immense potential for Clean Energy to obtain renewable electricity and thereby minimize our Scope 2 emissions associated with station operations. We successfully secured 100% renewable energy for select stations in Texas and California.

Renewable Energy Credits (“RECs”) retired from the renewable electricity procured in both Texas and California resulted in a Scope 2²⁷ reduction of 1,632 MT CO₂e, approximately 16% of the total company Scope 2 footprint from our stations.

In 2022, we also had customer-owned stations that were able to benefit from the procurement of renewable energy, approximately 1.1 million kWh that resulted in a Scope 3 reduction of 93 MT CO₂e, 0.2% of the Scope 3 footprint from customer-owned stations.

You can read more about our renewable energy procurement strategy for our stations [here](#).

STATION FUGITIVE EMISSIONS

Leaks and Vents	Metric Tons of Methane		Metric Tons of Carbon Dioxide Equivalent (CO ₂ e)	
	2021	2022	2021	2022
Nozzle Vent	2.39	2.22	66.81	62.07
Crankcase Vent	163.36	140.84	4,573.95	3,943.64
Gas Actuator	1.99	1.86	55.60	51.99
All Other Leaks	11.13	11.79	311.62	330.22
Total	178.9	156.71	5,008.0	4,387.91

RENEWABLE ENERGY PROCUREMENT IN 2022

	kWh of renewable electricity procured	CO ₂ e Reduction (Metric Tons)
Texas Stations	3,136,009	1,162
California Stations	1,940,190	470
Total	5,076,199	1,632

²⁷ This refers to market-based scope 2 emissions.

CLEAN ENERGY SERVICE FLEET VEHICLES EMISSIONS

Clean Energy operates a fleet of vehicles used to service our stations and for other operational uses. In 2021, 95% of Clean Energy–operated vehicles were fueled with natural gas. In 2022, that percentage stayed the same at 95%. Our fleet Scope 1 emissions lowered from 3,225 metric tons CO₂e to 1,423 metric tonsCO₂e. Our Scope 1 emissions decreased by over 56% due to less miles driven in 2022 and replacing our older fleet as needed with CNG.

FACILITIES

Since 2021, Clean Energy added a reporting category for the greenhouse-gas emissions from facilities where we operate, as well as from subsidiaries in which we have at least a 50% equity stake. This category includes emissions from our facilities including headquarters, sales offices, and warehouses, as well as emissions from subsidiaries including Clean Energy’s Cryogenics division and NG Advantage. Currently, our subsidiary facilities have the largest emissions impact within our various facilities’ Scope 2 categories. In 2022, we were able to obtain renewable energy for one of our warehouses that reduced our facilities Scope 2 emissions by approximately 32 MT CO₂e or 1.1%.

FACILITIES Location	Electricity Usage (kWh)		Scope 2 Emissions (MT CO ₂ e)	
	2021	2022	2021 ²⁸	2022
Headquarters	58,525	39,760	15.7	7.2
Satellite Offices	52,847	59,556	18.5	19.9
Warehouses	176,382	254,039	68.5	21.9
Subsidiaries	12,256,606	11,903,459	2,974.2	2,950.8
Total	12,544,630	12,256,814	3,076.9	2,999.9

²⁸ Recalculated in 2022.



FUEL SOLD

As a fuel provider, our Scope 3 emissions from the end use of our fuel (Scope 3, Category 11 “Use of Sold Products”) make up a significant portion of our carbon footprint. In 2022, our Scope 3 emissions from fuel sold decreased by 2.9% in 2022 versus 2021, this decrease is attributed to increased gallons of RNG fuel sold. Our RNG fuel sold increased by 31.2 million GGE or 18.7% since 2021 compared to our overall fuel sold, which increased by 25.8 GGE or 6.4%, making it possible for our Scope 3 emissions from fuel sold to decrease.

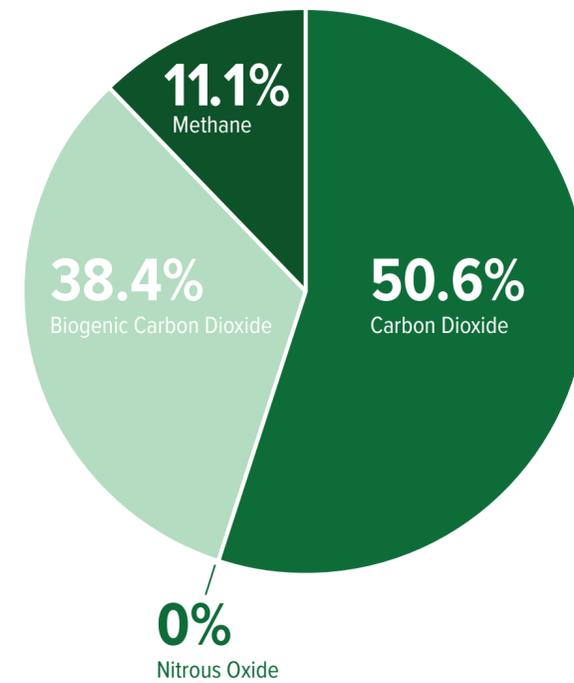
We calculate that our customers were able to reduce their emissions from the use of our fuel by a collective 924,897 MT of CO₂e in 2022, an increase of 23% from 2021.

This shows how RNG is a powerful and immediate tool our customers can use to make progress towards their decarbonization goals.

Fuel Sold Emissions	2020	2021	2022
Scope 3 Emissions from Fuel Sold (Metric tons CO ₂ e)	1,501,477	1,528,093	1,484,210
Biogenic Emissions from Fuel Sold (Metric tons CO ₂ e)	699,375	752,148	924,897

In the future, we will set more targets using our updated emissions data. As an increasing part of Clean Energy’s portfolio of fuel sold becomes RNG, our reportable Scope 3 GHG emissions from fuel sold could be reduced by 90–98% versus a conventional natural-gas portfolio. Low-carbon RNG also helps our customers reduce their Scope 1 emissions when used to fuel their own vehicles, in the same way that it also lowers Clean Energy’s indirect Scope 3 emissions.

2022 FUEL SOLD EMISSIONS COMPOSITION (MT CO₂e)



SUMMARY

Clean Energy is committed to reducing the emissions impact of our operations in line with our goal to be a climate-neutral company by 2035. In 2022, we were able to make progress and hit our target of having a 25% reduction of our Scope 3 emissions when compared to our 2017 baseline. Being able to provide our customers with low-carbon fuel has helped us meet our Scope 3 target. Clean Energy looks forward to setting more ambitious goals in the future while continuing to expand our ability to produce and provide RNG to our customers.



DATA AND ADDITIONAL INFORMATION

Renewable Natural Gas



About this Report

This is the second consecutive Sustainability Report from Clean Energy Fuels Corp. (Clean Energy), a Delaware corporation. Data in this report relates to the 2022 calendar year. Our last Sustainability Report was published in August 2022, covering 2021 performance. Clean Energy plans to continue to provide annual sustainability reporting. The scope of the information included in this report is all business under Clean Energy Fuel's equity-share approach as defined in the Greenhouse Gas Protocol Corporate Standard.

This report was prepared referencing the Global Reporting Initiative (GRI) Standards. The content within the report was informed by Clean Energy's 2020 materiality assessment, outlined in the Materiality section of this report.

For questions and feedback, please contact sustainability@cleanenergyfuels.com

PERFORMANCE

Below are metrics related to climate change, the environment, people, safety, and performance.

Please refer to our 2022 10-K for additional information on financial performance.

CLIMATE CHANGE

Emissions Scope (in MT CO ₂ e)	2020	2021	2022
Scope 1²⁹	105,212	57,750	16,980
CEF Fleet ³⁰	3,411	3,225	1,424
CE-Owned Stations Fugitive Emissions ³¹	N/A	5,008	4,388
LNG Plant Flaring	5,493	1,988	2,001
LNG Plant Fugitive Emissions ³²	96,309	47,529	9,167
Scope 2 (Market-based)	60,930	56,211³³	64,411
Purchased Electricity: LNG Plants	48,353	36,394	43,801
Purchased Heating: LNG Plants	2,805	6,109	8,092
Purchased Electricity: Stations	9,771	10,631	9,518
Purchased Electricity: Facilities	N/A	3,077 ³⁴	3,000
Scope 3²⁹	1,735,923	1,689,250	1,672,558
Use of Sold Product	1,501,477	1,528,093	1,484,210 ³⁵
Transportation & Distribution of LNG	9,653	4,915	3,049
Non-CE-Owned Station Fugitive Emissions	N/A	1,027	898
Purchased Electricity from Customer-Owned Stations	80,918	44,630	52,847
LNG Plant Return Gas Combustion	143,875	110,584	131,554
Total Footprint (Scope 1 + 2 + 3)	1,902,065	1,801,527³⁶	1,753,949

²⁹ Following the Greenhouse Gas Protocol Corporate Standard, biogenic carbon-dioxide emissions from the use of RNG in our own fleet are reported separately from the Scopes.

³⁰ Methodology to calculate Clean Energy's Scope 1 fleet emissions was updated to use the GREET model emissions factors for different vehicle and engine types.

³¹ This value only includes emissions from actuator, nozzle, crankcase, and LDAR-detected leaks at Clean Energy-owned public stations.

³² Clean Energy only measured fugitive emissions from our Boron Plant, so the LNG Plant Fugitive emissions only reflect data for our Boron Plant. In the future, we aim to improve metering at our Pickens plant so we can account for the associated fugitive emissions of that plant.

³³ In 2022, we recalculated our Purchased Electricity: Facilities, affecting Total Scope 2 emissions.

³⁴ In 2022, we recalculated our Purchased Electricity: Facilities.

³⁵ In 2022, Use of Sold product was separated out into transportation (tailpipe) and stationary usage.

³⁶ In 2022, we recalculated our Purchased Electricity: Facilities, affecting our 2021 Total Footprint.

Additional Information	2020	2021	2022
% of Clean Energy fleet that is powered by natural gas	95%	95%	95%
Number of Clean Energy–owned stations with LDAR	34	78	88
Municipal Water Utility	131,017 m ³	166,610 m ³	188,541 m ³

Stations and Fuel Volumes	2020	2021	2022
Total Number of Stations	540	548	590
Natural Gas Sold	382.5	402.6	428.4
CNG Sold	321.0	347.4	365.9
LNG Sold	61.5	55.2	62.9
RNG Sold (both compressed and liquefied)	153.1	167.0	198.2

Safety	2020	2021	2022
Work-Related Fatality	0	0	0
Lost Day Rate (LDR)	0	0.2	0.2
Vehicle and Personal Injury Rate (TRIR)	1.67	1.55	1.61
U.S. Occupational Health and Safety Administration (“OSHA”) or state OSHA citations	0	0	0

People	2020	2021	2022
Employees	428	443	495
US Employees	411	422	473
Employees Outside of U.S.A.	17	21	21
Men	336	339	377
Women	92	104	118
New Hires	95	112	148
Collective Bargaining Agreement Members	0%	0%	0%
Total Employee Turnover	18.9%	21.08%	18.9%
Promotions Given	27	32	40
Trainings Offered	234	292	– ³⁷
Trainings Completed	3,122	6,369	2,284

³⁷ Unable to confirm data.

Forward-Looking Statements Disclaimer

This annual sustainability report and the materials or websites cross-referenced herein contain statements that are aspirational or reflective of our views about our future performance that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are generally identified through the inclusion of words such as “aim,” “anticipate,” “aspire,” “believe,” “commit,” “could,” “endeavor,” “estimate,” “expect,” “goal,” “intend,” “may,” “plan,” “potential,” “predict,” “projection,” “seek,” “should,” “strive,” “target,” “will,” “would,” and “work,” or similar statements or variations of such terms and other similar expressions.

Forward-looking statements inherently involve risks and uncertainties that could cause actual results to differ materially from those predicted in such statements. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. These statements are based on numerous assumptions that we believe are reasonable, but are open to a wide range of uncertainties and business

risks. In addition, these statements may be based on standards for measuring progress that are still developing, controls and processes that continue to evolve, and assumptions that are subject to change in the future. Consequently, actual results may vary materially from what is contained in a forward-looking statement.

For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to our business in general, see our Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on February 28, 2023, and our subsequent periodic reports filed with the SEC from time to time. Copies of these filings are available on the Clean Energy Fuels Corp. website at <https://investors.cleanenergyfuels.com/sec-filings>, or on the SEC website at www.sec.gov. All forward-looking statements in this report are based on information currently available to us, and we assume no obligation to update these forward-looking statements in light of new information or future events.

A Note on Materiality

The information included in, and any issues identified as material for purposes of, this document may not be considered material for SEC reporting purposes. In the context of this sustainability report, the term “material” is distinct from, and should not be confused with, such term as defined for SEC reporting purposes. The inclusion of information in this report does not indicate that the subject or information is material to Clean Energy’s business or operating results.

Website references and hyperlinks throughout this document are provided for convenience only, and the content on the referenced third-party websites is not incorporated by reference into this report, nor does it constitute a part of this report. We assume no liability for the content contained on the referenced third-party references.

GRI content index

Statement of use: Clean Energy has reported the information cited in this GRI content index for the period calendar year 2022 with reference to the GRI Standards.

GRI 1 used: GRI 1: Foundation 2021.

Topic	Standard	GRI Standard Item	Disclosure	Location (Section, page #)
General	GRI 2: General Disclosures 2021	2-1	Organizational details	About Clean Energy, pg. 6 About this Report, pg. 49 Closing page, pg. 55
		2-2	Entities included in the organization’s sustainability reporting	About This Report, pg. 49
		2-3	Reporting period, frequency, and contact point	About This Report, pg. 49
		2-4	Restatements of information	Clean Energy’s 2022 Greenhouse Gas Inventory, pg. 43 About This Report, pg. 49
		2-5	External assurance	This report was not assured
		2-6	Activities, value chain and other business relationships	About Clean Energy, pg. 6 Our Products & Services, pg. 8–11
		2-7	Employees	Employee Recruitment, Retention, and Engagement, pg. 32 Diversity, Equity, and Inclusion, pg. 33 Performance, pg. 50
		2-9	Governance structure and composition	Corporate Governance, pg. 12
		2-10	Nomination and selection of the highest governance body	Business Ethics, Executive Compensation, and Incentives, pg. 41
		2-11	Chair of the highest governance body	Corporate Governance, pg. 12
		2-12	Role of the highest governance body in overseeing the management of impacts	Corporate Governance, pg. 12 Business Ethics, Executive Compensation, and Incentives, pg. 41
		2-13	Delegation of responsibility for managing impacts	Corporate Governance, pg. 12
		2-19	Remuneration policies	Executive Compensation, pg. 41
		2-20	Process to determine remuneration	Executive Compensation, pg. 41
2-22	Statement on sustainable development strategy	A message from Andrew J. Littlefair, President and CEO, pg. 3–4		

Topic	Standard	GRI Standard Item	Disclosure	Location (Section, page #)
General (continued)	GRI 2: General Disclosures 2021 (continued)	2-23	Policy commitments	Corporate Governance, pg. 12 Conflict Minerals Policy, pg. 27 Human Rights, pg. 35
		2-25	Processes to remediate negative impacts	Business Ethics, Executive Compensation, and Incentives, pg. 41
		2-26	Mechanisms for seeking advice and raising concerns	Addressing Methane Leaks, pg. 24
		2-28	Membership associations	Our Recruitment Partners, pg. 33 How We Combat Disproportionate Air-Quality Impacts in Low-Income Communities, pg. 34 Governance Goals, pg. 38 Associations, pg. 39
		2-29	Approach to stakeholder engagement	Conflict Minerals Policy, pg. 27 Human Rights, pg. 35 Stakeholder Engagement, Advocacy and Lobbying, pg. 39 Code of Ethics, pg. 41
		2-30	Collective bargaining agreements	Performance, pg. 50
GHG and Air Emissions	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Our Sustainability Strategy, pg. 13
		3-2	List of material topics	Environmental Goals, pg. 21
		3-3	Management of material topics	How We Combat Disproportionate Air-Quality Impacts in Low-Income Communities, pg. 34 Clean Energy's 2022 Greenhouse Gas Inventory, pg. 43
	GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Clean Energy's 2022 Greenhouse Gas Inventory, pg. 43 Performance: Company Emissions Within the Scopes, pg. 44 Station Fugitive Emissions, pg. 45 Clean Energy Service Fleet Vehicle Emissions, pg. 46 About This Report, pg. 49
		305-2	Energy indirect (Scope 2) GHG emissions	Clean Energy's 2022 Greenhouse Gas Inventory, pg. 43 Performance: Company Emissions Within the Scopes, pg. 44 Renewable Energy for Stations, pg. 45 Facilities, pg. 46 About This Report, pg. 49

Topic	Standard	GRI Standard Item	Disclosure	Location (Section, page #)
GHG and Air Emissions (continued)	GRI 305: Emissions 2016 (continued)	305-3	Other indirect (Scope 3) GHG emissions	Clean Energy's 2022 Greenhouse Gas Inventory, pg. 43 Performance: Company Emissions Within the Scopes, pg. 44 Fuel Sold, pg. 47 About This Report, pg. 49
		305-4	GHG emissions intensity	Environmental Goals, pg. 21 Our Products & Services, pg. 8 Del Rio Dairy, pg. 9 Clean Energy's 2022 Greenhouse Gas Inventory, pg. 43 Boron Plant Efficiency Metrics, pg. 44
		305-5	Reduction of GHG emissions	Environmental Goals, pg. 21 Biogenic Emissions, pg. 44 Boron Plant Emissions and Production, pg. 44 Renewable Energy for Stations, pg. 45 Clean Energy Service-Fleet Vehicle Emissions, pg. 46 Fuel Sold, pg. 47 Climate Change, pg. 49
		305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	Clean Energy's 2022 Greenhouse Gas Inventory, pg. 43
	GRI 302: Energy 2016	302-1	Energy consumption within the organization	Clean Energy's 2022 Greenhouse Gas Inventory, pg. 43
		302-3	Energy intensity	Boron Plant Emissions and Production, pg. 44 Boundary within CE: LNG Plants
		302-4	Reduction of energy consumption	Boron Plant Efficiency Metrics, pg. 44 Boundary within CE: LNG Plants
		302-5	Reductions in energy requirements of products and services	Boron Plant Emissions and Production, pg. 44 Boundary within CE: LNG Plants

Topic	Standard	GRI Standard Item	Disclosure	Location (Section, page #)
Customer Energy Efficiency and GHGs	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Clean Energy's 2022 Greenhouse Gas Inventory, pg. 43
		3-2	List of material topics	
		3-3	Management of material topics	
	GRI 302: Energy 2016	302-2	Energy consumption outside of the organization	Clean Energy's 2022 Greenhouse Gas Inventory, pg. 43 Fuel Sold, pg. 47
Disproportionate Air Quality Impacts	GRI 3: Material Topics 2021	3-1	Process to determine material topics	How We Combat Disproportionate Air-Quality Impacts in Low-Income Communities, pg. 34
		3-2	List of material topics	
		3-3	Management of material topics	
	GRI 413: Local Communities 2016	413-2	Operations with significant actual and potential negative impacts on local communities	How We Combat Disproportionate Air-Quality Impacts in Low-Income Communities, pg. 34 <i>Omissions: Partial, specific locations not disclosed</i>
GRI 3: Material Topics 2021 Employee Recruitment, Retention, and Engagement	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Social Goals, pg. 31 Employee Recruitment, Retention, and Engagement, pg. 32–36
		3-2	List of material topics	
		3-3	Management of material topics	
	GRI 404: Training and Education 2016	404-2	Programs for upgrading employee skills and transition assistance programs	Employee Recruitment, Retention, and Engagement, pg. 32 Diversity, Equity, and Inclusion, pg. 33 Employee and Contractor Safety, pg. 35 Performance, pg. 50
	GRI 401: Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Investing in Relationships, pg. 32
Diversity, Equity, and Inclusion (DEI)	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Social Goals, pg. 31 Diversity, Equity, and Inclusion, pg. 33
		3-2	List of material topics	
		3-3	Management of material topics	
	GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Employee Recruitment, Retention, and Engagement, pg. 32 Performance, pg. 50
	GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	2022 Highlights, pg. 16 Diversity, Equity, and Inclusion, pg. 33 Performance, pg. 50

Topic	Standard	GRI Standard Item	Disclosure	Location (Section, page #)
Employee and Contractor Safety	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Employee and Contractor Safety, pg. 35
		3-2	List of material topics	
		3-3	Management of material topics	
	GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Investing in Relationships, pg. 32 Employee and Contractor Safety, pg. 35
		403-5	Worker training on occupational health and safety	Employee Recruitment, Retention, and Engagement, pg. 32 Fostering a Diverse Workforce, pg. 33 Performance, pg. 50
		403-6	Promotion of worker health	Investing in Relationships, pg. 32
		403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Addressing Methane Leaks, pg. 24 Conflict Minerals Policy, pg. 27 How We Combat Disproportionate Air-Quality Impacts in Low-Income Communities, pg. 34 Employee and Contractor Safety, pg. 35
		403-9	Work-related injuries	Performance, pg. 50
Policy, Advocacy, and Lobbying	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Governance Goals, pg. 38 Stakeholder Engagement, Advocacy, and Lobbying, pg. 39 Policy, Advocacy, and Lobbying, pg. 40
		3-2	List of material topics	
		3-3	Management of material topics	
	GRI 415: Public Policy 2016	415-1	Political contributions	Political Contributions, pg. 40
Environmental and Social Impacts of Natural Gas Extraction, Processing, and Transport	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Physical Risks, pg. 28
		3-2	List of material topics	
		3-3	Management of material topics	
	GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	How We Combat Disproportionate Air-Quality Impacts in Low-Income Communities, pg. 34
		416-2	Incidents of noncompliance concerning the health and safety impacts of products and services	Performance, pg. 50

Topic	Standard	GRI Standard Item	Disclosure	Location (Section, page #)
Climate-Transition Risk	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Climate-Transition Risk, pg. 28
		3-2	List of material topics	
		3-3	Management of material topics	
Human Rights	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Human Rights, pg. 35
		3-2	List of material topics	
		3-3	Management of material topics	
Labor Standards and Employment Conditions	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Investing in Relationships, pg. 32 Employee and Contractor Safety, pg. 35–36
		3-2	List of material topics	
		3-3	Management of material topics	
	GRI 403: Occupational Health and Safety 2018	403-2	Hazard identification, risk assessment, and incident investigation	Our Sustainability Strategy, pg. 13 Employee and Contractor Safety, pg. 35–36
Operational Energy Efficiency	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Operational Energy Efficiency, pg. 44 Boundary within CE: LNG Plants
		3-2	List of material topics	
		3-3	Management of material topics	
Biodiversity and Land Use	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Biodiversity and Land Use, pg. 27
		3-2	List of material topics	
		3-3	Management of material topics	
Waste	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Our Sustainability Strategy, pg. 13 Environmental Benefits of Dairy RNG, pg. 22 Environmental Benefits of Landfill RNG, pg. 23
		3-2	List of material topics	
		3-3	Management of material topics	
	GRI 306: Waste 2020	306-3	Waste generated	Recycling, pg. 27

Topic	Standard	GRI Standard Item	Disclosure	Location (Section, page #)
Water Stewardship	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Water, pg. 26
		3-2	List of material topics	Water Reclamation at Our Boron Plant, pg. 27
		3-3	Management of material topics	
	GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Water, pg. 26 Water Reclamation at Our Boron Plant, pg. 27 Boundary within CE: All <i>Omissions: Partial disclosure, high level discussion on water impacts and management in operations. We aim to improve the disclosure in future reports</i>
		303-5	Water consumption	Performance, pg. 50 Boundary within CE: LNG Plants <i>Omissions: Partial disclosure, with water consumption from LNG Plants, but not from other facilities like company offices</i>
Disaster Preparedness and Response	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Climate Transition Risk, pg. 28-29
		3-2	List of material topics	Infrastructure Safety and Security, pg. 36
		3-3	Management of material topics	Data Security and Resiliency, pg. 36
	GRI 201: Economic Performance 2016	201-2	Financial implications and other risks and opportunities due to climate change	Climate Transition Risk, pg. 28–29
Infrastructure Safety and Security	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Infrastructure Safety and Security, pg. 36
		3-2	List of material topics	Data Security and Resiliency, pg. 36
		3-3	Management of material topics	
Business Ethics, Executive Compensation, and Incentives	GRI 3: Material Topics 2021	3-1	Process to determine material topics	Business Ethics, Executive Compensation, and Incentives, pg. 41
		3-2	List of material topics	
		3-3	Management of material topics	
	GRI 205: Anti-corruption 2016	205-2	Communication and training about anti-corruption policies and procedures	Anti-Corruption Policy, pg. 41



Clean Energy

4675 MacArthur Court, Suite 800
Newport Beach, CA 92660
949.437.1000

CleanEnergyFuels.com