

CLEAN ENERGY FUELS CORP.

# SUSTAINABILITY REPORT 2017



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## Introduction from the CEO



**“We take pride in our ability to deliver a cleaner fuel to these cities and towns across North America to improve the health and lives of our customers and the communities they operate in.”**

At **Clean Energy** we believe that natural gas-fueled trucks, transportation, and commercial vehicles are the best and most immediate solution for eliminating the negative impact of pollutants from diesel fuel and combatting climate change. With new advancements in engine technology, coupled with a wider adoption of natural gas, the transportation industry has come a long way in reducing the amount of toxic emissions on our roads, highways, and communities.

In 2017 we continued this momentum and saw a heightened interest in **Redeem™**, the world’s first renewable and commercially available vehicle fuel made entirely from 100 percent organic waste. In driving the expansion of RNG as a transportation fuel, we have reduced reliance on extracted fossil fuels and furthered our customer’s sustainability goals, while delivering a seamless transition to cleaner, greener fleets.

**Clean Energy** also championed a near-zero fueling solution, combining Redeem with revolutionary engine technology, to reduce smog-forming NO<sub>x</sub> emissions by 90 percent over the current EPA standard, and produce 70 percent less greenhouse gas (GHG) emissions than diesel trucks.

In 2017 **Clean Energy** gained a wider acceptance and understanding of natural gas as an alternative transportation fuel, and increased adoption in many vehicle segments including trucking, public transportation, refuse, ready mix, airports, and delivery. We continue to promote the growth of natural gas as a stable, cost effective, and domestic energy source that can significantly reduce GHG emissions in the transportation sector and protect populations from harmful diesel gas toxins.

We take pride in our ability to deliver a cleaner fuel to these cities and towns across North America to improve the health and lives of our customers and the communities they operate in. Protecting our local neighborhoods and residents is consistent with our founding principles and our responsibility as a leader in our industry.

**Andrew J. Littlefair**  
*President and Chief Executive Officer*

# About Clean Energy

Twenty years ago, Pickens Fuel Corporation became **Clean Energy Fuels Corp.**, the leading provider of natural gas fuel and renewable natural gas (RNG) fuel for transportation in North America. With over 530 private and public fueling stations in 42 states and Canada, **Clean Energy** designs, builds, owns, and operates liquefied natural gas (LNG) and compressed natural gas (CNG) stations for hundreds of fleets in the refuse, airport, transit, and heavy-duty trucking industries.

Since its inception, the company has continued on an upward growth trajectory, and 2017 was no exception.

In 2017, BP acquired the upstream portion of Clean Energy's RNG business and signed a long-term supply contract. **Clean Energy's** transaction with BP has allowed it to increase its U.S. RNG

transportation fueling capabilities and expand its customer base in North America. The deal enabled both companies to meet the escalating demand for low carbon renewable fuels.

Accelerating further growth, in November 2017 **Clean Energy** and Landi Renzo combined their compressor manufacturing subsidiaries to form a new standalone company that immediately became one of the leading suppliers of natural gas compressors and other related products across the entire globe.

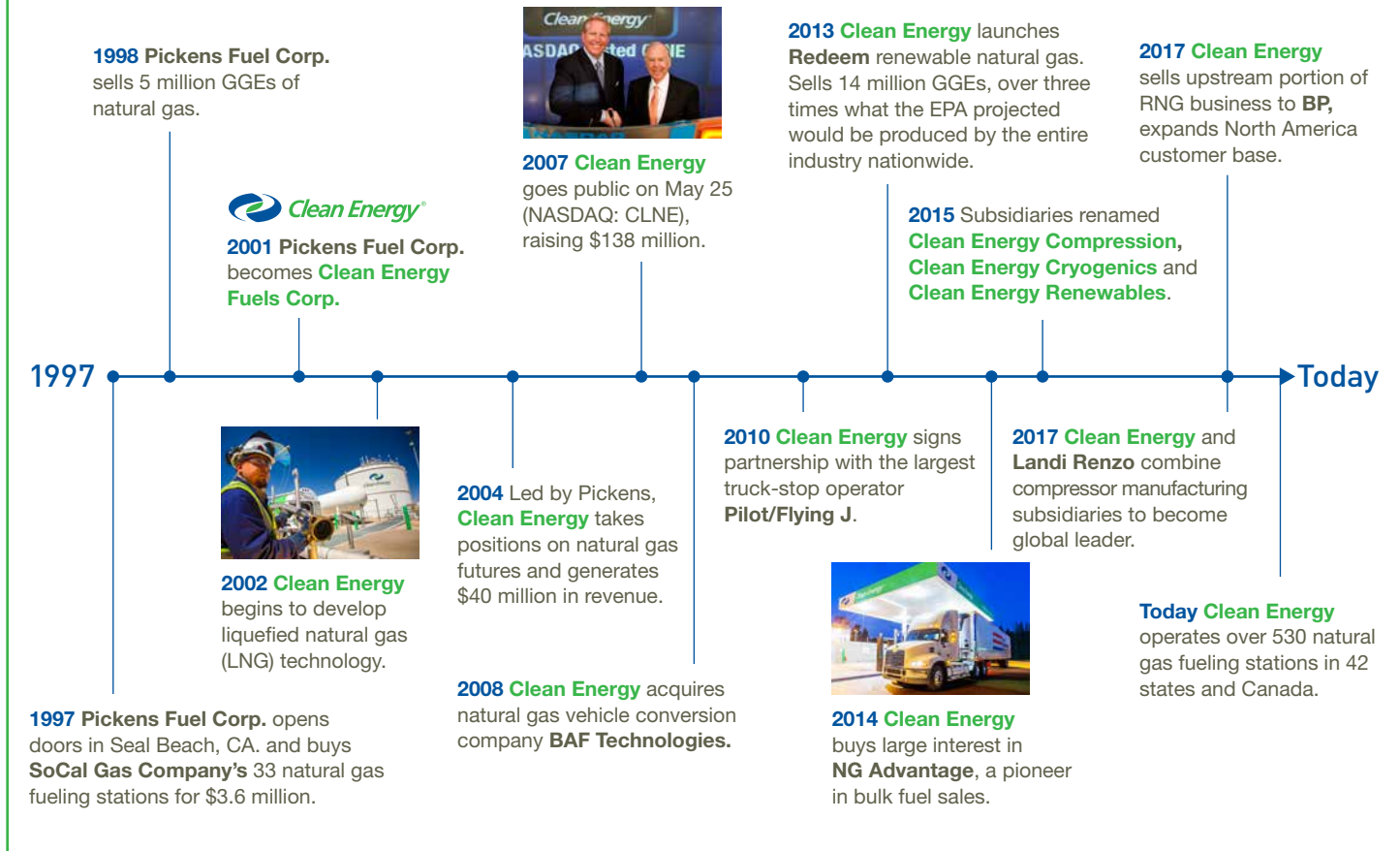
Additionally, in 2017 **Clean Energy** supported large municipalities like LA Metro in putting the needs of its customers and the people of Los Angeles County at the forefront in its decision to switch to **Redeem**. **Clean Energy** helped the county adopt an affordable natural gas fueling

alternative that will make significant strides in cleaning up the air and reducing harmful air toxins and greenhouse gases.

**Clean Energy** further advanced natural gas as a transportation fuel in 2017 when it broke ground on a new, state-of-the-art compressed natural gas (CNG) station in the Hunts Point section of the Bronx that will fuel multiple fleets operating across the city. As the first RNG station in New York, it will allow more fleets, both public and private, to realize the economic and environmental benefits of fueling with natural gas, and the air over the region will be cleaner because of it.

In another 2017 milestone, **Clean Energy** supplied Dallas/Fort Worth International Airport with **Redeem**, helping it to become the only airport in the United States to be certified carbon neutral, the largest airport in the world with that distinction.

## Company History



# Why Natural Gas?

## The Clean Energy Solution

Clean. Abundant. Domestic. Affordable. Safe. Reliable. Natural gas, the cleanest-burning motor fuel, is the vital energy source of our lower carbon future. With a growing number of cleaner fuel alternatives for vehicles today, natural gas is the best choice for powering the transportation industry due to its clean, cost-efficient, domestically abundant, safe, and consistently reliable properties.

## Cleaner

Greenhouse gas emissions can be reduced by up to 27 percent when fueling with traditional natural gas or 70 percent when using **Clean Energy's Redeem™** branded renewable natural gas (RNG) (**Clean Energy**, 2017b) in place of diesel. Natural gas has a lower carbon footprint and produces less carbon dioxide emissions when burned. The California Air Resources Board (CARB) has concluded that natural gas vehicles emit less greenhouse gas emissions than a comparable gasoline or diesel-fueled vehicle on a well-to-wheel basis (**Clean Energy**, 2016b). Additionally, a recent study of alternative fuel vehicle technology concluded that natural gas heavy-duty vehicles fueled by renewable natural gas and using the most current engine technology performed equivalent to electric vehicles powered by the current grid with respect to greenhouse gas emissions (GNA, 2016).

## Organically-Sourced Renewable Fuel

**Redeem™** is the first commercially available, renewable natural gas vehicle fuel. It is derived entirely from organic waste streams and is available in either CNG or LNG form.

According to CARB estimates, **Redeem** enables up to a 70 percent reduction in carbon emissions when displacing diesel or gasoline.

**Redeem** is derived from biogenic methane that is naturally generated by the decomposition of organic waste at landfills and agricultural waste sources. Capture and combustion of this methane, which might otherwise have migrated to the atmosphere, can result in a negative carbon footprint.

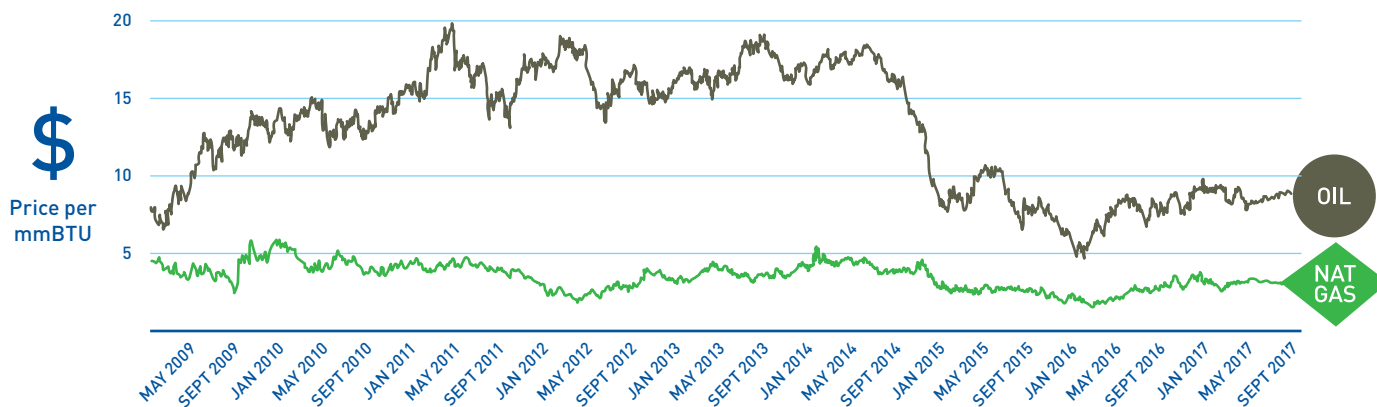
## Less Expensive

Natural gas fuel prices are more stable and affordable than diesel or gasoline. Due to the abundance of natural gas, its cost in the United States is significantly less than that of crude oil on an energy-equivalent basis. Based on projections from the U.S. Energy Information Administration, natural gas will remain cheaper than gasoline and diesel for the foreseeable future (**Clean Energy**, 2016b).

## National Security

Keeping America's natural gas safely flowing through the 2.2-million-mile pipeline is vital to our national security. According to the American Gas Association (AGA), the nation's natural gas energy utilities work closely with the Department of Homeland Security (DHS), Department of Energy, Department of Transportation, Federal Energy Regulatory Commission, Congress, and National Association of Regulatory Utility Commissioners (NARUC) to examine their security practices by performing vulnerability assessments and making appropriate enhancements to their physical and cybersecurity programs. Such enhancements include supplementing current emergency plans with terrorist risk elements, strengthening physical barriers, tightening control access, adjusting frequency of patrols, and confirming response and recovery actions with local law and emergency officials. Utilities monitor and respond to any potential threats to the industry.

Cost of Oil vs. Natural Gas



Data provided by the U.S. Energy Information Administration

## Emergency Preparedness

Natural gas is transported in two ways: CNG via underground pipelines and LNG on tanker trucks like gasoline or diesel. Many of our customers choose CNG as their preferred fueling option, particularly in the northeast, where weather can impact operations. Since CNG is transported through an extensive 2.2 million-mile underground natural gas delivery system that has an outstanding safety record, it is not subject to road closures or other operational constraints that can arise in inclement weather, allowing operations to continue at the most critical times.

When natural disasters strike, **Clean Energy** has a formal Emergency Preparedness and Response Plan to safely operate through emergency conditions. When Hurricane Harvey hit the Houston area, our disaster preparedness was highly praised by our customers. Our service technicians took safety precautions and were on hand to bring the stations online. [See sidebar]



## Service Technicians Become Hurricane Harvey Heroes

When in late August 2017 Hurricane Harvey threatened the Houston area, **Clean Energy** service technicians immediately took preventative measures to protect station assets. As they weathered the storm, the team encountered dangerous conditions in efforts to monitor station conditions and restore operability.

Upon learning that Harvey was heading toward Houston, **Clean Energy** technicians sprang into action and started preparing by visiting customers' stations to take precautions that included ensuring that generators were operational, securing fuel tanks with straps, and weather-proofing other apparatus.

While some of the technicians were still making rounds to secure stations Harvey hit with ferocity on August 27. With visibility near zero, one technician had to drive through water above the hood of his car and narrowly made it to safety. Another needed the Coast Guard to help evacuate his family from their home. As the extreme weather conditions continued and record-breaking rains pounded the region, most of Houston was under water, rendering the main roads and highways impassible. After they made it to safety, tech team members hunkered down and focused on protecting their families and assessing property damage, all while communicating with **Clean Energy** headquarters, where updates were broadcast out over Twitter.

When Harvey started to clear, the technicians used GPS maps to find alternative routes, so they could bypass washed-out roads and navigate the back roads to get to the stations. Despite the dangers of driving through flood-ravaged terrain, their priority was to evaluate conditions at the sites and make repairs. Using the generator power that they had prepared prior to the storm and scrambling to obtain spare generators under hardship conditions, **Clean Energy** technicians were able to get eight of nine stations online within 24 hours, including Dean Foods, Waste Connection, and Republic Services, faster than diesel services could be restored.

**Clean Energy's** technicians were the heroes of Hurricane Harvey, putting themselves in dangerous situations to ensure that stations experienced minimal impact from the storm and among the first facilities to get back online after. The team members' extensive training, expertise, and dedication paid off resulting in a job well done.

## Subsidiaries

The **Clean Energy** portfolio includes both majority and wholly-owned subsidiaries that allow us greater geographic and technological range to deliver natural gas solutions worldwide. Our subsidiaries include:



**Clean Energy Renewables** markets and distributes biomethane and is a leading marketer of renewable natural gas (RNG), including **Redeem**, the first RNG for commercial vehicles.



**Clean Energy Cryogenics** is the leading engineering and construction team responsible for building over 70% of the United States network of turnkey LNG/LCNG fleet fueling stations.



**NG Advantage™** is the nation's leading provider of "virtual pipeline" services for industrial energy users who do not have access to natural gas pipelines. NG Advantage uses high-capacity tube trailers to deliver CNG for non-vehicle purposes, such as hospitals, food processors, and manufacturers.



**LANDIRENZO®**

**Clean Energy Compression** is North America's largest sole manufacturer of non-lubricated gas compressors and related technologies and sells quality compressors in over 25 countries. In 2017 we partnered with **Landi Renzo**, who now owns the majority stake in **Clean Energy Compression**.

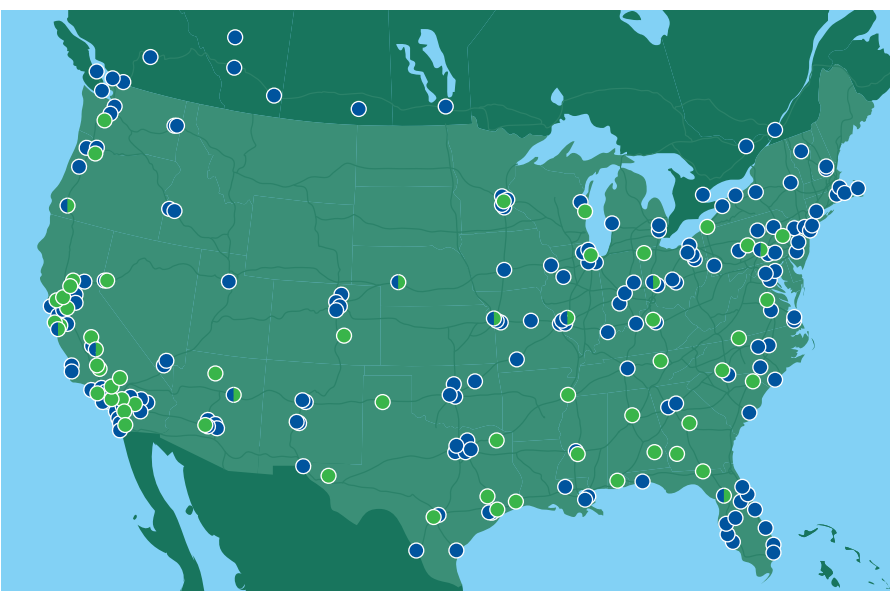
A complete list of **Clean Energy** subsidiaries can be found in Appendix A.

### Scale

Metrics related to company scale.

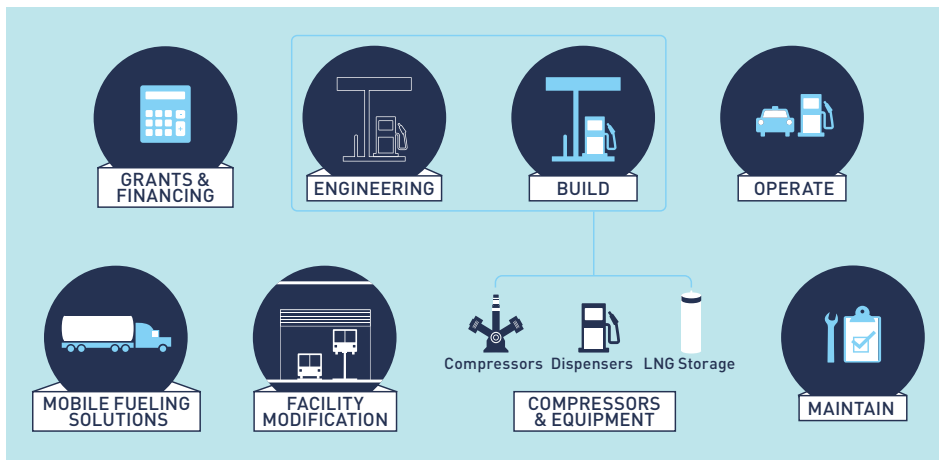
Corporate Headquarters	4675 MacArthur Court, Suite 800 Newport Beach, California 92660
Global Employees	431
Gasoline Gallon Equivalents (GGEs) Delivered in 2017	351 million
LNG Liquefaction Plants	Willis, Texas Boron, California
Fueling Stations (own, operate, or supply)	over 530 (42 States in U.S., 4 Provinces in Canada)
Fleet Customers	nearly 1,000
Natural Gas Vehicles Fueled Daily	over 45,000
Heavy-Duty Trucks Fueled Daily	over 3,000
Airports Serviced Daily	nearly 40
Refuse Vehicles Fueled Daily	nearly 10,000
Transit Vehicles Fueled Daily	nearly 9,000

### Clean Energy Station Locations



● CNG Station ● LNG Station ● CNG/LNG Station

## Products & Services



**Clean Energy** offers a comprehensive portfolio of premium fuel products and commercial services for existing natural gas fleets and new fleets converting from diesel or gasoline. Our services include designing, building, operating and maintaining time-fill and fast-fill CNG, LNG and CNG/LNG combination fueling stations. The following is a comprehensive list of the products and services **Clean Energy** provides:

### In-House Engineering, Construction, and Permitting

In recent years, **Clean Energy** has expanded its internal engineering and construction capacities by adding engineers, internal permitting specialists and project managers. The team has the knowledge and qualifications needed to design and build natural gas fueling stations that meet our customer's needs while incorporating best practices and ensuring code compliance.

### Station Operation and Maintenance

Station maintenance begins with local, qualified, trained and company-employed service technicians that can respond to our customers' requirements at any time. We operate and maintain the most extensive network of private and public natural gas fueling stations in North America with a team of more than 150 fully-trained service technicians. Daily we inspect and service more than 500 compressors, dryers, motors, instrumentation, piping/valves, storage vessels, safety equipment, and dispensers at natural gas fueling stations across North America.

### Vehicle Financing

We work with our customers to help facilitate their vehicle acquisition and transition to natural gas. This includes assisting with vehicle selection and financing, as well as aligning the vehicle purchase with the infrastructure development timeline, ensuring customers maximize returns through fuel savings as more vehicles are deployed. Our approach is designed to give our customers the power to purchase vehicles that meet their specific requirements.

### Grant Funding

**Clean Energy** assists customers applying for grants and incentive funding to help reduce the acquisition cost of natural gas vehicles. Our dedicated in-house staff has the knowledge, resources, and experience to help customers with the application process, as well as the ongoing reporting requirements. To date, our team has secured over \$390 million in funding from a variety of federal, state and local agencies.

### Success Story

#### GRANT DEPARTMENT

Total Requested (2017)	\$48,624,771
Total Awarded (2017)	\$18,950,346
Total Awarded (Historical)	\$390,722,478

### CNG Sales

CNG is natural gas fuel that has been compressed to approximately 3,600 pounds per square inch (PSI). It is a naturally odorless, colorless, and gaseous fuel. CNG is inexpensive to produce and store and is an ideal fuel source for scalable fleets. We obtain natural gas from local utilities or third-party marketers, then compress it, store it, and dispense it to customer vehicles. Before compression, our CNG is the same natural gas that is used for heating and cooking in homes and industries across the United States.

### LNG Production & Sales

Liquefied natural gas (LNG) is natural gas cooled to -264°F, condensed into a liquid. LNG is naturally clear, non-toxic, and odorless. LNG tanks are fuel efficient and light. Less tank weight means more fuel storage, making LNG ideal for vehicles that have limited access to fueling stations. We obtain LNG from our liquefaction plants, located near Houston, Texas and Boron, California, as well as from 25 third party suppliers. In 2017, 65 percent of our LNG was produced at our plants, up from 56 percent in 2016. We also sell LNG on a bulk basis to fleet customers.



## Redeem™

Renewable natural gas (RNG) is natural gas collected from organic waste streams such as landfills, animal waste digesters, and wastewater treatment plants. We source RNG through third-party producers. We sell most of the RNG we produce through our natural gas fueling infrastructure for use as a vehicle fuel. The RNG we sell for vehicle fuel is distributed under the **Clean Energy** branded name **Redeem™**. The **Clean Energy Redeem** product offers life-cycle carbon emissions reductions up to 70 percent when displacing the use of gasoline or diesel (**Clean Energy**, 2017b). **Redeem** is an exact replacement transportation fuel for fossil CNG and LNG

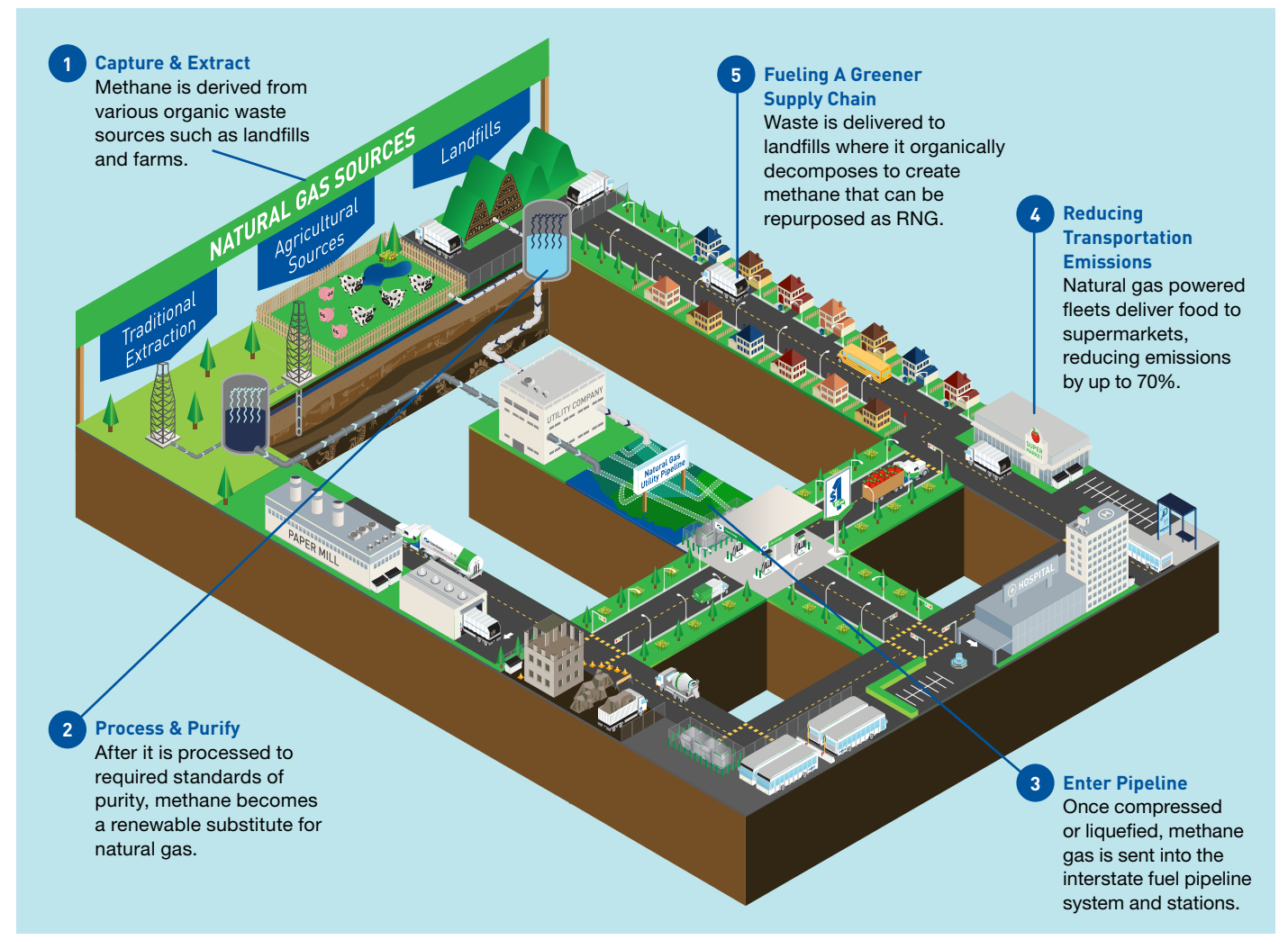
with a significant and potentially negative carbon footprint, depending on the feedstock. It can power any natural gas engine—whether in an eighteen-wheeler or a taxi cab—and meet 100 percent of its fueling requirements while providing even greater carbon reduction benefits than our standard fuel products.

In addition to the carbon reduction benefits produced, every gallon of **Redeem** consumed provides additional emissions benefits by either capturing and converting atmosphere-bound greenhouse gas from organic waste sources or by offsetting criteria pollutants that would have resulted

from flares. **Redeem** was launched by **Clean Energy** in 2013, with 14 million GGEs delivered and consumed as a vehicle fuel, nearly triple the amount of cellulosic biofuel that the EPA projected would be produced by the entire industry nationwide.

Today, all 135 owned and operated California fueling stations are supplied 100 percent with **Redeem**, fueling thousands of vehicles daily. In 2017, we sold over 78.5 million GGEs, and **Redeem** contributed to over 435,701 metric tons of greenhouse gas emissions reductions.

### What is Renewable Natural Gas?



## Customer Markets

We serve customers in a variety of markets, including trucking, airports, refuse, public transit, industrial, and institutional energy users and government fleets. We believe these customer markets are well-suited for the adoption of natural gas vehicle fuel because they consume relatively high volumes of fuel, refuel at centralized locations or along well-defined routes and/or are facing increasingly stringent emissions or other environmental requirements.



### Trucking

We believe heavy-duty trucking represents one of the greatest opportunities for natural gas to be used as a vehicle fuel in the United States, and as of December 31, 2017, we have fueled over 3,000 heavy-duty trucks. Because these high-mileage vehicles consume substantial amounts of fuel, they can derive significant benefits from the lower cost of natural gas without sacrificing performance. Many well-known shippers, manufacturers, retailers, and other truck fleet operators have started to adopt natural gas fueled trucks to move their freight. Such companies include *Honda, Frito-Lay, FedEx, Anheuser-Busch, Verizon, Bimbo, The Home Depot, AT&T, Colgate-Palmolive, Costco Wholesale, Lowes, Pepsi, UPS, MillerCoors, HP, Unilever, Starbucks, Kraft, Kroger, P&G, Hertz* and *Owens Corning*.

To help facilitate the transition of trucking fleets to natural gas, we have negotiated favorable CNG and LNG tank pricing from manufacturers, which we are passing along to our customers, and we've built America's Natural Gas Highway (ANGH). Many existing ANGH stations are located at Pilot Flying J Travel Centers, the largest truck fueling operator in the United States.



### Airports

We estimate that vehicles serving airports in the United States, including airport delivery fleets, rental car and parking passenger shuttles and taxis, consume an aggregate of approximately two billion gallons of fuel per year. Additionally, many U.S. airports face emissions challenges and are under regulatory directives and political pressure to reduce pollution, particularly as part of any expansion plans. As a result, many of these airports have adopted various strategies to address tailpipe emissions, including rental car and hotel shuttle consolidation and requiring or encouraging service vehicle operators to switch their fleets to natural gas. To assist in this effort, airports are contracting with service providers to design, build, and operate natural gas fueling stations in strategic locations on their properties.

As of December 31, 2017, we served 39 airport customers, including *Atlanta Hartsfield Jackson International, Baltimore Washington International, Dallas/Fort Worth International, Denver International, Dulles International (Washington D.C.), George Bush International (Houston), Las Vegas, Logan International (Boston), LaGuardia (New York City), John F. Kennedy International (New York City), Los Angeles International, Newark International, Oakland International, Orlando, Phoenix Sky Harbor International, San Francisco International, San Diego International, Sea-Tac International (Seattle), and Tampa International*.

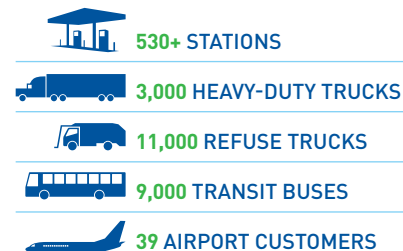




## Refuse

According to INFORM, there are nearly 200,000 refuse trucks in the United States that collect, support, and haul refuse and recyclables, which collectively consume approximately two billion gallons of fuel per year. We estimate that approximately 10-15 percent of refuse trucks in 2017 operate on natural gas, with the top three private haulers operating nearly 30% of their daily route vehicles on natural gas. Refuse haulers are increasingly adopting trucks that run on CNG to realize operational savings and to address their customers' demands for reduced emissions. As of December 31, 2017, we fuel over 11,000 refuse vehicles for customers including *Waste Management* and *Republic Services*, as well as other waste haulers such as *Waste Connections*, *Atlas Disposal*, *Burrtec*, *Recology*, *South San Francisco Scavenger Waste Pro*, and more. We also provide vehicle fueling services to municipal refuse fleets, including fleets in Dallas, Los Angeles, San Antonio and New York City, among other locations.

## Highlights



## Public Transit

According to the American Public Transportation Association, there are over 71,000 municipal transit buses operating in the United States. In many areas, increasingly stringent emissions standards have limited the fueling options available to public transit operators. Also, transit agencies typically fuel at a central location and use high volumes of fuel. It is estimated that transit agencies in the United States consume approximately 1.5 billion gallons of fuel per year. Many transit agencies have been early adopters of natural gas vehicles, and over 25 percent of existing transit buses and over 35 percent of new transit buses operate on natural gas.

As of December 31, 2017, we fuel close to 9,000 transit vehicles for customers including *Los Angeles Metropolitan Transit Authority*, *Foothill Transit* (Los Angeles County, California), *Orange County Transit Authority*, *Santa Monica Big Blue Bus*, *Dallas Area Rapid Transit Phoenix Transit*, *New Jersey Transit*, *Jacksonville Transportation Authority*, *NICE Bus* (Nassau County, New York) and *Washington Metro Area Transportation Authority*, as well as public transit customers in British Columbia.



## Industrial and Institutional Customers

**NG Advantage** uses its virtual natural gas pipelines and interconnects to serve several customers that do not have direct access to natural gas pipelines or desire to take advantage of commodity price differences. We also transport LNG to customers via virtual natural gas pipelines.



## Government Fleets

In 2015, 2016 and 2017, approximately 18 percent, 16 percent and 19 percent of our revenue, respectively, was derived from contracts with government entities, such as municipal transit fleets. As government regulations on pollution continue to become more stringent, government agencies are evaluating ways to make their fleets cleaner and run more economically.

Our representative government fleet customers include the *California Department of Transportation*, *State of New York*, *State of Colorado*, *City of New York*, *City of Denver*, *City and County of Los Angeles*, *City of Newport Beach*, *South Coast Air Quality Management District* (Southern California region), *City and County of San Francisco*, *City of Oakland*, *City and County of Dallas*, *City of Phoenix*, *The University of California*, and *Oklahoma State University*.



## Stakeholders

**Clean Energy** is committed to active, collaborative stakeholder engagement. We identify our stakeholders as those groups upon whom our success depends, as well as those who are affected by our business. Our stakeholders begin with our shareholders and exist across our supply chain of upstream energy production and downstream fueling infrastructure from the communities they impact to the employees in our offices.

We view active engagement as the foundation of responsible corporate citizenship. The following list introduces our stakeholders, along with typical forms of engagement and their priorities.

### Stakeholders

STAKEHOLDER	EXAMPLES OF ENGAGEMENT	KEY TOPICS
Employees	Clean Connection, Meetings, Training Sessions	Safety, Health & Wellness, Career Development, Benefits, Diversity, Tower of Success
Customers	Surveys, Growth Strategies, Account Management	Affordability, Reliability, Product Safety, Air Quality
Shareholders	Annual Report, Quarterly/ Annual Disclosures	Growth, Sustainability, Governance Practices, Policy Engagement
Local Communities	Engagement Program, Community Events, Sponsorships	Air Quality, Economic Development
Regulatory Agencies / Government	Inspections, Facility Audits, Performance Disclosures	Environmental Impact, Taxes
Non-Governmental Organizations	Community Meetings	Climate Change, Environmental Impact, Air Quality
Partners	Executive Briefings, Quarterly/ Annual Disclosures	Growth, Government Policy, Sustainability, Natural Gas Technology



## Material Issues

In preparing our initial baseline 2016 report, we reviewed feedback received from stakeholders. Our regular outreach continues to include targeted customer surveys, community meetings, industry conferences, public policy committees, and shareholder meetings. We also held discussion sessions with our employees to ask what issues were important to them. The questions, input, and insight we received from our stakeholders throughout 2016 informed the material issues selected for this publication.

This 2017 update is organized by those same material issues, from global concerns to our impact at the local level.

- Climate Change
- Environment
- Profit & Stability
- Citizenship

### Material Issue Selection Process



#### ENGAGE

Clean Energy listens. We maintain dialogues with our stakeholders and understand what is important to them.



#### ASSESS

From addressing changing climate to maintaining a sustainable business, we consider our stakeholders' diverse priorities and the significance of their economic, social, and environmental impacts.



#### VALIDATE

We validate issue selection with our leadership, ensuring they align with our principal risks, and select material issues of the highest priority.

# Climate Change



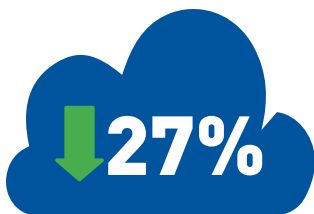
# Climate Change

In recent years the focus on climate change has become a top policy issue with nations and states as they aggressively plan to tackle emissions that contribute to climate change. The most widely adopted method for measuring climate change is Global Warming Potential (GWP), which compares the impact of different greenhouse gas (GHG) emissions to carbon dioxide over a specific time period, usually 100 years.

The most dominant GHG in terms of annual emissions is carbon dioxide. Methane is a powerful GHG that is created from several sources including: dairy cows and other livestock manure, organic waste streams, landfills, and gas pipeline systems. While carbon dioxide can stay in the atmosphere for thousands of years, methane is short-lived before it decays or oxidizes in the atmosphere.

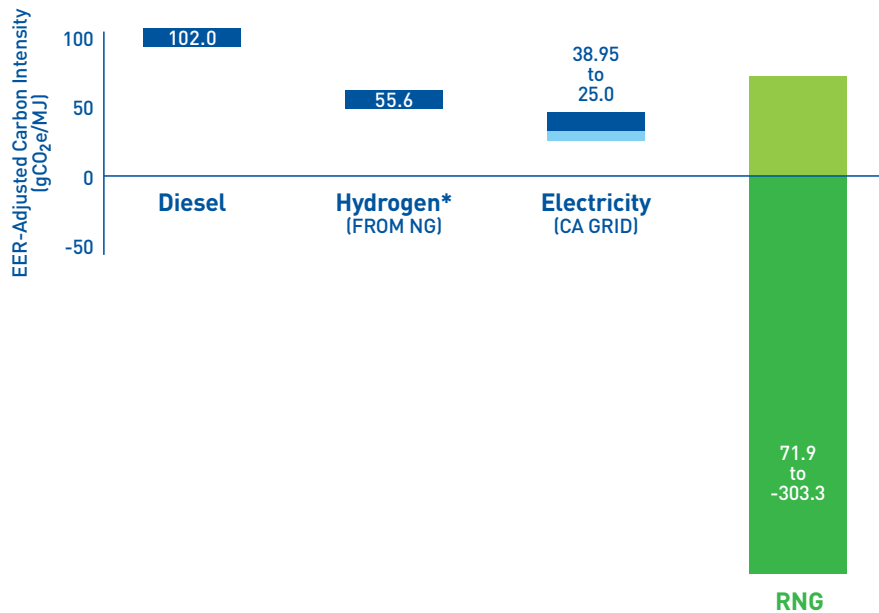
The transportation industry is increasingly adopting natural gas to combat climate change and reduce its carbon footprint. Using natural gas in transportation provides an immediate reduction in long-lived carbon dioxide emissions. Natural gas consists mostly of methane, and when combusted can produce about 27 percent less carbon dioxide than diesel on a fuel energy basis.

Natural gas has the ability to dramatically reduce the amount of methane emitted along the whole supply chain, minimizing the short-term impact of methane and leading to a strong contribution in overall climate change mitigation more than many other currently available fuels in the transportation sector. (\*Source: www.ngvamerica.org)



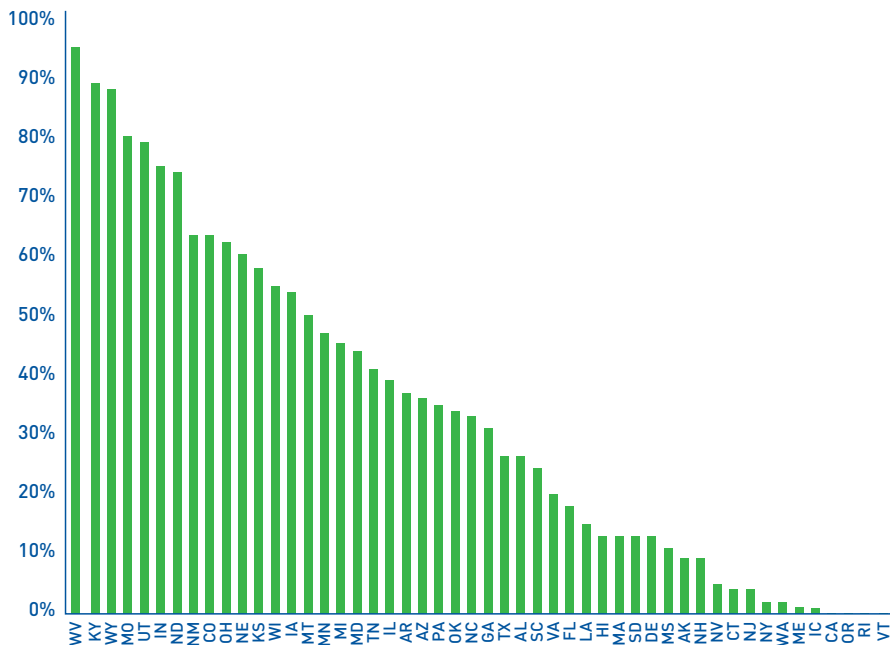
**Combusting natural gas produces 27% fewer CO<sub>2</sub> emissions than diesel fuel on an energy equivalent basis.\***

## Carbon Intensity Rating of Key Transportation Fuels



Source: \*Includes 33% renewable feedstock. Hydrogen by steam-methane reformation.

## Percent Coal-Fire Generation by State



Source:

## Greenhouse Gas Emission Reductions

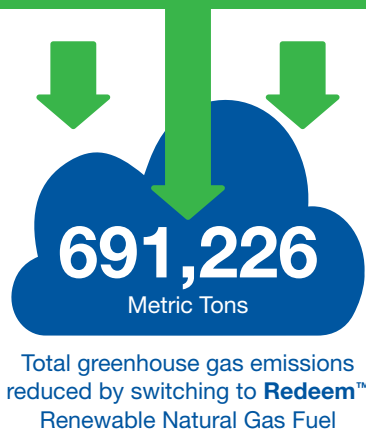
Each day our nearly 1,000 customers are fueling more than 45,000 vehicles with clean-burning natural gas. Climate change is a primary concern for many of these customers. Our customers strive to be good environmental citizens by reducing greenhouse gas emissions associated with their operations.

One of the many benefits of natural gas is that it is a less intense fuel from a

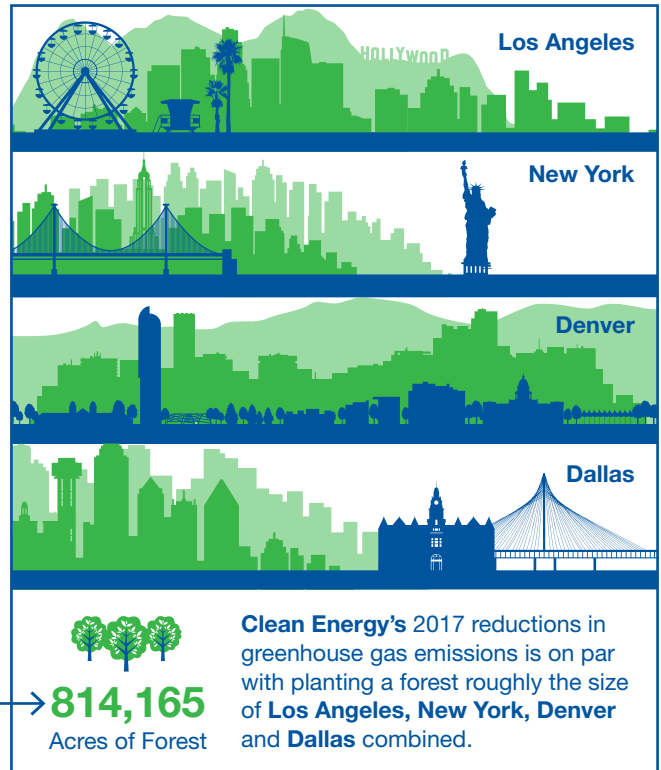
greenhouse gas perspective. Natural gas vehicles emit less CO<sub>2</sub> when compared to an equivalent amount of fuel burned by diesel or gasoline vehicles. This 'tailpipe' benefit is due to the chemical composition of natural gas compared to gasoline and diesel. Therefore, every time we help our customers switch from gasoline or diesel to natural gas vehicles we are reducing their carbon footprint.



With the tailpipe greenhouse gas benefits of natural gas, our displacement of 351 million gallons of gasoline and diesel resulted in the following benefits:



That's like



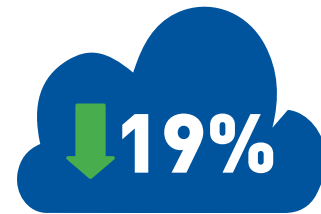


## Approach to Climate Solutions

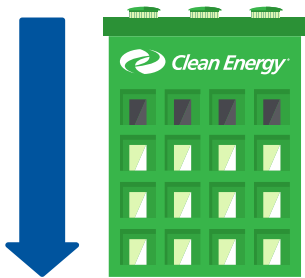
In 2016 we released our first Global Reporting Initiative (GRI) compliant Corporate Sustainability Report (CSR) in which we committed to specific waste reduction goals, demographic goals, and transportation fleet goals. We also committed to evaluate the development of carbon, social, and supply chain goals, with carbon being the most important metric for our industry.

**Clean Energy's** corporate vision is directly tied to reducing the impact of harmful emissions from the transportation sector. As such, **Clean Energy** spent the year identifying, reducing, and evaluating its carbon footprint. As a result, in 2017 we were able to reduce our carbon footprint by 19 percent from our baseline year of 2016.

After evaluating how to most materially address carbon in our value chain, we're making three commitments to significantly reduce our carbon impact:



In 2017, we were able to reduce our carbon footprint by 19% from our baseline year of 2016.



Reduce Clean Energy's carbon footprint by 25% by 2025



Continue to grow our low-carbon fuel portfolio to 100% by 2025



Achieve a zero carbon intensity renewables portfolio by 2025



## Air Quality Management

Natural gas is an air quality solution, and the need for better air quality in many urban areas has helped build the market.

At the core of its appeal as a fuel source, natural gas offers reduced air pollutant emissions, relative to diesel or gasoline including the criteria air pollutants' carbon monoxide (CO), particulate matter (PM), and nitrous oxides (NO<sub>x</sub>).

Addressing local air quality has been, and will continue to be, a key concern of many of our stakeholders, including customers, local communities, regulatory agencies, and nongovernmental organizations (NGOs). **Clean Energy's** industrial activities include natural gas compression and liquefaction, which may emit air pollutants. As such, we maintain comprehensive treatment measures to manage these emissions and protect ecosystems as well as the health of local communities in accordance with regulatory guidelines.

Additionally, natural gas-fueled vehicles are the best and most immediate and cost-effective solution for reducing the negative impacts of transportation emissions on local air quality. Today, 92 percent of vehicles owned by **Clean Energy** are natural gas, representing an increase of 29 percent since 2016. Another 92 percent of the operations and maintenance fleet remain powered by natural gas. As a company, we strive to use natural gas vehicles in our operations wherever feasible. By 2022, we are committed to fueling all **Clean Energy's** operations and maintenance and fleet vehicles with clean natural gas.



### Ports of Los Angeles and Long Beach: ACT Now - Clean Air Can't Wait

In 2017 the Clean Air Action Plan (CAAP) was updated to include adding near-zero trucks to the program as a key part of the near-term strategy to reduce greenhouse gases and toxic emissions that cost-effectively achieves clean air goals at the Ports of Los Angeles/Long Beach. This was a tremendous win for the natural gas industry in a region that experiences a high concentration of output from heavy-duty diesel trucks.

Local businesses and organizations formed Clean Trucks Now, a coalition that advocated for air quality improvements in the Ports of Los Angeles/Long Beach among local officials and residents. The group was able to create a sense of urgency about reducing port emissions, citing a research report from the University of California/Riverside. The study found that heavy-duty trucks in low-speed environments, such as those at the busy ports, produce high levels of toxic emissions, which can greatly be reduced by switching to natural gas.

In order to negate previous negativity about the performance of older natural gas trucks, Ride-and-Drive events were held to showcase the latest 12-liter natural gas engines, and half-day workshops were held to educate fleet owners and professional drivers.

As a result of this push, the Governing Boards of the Ports of Los Angeles and Long Beach approved the CAAP 2017 Update, ushering in a new era of aggressive clean air strategies for moving cargo through the nation's busiest container port complex. The document provides high-level guidance for accelerating progress toward a zero-emission future while protecting and strengthening the ports' competitive position in the global economy.

The addition of near-zero natural gas vehicles to CAAP in 2017 was a encouraging step forward for the natural gas industry that positively impacted the ports community, and the message was: "ACT Now - Clean air can't wait."

## Methane Leak Mitigation

Natural gas is made up mostly of methane, which is a powerful greenhouse gas. While the use of natural gas as a fuel is conducive to the reduction of greenhouse gas emissions, uncontrolled methane leaks are a significant concern in the oil and gas industry. Methane leaks can occur at any stage of production, transportation, distribution or storage if containment practices are insufficient. In addition to contributing to atmospheric carbon, natural gas leaks may present explosion risks. As an issue of safety, environmental performance and profit, **Clean Energy** looks for potential sources of methane emissions by installing technology that continually monitors and detects methane leaks alerting staff in case of leakage. Along with other system reports, routine visits include inspection, detection and repair of any leak to further support these efforts.

In addition, **Clean Energy** has created its own expanded Leak Detection and Repair (LDAR) program, which it recently rolled out to its California station network. The refined LDAR implements routine inspections with advanced technology, such as gas-imaging cameras, to manage potential methane leaks. **Clean Energy** continues to track the benefits of the expanded LDAR program and upon proven results will make a formal commitment to roll it out to its national station network and make it a service offering to its customers.

These types of voluntary actions to mitigate leaks are just one element of how we strive to be an innovative industry leader.



# Environment



## Environment



Many of **Clean Energy's** stations and customers operate in areas that are considered mild to severely polluted (airports, ports, landfills, wastewater treatment facilities, highways, etc.). By delivering a cleaner fuel to these regions, we have a direct impact on the health and lives of our customers and the communities they operate in.

Our potential to make an environmental impact does not stop with air quality. We are proactive in our management of environmental issues, including waste, water, and environmentally sensitive areas and many other facets.

### Waste Minimization

**Clean Energy** has initiated a company-wide effort to reduce paper usage at our offices and field locations. In 2017 our print count grew 2 percent over 2016. This increase has led us to evaluate and better understand our paper usage. In 2018, we will use this data to adopt waste minimization programs aimed at reducing our print count, with the goal of achieving a 20 percent reduction by 2022.

### Water Conservation

We are conscious of our impact on local watersheds in all aspects of our operations. We review facility design in areas prone to flooding risks, and instituted a policy of best practices outlined in our Health and Safety Program to minimize the potential for rain to contact hazardous materials. **Clean Energy** complies with all storm water management requirements and maintains appropriate infrastructure at all our facilities. Further, **Clean Energy** chooses its facility locations such that it does not make significant withdrawals of water from sensitive or threatened sources.

### Hydraulic Fracturing

Most of the natural gas production in the United States relies on hydraulically fractured wells. Fracking requires significant water usage. Although the water needs of fracking are small compared to processes such as power plant cooling, the process can strain water supplies in arid regions. RNG, on the other hand, is not a fossil fuel and is not sourced or produced using the same energy and water-intensive methods as fossil natural gas. As such, **Clean Energy** is committed to expanding its industry-leading deployment of RNG. Biogenically sourced RNG allows **Clean Energy** to deliver the same high quality natural gas to our customers without the water use associated with hydraulic fracturing.

### Sensitive Areas

**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 we act to mitigate potential impacts on biodiversity.

### General Efficiency

**Clean Energy** currently operates out of two LEED Certified buildings and is committed to contracting with offices that are LEED Certified.

# Economics



## Economics



**Clean Energy** creates sustainable brand value for our customers and shareholders through strong financial performance, which allows us to create and maintain jobs, invest in process improvement, and act to further reduce our environmental footprint. The following sections highlight our financial and economic contributions as well as technological advancements.

### Economic Contributions

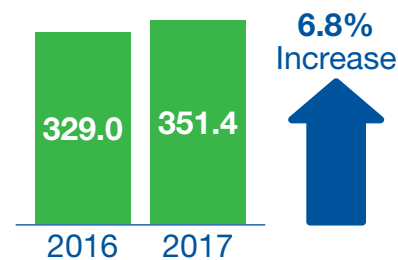
**Clean Energy** delivered 351.4 million gallons, a 6.8 percent increase from 329.0 million gallons delivered for the year ended December 31, 2016. Revenue for 2017 was \$341.6 million, a 15.2 percent decrease from \$402.7 million for 2016. This decrease was primarily due to the absence of revenue recognized in 2017 from a federal alternative fuels tax credit (“AFTC,” formerly referred to as VETC) and a lower effective price per gallon in 2017. The lower effective price per gallon was largely attributable to the effects of the company’s sale of certain assets related to the upstream production portion of its RNG business to BP Products North

America Inc. (“BP”) in the first quarter of 2017 (the “BP Transaction”), which has resulted in decreased revenue from the sale of certain tradable credits the company generates by selling CNG, LNG and its **Redeem™** RNG vehicle fuel (collectively, “RIN and LCFS credits”). These decreases were partially offset by an increase in revenue as a result of the increased gallons delivered in the fourth quarter of 2017 compared to the same period in 2016, as well as increased station construction and compressor revenue. Additional financial information can be found in our 10K (**Clean Energy**, 2017b).

### Key Trends

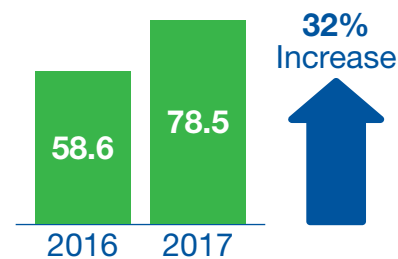
#### GALLONS DELIVERED

GGEs IN MILLIONS (2016 vs 2017)



#### REDEEM DELIVERED

GGEs IN MILLIONS (2016 vs 2017)



### Key Operating Data

Gasoline Gallon Equivalents (GGEs) delivered, millions

Product	2014	2015	2016	2017
CNG	182.6	229.2	259.2	283.4
LNG	70.3	70.5	66.8	66.1
Redeem	20.2	50.0	58.6	78.5
<b>Total</b>	<b>265.1</b>	<b>308.5</b>	<b>329.0</b>	<b>351.4</b>



## Supply Chain

**Clean Energy** ensures that our suppliers and contractors understand, and are aligned with, our corporate values and meet our standards of citizenship at every level of operation.

### Suppliers

To ensure the quality of **Clean Energy** products, we foster strong, communicative relationships with our suppliers. We seek to gauge suppliers who adhere to best practices related to health, safety, environmental protection, and human and labor rights. Furthermore, we support their efforts for continuous improvement in these areas. We conduct comprehensive pre-qualification assessments and recognize that our selection of suppliers impacts our performance. Recently **Clean Energy** began requesting its fuel tanker haulers deliver our fuel via natural gas trucks. **Clean Energy** will track the percentage of natural gas trucks the fuel tanker fleet is using to deliver **Clean Energy** fuel. Based on that tracking we will establish corporate goals for future procurements.

### Local Content

**Clean Energy** is committed to contributing to sustainable economic development in the communities where we conduct business. We provide local suppliers and contractors with the opportunity to participate in our work through a competitive bid processes. We recognize that our unique technology needs present challenges to local and small suppliers. Beginning in 2018, **Clean Energy** will track the materials and services supplied to us by local and small businesses. Based on that data we will establish corporate goals for future procurements.





## Ethics and Integrity

As a publicly traded company, **Clean Energy** recognizes and respects our responsibility to our stockholders for the stewardship of company assets and resources. **Clean Energy** is committed to compliance with the laws and regulations to which it is subject.

### Governance

Our Board of Directors provides independent oversight of **Clean Energy's** affairs, inclusive of but not limited to financial, operational, and economic issues. The Board is dedicated to transparent communication on corporate citizenship topics, and we strive to maintain a diverse board regarding expertise and experience.

**Clean Energy** is committed to maintaining open dialogues with our shareholders on governance, financial, and environmental topics provided in our Securities and Exchange Commission filings, Annual Report, and this and future Corporate Sustainability Reports, which can all be found on our website ([www.cleanenergyfuels.com](http://www.cleanenergyfuels.com)).

### Code of Ethics

**Clean Energy's** Code of Ethics, adopted and administered by the Board of Directors, ensures that we operate at the highest level of integrity in all aspects of our business. Our Code of Ethics is comprehensive in scope, including discussions of conflict of interest, fair dealing, and accounting controls and disclosures.

**Clean Energy** is subject to regulations both in the United States and abroad. Company policy requires that all employees, officers, and directors of the company comply fully with both the spirit and the letter of all laws, rules, and regulations. To establish a consistent understanding of our ethical standards, all **Clean Energy** employees 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.

**Clean Energy** takes the conduct of our employees seriously and encourages reporting of questionable conduct. Our Whistleblower Policy governs the reporting and investigation of improper activities at **Clean Energy**, as well as the protection afforded to those employees who report them. **Clean Energy** has obtained a confidential environment, and to comply with the terms of the Sarbanes-Oxley Act of 2002, **Clean Energy** has retained a confidential third-party reporting service to handle reports of any improper financial procedures.

### Anti-Corruption Policy

**Clean Energy** has a responsibility to our employees, shareholders, and the communities in which we do business to be lawful and ethical in our work. As such, 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).

### Conflict Minerals

**Clean Energy** maintains a policy relating to the Conflict Minerals that is guided by its core beliefs and values as stated in the Company's Code of Ethics. We are committed to ethical practices and compliance with applicable laws and regulations wherever we do business. **Clean Energy** believes that our commitment to integrity and citizenship extends to our worldwide supply base. We are committed to sourcing our products responsibly and expect our suppliers to also source materials from responsible suppliers. **Clean Energy** expects our suppliers to partner with us to comply with the Conflict Minerals Rule. We evaluate our relationships with our suppliers on an ongoing basis and reserve the right to consider the extent to which a supplier has failed to reasonably comply with the Company Policy.

**Clean Energy** has designed its Conflict Minerals reporting efforts to align and comply with the Conflict Mineral Rule. The full text of the Company Policy is available at <http://investors.cleanenergyfuels.com/corporate-governance.cfm>.



# Citizenship



## Citizenship



**Clean Energy** understands that corporate citizenship is integral to sustainable development, extending beyond basic legal and ethical responsibilities. Our goal is to improve quality of life for our employees, customers, partners, shareholders, and the communities we serve. At **Clean Energy**, we view our company as a responsible citizen that is committed to the growth of natural gas as an alternative transportation fuel that replaces diesel to lower toxic emissions and improve air quality. In 2017 we started identifying various philanthropic organizations that have mutual goals, with the goal of establishing a partnership in 2018.

### Safety

Safety is more than just our top priority. It is the foundation upon which **Clean Energy's** programs and initiatives are built. Whether it be in the design of new stations, upgrades to existing stations, managing construction sites, or providing on-going operations and maintenance services, safety best practices are intertwined in all we do.

To us, safety begins with sound engineering and design. We require that our facilities and equipment meet or exceed all appropriate standards, and we incorporate multiple layers of protection into design to safeguard our operations.

### Occupational Safety and Health Administration (OSHA)

**Clean Energy** provides comprehensive OSHA training to all levels of our operations team. Training comprises hazard communication, personal protective equipment, emergency action plans, fire prevention and protection, and exit routes, among other general and industry-specific safety topics. **Clean Energy** technicians complete OSHA-10 training, and all management is OSHA-30 certified.

### Process Safety

In identifying process safety risks, we employ a proactive approach. Through regular, systematic assessments, engaging third-party reviewers where necessary, we evaluate our facilities and programs on a continual basis. We focus on proactive detection and resolution of potential issues to ensure, to the extent possible, that risks are mitigated before incidents can occur.

### Product Safety & Service

**Clean Energy** fuel products are assessed through their lifecycles for potential safety, health, and environmental risks. All products are evaluated for compliance with chemical control and hazardous communication regulations at multiple points during our production and distribution processes. Lifecycle monitoring is crucial for ensuring that our products fulfill their intended performance, meeting customer, and legal expectations.

Safety is more than just our top priority. It is the foundation upon which **Clean Energy's** programs and initiatives are built.



### Technical Training Center

At **Clean Energy** we provide remote, 24/7 monitoring, systematic safety and quality inspections, preventative maintenance, and timely expert repairs to keep our stations running safely and efficiently. All service technicians are required to attend **Clean Energy's** Technical Training Center in Denver, where they learn to service and maintain critical CNG station components, along with safety procedures. Education is part of **Clean Energy's** commitment to develop the most qualified, well-trained team of technicians in the natural gas fueling industry that will help us deliver a consistent product across the country.

## Our People



**Clean Energy** is proud of our talented, motivated workforce. From plant operations to our nationwide network of technicians, providing high-quality fuel across North America requires a wide range of specialist skills. We seek to foster a diverse workforce of highly-skilled individuals who are committed to integrity and corporate citizenship.

### Diversity & Inclusion

As a global employer, **Clean Energy** recognizes that diversity of experience, thought, and culture is not only central to our identity, but a competitive advantage. Slightly more than half of our employees are based in the United States. Of **Clean Energy's** US employees, 79 percent are male with the remaining 21 percent female, 27 percent representing minorities, and 10 percent self-reporting as active or retired military. **Clean Energy** is committed to tracking and reporting demographics of our employees.

**Clean Energy** is committed to fostering diversity at every level. Women and minorities in leadership roles make up nearly 31 percent, with a goal of reaching 35 percent by 2020.

### Employee Benefits

Our benefits program is a critical part of a total compensation package designed to reward and retain our employees. Our welfare benefits include medical insurance, dental insurance, vision insurance, disability insurance, life insurance, prescription drug coverage, 401-K retirement plan, and an Employee Assistance Program (EAP).

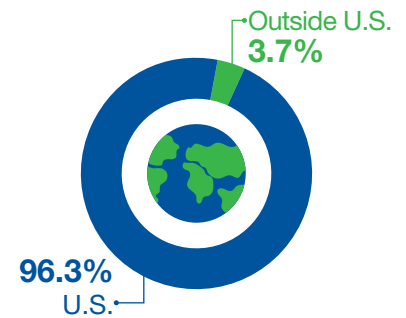
### Health & Wellness

Our health policy communicates the corporate expectations for identifying and evaluating health risks related to operations that can affect employees, contractors, or the public.

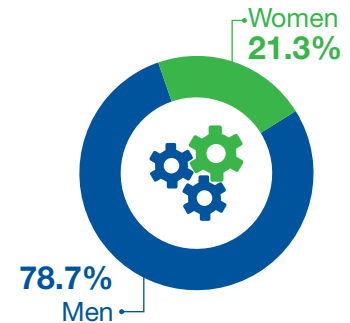
**Clean Energy** also provides voluntary health programs to our employees to improve well-being and productivity. For example, **Clean Energy** offers voluntary fitness programs and gym membership reimbursement to promote physical fitness and employee wellness.

### Workforce


#### LOCATION



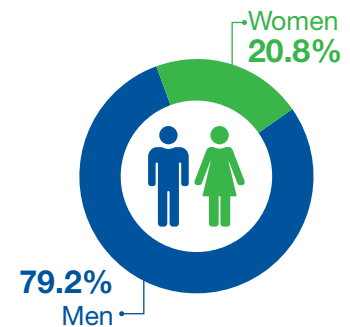
#### OVERVIEW (U.S. ONLY)



 **10% Active & Retired Military\***

 **26.9% Minority**

#### GENDER LEADERSHIP ROLES (U.S. ONLY)



 **17.8% Minority**

## Our Community

Ensuring that we have a positive impact on our local communities is crucial to being a good corporate citizen. From charitable efforts to empowering tomorrow's leaders, **Clean Energy** is committed to community involvement. **Clean Energy** team members support, donate to, and volunteer for charitable causes throughout the year.



### Run Seal Beach®



**Clean Energy** continued to support the annual Run Seal Beach community race in Seal Beach, California in 2017. Run Seal Beach is a non-profit organization whose charter is to raise funds and awareness for recreation and fitness programs to benefit the greater Seal Beach Community. **Clean Energy** team members participated both as runners and as volunteers.

### Second Harvest Food Bank of Orange



During the Thanksgiving season in 2017, **Clean Energy** supported the Second Harvest Food Bank of Orange County. As Orange County's leading hunger-relief organization, Second Harvest provides wholesome food and fresh produce to more than 250,000 hungry children, seniors, and families in Orange County every month. **Clean Energy** believes we can achieve a future without hunger in our community. As such, **Clean Energy** team members donated enough for over 300 Thanksgiving meals.

### Toys for Tots



For many years **Clean Energy** and our staff have supported the U.S. Marine Corps Reserve's Toys for Tots Program. Toys for Tots' mission to improve the lives of communities across the United States aligns with the founding principles of **Clean Energy**. Toys for Tots supports the community by delivering gifts in December to needy families. Each November and December our staff collects toys to donate to the Program. The Marines accept the toys and distribute them to less fortunate families across our community.

## Associations

To broaden our understanding of the trends and issues of the energy industry and markets we serve, **Clean Energy** is an active participant in many trade and industry associations. Additionally, as discussed elsewhere, **Clean Energy** is a leader in organizations that are committed to expanding access to, and acceptance of, natural gas as a transportation fuel. Highlights of our organizational involvement include:

- American Biogas Council
- American Public Transit Association
- American Association of Airport Executives
- Association of Washington Businesses
- Bioenergy Association of California
- Business for Social Responsibility
- California Construction and Industrial Materials Association
- California Natural Gas Vehicle Association
- California Natural Gas Vehicle Coalition
- California Refuse & Recycling Council
- California Transit Association
- Canadian Urban Transport Association
- Canadian Natural Gas Vehicle Association
- Chambers of Commerce – Local, State, and Federal
- Clean Cities – Local and State
- Coalition for Clean Air
- Coalition for Renewable Natural Gas
- Council of Supply Chain Management Professionals
- FuturePorts
- Greater Concord Chamber of Commerce
- Harbor Association of Industry & Commerce
- Los Angeles Transportation Club
- National Ready Mixed & Concrete Association
- National Star Route Motor Carriers Association
- National Parking Association
- Nevada Trucking Association
- Natural Gas Vehicles for America
- Oregon Refuse & Recycling Association
- Ontario Trucking Association
- Ontario Public Transportation Association
- Ontario Transit Association
- Propeller Club
- Renewable Natural Gas Coalition
- Supply Chain Leaders Association
- Trucking Associations – Various States
- Washington Refuse & Recycling Association
- Washington Trucking Association





# Conclusion



## Conclusion

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This Sustainability Report was prepared in accordance with the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines and the GRI Oil and Gas Sector Supplement. Core Disclosures are indexed in Table 23 for reference.

**Clean Energy's** operating territories include the United States, Canada, China, Bangladesh and Columbia. Material issues discussed in this 2017 Sustainability Report address our operations in the United States and Canada.

The 2017 Sustainability Report comprises **Clean Energy's** operations from January 1, 2017, to December 31, 2017. Sustainability metrics will be reported on an annual basis.

For any questions regarding this report, please contact Ashley White, Director and Head of Corporate Sustainability.

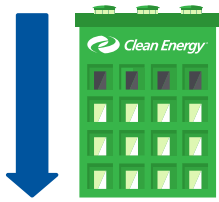


## Corporate Sustainability Goals

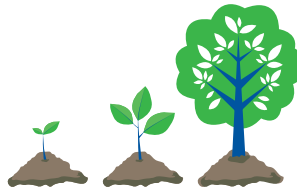
Throughout this document, **Clean Energy** has committed to continue advancing its corporate sustainability. The following is a summary of those commitments:

### Carbon Footprint

**Clean Energy** is committed to further reducing its carbon footprint in the follow three ways:



Reduce **Clean Energy's** carbon footprint by 25% by 2025.



Continue to **grow our** low-carbon fuel portfolio to 100% by 2025.



Achieve a **zero carbon** intensity renewables portfolio by 2025.

### Air Quality



Commitment to **procuring** natural gas vehicles for all Clean Energy maintenance fleets vehicles by 2022.

### Methane Leak Mitigation



Track the benefits of the expanded **LDAR program**, and upon proven results will make a formal commitment to roll it out to all stations.

### Supply Chain



**Track and report** the percentage of natural gas trucks the **fuel tanker fleet** is using to deliver Clean Energy fuel.

### Corporate Offices



Contracting with office buildings that are **LEED-certified**.

### Waste



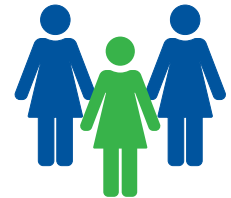
Goal to **reduce our** paper usage by 20% by 2022.

### Local Content



**Track and report** additional demographics of our employees.

### Demographics



Goal to achieve **40% leadership representation** by female and minority employees.

# Performance

CLIMATE CHANGE		
Direct GHG Emissions (Scope 1)*	5,693	metric tons of CO <sub>2</sub> equivalent
Indirect GHG Emissions (Scope 2)	46,643	metric tons of CO <sub>2</sub> equivalent
Other Indirect GHG Emissions (Scope 3)	2,220,579	metric tons of CO <sub>2</sub> equivalent
Carbon Dioxide (CO <sub>2</sub> ) Emissions*	2,271,996	metric tons of CO <sub>2</sub>
Methane (CH <sub>4</sub> ) Emissions	14.22	metric tons of CH <sub>4</sub>
Nitrous Oxide (N <sub>2</sub> O) Emissions	107.85	metric tons of N <sub>2</sub> O
Hydrofluorocarbons (HFCs) Emissions	N/A	metric tons
Perfluorocarbons (PFCs) Emissions	N/A	metric tons
Sulphur Hexafluoride (SF <sub>6</sub> ) Emissions	N/A	metric tons
Nitrogen Trifluoride (NF <sub>3</sub> ) Emissions	N/A	metric tons
Volume of flared hydrocarbons	N/A	m <sup>3</sup>
Volume of vented hydrocarbons	2,407	MMBTU
ENVIRONMENT		
NO <sub>x</sub>	107,854	kg
SO <sub>x</sub>	188,744	kg
Persistent Organic Pollutants (POP)	NA	kg
Volatile Organic Compounds (VOC)	81.9	kg
Hazardous Air Pollutants (HAP)	N/A	kg
Municipal Water Utility	224,475	m <sup>3</sup>
Surface Water	N/A	m <sup>3</sup>
Groundwater	N/A	m <sup>3</sup>
Collected/Stored Rainwater	N/A	m <sup>3</sup>
Wastewater	593	m <sup>3</sup>
PEOPLE		
Employees	431	—
Employees — Leadership Role	101	—
Women — Leadership Role	21	—
U.S. Employees	413	—
Employees Outside U.S.	16	—
Men — U.S. Only	325	—
Women — U.S. Only	88	—
Collective Bargaining Agreement Members	0	%
SAFETY		
Tier 1 Process Safety Event	0	—
Tier 2 Process Safety Event	0	—
Work-Related Fatality	0	—
Lost Day Rate (LDR)	0.41	—
Absentee Rate (AR)	1.64	—
Injury Rate (IR)	1.64	—
Occupational Diseases Rate (ODR)	0	—
PERFORMANCE		
Natural Gas Sold	351.4	GGEs
Biomethane Produced	5,694,200	L of GGE
Energy Intensity of Produced CNG	N/A	GJ/mboe
Energy intensity of Produced LNG	N/A	GJ/mboe
Energy Value of Biomethane	2,146,835	MWh
Energy Consumed in Clean Energy Operations	165,912	MWh
Biomethane Purchased	283,412,859	L
Cost of Biomethane Purchased	Not reported	\$
Area of Land Used for Biomethane Production	469	Ha
FINANCIAL		
Net Revenues	341,599	\$, thousands
Operating Costs	476,046	\$, thousands
Employee Wages	8,363	\$, thousands
Payments to Providers of Capital	1,486	\$, thousands
Payments to Governments	4,582	\$, thousands
Economic Value Retained	(36,351)	\$, thousands

\*At the time of preparation Clean Energy Fuels had data for only the Boron Plant.

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	G4-DMA	Code of Ethics
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	OG12	N/A
Asset Integrity and Process Safety	G4-DMA	Process safety
	OG13	Performance
Fossil Fuel Substitutes	OG14	Performance

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## Appendix A

# Clean Energy Subsidiary Listing

### Clean Energy Fuels Corp. Subsidiaries as of December 31, 2017

NAME OF SUBSIDIARY	STATE OR COUNTRY OF INCORPORATION OR ORGANIZATION
Clean Energy Fueling Services Corp.	British Columbia
Clean Energy	California
Clean Energy Finance, LLC	California
Clean Energy LNG, LLC	California
Clean Energy Los Angeles, LLC	California
Natural Fuels Company, LLC	Colorado
Blue Energy General LLC	Delaware
Blue Energy Limited LLC	Delaware
CE Natural Gas Fueling Services, LLC	Delaware
Clean Energy National LNG Corridor, LLC	Delaware
Clean Energy Renewable Fuels, LLC	Delaware
Clean Energy & Technologies LLC	Delaware
Mansfield Clean Energy Partners, LLC*	Delaware
NG Advantage LLC*	Delaware
Mansfield Gas Equipment Systems Corporation	Georgia
Blue Fuels Group LP	Texas
Clean Energy Texas LNG, LLC	Texas
TranStar Energy Company LP	Texas
M&S Rental, LLC	Wyoming
Southstar LLC	Wyoming
Wyoming Northstar Incorporated	Wyoming

\* Own less than 100%



## Let us find the right fueling solution for you.

**Clean Energy** is a pioneer in creating comprehensive natural gas fueling solutions for the transportation industry. We continually invest in developing and manufacturing new technologies. This means everything we do — from designing and operating stations, to helping you navigate financing options, which gives you one of the most advanced fleets on the road today. The switch to natural gas fuel is easier and more affordable than you think. Start saving money from day one, and reduce your carbon footprint with the leading domestic, alternative fueling solution.

To learn more, call the **Clean Energy** team today.

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