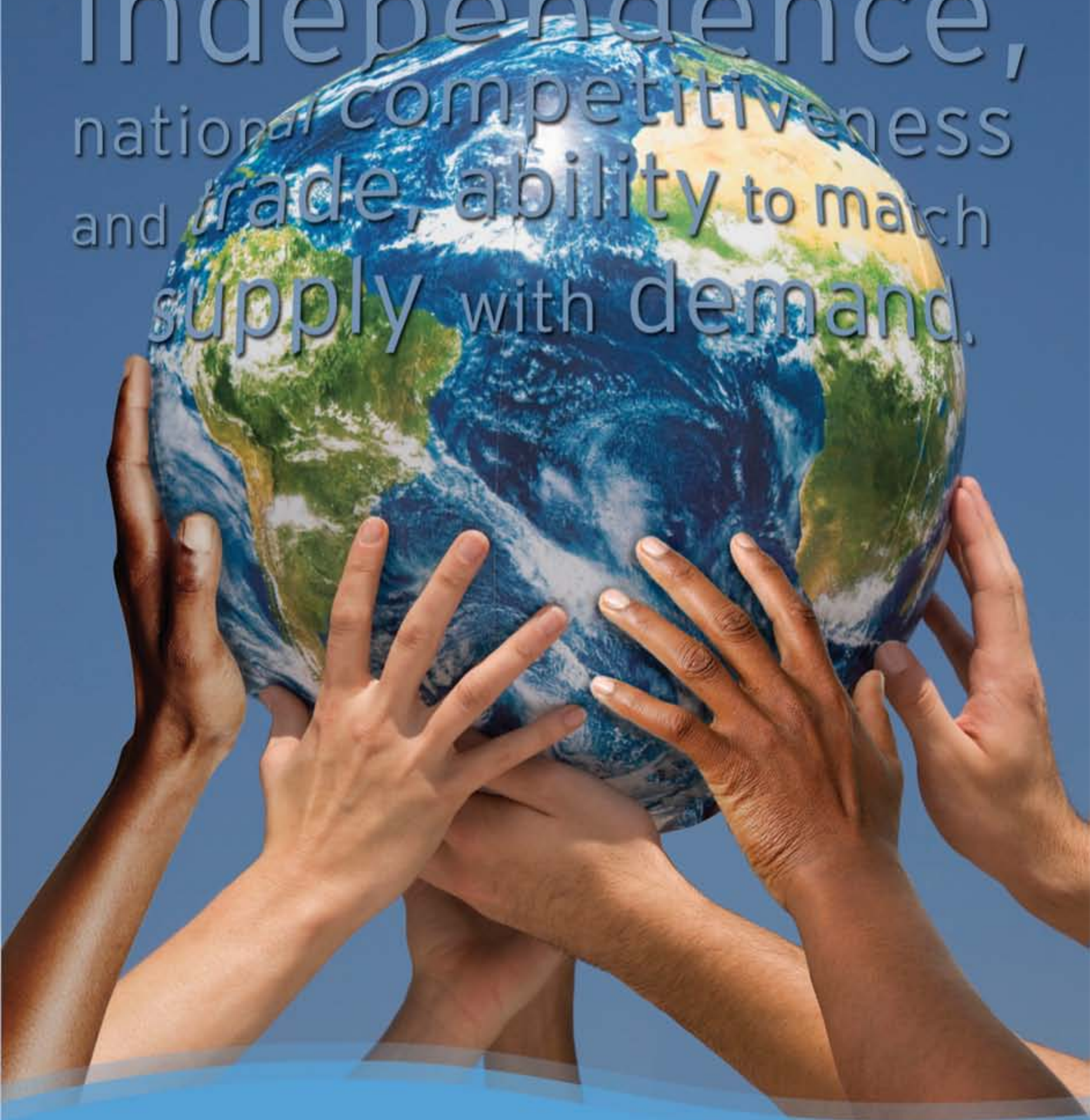


Affordability, air quality
and emissions, safety
and reliability, energy
independence,
national competitiveness
and trade, ability to match
supply with demand.



Natural Gas: Part of
the Clean Energy Solution

For today's savvy energy consumer—residential, industrial or commercial—one thing is certain. The pressure is on to meet the energy needs of one's family, facility or business in a way that is not only efficient, reliable and cost-effective, but also addresses the impact of climate change, ever-changing air quality regulations and the desire for an environmentally-sound, sustainable energy future.

The solution is a collaborative approach from the energy community, offering a portfolio of options that work in an integrated, interdependent way to help customers achieve efficiency, reduce emissions and match supply with demand.



**A portfolio of traditional energy sources,
such as electricity and natural gas,
PLUS**



**A combination of viable alternative sources,
such as wind, solar, hydro and others,
plus new approaches and new technologies.**

Despite its many attributes and its important role, natural gas is the one energy resource that is often overlooked in this mix.

Where else can you find an energy resource that can warm a home and heat the water, dry the clothes, fuel the car, cook the food...and even more...at a fraction of the cost of other sources and with a smaller environmental impact?

The Benefits of Natural Gas

Available in abundance domestically, natural gas offers the U.S. the opportunity to achieve energy independence. There is currently enough natural gas, in its traditional form, to meet U.S. demand for more than 100 years. Natural gas is:

- A cost-effective primary energy source that meets the needs of a wide range of residential, commercial and industrial applications
- Highly reliable and very flexible so it can be stored and then delivered whenever customers need it
- Clean burning


Powered by Natural Gas

Much of California relies on natural gas every day. Natural gas is the primary fuel for heating homes with more than 90 percent in Southern California using this energy source for space and water heating.

Natural gas is California's fuel of choice for electricity. Nearly half of all the electricity consumed in the state is generated with the help of natural gas. And, 45 percent of all natural gas used in California is for electric generation.

Natural Gas Helps Alternative Energy Sources Deliver to Their Potential

Despite the promise, renewable resources, such as solar and wind power, are not available when the sun does not shine or the wind does not blow. With natural gas as their back-up, these sources can deliver power continuously, regardless of the weather.

A woman with long, wavy brown hair, wearing a dark business suit, is smiling and holding a large, realistic globe of the Earth. The globe shows the Americas, with North and South America visible. She is holding it with both hands, cradling it against her chest.

Natural gas emits less CO₂ per unit of energy than any other fossil fuel; less greenhouse gas (GHG) than electricity (which is often generated using coal); less than 50 percent of the emissions of coal; 80 percent less nitrogen oxides (NO_x); and negligible amounts of mercury, sulfur dioxide and particulate matter.

Maximum Energy Return for the Investment

Natural gas is highly affordable, a combination of its low cost as well as its efficient delivery of energy. The annual operating cost for an electric water heater is 2.5 times higher than an equivalent sized natural gas water heater. Natural gas costs, on average, 42 percent less than diesel fuel on an energy equivalent basis and is expected to cost 50 percent less by 2035.*

Very little energy is lost as natural gas is delivered to the point of use. Ninety-two percent of natural gas is delivered as energy after transmission, while only 26 percent to 38 percent of the power remains as electricity travels through power lines.

* U.S. Energy Information Administration

Part of the Energy Efficiency Solution

Southern California Gas Company (SoCalGas®) partners with its customers to achieve even greater efficiencies. Energy-efficiency programs help customers reduce energy consumption and save money through lower operating costs.

New technologies have helped increase efficiency, from solar water heaters and solar thermal chilled water, to smart meters, which help customers make informed decisions about energy usage.

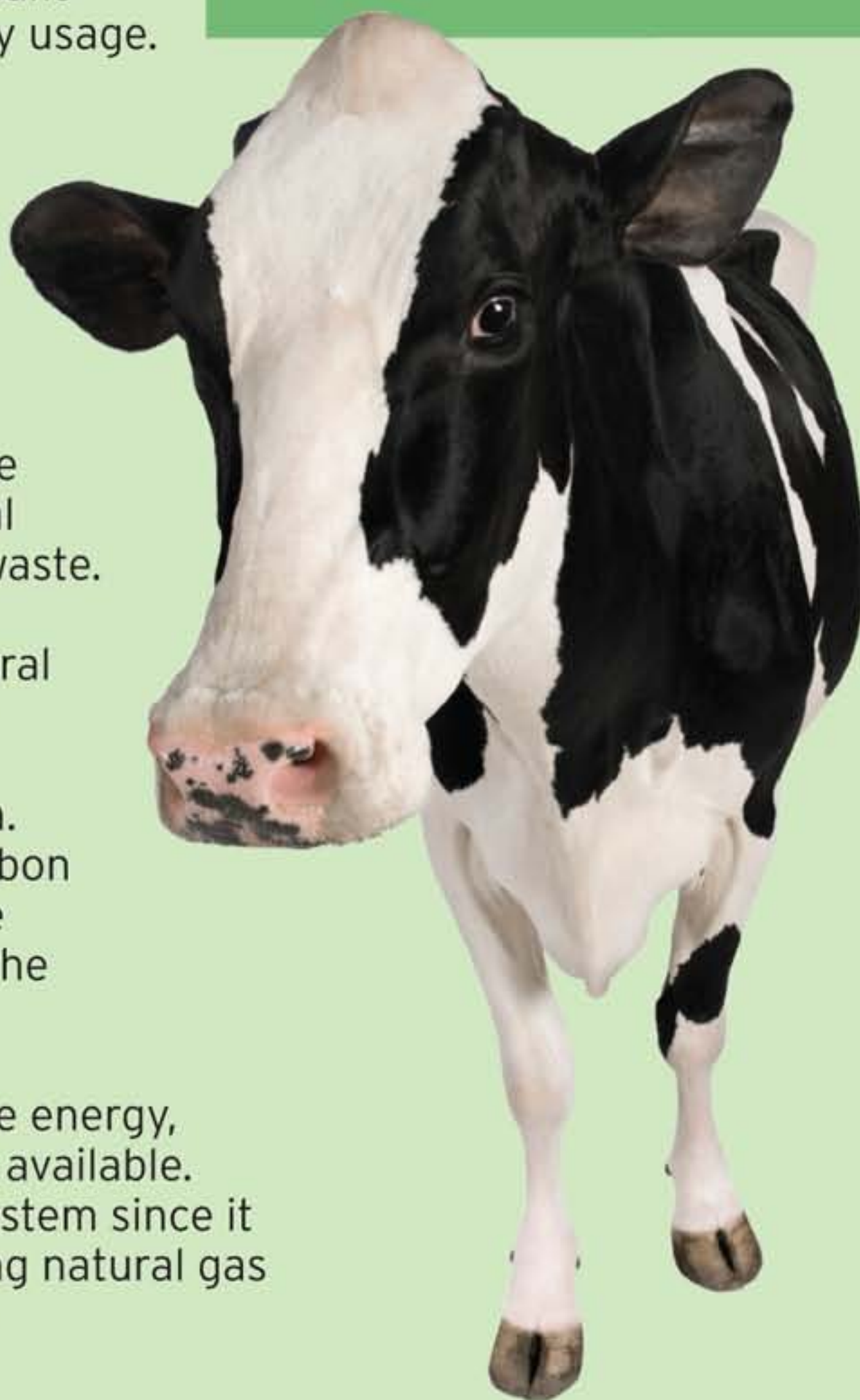
SoCalGas' energy-efficiency programs have helped customers save more than 425 million therms of natural gas, enough to supply energy to more than 850,000 homes for one year.

Part of the Renewable Energy Solution

Already a source of clean energy, natural gas can make the air even cleaner when it is produced in a new way: from renewable sources such as waste products, like wastewater, animal manure, food waste and green waste.

Renewable pipeline quality natural gas has the potential to supply up to 16 percent of California's annual natural gas consumption. This energy resource is also carbon neutral since the carbon dioxide released as it is used is part of the natural carbon cycle.

Unlike other forms of alternative energy, renewable natural gas is always available. It has an established delivery system since it can be delivered through existing natural gas pipelines alongside natural gas.



Renewable natural gas has the same capabilities and applications as natural gas: a fuel source for electric generation, for transportation, for home and industrial use and more.

SoCalGas continues to evolve the use of renewable natural gas with technologies such as fuel cells that allow customers to generate energy on-site through an electrochemical reaction, rather than combustion. This process results in negligible levels of pollutants and reduces carbon emissions below levels for traditional power plants.

Part of the Clean Transportation Solution

The use of gasoline and diesel fuels for transportation represents 40 percent of California's GHG inventory. In the South Coast Air Basin alone, gasoline and diesel vehicles represent 90 percent of NOx, a major contributor to ozone.

Delivered as compressed natural gas (CNG), natural gas is an alternative fuel for clean transportation with 30 percent lower carbon intensity than gasoline, which means much lower vehicle emissions. When renewable natural gas is added into the equation, GHG emissions can be reduced by 90 percent or more compared to the use of gasoline or diesel fuel. In fact, converting just one truck from diesel to natural gas is like taking 325 cars off the road.*

* America's Natural Gas Alliance

No One Energy Source Can Do it Alone

As an abundant, domestic and affordable source of energy, natural gas is an important part of the energy mix. And with the help of an overall energy portfolio—electricity and natural gas plus alternative energy sources such as wind, solar, hydro and even renewable natural gas—the ability to achieve a clean energy future is within reach.



SoCalGas' natural gas vehicle (NGV) program reduces GHG emissions by more than 730,000 tons/year and NOx emissions by more than 1,600 tons/year. Larger operators of transit buses, garbage trucks, local delivery and long-haul trucks save 30 percent to 40 percent compared to those using diesel fuel.



For more information, please visit socialgas.com (search "SOLUTION").