

# GET THE FACTS ON METHANE EMISSIONS

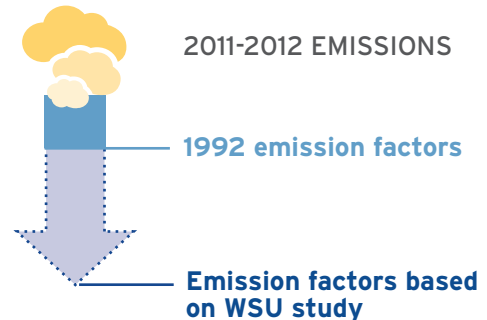


## NATURAL GAS SYSTEM EMISSIONS ARE DECREASING

In every sector of the natural gas system, EMISSIONS ARE DECREASING.

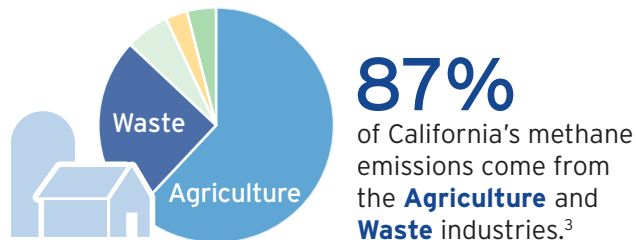
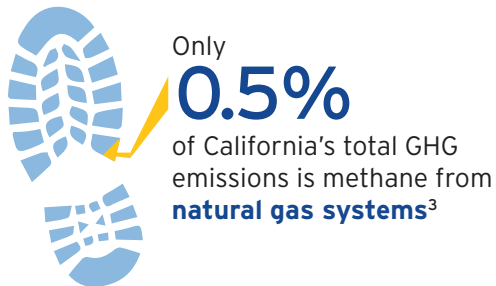
Using **20-year old emissions factors**, the US EPA<sup>1</sup> found total emissions from the natural gas systems from 2011-2012 decreased by **35%**

But, a recent WSU study<sup>2</sup> using **advanced methods** and **direct measurement** found that emissions from the natural gas distribution system are actually lower by **36-70%**



## FOCUS ON THE REAL PROBLEM

Methane emissions from natural gas systems are a **SMALL FRACTION** of California's **TOTAL GHG** emissions.



Renewable natural gas (biogas) can be a **PART OF THE SOLUTION**.



By converting emissions from the Ag and Waste sectors into renewable bio-methane, California can produce enough **renewable natural gas** to replace **75%** of all **diesel fuel** used by vehicles in the state.<sup>4</sup>

With biogas, California can significantly reduce its GHG emissions—**ACTUALLY TAKING METHANE OUT OF THE AIR!**

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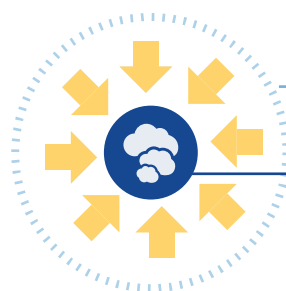
# SoCalGas® IS LEADER IN REDUCING EMISSIONS

SoCalGas has one of the **LOWEST** emission rates in the country, despite being the nation's largest natural gas distribution utility.

With **modern emissions** factors, SoCalGas' emission rate is

**0.12%**<sup>2</sup>

**2.5x** less than previous estimates.<sup>2</sup>

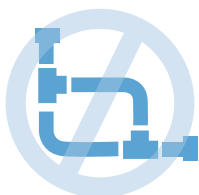


SoCalGas EMISSIONS RATE

— 1992 emissions factors  
0.31%

— Emission factors based on WSU study  
0.12%

We work hard to **REDUCE** our environmental impact.



We voluntarily **ELIMINATED ALL CAST IRON PIPES**—which are prone to rust and leaks—from our system.



SoCalGas was one of the **FIRST MEMBERS** to join the EPA's Natural Gas STAR program in 1993.



Since then, we have **CUT MORE THAN 800,000** metric tons of carbon dioxide equivalent (CO<sub>2</sub>e). That's the same as reducing the mileage driven in California every year by more than **2 BILLION MILES!**<sup>5</sup>

## WE CONTINUE TO BACK UP OUR COMMITMENT WITH RESOURCES

SoCalGas will invest **\$6 billion** over the next five years to maintain and improve **safety, reliability and service** to its customers.



<sup>1</sup> US EPA GHG Inventory 2012/2013

<sup>2</sup> 2014 Washington State University, Natural Gas Local Distribution - Methane Emissions Study

<sup>3</sup> California Air Resources Board's 2014 Inventory, Reducing Short Lived Climate Pollutants in California

<sup>4</sup> Bioenergy Association of California

<sup>5</sup> US EPA Greenhouse Gas Equivalencies Calculator



A Sempra Energy utility