

Renewable Natural Gas :

*Part of our Sustainable Energy
Future*

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The American Gas Foundation

- A 501(c)(3) organization, founded in 1989.
- An independent source of information research and programs on energy and environmental issues that affect public policy, with a particular emphasis on natural gas.

Major Study: The Potential for Renewable Gas (2011)

<http://www.gasfoundation.org/ResearchStudies/agf-renewable-gas-assessment-report-110901.pdf>

Benefits of Renewable Natural Gas:

Economic Benefits



Social Benefits



Environmental Benefits

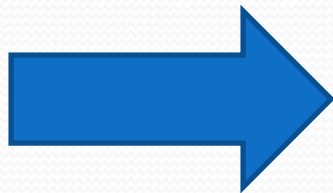


Energy Security Benefits

What is Renewable Natural Gas?

A *carbon-neutral fuel* produced or captured from:

- Renewable, sustainable biomass sources;
- Landfills;
- Wastewater treatment facilities.



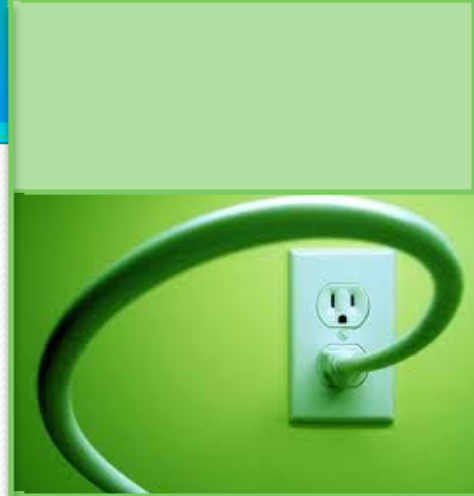
Beyond carbon-neutral:
Substantial greenhouse gas
reductions from avoided
methane emissions

What is Renewable Natural Gas?

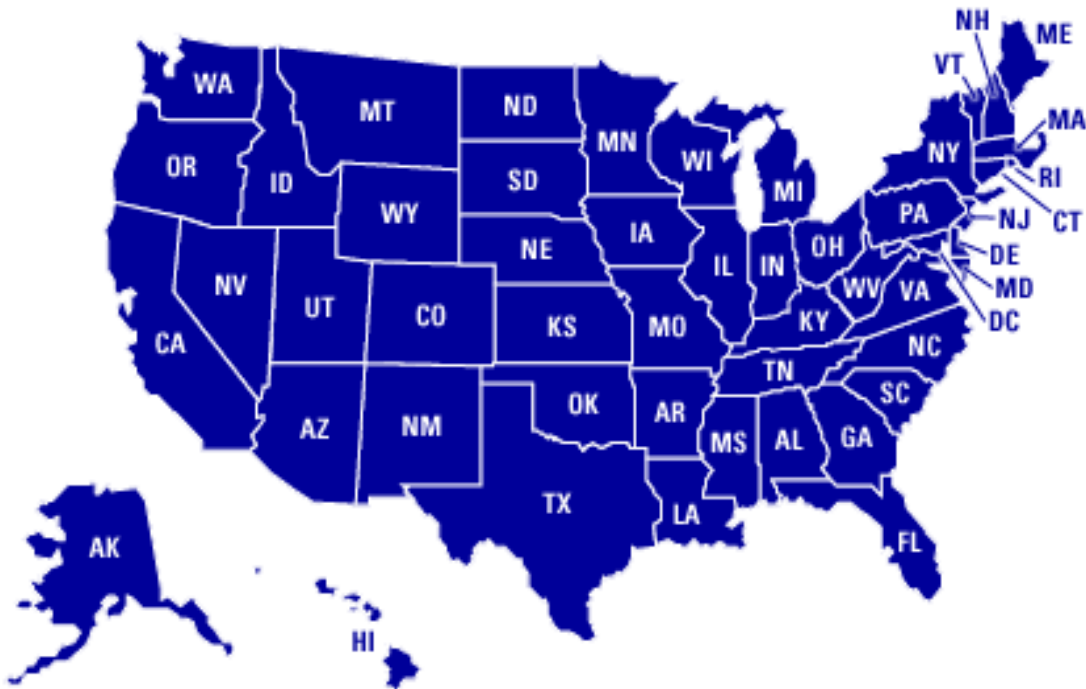
A highly versatile energy source that can be used for:

- Direct use at site;
- Residential heating and cooking;
- Commercial applications;
- Manufacturing, including heavy industry;
- Electricity production;
- Transportation fuel.

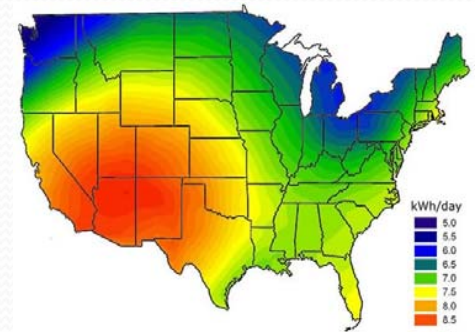
Renewable natural gas could meet demand for between 4-10% of natural gas usage.



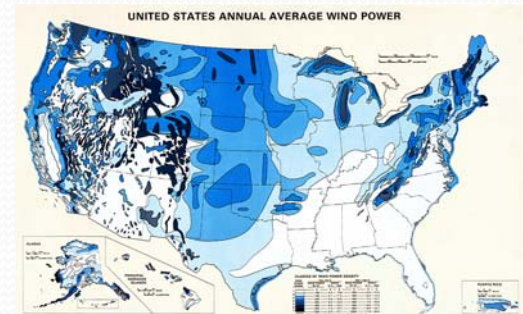
Where is there Significant Potential for *Renewable Natural Gas Production*?



Solar Power Potential



Wind Power Potential



Geography is no longer destiny for renewable power.

Renewable Natural Gas: A Fifty-State Resource

- Every state has potential from landfills, wastewater treatment, and/or agricultural sources.
- Nearly every state in the US has potential for renewable feedstock production suitable for renewable gas.

Using all available feedstocks nationally, we could provide 9.5 quadrillion Btus per year.

Reduction in GHG Emissions

- National Greenhouse Gas reductions estimated at up to 146 million tons of CO₂ per year.
 - Approximately the equivalent emissions of 29 million cars
 - According to the California Air Resources Board, renewable gas is the lowest carbon transportation fuel available.
- Additional benefits to the agricultural sector by controlling the release of methane.



Renewable Natural Gas: A pathway to sustainable transportation.

- Renewable gas provides increase security by the potential displacement of foreign produced transportation fuel .
- European nations, especially Sweden and Germany, are developing renewable gas (biomethane) as an alternative transportation fuel.
- 22 models of light duty natural gas vehicles available in Europe today - all compatible with renewable natural gas



Developing Renewable Gas Resources: Job Creation Potential



Up to 250,000 jobs
in green energy,
farming, and
agricultural
sectors.

Source: The Potential For Renewable Natural Gas published by the American Gas Foundation (2011)

Renewable Natural Gas: Compatible with Existing Infrastructure

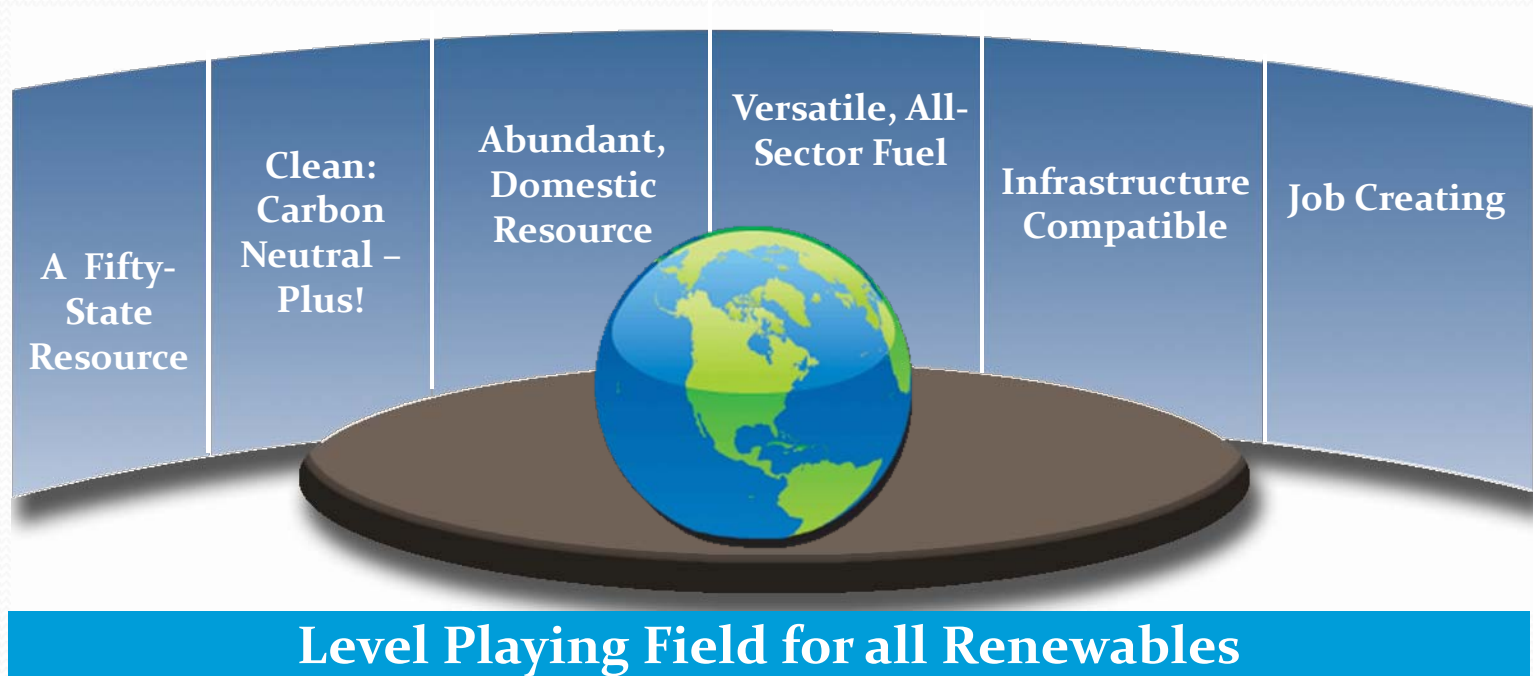
- The nation has 2.4 million miles of natural gas pipeline in place today - all compatible with renewable natural gas.



Developing the Potential: Renewable Natural Gas

- Maintaining a level playing field for all renewable energy sources, including renewable natural gas, will help us meet our national energy goals.
- Solar energy receives a 30 percent federal investment tax credit (ITC) through December 31, 2016.
- *Including renewable natural gas in the renewable energy ITC would stimulate deployment of this clean, versatile, and abundant resource.*

The Case for Renewable Natural Gas





The American Gas Foundation

Dedicated to addressing the role natural gas can play in a sustainable, secure energy future.

Please find this and other studies at www.gasfoundation.org:

The Potential for Renewable Gas (2011)