

Utility Programs to Sell RNG

ABC Webinar January 21, 2020



Today's Speakers



Michael Gifford Commercial Efficiency and Innovation Lead

VGS



Lizzy Reinholt
Senior Director of
Sustainability & Corporate
Affairs

Summit Utilities



Jared Liu-Klein
Public Policy Manager

SoCalGas



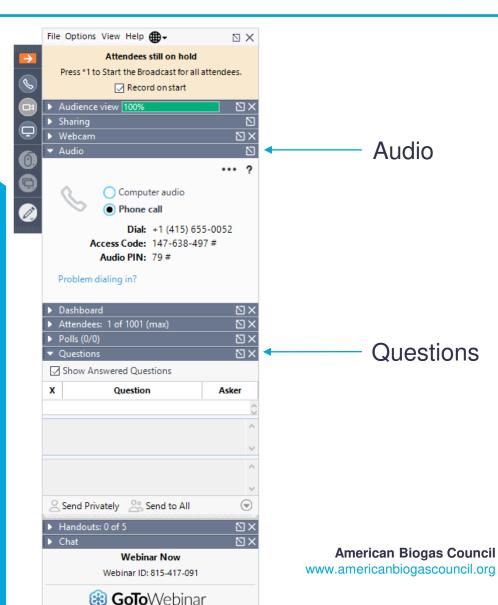
Patrick Serfass (Moderator) Executive Director

American Biogas Council

Quick Notes



- You should be able to hear me talking now. If you can't, use the questions module to describe your issue.
- Two Audio Options: Phone or Computer
 Choose one and connect
- Pro tip: Don't call in on our phone if your audio is set to "Mic and Speakers"
- Ask questions using the Questions Panel on the right side of your screen at any time.
- The recording of the webinar and the slides will be available after the event. We will post them online and send you a link.



Who we are



The <u>only</u> US organization representing the <u>entire biogas</u> <u>industry</u>

All sectors represented

- Project developers/owners
- Equipment retailers and dealers
- Waste management companies
- Waste water companies
- Farms
- Utilities
- Municipalities
- Consultants and EPCs
- Financiers, accountants, lawyers and engineers
- Non-profits, universities and government agencies

200+ organizations 2,000+ individuals

The US Biogas Market



Current

282 on Farm

1,269 Water

66 Food Scrap

645 at Landfills

Potential

8,300 on Farm

4,000 Wastewater

1,000 Food Scrap

440 at Landfills



Topics Covered



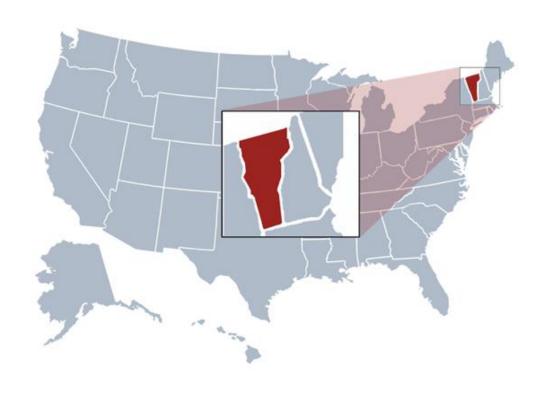
- -Fundamentals of gas utilities' RNG programs
- -RNG procurement
- -Essential policies to facilitate program creation
- -Approval process with public utility commissions
- -Ensuring sufficient and consistent supply of RNG
- -Q&A



Renewable Natural Gas Offering and Program

Vermont Gas Systems (VGS)

- Natural Gas Transmission and LDC Located in Northwestern Vermont
- Over 50,000 Customers
- 118 Miles of Transmission Pipe
- 853 Miles of Distribution
- Approximately 10 Bcf in retail traditional natural gas sales



Customer Partnerships



VGS and NG Advantage partner to offer first renewable natural gas product to industrial users and hospitals across the



Vanguard Renewables, Goodrich Farm, Middlebury College, and Vermont Gas Celebrate Groundbreaking for Facility that Turns Manure and Food Waste into Renewable Energy

Vermont Coffee Roaster Producing 'Green' Beans

The Vermont Coffee Company says it's the first roaster in the U.S. to use all renewable energy sources

By Jack Thurston







From Garbage to Green Energy: UVM Medical Center Commits to Using Renewable Fuel Through Innovative Vermont Gas Program

Energy Produced at Canadian Landfill Tapped to Power Doctor's Offices



Other Notable Commercial Customers









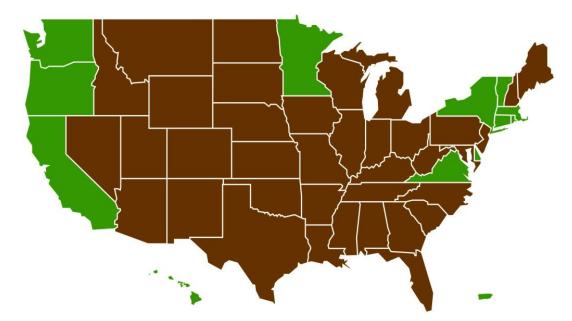






Contributing Factors

- Vermont's Aggressive Energy Goals
- Environmental Commitments by Vermont Gas
- Vermont Gas' Sustainability Goals
- Customer Feedback
- Regulatory Commitments
- Zero Food Waste to Landfills







VGS's RNG Mission Statement

VGS Renewable Natural Gas (RNG)
program is a simple way for our
customers to reduce fossil fuel use,
achieve their carbon reduction
objectives and contribute in an
innovative way to addressing climate
change.

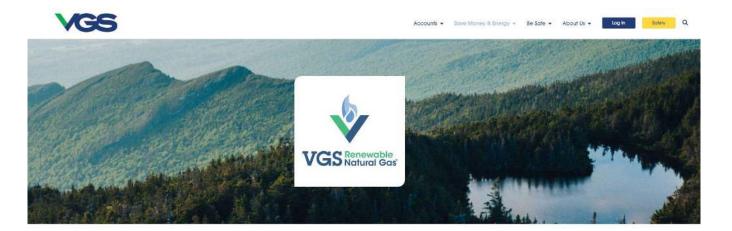
Regulatory and Accounting





Customer Pricing Structure

- The voluntary "Adder" is ~\$1.1964/ccf.
- Updated with each Quarterly PGA
- Available to all rates
- Voluntary selection for customers by % of use
- Standalone RNG approved 2019
- RNG Adder Price = Value "RENEWABLE ATTRIBUTE"
 Purchased



Vermont Gas is committed to a sustainable future—that's why we're proud to offer our Renewable Natural Gas program. Renewable Natural Gas is created from the methane produced by the organic material in landfills, wastewater treatment facilities and farms. VGS Renewable Natural Gas Program gives customers another opportunity to make a difference.

Check out our innovative RNG Adder Calculator to see what amount works with your budget and energy goals.

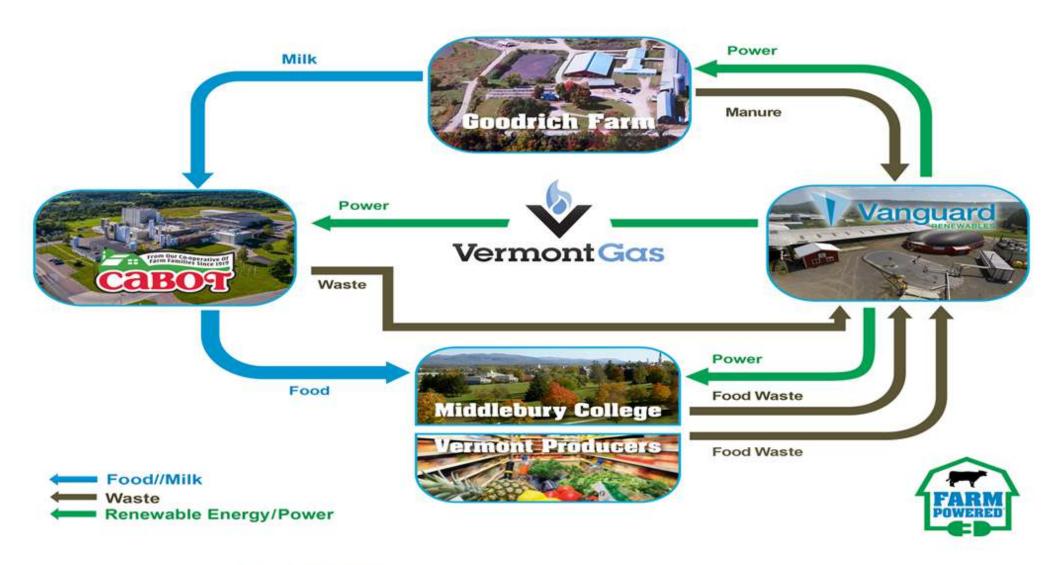


Long Term Contracts and Tariffs



- PUCs want to see price stability
- Long term contracts are easier to secure if the utility has a tariff in place
- Having projects in development can help get over the hurdles

Vanguard Direct Injection Project





Example: Vanguard RNG Project

- Coming online September 2020
- Goodrich Farm in Salisbury, Vermont provides manure.
- Middlebury College and other Vermont businesses provide food waste.
- Vanguard Renewables combines and produces RNG (bio-methane) and supplies VGS pipeline.
- VGS will be able to provide locally sourced RNG that is being directly injected into pipeline.
- Additional benefits:
 - Reduce farm run-off into Lake Champlain
 - Provide energy cost reductions to farm
 - Reduce waste stream to landfills.
 - Capture Phosphorus from digester



VGS RNG Future and Innovation

- VGS to reduce emissions 30% by 2030
- RNG to be 20% of retail supply by 2030
- Innovative District Energy Systems
- Area's first depackaging facility to open 2020
- Establish federal guidelines and standards for pipeline RNG projects





https://vtdigger.org/2019/11/15/vermont-gas-commits-to-zero-emissions-by-2050/









LOCATIONS

6

COLORADO (HQ)

Customers: 22,000

T&D Main Line: 1,258 miles

OKLAHOMA

Customers: 12,600

T&D Main Line: 832 miles

ARKANSAS

Customers: 45,600

T&D Main Line: 1,717 miles

MISSOURI

Customers: 18,900

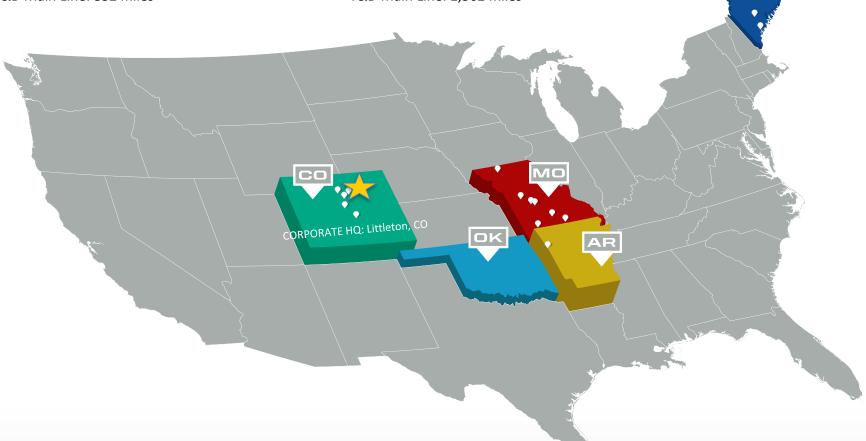
T&D Main Line: 1,362 miles

MAINE

Customers: 3,800

T&D Main Line: 231 miles

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Voluntary Customer Option





At Summit we want our customers to have the opportunity to participate in our renewable program, which is why we launch a voluntary renewable program for our customers.



This program will allow Summit customers to purchase additional RNG attributes to further reduce their carbon footprint.

The more people sign up...

The larger the impact on reducing carbon emmissions for our customers in Maine

The larger the impact on reducing carbon emmissions for our customers in Maine

The larger the investment to



Customers enrolling in the program may elect to match ten to 100 percent of their average annual usage with RNG attributes as an additional fee on their bill.

support future RNG projects, and...

RNG and Natural GAS LDC'S Working Together





Safety will always be an LDC's top priority, ensuring the gas is pipeline quality and does not pose a safety threat to the end user will always take precedence.



LDC's are heavily regulated from a safety and rate perspective. Any purchase of RNG and RNG attributes will have to flow through a regulatory proceeding, resulting in a longer lead time and some uncertainty in any partnership.



Cost to consumers will always play a critical role in any LDC partnership, unless an RPS like standard has been created at the state level for home heating, utilities will need to demonstrate the investment in RNG is prudent.



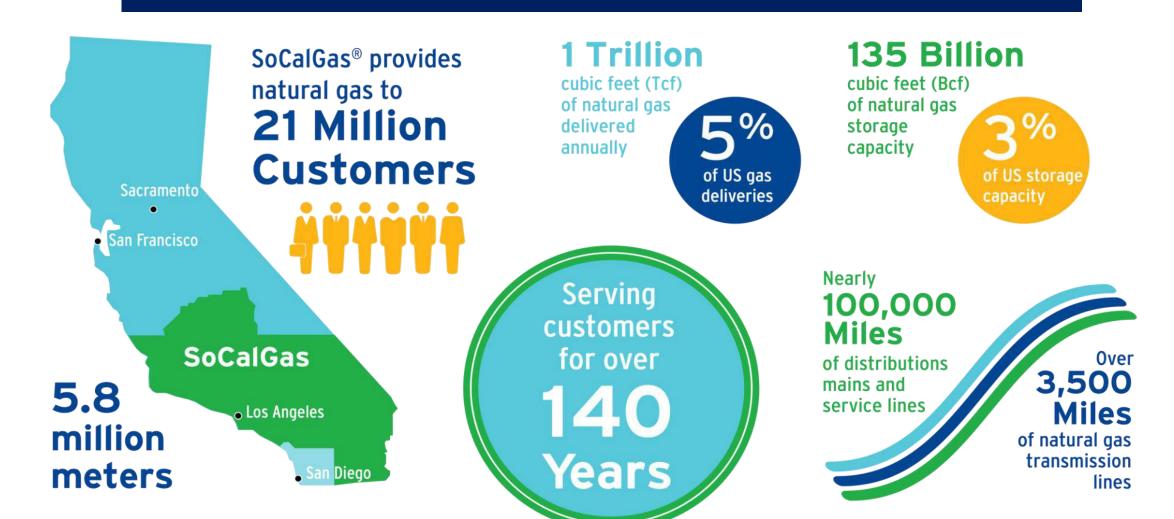


THANK YOU



SoCalGas:

Largest Gas Distribution Utility in United States

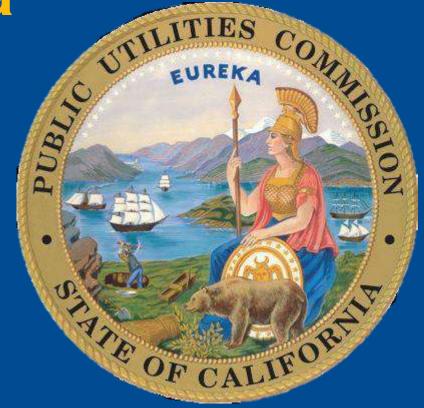


Become the cleanest natural gas utility in North America

5% RNG being 2022 5% RNG being delivered on our system

2030

20% RNG being delivered on our system



Need regulatory authority to recover the above market costs

SB 1440 (2018) - Open Proceeding

<u> Mandatory Program – Similar Renewable Portfolio Standard</u>

- Establishing renewable gas procurement targets are crucial to the development, deployment and utilization of renewable gases from a variety of feedstocks.
- Provides thermal users an opportunity to play an important role in advancing the state's climate change goals.

Items for Procurement Consideration

Establish Procurement Goals

Cost Recovery from Customers – Not Shareholders Cost Allocation – All customers or core customers?

In-state vs out-ofstate Biomethane

SLCP vs GHG Priority Cost Recovery for Duration of Offtake Contracts

Buckets- Types of Gas to Procure

Off Ramps/Cost Controls

Ratebase Interconnections Cap & Trade Allocations

Authority to Buy and Sell Credits

Green Attribute
Accounting/Trading

Voluntary Green Tariff

- SoCalGas submitted a proposal to state regulators at the California Public Utilities Commission (CPUC) that will empower customers with the option of purchasing a portion of their gas from renewable sources.
- If approved by the CPUC, the program will be open to all residential customers and to commercial and industrial customers for whom SoCalGas purchases gas.
- Residential Customers will select from fixed monthly dollar amounts.
- Commercial and industrial customers will be able to select either from set dollar amounts or a percentage of their total gas load.

Items for Procurement Consideration

Customer Eligibility

Subscription Levels

Commitment Periods

Billing

RG Feedstocks In-state vs out-of-state

Additionality - Verification

Contract Length

Questions and Answers





Lizzy Reinholt Summit Utilities



Patrick Serfass (Moderator) American Biogas Council



Jared Liu-Klein SoCalGas

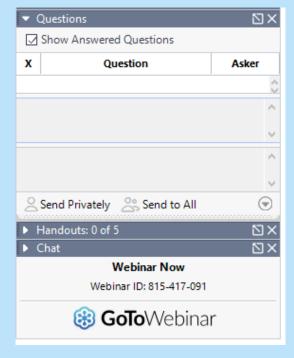


Michael Gifford VGS

Ask Questions using the Questions Panel on the right side of your screen.

All questions and comments will be recorded.

A recording of the webinar and slides will be available by 1/23 to all ABC Members and all attendees of the webinar



Upcoming Webinar:

How to Maximize USDA Grant Dollars from REAP

January 30th at 1:00pm EST

Are you developing a biogas-electricity or RNG project that serves the agriculture industry? With recent changes in the industry, newly passed tax credits, and the application for USDA's Renewable Energy for America Program (REAP) from the last Farm Bill, it's the right time to update you and teach you all the tricks to maximize the USDA grant dollars you can get from this popular program for biogas, solar, wind and other renewable energy projects.

Speakers:

Fred Petok, Business Loan and Grant Analyst, USDA Irene Langan, Energy Programs Specialist, USDA Moderator: Patrick Serfass, American Biogas Council

Thank you!

Don't forget to fill out our survey after the webinar

Become a member!

-Receive regulatory and policy intelligence
-Connect with other biogas and anaerobic digestion leaders

-Support the industry's growth and outreach

Thanks for attending!