

Decarbonizing Thermal Energy: Projects and Policies

PICTURE THE POTENTIAL

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AGA Actively Tracks Member Company Emissions Goals

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- **16** AGA member companies have a net-zero, carbon neutral, or 100% clean energy goal
- **45 percent** of AGA member companies' gas throughput comes from a utility with a carbon-neutral, net-zero commitment or clean energy goal



October 2021

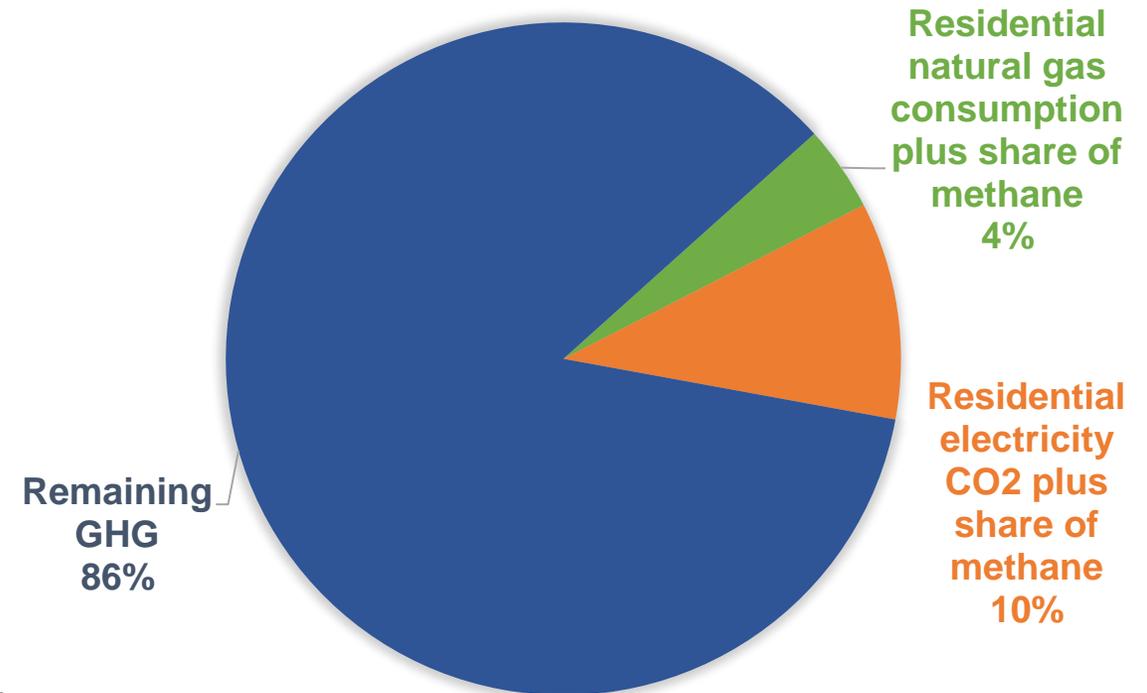
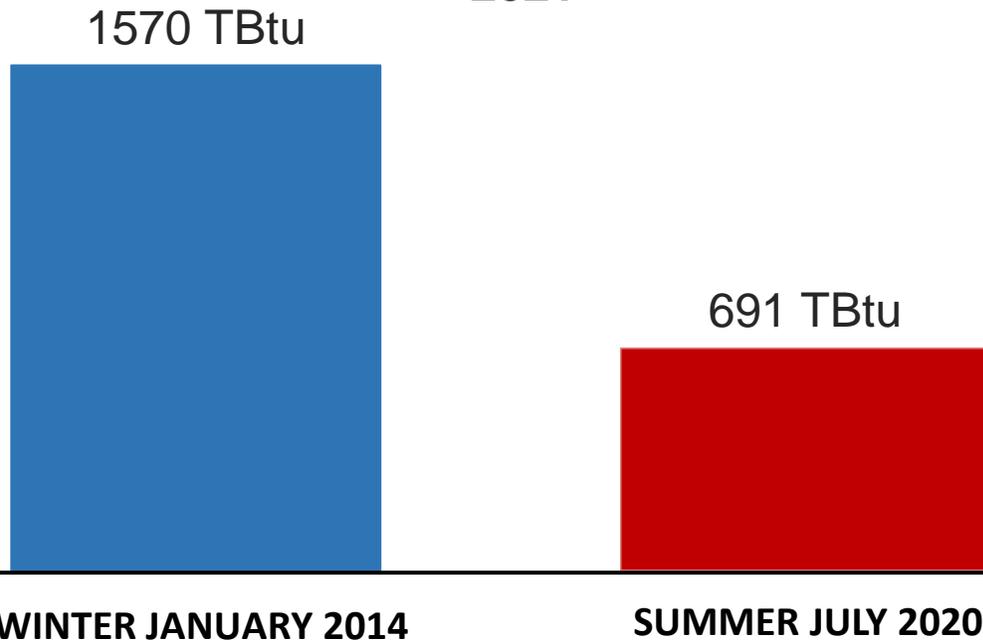
- **29** AGA member companies have a net-zero, carbon neutral, or 100% clean energy goal
- **65 percent** of AGA member companies' gas throughput comes from a utility with a carbon-neutral, net-zero commitment or clean energy goal

A Look at the Residential Heating Market and GHG Emissions

Natural gas system delivers a tremendous scale of energy

Residential natural gas use accounts for only 4.6% of U.S. greenhouse gas emission

US Residential Monthly Winter & Summer Energy Consumption, Top Months 2010-2021



EPA Inventory of Greenhouse Gas Emissions & Sinks 2019, data for 2017
Residential gas methane share based on gas consumption
Residential electricity methane share based on gas for electricity consumption & residential electricity sales, EIA

A PROVEN PATHWAY TOWARDS

Emission Reductions

America's natural gas utilities are committed to being part of the clean energy future and have a proven pathway to get us there.



Increasing Access to High-Efficiency Natural Gas Appliances

Utilities are working with policymakers to enhance energy efficiency programs and to ensure all customers have access to high-efficiency natural gas appliances to reduce emissions and lower costs.



TECHNOLOGY

Advancing Research, Development and Deployment of Next-Generation Natural Gas Technologies

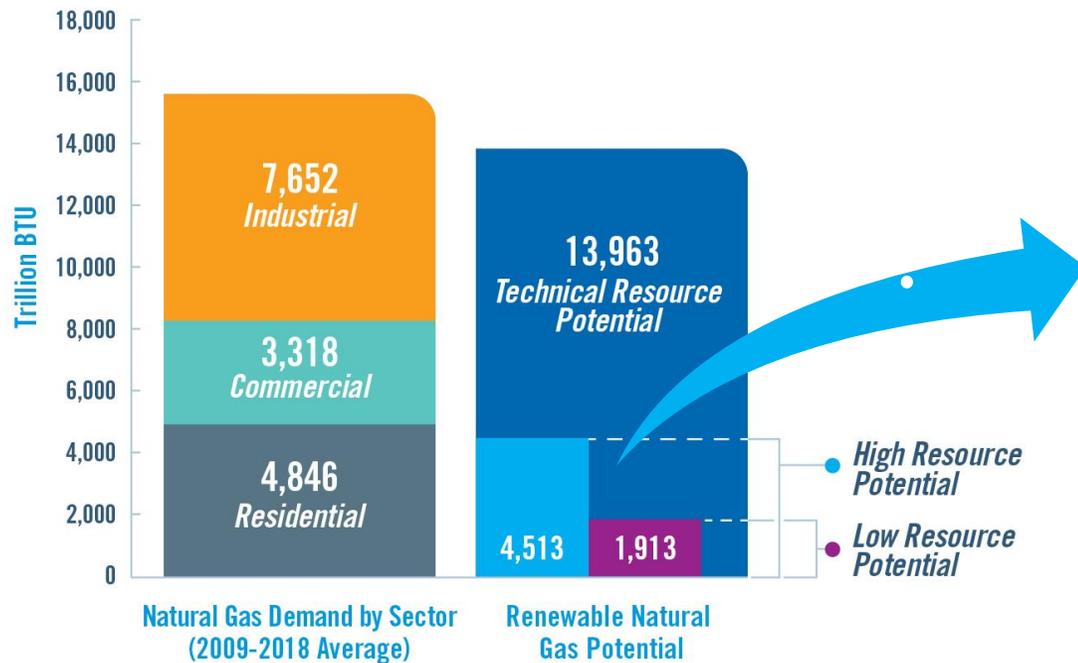
More research and development is necessary for continued improvement in next-generation natural gas technologies and to make them widely available to consumers for greater efficiency, affordability and emission reduction.

RNG Study Executive Summary

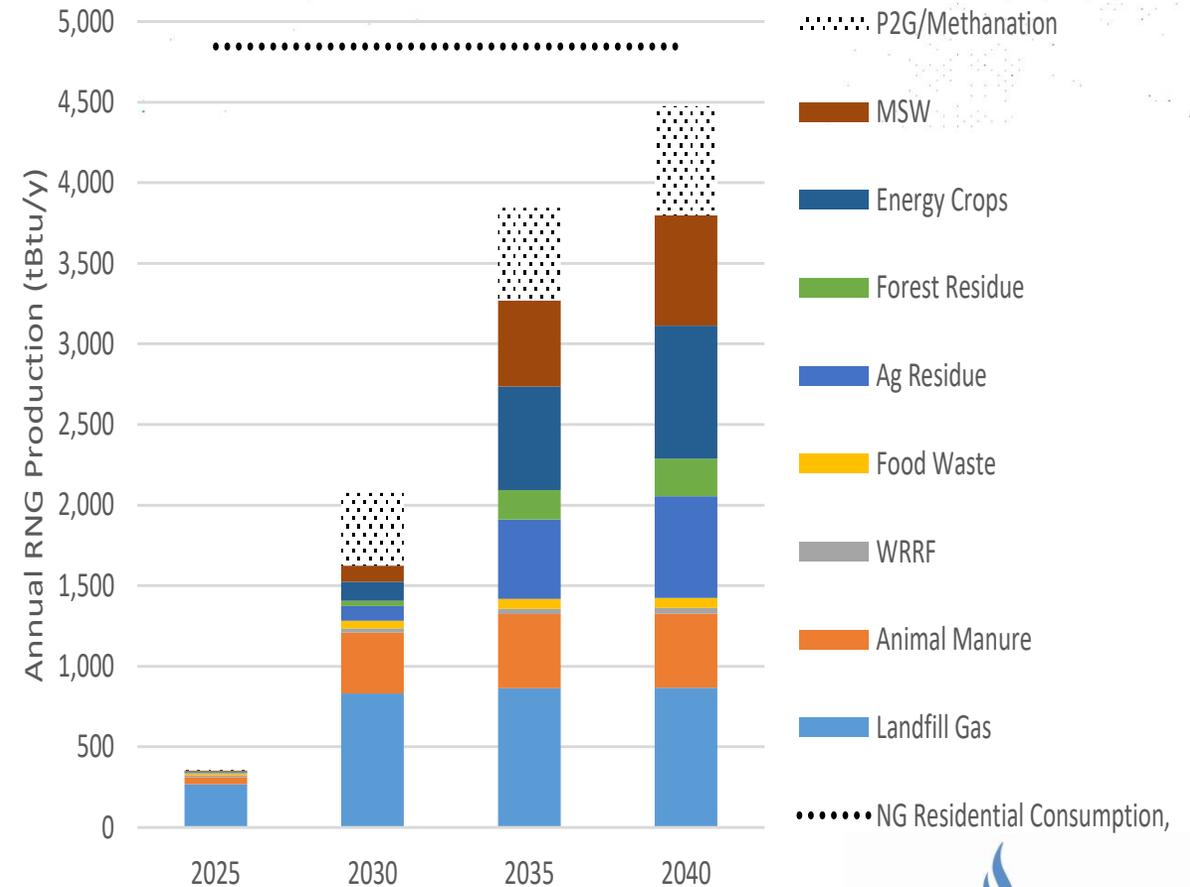
Key Findings

- Potential to Offset Residential Demand with RNG
- Represents up to a **95% reduction** in residential GHG emissions from natural gas
- RNG Costs are Competitive with Other Emission Reduction Strategies, \$55-300/ton of GHG Emission Reductions

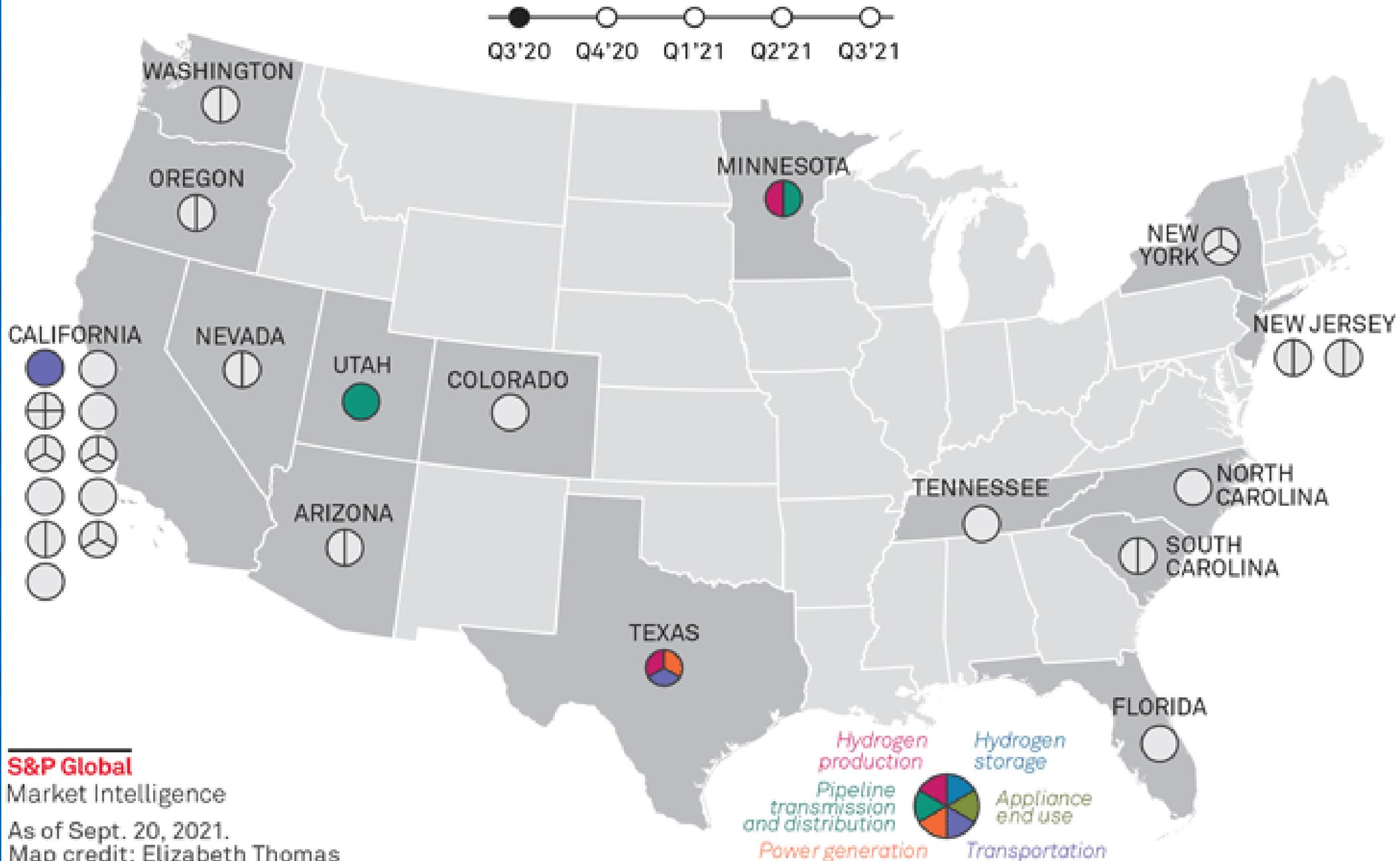
RNG Resource Potential



Estimated Annual Production



Announced US hydrogen pilot projects



S&P Global

Market Intelligence

As of Sept. 20, 2021.

Map credit: Elizabeth Thomas

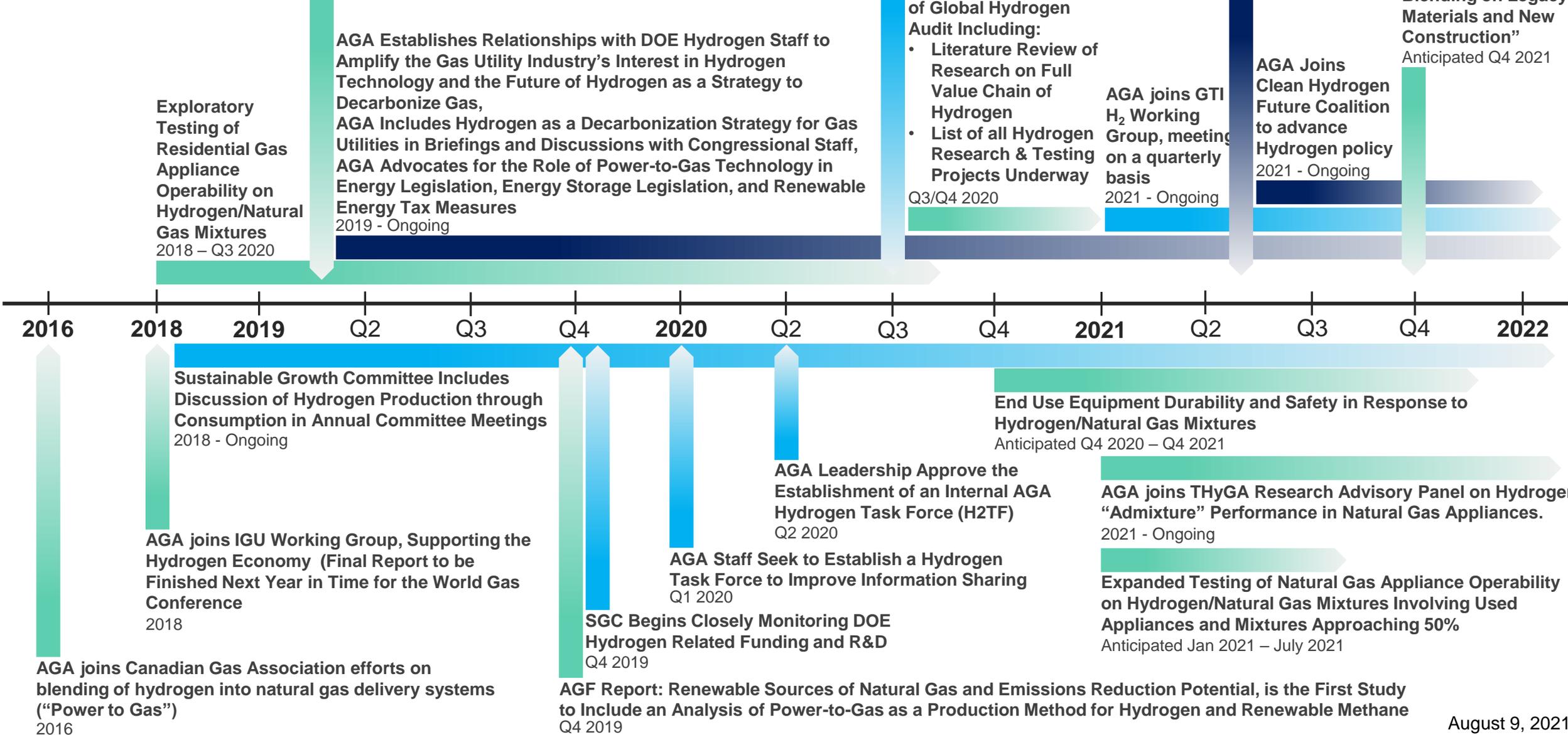
Source: S&P Global Market Intelligence

AGA Hydrogen Activities to Date

Member Engagement and Support

Advocacy

Research



Thank you!

“With its low to negative life-cycle carbon footprint, RNG has great potential to continue driving down emissions and helping meet our nation’s environmental goals.”

- American Gas Foundation
2019 Renewable Sources of Natural Gas
Supply & Emission Reduction Assessment Study

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