



What is the Future of Gas?

Midwest Energy Solutions Conference

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GTI Energy

GTI Energy Overview

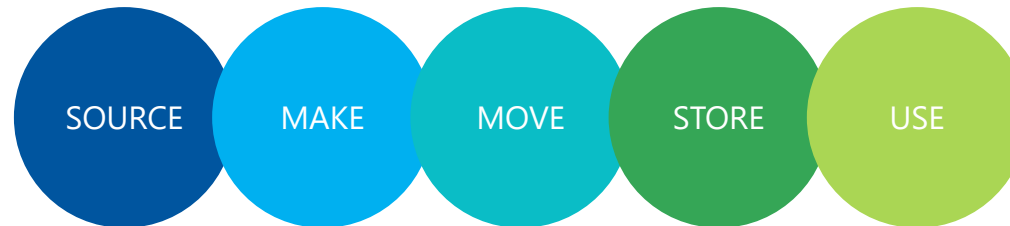
Serving the Energy Industry Since 1941



- Independent, not-for-profit research, technology development and deployment organization
- Areas of research include energy production and conversion, energy delivery, and **end-use**
- Technology development focus on safety, improving efficiency, and reducing emissions
- Research Facilities
 - 18-acre campus near Chicago
 - Pilot and demo facilities worldwide



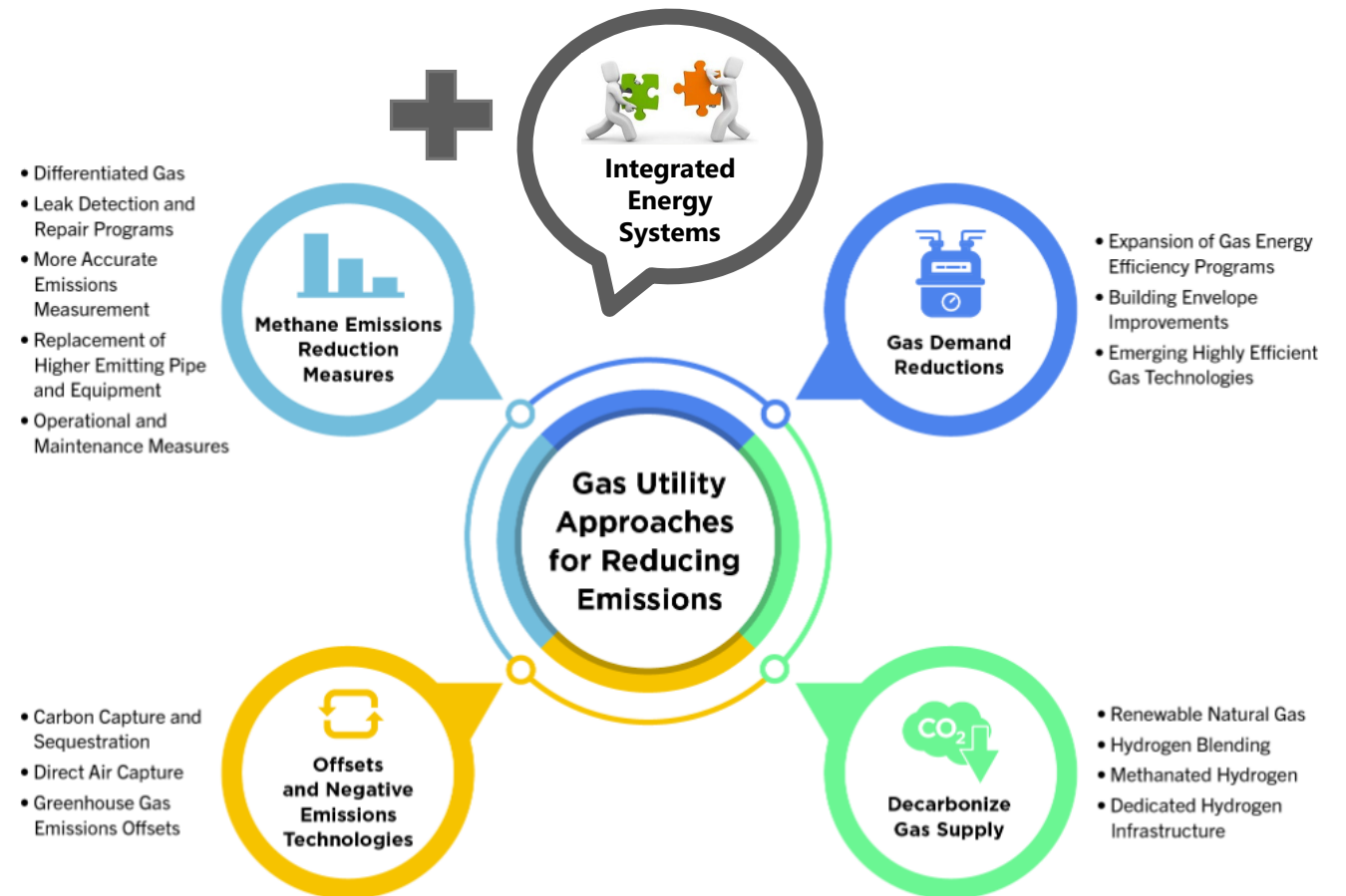
500
Enterprise
Employees



Customer Decarbonization: *It takes a village*

A few things we're working on...

- Traditional Energy Efficiency!
- Gas Heat Pumps
- Green Hydrogen
- Distributed Carbon Capture
- Hybrid/Dual-Fuel Space Heating
- Microgrids



Customer Decarbonization: Pathway Exploration

In 2023, GTI Energy was commissioned by AHRI to study **Decarbonization Pathways for Combustion Equipment**, which dove deep into seven areas focused on residential, commercial, and light industrial buildings:

- Heat Pump Technology: Fuel-fired & Hybrid Heat Pumps (separately)
- Compatibility with Low/Zero Carbon Fuels
- Mitigating Methane Emissions
- Micro Combined Heat & Power (mCHP)
- Thermal Energy Storage
- Distributed Carbon Capture

Used in differing combinations, net zero emissions were feasible for boilers, furnaces, water heating, and radiant heating.

