UTD
Utilization Technology Development

UTILIZATION TECHNOLOGY DEVELOPMENT

COLLABORATIVE NATURAL GAS PROGRAMS BENEFIT UTILITIES AND THEIR CUSTOMERS

GOALS

SAVE CONSUMERS MONEY

Advanced gas technologies reduce energy bills through higher efficiencies, and can lower installation costs by superior designs or more product choices.

SAVE ENERGY

Innovative end-use equipment with substantially higher efficiency reduces consumers' energy consumption and costs, and supports energy efficiency program goals. Codes and standards updates preserve consumers' options to use this equipment, including through the efficient direct use of gas.

ENSURE SAFE, RELIABLE, AND RESILIENT OPERATION OF END USER'S EQUIPMENT AND ENERGY DELIVERY SYSTEMS

New equipment and systems that leverage the high reliability of underground gas distribution (including on-site-, self-, or back-up-power) and incorporate safety advancements support the reliable, resilient operation of buildings, facilities, microgrids, and other critical infrastructure.

ACHIEVE SUPERIOR ENVIRONMENTAL PERFORMANCE

Cutting-edge combustion, heat pump, heat-recovery, and transportation technologies provide ultra-high energy efficiency while meeting rigorous environmental standards and minimizing emissions.

INTEGRATE WITH RENEWABLE ENERGY SOURCES

Integrating renewable natural gas (RNG) or hydrogen made from renewable energy (RE) with natural gas reduces greenhouse gas (GHG) emissions of all gas-fired equipment. Coupling that with additional site-based integration of other RE provides economical pathways to achieve low-carbon environmental goals such as Net Zero Energy (NZE) buildings—while ensuring that consumers' annual and peak energy needs are met.

UTD is managed by GTI, a leading non-profit research, development, and training organization.

MISSION

Identify, select, fund, and oversee research projects resulting in innovative customer solutions which maximize the environmental performance, affordability, efficiency and safety of equipment and processes that use natural gas and renewable energy resources.

HOW WE DO IT

- Develop, demonstrate, and validate advanced equipment solutions through technology innovations, better designs, lab testing, and field demonstrations—all important steps for cost-effective market transformation
- Partner with energy users, governmental agencies, laboratories, industry, and utilities
- Apply rigorous scientific analysis and testing to optimize efficiency and environmental performance
- Provide emissions- and codes-and-standards-related support and expertise for innovative product developments
- Integrate with renewable energy sources to impact NZE