

Cutting Costs & Cutting Carbon

The Growing Imperative for Natural Gas Energy Efficiency



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Meet the Presenters



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Where we're going

- AGA Beyond the Buzzwords
- American Gas Foundation (AGF) Study
- Key Takeaways
- Connecting the Pieces
- Discussion

Let's add some clarity

- **Decarbonization:** The process of reducing greenhouse gas emissions across energy end-uses or sectors of the economy
- **Electrification:** The replacement of direct fuel use with electric end-uses
- **Energy Efficiency:** Using less energy to perform the same task or produce the same outcome

What is full-fuel-cycle energy?

- **Full-fuel-cycle energy** is the energy consumed by an appliance, system, or building as measured at the building site plus the energy consumed in the extraction, processing and transport of primary energy forms such as coal, oil, natural gas, biomass and nuclear fuel; energy consumed in conversion to electricity in power-generation plants; and energy consumed in transmission and distribution to the building site.

New AGA White Paper

Available at

<https://www.aga.org/research-policy/resource-library/beyond-the-buzzwords-unpacking-energy-efficiency-electrification-and-decarbonization/>

A link will be emailed following the presentation

Beyond the Buzzwords:
Unpacking Energy
Efficiency, Electrification
and Decarbonization

ABOUT THE FOUNDATION

Founded in 1989, the AGF is a 501(c)(3) organization providing independent research and information on energy issues that affect public policy, with a particular emphasis on natural gas. Overseen by a board of trustees, the AGF has produced a series of important public policy reports, sponsoring executive level forums and events that support enlightened development of energy policies at state and national levels.

Background

- The American Gas Foundation (AGF) contracted MCR Performance Solutions (MCR)
- Assess the benefits & potential of natural gas EE programs
- How existing gas infrastructure can support energy efficiency
- Link: <https://gasfoundation.org/2025/02/05/assessment-study-of-gas-utility-energy-efficiency-programs/>



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The Growing Imperative for Natural Gas Energy Efficiency:

An Assessment Study of Gas Utility
Energy Efficiency Programs

An American Gas Foundation Study Prepared by:

MCR

MCR: Consulting to Utilities Since 1999

- Practice areas include:
 - Energy Products and Services
 - Regulatory Services
 - Financial Planning and Analysis
 - Strategic and Financial Advisory
 - Transmission Strategy (FERC matters)
 - Nuclear Generation
- Visit www.mcr-group.com for more information

The 'so what'

1. Stakeholder processes, especially related to cost-effectiveness and the basis for regulatory approval, are changing the way EE is planned, reviewed, and executed.
2. The growing dependence of the electric grid on the gas system is changing the role of and opportunities for gas and gas EE.
3. Federal and state funding and policy dynamics demand close attention.

EE Study Assessment Scope

- **Evaluation of current and future potential benefits** from natural gas utility energy efficiency (EE) programs and how gas utility EE programs may evolve
- The study examined:
 - The current state of EE program portfolios of 20 gas utilities.
 - Cost-effectiveness evaluation and testing methodologies.
 - A case study of existing EE programs, including a comparison of current regulatory cost-effectiveness methodologies versus an agreed-upon potential future approach.
 - A forward-looking perspective on EE solutions with a focus on customer and societal impacts.

More than a Narrative

The report itself is comprehensive with detailed tables and graphics, warranting offline review and contemplation.

Element	PCT	UCT	RIM	TRC	SCT
Avoided energy costs		●	●	●	●
Other resource savings (water, secondary fuel)					●
Non-energy benefits					●
Equipment and installation costs	●			●	●
Program overhead costs		●	●	●	●
Incentive payments	●	●	●		
Bill savings	●		●		

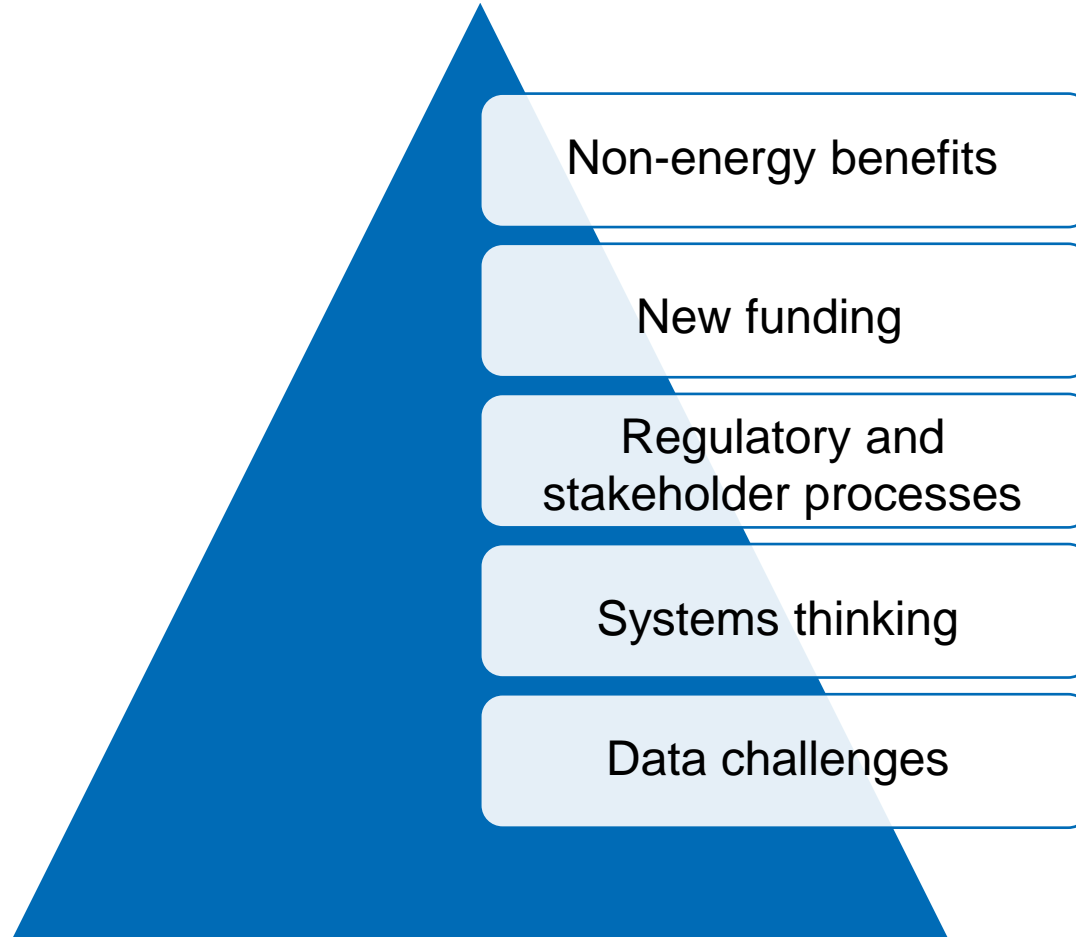
● BENEFIT ● COST

- **PCT:** Participant Cost Test
- **UCT:** Utility Cost Test
- **RIM:** Rate Impact Measure Test
- **TRC:** Total Resource Cost Test
- **SCT:** Societal Cost Test

Key Observations

1. Current federal policy and funding priorities emphasize energy efficiency, bringing new or increasing scale of existing parties directly or indirectly related to EE program implementation.
2. The deployment of and spending devoted to natural gas EE programs varies considerably, both between regions and within them.
3. A wide range of EE measures and technologies are currently available, and though only a handful of new measures and technologies appear imminent in the near future, there are opportunities for new approaches to program design and incentives.
4. Although most jurisdictions primarily use the Total Resource Cost Test or Utility Cost Test, test parameters vary widely.
5. Natural gas EE programs can drive a wide range of impactful, cost-effective direct and indirect non-energy benefits to the broader energy system.

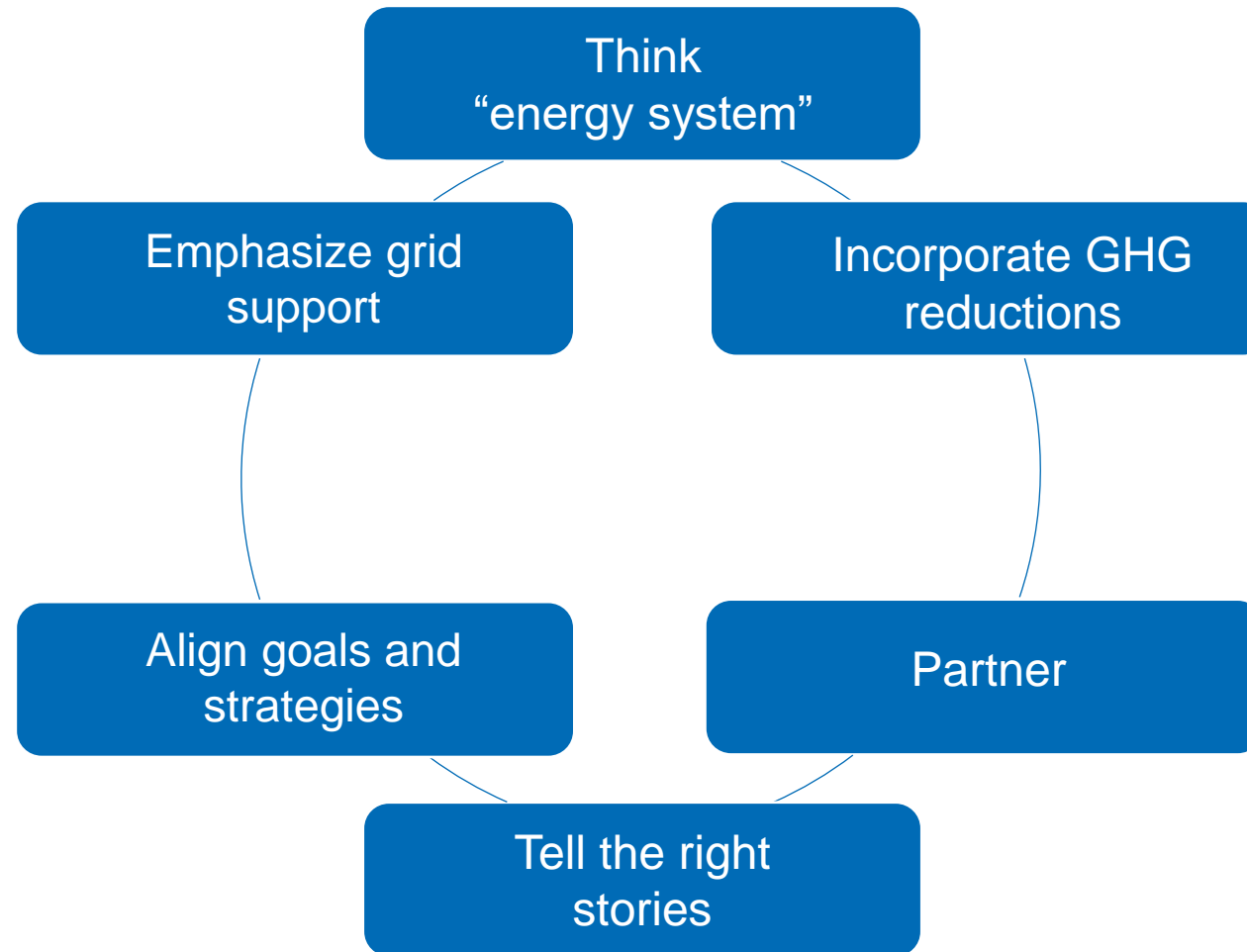
Observations => Takeaways



Interlude: Remember this

Fuel	Pounds CO ₂ per MMBtu
Natural Gas	116.65
Propane	138.63
Distillate Fuel Oil	163.45
Coal (EIA “all types”)	211.47

Natural Gas Utility Call to Action



Connecting the Pieces

- Beyond the Buzzwords – defining energy efficiency
- More than a narrative
- Recognizing the full value of natural gas energy efficiency programs
- Cost effectiveness testing is evolving
- Utilities and regulators should stay informed on energy efficiency advancements
- Granular data is vital



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Questions?



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