

Crystal Clear? Progress and Next Steps on the Future of Gas

With Insights for Implementors

2025-1-30



Energy+Environmental Economics

Dan Aas

Who is E3?

Thought Leadership, Fact Based, Trusted.

130+ full-time consultants

30+ years of deep expertise

Engineering, Economics, Mathematics, and Public Policy Degrees



San Francisco



New York



Boston



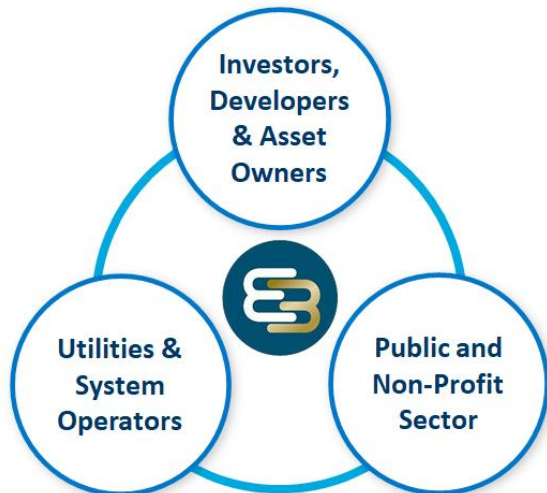
Calgary



Denver

E3 Clients

300+ projects per year across our diverse client base



Recent Examples of E3 Projects

- Creating **economy-wide decarbonization scenarios** for the United States Climate Alliance
- Developed a **Business Diversification Study** for Philadelphia Gas Works
- Supporting multiple utilities and state agencies to develop **clean heat plans and electrification strategies**
- Creating **national heat pump adoption forecasts and strategy support** for a major original equipment manufacturer
- Supporting **Integrated Resource Plan** of El Paso Electric
- Market analysis for **emerging energy storage technologies** like molten salt, iron-air and advanced pumped storage
- Supporting investment in 5+ GW of **community solar and distributed energy resource** projects
- Supporting the **CPUC** in developing the **CA Integrated Resource Plan**
- **Hydrogen policy and market support** for State of Colorado, Mitsubishi Americas, and ACORE

Key takeaways

- + Future of gas proceedings have proliferated across North America. They seek to align gas utility planning and operations with state climate policy**
- + Proceedings have produced initial progress towards that alignment, particularly in areas related to gas infrastructure planning and non-pipeline alternatives (NPAs)**
- + Expertise from professionals with experience delivering customer programs (you!) will be needed to effectively design and implement programs (including NPAs) to reduce gas sector emissions**

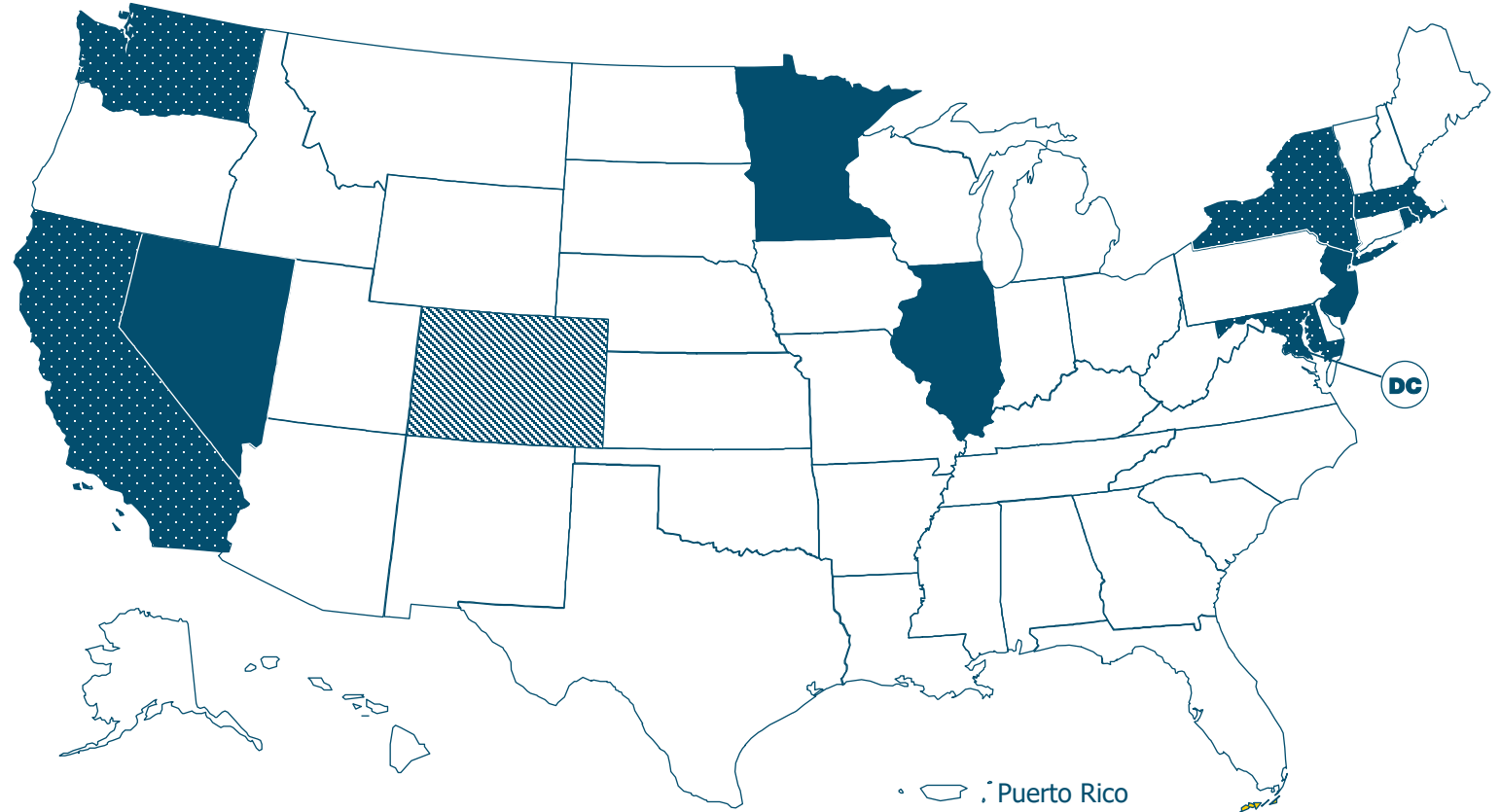
What is a Future of Gas Proceeding?



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Twelve states and D.C. have initiated Future of Gas Proceedings

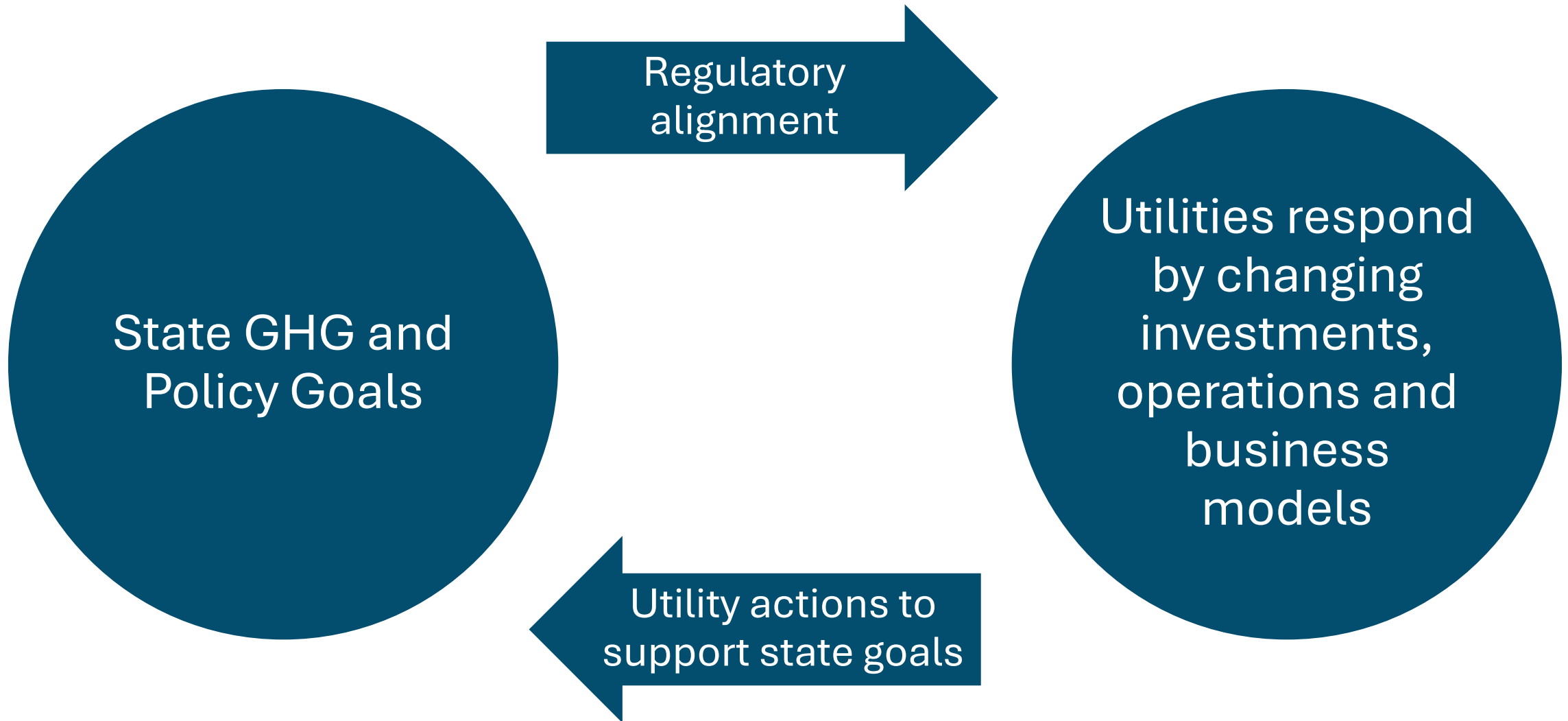
State	Proceeding Date
California	2020 to 2024*
Colorado	2021 to Present
Illinois	2024 to Present
Maryland	2024 to Present
Massachusetts	2020 to Present
Minnesota	2021 to Present
Nevada	2021 to Present**
New Jersey	2024 to Present
New York	2020 to Present
Oregon	2020 to 2023
Rhode Island	2022 to Present
Washington	2021 to Present
D.C.	2020 to Present



States with Future of Gas proceedings driven by:

- Economy-wide GHG reduction goal
- Economy-wide and gas-sector specific GHG reduction goals
- Economy-wide goal and statewide decarbonization roadmap

Proceedings are motivated by state policy goals and seek to align gas utility regulation with those goals.



Future of Gas Proceeding Outcomes



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Example policy and other outcomes (non-exhaustive)

Near-Term Regulatory/ Operational Changes

Modification of Line Extension Policies (MA, CA)

Require non-pipeline alternatives (NPA) as a condition for prudence (MA)

Funding for Clean Heat Programs (CO)

New Planning Processes

Long-term Decarbonization/ Transition Plans (MA, NY)

NPA Processes (CO, MA)

Integrated Gas & Electric System Planning (MA)

Policy preferences/ guidance

Preference for technology options (CO, MA)

Support for new business models (MA, NY)

Concern for long-term affordability impacts (All)

Implementation Considerations



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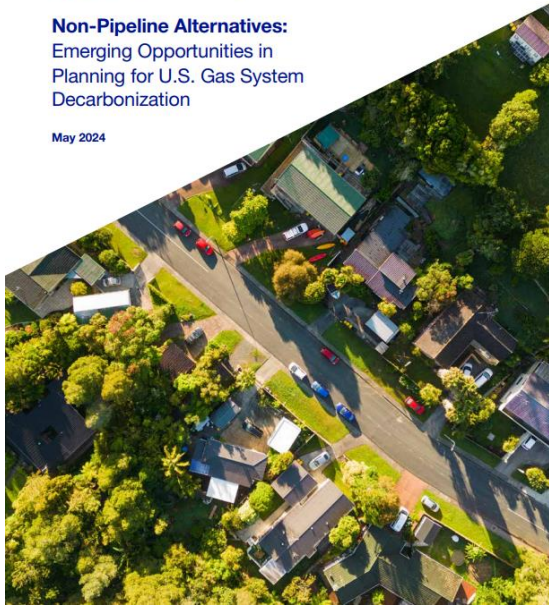
NPA processes are nascent, but likely to be a growing area of practice for program implementors

Where we've been

RMI | nationalgrid

Non-Pipeline Alternatives:
Emerging Opportunities in
Planning for U.S. Gas System
Decarbonization

May 2024

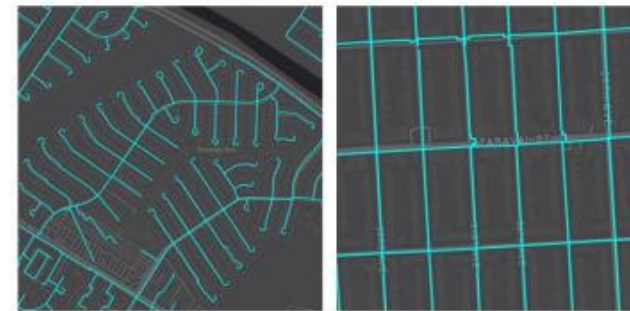


Source: National Grid and RMI, *Non-Pipeline Alternatives: Emerging Opportunities in Planning for U.S. Gas System Decarbonization*

- + A handful of utilities have attempted NPAs.
- + Success has been limited due to obligation to serve requiring 100% customer opt-in.
- + Projects that have seen success have typically targeted a small number of customers (1 to 5)

Where we're headed

Terminal Branches Networked



Blue = gas distribution mains

Source: E3, Gridworks and Ava Community Energy - *Strategic Pathways and Analytics for Tactical Decommissioning of Portions of Gas Infrastructure in Northern California*

- + Targeted electrification pilots
- + System-wide site identification, selection and evaluation
- + Integrated gas-electric system planning
- + Customer and community outreach
- + Customer choice/ obligation to serve

Thank You

dan@ethree.com



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