CRA Insights:
Energy

CRA Charles River Associates

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Natural Gas Utilities 2.0

Adjusting to a new climate

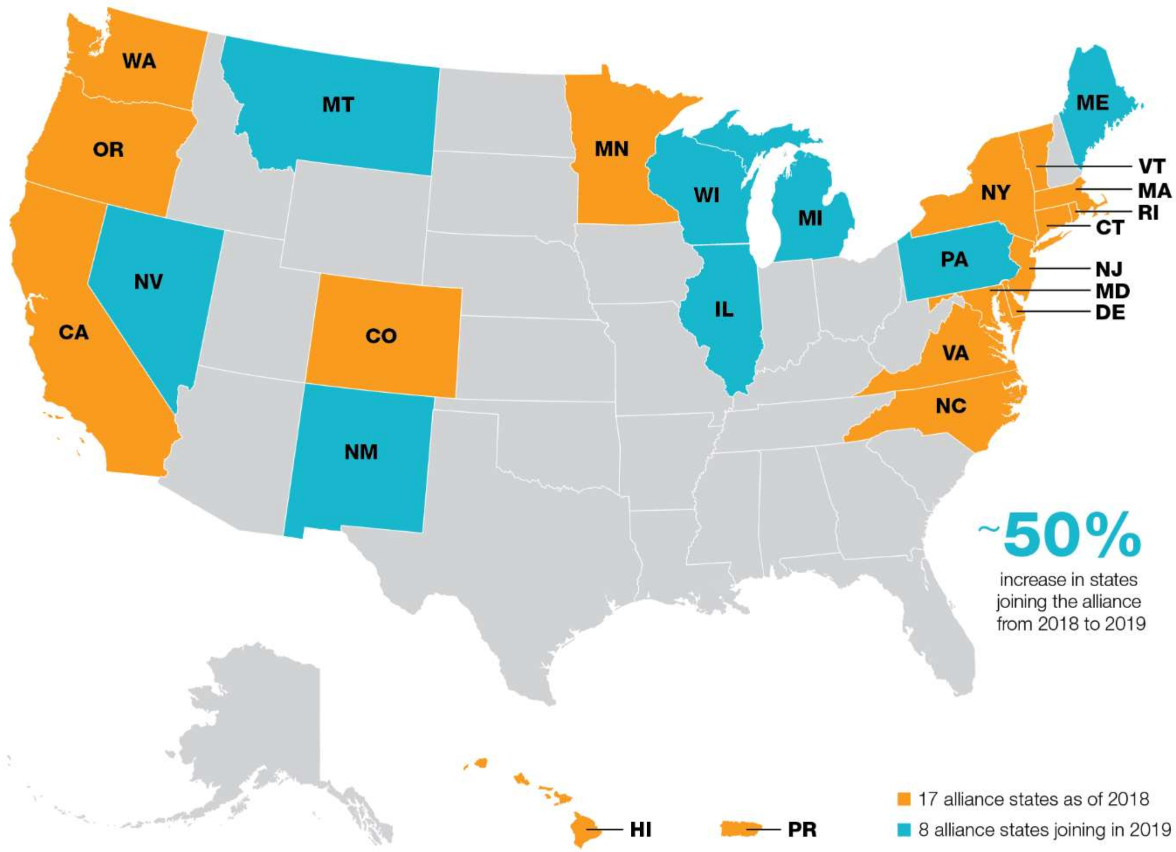
The increase in climate awareness over the past few years has led to a shifting landscape for energy market participants. In particular, many state-driven climate initiatives are challenging the traditional earnings growth strategies of natural gas utilities. More recently, local governments have introduced proposals to ban future natural gas connections.

Historically, utilities have looked outside their franchise territories and regulated services to bridge the gap of market growth (1-2%) and shareholder expectations for earnings growth (~6%). In the recent past, this was accomplished by investing in pipeline infrastructure and currently, the trend is to accelerate modernization programs. Changes in the natural gas market will present opportunities and perhaps, requirements to seek new avenues of earnings growth, both regulated and unregulated.

As we have seen in the past, when government mandates begin to redefine market structure, misalignments and gaps are often created within the framework of efficient market operations. Natural gas utilities will need to identify and act on the opportunities presented by this shift or they could become risks. Business as usual will not work.

In this *Insights* we explore new proactive approaches for natural gas utilities to maintain and expand earnings growth in this challenging business environment.

Figure 1: States in the US Climate Alliance



Source: US Climate Alliance

Note: These states (and Puerto Rico) have committed to implement state climate initiatives consistent with the Paris Agreement.

Background

As the fossil fuel debate moves from the field (NIMBYism) to the boardroom and financial markets (ESG, Task Force on Climate-related Financial Disclosures, etc.), utilities will come under increasing pressure to demonstrate both environmental stewardship and a vision to maintain earnings growth within an evolving regulatory framework.

As states mandate aggressive climate (emissions) goals and cities propose gas bans, we are beginning to see some actual market responses which allow us to differentiate between aspirations and reality for all stakeholders. This data provides important guidance for natural gas utilities to develop new strategic approaches.

Realities behind climate initiatives

1

State agency mandates are shifting.

In states which have implemented aggressive emissions mandates, we have seen a dramatic shift in how state agencies are tasked with supporting these mandates and perhaps the actual relationship between regulator and regulated. In short, the regulatory environment which has considerable influence on utility earnings, is changing.

2

Demand for natural gas

Future core market demand for natural gas may be impacted by new connection bans, efficiency initiatives, and, more broadly, electrification. After the fallout from the gas connection moratoriums in New York, it is clear that many residents and businesses want natural gas.[1] How utilities manage moratoriums and respond to proposed bans will determine whether they will experience market growth or declines in the future.

3

Decarbonization moves from the right-of-way to the boardroom.

The movement against fossil fuels has progressed from project opposition, to the approval process (FERC), and now to the financial markets which support capital investments. A utility's response to climate initiatives needs to move beyond project execution and to a future vision and strategy reflecting the current operational environment.

4

There will be opportunities and risks.

Any transition to lower-carbon energy sources will cost trillions of dollars. It is also likely that new service offerings required, to fill market gaps, will be premium services. In the past, these new services were provided by new market entrants. Utilities are well positioned to serve these needs, if they choose to do so. We are beginning to see this, as some utilities have begun to invest in new assets behind their "city-gate" meters.

5

ESG needs to move beyond "fill in the blanks" reporting.

The financial community will require a more rigorous approach to ESG reporting and no longer accommodate "greenwashing." Financial reporting of physical and commercial climate risks as well as environmental, social, and governance (ESG) considerations require corporate attention and action. This is particularly critical for gas utilities as they are both subject to state initiatives and are market-facing entities.

[1] The settlement between National Grid and the State supports the ability of residents and businesses to obtain natural gas service now and well into the future and provides some guidance as to how future supply options may be considered. See Proceeding on Motion of the Commission to Investigate Denials of Service Requests by National Grid USA, The Brooklyn Union Gas Company d/b/a National Grid NY and KeySpan Gas East Corporation d/b/a National Grid, November 26, 2019.

Natural gas utility 2.0 – Strategic considerations

The immediate challenge for natural gas utilities is to articulate a strategy to address new stakeholder expectations. Natural gas utilities will need to demonstrate an ability to maintain earnings growth, while satisfying the societal demands regarding climate and governance. While the measures a company can take to address this shifting balance of stakeholder demands will be specific to their jurisdiction and core business attributes, a few broad approaches are presented below.

Environment, Social, and Governance (ESG) – The natural gas industry, and in particular, the utility sector, has made great progress in the past few years with respect to ESG reporting. The bar, however, is being raised as environmental organizations and financial institutions are insisting that climate-related risks, both commercial and physical, be incorporated into financial reports. This requires companies to move beyond simple reporting. Given the considerable cost and market impacts of announced programs to address climate change, utilities should take ESG to the next level. A company's ESG reporting should address its environmental stewardship, but also be an integral tool to develop internal strategies to address market risks and value creation, leading to earnings growth.

Protecting Core Markets – As moratoriums in the northeast demonstrate, residents and businesses want, and even demand, natural gas for their homes and businesses.[2] Utilities must create and expand new service offerings to avoid future moratoriums and maintain community relations and support.

Portfolio Considerations – State agencies and climate advocates are challenging traditional approaches to building a supply portfolio.[3] Historically utilities have tried to balance cost, reliability, and environmental considerations. The new regulatory lens has increased the focus on environmental impacts and broadened the options a utility must consider.

Utilities need to reconsider their approach to building a supply portfolio. In today's environment, it may make sense to consider additional behind their "city-gate" meter solutions such as LNG or storage. This could permit an incremental shift from "pass-through" supply options (new pipelines) to utility-based capital investments. While this approach admittedly will not result in an entire reshaping of the utility's existing portfolio, it will address a number of competing stakeholder requirements and create an opportunity for growth capital, while mitigating cost increases to end users. To address increasing regulatory scrutiny, utilities will also need to employ a robust integrated resource planning (IRP) process to support future forecasts and portfolio decisions.

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2 As for long-term solutions, National Grid is required to provide a Long-Term Capacity Report within three months of the effective date, which is to analyze all reasonable available options, including pipeline construction, liquefied natural gas and CNG facilities, renewable energy sources, and conservation strategies. Any long-term solutions proposed in the Report would then be subject to no fewer than four public meetings to be held in the areas of downstate New York impacted by the moratorium. See supra note 1.

3 See supra note 1.

Balancing Maintenance and Growth Capital – With gas prices remaining at historic lows, many companies recognize an opportunity to promote accelerated modernization and pipeline replacement programs. While this work is important, it should not be viewed as a long-term source of earnings growth. We are already seeing some regulatory pushback on the more aggressive replacement programs. In the long run, cost competitiveness will be the greatest defense to any consideration of electrification. If natural gas is considerably less expensive than electric service, the public and business community will be less likely to support wholesale conversion away from gas, which would otherwise result in significant demand destruction. As we have seen, residents and businesses want natural gas, and their advocacy will influence a state's approach in allowing that demand to be met.[4] Maintaining the current cost advantage of natural gas over the long term will assure continued public support and demand for natural gas by utility customers.

Rethinking Sources of Earnings Growth – Behind the city-gate meter investments will provide some degree of regulated earnings growth, but in most cases will not provide long-term meaningful earnings growth that utilities require. In its Reference case, the US Energy Information Agency (EIA) forecasts domestic demand for natural gas to increase by 0.5% per year through 2050,[5] which will not support earnings growth by itself.

As in the past, many utilities have looked outside of the regulated business model to attain earnings goals. Most recently, utilities invested in the retooling of the pipeline network as it expanded to connect economic shale production to markets. Some utilities saw success with this approach and others faced headwinds as permitting challenges resulted in project delays and cost overruns. As demand for natural gas continues, there will be a corresponding need for capital investment. Today, utilities may need to focus on capital investment within their service territory.

Utilities that are ultimately able to leverage core competencies to capture growth capital beyond their service territory will be successful despite the challenging regulatory environment. The key attribute of the successful utility will be the ability to demonstrate value creation in the evolving supply portfolio asset base. As previously noted, we expect market "gaps" to be created as energy markets transition. Successful utilities will be the ones filling those gaps with services and capital investments in the broader market. We may have seen the initial gaps created by pipeline permitting headwinds being filled by "non-pipeline" solutions.

Key takeaways

Changes in societal views regarding energy use and delivery are influencing the regulatory and business environment for energy companies.

- The universe of stakeholders has increased, and their view of a utility's societal role has changed. This is especially critical given the "market-facing" position of natural gas utilities.
- It is becoming evident that the market's interest and, perhaps, need to continue the use of natural gas will exist for decades to come.

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[4] ICF for American Gas Association, "Implications of Policy-Driven Residential Electrification," July 2018. https://www.aga.org/globalassets/research--insights/reports/aga_study_on_residential_electrification.pdf.

[5] US Energy Information Administration, Annual Energy Outlook 2020, https://www.eia.gov/outlooks/aeo/.

- A new business model to address and leverage these facts will allow natural gas utilities to grow earnings and meet the broad expectations of their stakeholders while avoiding the risks these same changes present.

Natural gas utilities need to review their market position and decide if it is time to reboot to Gas Utility 2.0.

About CRA's Energy Practice

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