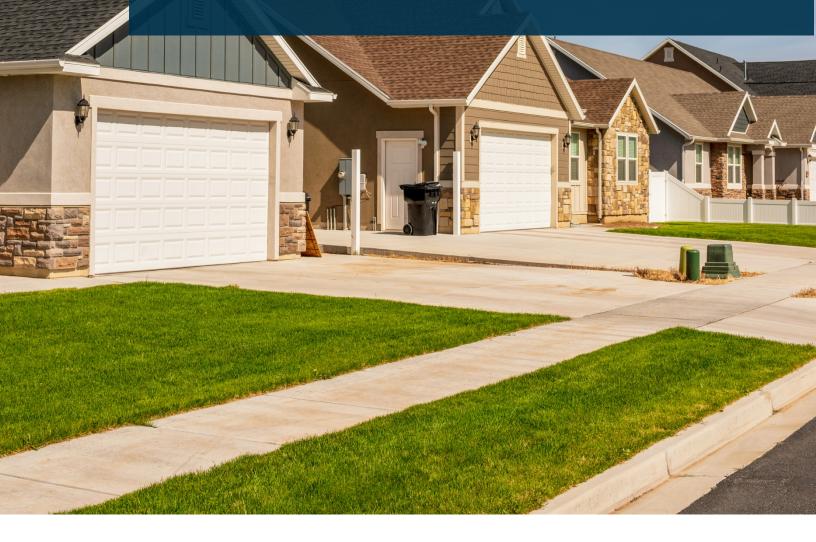
Net Zero 2050: Assessing the Challenge and Opportunity for Regulators and the Natural Gas Delivery Industry

Forum Report: Summary and Action Items







Overview

The Canadian Gas Association and its member companies are working across stakeholder groups to discuss the evolving role of gaseous fuels and infrastructure in Canada's energy future. This workshop was a first discussion focusing on net zero 2050. We thank all the contributors and those who helped bring this workshop together. A special thank you to Monica Gattinger who led the overall discussion and to all our panelists, moderators and attendees.

About Professor Monica Gattinger

Dr. Monica Gattinger is Director of the Institute for Science, Society and Policy, Full Professor at the School of Political Studies and Founder/Chair of Positive Energy at the University of Ottawa. Dr. Gattinger is an award-winning researcher and highly sought-after speaker, adviser and media commentator on energy politics, policy and regulation. She is Founding Chair of Positive Energy, an innovative research programme that convenes business, government, Indigenous, civil society and academic leaders to identify how to strengthen public confidence in energy decision-making. She has published widely in the energy field, and her research features close collaboration and partnerships with organizations including CAMPUT (Canada's energy regulators), the First Nations Major Projects Coalition and Natural Resources Canada. Dr. Gattinger is a Fellow at the Canadian Global Affairs Institute, a board member of the Clean Resource Innovation Network, and she serves on advisory boards for the Institute on Governance, the National Research Council Canada, the Nuclear Waste Management Organization, Pollution Probe, the University of Calgary, and Women in Nuclear Canada. She Chairs the Editorial Board of the University of Ottawa Press and is a columnist for JWN Energy's Daily Oil Bulletin. Professor Gattinger received the 2020 Clean50 Award for her thought leadership in the energy sector. She holds a PhD in public policy from Carleton University.

About the Canadian Gas Association

The Canadian Gas Association is the voice of Canada's natural gas delivery industry. Its membership includes natural gas distribution and transmission companies, equipment manufacturers, and suppliers to the industry. Our utility members are active in eight provinces and one territory and meet 35 per cent of Canadians' energy needs through a network of over 566,000 kilometers of underground infrastructure. This infrastructure can also be used to deliver renewable gases including renewable natural gas and hydrogen, in order to contribute to Canada's greenhouse gas emission reductions. Today, over 7.2 million customer locations representing approximately two-thirds of Canadians, rely on natural gas for clean, affordable and reliable heating and power.



Introduction

On April 13, 2021 from 12:00–3:30pm EST, the Canadian Gas Association hosted the virtual forum, *Net Zero 2050: Assessing the Challenge and Opportunity for Regulators and the Natural Gas Delivery Industry.* This first-of-kind event explored the role of the natural gas delivery industry within Canada's 2030 and 2050 emissions reduction goals from multiple vantage points — policy, regulatory, industry, and consumer.

The federal government's net zero emissions by 2050 legislation acted as the backdrop for the session. The legislation, introduced in November 2020, sets the long-term direction for Canada and builds on the federal climate plan, *A Healthy Environment and a Healthy Economy*, that aims to position Canada to exceed its 2030 GHG emissions reduction target. In addition, many provinces and territories are actively exploring, or in the case of Nova Scotia have passed, 2050 net zero legislation.

The forum was attended by approximately 250 people from a broad cross section of industry, government, regulatory agencies, the legal community and civil society organizations. It was the first in a series of conversations the CGA is organizing on the role of rate-regulated energy delivery companies on the road to 2050. The session explored three key themes: pathways to net zero by 2050 for natural gas delivery companies, utility leadership on emissions reductions, and consumers and affordability.

This report provides a summary of the forum's sessions and key themes, as well as action items and next steps for a forward looking, results-based dialogue. The agenda and a recording of the forum can be accessed online (agenda; recording: Part 1 and Part 2).

Future sessions will delve deeper into how to transform the gas delivery industry and its legislative and regulatory construct to help Canada achieve its 2030 and 2050 objectives. Doing so is vital: natural gas and electricity meet a combined 55% (35% natural gas and 20% electricity) of Canadian energy needs through vast energy infrastructure systems owned and operated by regulated infrastructure companies. Their capacity to leverage the regulatory process, capital, and business models to invest in lower carbon energy solutions will be key to progress on emissions reductions.

A key challenge for governments, particularly at the sub-national level, is to prepare for the future by modernizing the frameworks that regulate their respective energy sectors. While wholesale change to the regulation of provincial and territorial systems is not required, there is a pressing need to update many regulatory mandates to enable natural gas technology and innovation funding, renewable gases, natural gas transportation and CCUS. While some early progress in Canada is being made, namely in British Columbia, there is much work to do. The balance of this summary report presents a path forward for all stakeholders. We welcome comment and reflection on the approach.



Summary of Panels

A brief summary of the forum appears below. For further details, readers are invited to consult the <u>agenda</u> and session recordings (<u>Part 1</u> and <u>Part 2</u>).

The forum began with words of welcome from Paul Cheliak, Vice-President of Strategy and Delivery at the CGA. Mr. Cheliak described the session objectives and introduced the event moderator and rapporteur, Professor Monica Gattinger, Director of the University of Ottawa's Institute for Science, Society and Policy. Dr. Gattinger outlined the key questions for the day: What is the contribution of regulated natural gas delivery companies on the road to net zero by 2050? What are the obstacles to their making that contribution? What reforms to current decision-making — policy, legislative, regulatory, industry — will be needed?

The opening plenary focused on federal climate policy with a presentation by Doug Nevison, Senior Economic Advisor to the Deputy Minister at Environment and Climate Change Canada. Mr. Nevison provided an overview of the federal government's climate plan, *A Healthy Environment and a Healthy Economy*, and described the purpose and goals of the government's Net Zero Challenge, a program under development that aims to encourage companies to develop net zero emissions plans.

The second session examined natural gas pathways to net zero by 2050 with a presentation by ICF International's Duncan Rotherham, Vice-President, Utility Programs and Services, and Peter Narbaitz, Senior Manager, Energy Markets – Gas. The presentation underscored that Canada's energy profile will need to change fast and significantly to meet the country's emissions targets and that decarbonization pathways for natural gas will vary province by province based on their particular energy profiles. The presenters identified key decarbonization opportunities in the full lifecycle of the natural gas industry, with a focus on end-use opportunities (e.g., efficiency, hybrid heating, renewable natural gas, hydrogen) and regulatory enablement of low carbon gas utility pathways.

The third session discussed natural gas delivery leadership on emissions reductions. The panel, moderated by Jennifer Nicholson (Member, Nova Scotia Utility and Review Board), featured presentations by Enbridge (Malini Giridhar, Vice-President Business Development and Regulatory), Énergir (Frédéric Krikorian, Vice-President, Sustainable Development, Public and Government Affairs) and FortisBC (Doug Slater, Vice-President, External and Indigenous Affairs). The panel highlighted the diversity of company efforts to reduce emissions to 2050 (e.g., efficiency, renewable gas and hydrogen, LNG for marine fueling and export, geothermal, diversification into renewable electricity, etc.), the need for supportive public policies and regulation, and the importance of leveraging the interdependence and complementary nature of the electricity and natural gas systems ('both/and' not 'either/or').

The final session focused on consumers and affordability. Moderated by Diane Allan (President, Measurement Canada), the panel featured Meredith Adler (Executive Director, Student Energy), Dan McTeague (President, Canadians for Affordable Energy), Shahrzad Rahbar (President and CEO, Industrial Gas Users Association) and Jay Shepherd (Principal, Shepherd Rubenstein). The discussion illustrated the diversity of views on several topics, including the future of natural gas in Canada's energy system, the country's capacity to meet its emissions targets, the economic implications of emissions reductions, the level of consumer price sensitivity, and the role of business, regulators and regulatory models.



Dr. Gattinger concluded the session by highlighting key themes emerging during the forum and identifying next steps for the series.

Key Themes

Three key themes emerged over the course of the forum.

The first deals with the role of regulated natural gas delivery companies. These companies bring a wealth of valued business capacities to transform energy use in Canada — patient capital, an extensive customer base, vast infrastructure systems and transparent regulatory systems. The forum underscored this and demonstrated that they are motivated to play a leadership role in the years ahead. In order to do so, it will be important to reframe how the industry works with its consumers and government agencies. The industry is not a homogenous group of companies delivering traditional natural gas products. They are a diverse group of businesses exploring and planning for a new suite of energy offerings that leverage existing infrastructure to reduce emissions. Key examples include expanded energy efficiency programs, renewable natural gas, liquefied and compressed natural gas, and hydrogen. It will be crucial to focus on the areas where industry can play the greatest role. This will be a company by company, jurisdiction by jurisdiction, sector by sector, set of choices, that should be informed by integrated 'both/and' approaches that solve for multiple imperatives — not just climate, but energy security, affordability, reliability and safety. Importantly, young people and consumers want to be part of these discussions and have expectations for environmental responsibility and affordability.

The second theme deals with how to facilitate industry playing a positive role in emissions reductions. It will be pivotal to remove obstacles and provide incentives to amplify good work. The forum identified obstacles at multiple levels — political, policy, regulatory, and within the industry itself. Regulatory frameworks and legislation will need to be reformed to incentivize and reward innovation for emissions reductions. Differing views about the role of natural gas (and, more broadly, hydrocarbons) in Canada's energy future can act as a constraint on realizing Canada's emissions reduction potential. Integrated 'both/and' systems thinking rather than 'either/or' binary thinking about the role of various energy sources will be crucial. The forum highlighted a number of Canadian and American examples of how to overcome obstacles and reform incentive structures. Policy, regulatory and industry decision-makers should be encouraged to work alongside industry to learn what works and what doesn't and to collectively transform traditional thinking and decision-making structures accordingly.

The third theme deals with key areas of reform to decision-making. The session demonstrated that reforms to unlock the potential of regulated infrastructure owners to contribute to Canada's 2050 ambitions go beyond tinkering with the system. They include reforming utilities legislation, reforming regulators' mandates and/or processes, transforming organizational culture and practices, building new models of collaboration across the entire energy system, and reframing how people think about the value proposition of their natural gas delivery company. Importantly, reforms will need to be 'informed': focused on the energy system writ large, how the various elements of the system fit together, and ensuring that both intended and unintended consequences are front and centre. The policy, legislative, and regulatory elements of the system need to align in order to deliver on societal imperatives for energy that is simultaneously low emitting, affordable, reliable, competitive, and safe.



Recommendations for Action and Next Steps

The high level of attendance and engagement at the forum amply demonstrated the natural gas delivery ecosystem's appetite to assess and address the challenges and opportunities of contributing to Canada's emissions reductions goals. Actions should be taken in both the short and medium terms to move the needle.

In the short term (over the next twelve months), the CGA, in collaboration with members, governments, regulators, stakeholders and researchers will explore the following:

- Strike a multi-stakeholder task force to identify research priorities and guide the overall planning process. The task force should include a broad range of disciplines active in energy regulation.
- Conduct a rigorous analysis identifying the areas where industry can play the most impactful roles in emissions reductions and the main obstacles that will need to be overcome in order for them to do so (political, policy, legislative, regulatory, industry, etc.). The research could take the form of case studies of a select number of Canadian provinces and US states.
- Prepare a discussion paper summarizing the research findings and proposing the respective roles and responsibilities of federal-provincial-territorial policymakers and regulators (jurisdictional alignment), industry, and other actors to address obstacles and create incentives. The paper should be workshopped with key parties to validate content and recommendations.

Building on the work above, in the medium term (twelve to twenty-four/thirty-six months), the task force should:

- Propose reforms to decision-making for rate regulated utilities, notably reforms to
 utilities legislation and to regulators' mandates and processes, but also to industry
 decision-making/processes. Additional primary and secondary research to identify best
 and promising practices in Canada and abroad could support this effort.
- Based on the above, the task force will draft a set of legislative best practices/model legislation(s) that will be discussed with energy decision makers to validate and refine. Importantly, the players who need to support change and those required to make change happen should be engaged in the process.

Next steps

As an immediate next step, the CGA will circulate this report broadly and solicit input and feedback on the document and proposed action items. The Association will then develop a workplan over the summer of 2021 to guide efforts over the next few years. The workplan will be shared through CGA networks to seek input and feedback. A second forum will be held in the fall 2021 to continue the conversation and move the agenda forward.