



**CANADIAN GLOBAL AFFAIRS INSTITUTE**  
**INSTITUT CANADIEN DES AFFAIRES MONDIALES**

# **Natural Partners?: Natural Gas and North American Energy Security**

by Abbey Spackman  
May 2021

# CONFERENCE REPORT

---

## **NATURAL PARTNERS?: NATURAL GAS AND NORTH AMERICAN ENERGY SECURITY**

by Abbey Spackman

May 2021



CANADIAN GLOBAL AFFAIRS INSTITUTE  
INSTITUT CANADIEN DES AFFAIRES MONDIALES

Prepared for the Canadian Global Affairs Institute  
1800, 150 – 9th Avenue S.W., Calgary, AB T2P 3H9  
[www.cgai.ca](http://www.cgai.ca)

©2021 Canadian Global Affairs Institute



**Richard Meyer** – Vice-President Energy Markets, American Gas Association

**Timothy M. Egan** – President and CEO, Canadian Gas Association

**QUESTION:** *At the Virtual Global Energy Summit, both Prime Minister Trudeau and President Biden set bold targets for greenhouse gas reductions. Could you comment on these?*

*Richard Meyer*

- President Biden announced a target of 50-52 per cent reduction in net greenhouse gas emissions by 2030. Currently, the U.S. are between the 2005-2019 levels, experienced 1.1 per cent reduction in greenhouse gas emissions per year. The targets establish a 2.7 per cent pace of reduction, or two and a half times current pace.
- Reaching those targets will require collaborative efforts, and the American Gas Association (AGA) will make meaningful contribution to President Biden's vision and has proven track record of reducing emissions. AGA is ready to work with the administration to meet climate goals.

*Timothy Egan*

- The Canadian Gas Association (CGA) works with the AGA, especially on the integration of gas system between the two countries.
- On the Canadian side, Trudeau committed to 40-45 per cent reduction from 2005 baseline by 2030. The challenge is bigger for Canada because emissions are not dropping as fast as in the U.S., with a reduction of 1.1 per cent over the entire period 2005-2019. Canada needs to reduce emissions by a further 29 per cent, must increase pace of reduction by 30 times to reach current target. The new commitment means that Canada must increase its rate of reduction by 50 times.
- Canada companies will be compliant; they have always tried to comply and reduce emissions, but it seems a steep hill to climb.



**QUESTION:** *What is the role of natural gas in the energy transition, and how might the need to reduce emissions impact the redundancy and resiliency necessary to continue to provide energy while this transition is under way?*

*Timothy Egan*

- Transition implies there is a wrong, but natural gas is not wrong; it is always improving. It is difficult to imagine a future without natural gas and infrastructure. Hydrogen is part of that future; natural gas produces hydrogen and natural gas infrastructure transports it.
- Natural gas is fundamental to achieving future goals; solar and wind technologies still need natural gas to fill the gaps. There are world examples that demonstrate the need for reliability and redundancy in energy systems; exposure to risk means that the stability of natural gas is necessary.
- There are three big energy delivery systems: electric, gas, liquid. All of those systems are present in North America and they are critical for stability. The idea that one system is reliable enough to be the sole source of energy (i.e., no more gas infrastructure) is dangerous to stability.

*Richard Meyer*

- The discussion needs to be about transformation or evolution (rather than right or wrong), and investments are needed to create resilient energy systems. Investing in pipeline and infrastructure will help reach emission goals quicker and will allow for each system (gas, electric, liquid) to support each other.
- Across North America, the local distribution of natural gas only had a few interruptions in recent history, and all were isolated cases. In the U.S., natural gas consumption reached new records. The Texan disrupted electric grid caused a spike in natural gas use, and natural gas demand through pipelines from Canada went from 3.6 billion cubic feet/day to spike 8.4 bcf during peak. The system was flexible enough to manage its supply at a time of increased demand.
- The human impact of the event was significant, but there was a lot that went well. There were some gaps that are being discovered.

**QUESTION:** *How is the integration of the Canadian and American natural gas systems operating?*

*Timothy Egan*

- North American natural gas integration implies integrating two of the largest producers in the world, partners that work together well. Integration is critically important; Canada



and the U.S. are two strong supplier countries with regional markets to supply to that work fairly seamlessly. Because of its high reliability and effectiveness, its importance is not always recognized.

- Integration is also a question of infrastructure; not only state infrastructures, but also between companies, countries, and ownership. Integration of safety, innovation, security, and research and development is another side of it.

*Richard Meyer*

- North America is extremely integrated; the countries support each other and have a productive partnership. AGA has benefited significantly from the Canadian Gas Association's innovation and research and development, which has been very applicable to the U.S. market. The collaboration can and should continue in this direction.

**QUESTION:** *What does the future of gas system infrastructure look like? What are the challenges?*

*Timothy Egan*

- There are several challenges. The economic challenge comes from the need for new investment to reach targets that have been proposed, and the political challenge stems from opposition to building certain infrastructure (especially large plants, hydrocarbon infrastructure).
- There needs to be better communication of how infrastructure building will benefit communities, improve the response to climate change, etc.

**QUESTION:** *What are the public policy challenges natural gas is facing?*

*Richard Meyer*

- The central idea to today's public policy thinking is that investing in pipelines is fundamentally incompatible with climate change targets. But another perspective could be that continued investment will give us more options for reducing emissions now and in the future.
- It is necessary to leverage the current system; and the necessary R&D has to acknowledge the role that natural gas plays in achieving climate change goals. It is also necessary to make sure it is and continues to be easy to invest in infrastructure. New processes to engage the public, and to deploy the communication/policies necessary to meet these challenges might be needed.



**QUESTION:** *What promise does hydrogen offer to energy security? What are the challenges?*

*Timothy Egan*

- Hydrogen could be added into the gas system; the questions are “how much,” “at what cost,” or whether it needs its own dedicated system. Hydrogen presents opportunities, but its costs (including the costs of not pursuing it) need to be assessed.
- Other conversations around hydrogen that need to occur about which, how much, and how to extract hydrogen.

*Richard Meyer*

- The U.S. is on forefront of hydrogen technologies. Hydrogen can be an enabler of renewable energy, as it does not release CO<sub>2</sub>. North America has a strategic advantage in emerging hydrogen market because of its natural gas supply
- There are challenges around the costs associated with hydrogen extraction and around what source of hydrogen to extract. Innovation will be necessary to deploy hydrogen.
- If gaseous fuels are to be part of the climate future, hydrogen will need to be included.

*DISCLAIMER: This report was funded by a grant from the United States Department of State. The opinions, findings and conclusions stated herein are those of the speakers and do not necessarily reflect those of the United States Department of State.*

## ▶ **About the Author**

---

***Abbey Spackman** is currently a master's student at the University of Calgary's School of Public Policy. She has a BA in Political Science and has worked with various non-profits.*

## ► **Canadian Global Affairs Institute**

---

The Canadian Global Affairs Institute focuses on the entire range of Canada's international relations in all its forms including (in partnership with the University of Calgary's School of Public Policy), trade investment and international capacity building. Successor to the Canadian Defence and Foreign Affairs Institute (CDFAI, which was established in 2001), the Institute works to inform Canadians about the importance of having a respected and influential voice in those parts of the globe where Canada has significant interests due to trade and investment, origins of Canada's population, geographic security (and especially security of North America in conjunction with the United States), social development, or the peace and freedom of allied nations. The Institute aims to demonstrate to Canadians the importance of comprehensive foreign, defence and trade policies which both express our values and represent our interests.

The Institute was created to bridge the gap between what Canadians need to know about Canadian international activities and what they do know. Historically Canadians have tended to look abroad out of a search for markets because Canada depends heavily on foreign trade. In the modern post-Cold War world, however, global security and stability have become the bedrocks of global commerce and the free movement of people, goods and ideas across international boundaries. Canada has striven to open the world since the 1930s and was a driving factor behind the adoption of the main structures which underpin globalization such as the International Monetary Fund, the World Bank, the World Trade Organization and emerging free trade networks connecting dozens of international economies. The Canadian Global Affairs Institute recognizes Canada's contribution to a globalized world and aims to inform Canadians about Canada's role in that process and the connection between globalization and security.

In all its activities the Institute is a charitable, non-partisan, non-advocacy organization that provides a platform for a variety of viewpoints. It is supported financially by the contributions of individuals, foundations, and corporations. Conclusions or opinions expressed in Institute publications and programs are those of the author(s) and do not necessarily reflect the views of Institute staff, fellows, directors, advisors or any individuals or organizations that provide financial support to, or collaborate with, the Institute.