



August 3, 2018

Dear Members of the Standing Committee on Finance,

On behalf of our member companies, the Canadian Gas Association (CGA) welcomes the opportunity to provide our 2019 pre-budget submission: *Driving Canadian Competitiveness with Natural Gas*.

By way of background, CGA members have been meeting the energy needs of Canadians for over 100 years. Today, through 500,000 kilometers of transmission and distribution pipeline and natural gas storage facilities, affordable natural gas is delivered to over 7 million customer locations. This means more than 20 million Canadians benefit from affordable, clean burning, safe and reliable natural gas solutions. A map of the Canadian natural gas service area is provided in Appendix 1.

Natural gas meets 34% of Canada's energy needs. Over the last decade natural gas use in Canada increased by 28% and Canada's utilities added over 1 million new homes, businesses and industries to the gas system. Looking forward, the National Energy Board forecasts natural gas will become the largest energy source in Canada by 2040. Globally, the International Energy Agency forecasts natural gas use will increase 45%.

The Government of Canada has focused its 2019 budget priorities on strengthening Canada's competitiveness. In order to deliver on a more competitive country, our homes, businesses and industries require expanded and innovative access to clean, reliable and affordable natural gas.

This pre-budget submission offers six recommendations to leverage natural gas, our country's most competitive energy source. The recommendations address competitiveness in: Renewable Gas; Rural and Indigenous Communities; Housing and Business; Transportation; Infrastructure/Cyber Security; and, Industrial Competitiveness.

We would welcome the opportunity to appear before the Finance Committee to present our submission directly. We look forward to working with the Committee and federal departments to deliver these natural gas solutions to Canadians.

Sincerely,

A handwritten signature in black ink, appearing to read 'Timothy M. Egan', with a horizontal line underneath.

Timothy M. Egan
President & CEO
Canadian Gas Association

**Driving Canadian Competitiveness with Natural Gas
Canadian Gas Association 2019 Pre-Budget Submission**

Recommendation 1: Renewable Gas Technology Commercialization Fund

Create a six-year, two-stream fund for the advancement of renewable gases in Canada.

Stream 1: The *Renewable Gas Technology Commercialization Fund* (\$175 million) allocates:

- \$150 million to support renewable gas technology demonstrations across Canada. Project intake, screening, evaluation and selection would be conducted jointly between Natural Resources Canada (NRCan) and the Natural Gas Innovation Fund.
- \$15 million to support the creation of a hub for renewable gases at CanmetENERGY federal laboratories in Ottawa. Funds would support equipment upgrades, operational cost support and a pan-Canadian renewable gas R&D/technology needs assessment.
- \$10 million to fund a competitive process for collaborative academia/government/industry support that address specific gaps in capacity building, codes and standards and bench scale research.

Stream 2: The *Renewable Gas Supply Fund* (\$575 million) would support project deployment activities across Canada with the goal of achieving 5% renewable gas content by 2030. Project support could be made available through a production incentive, capital cost contribution or a hybrid capital cost and production incentive approach. Project allocations would be capped and none of the three project funding pathways would be more beneficial than the other. The funds would be repayable based on a formula for project profitability (to be determined).

Recommendation 2: Connect Rural Canadians to Natural Gas

Commit \$450 million of federal infrastructure funding to leverage natural gas utility funding that would result in new connections for thousands of rural Canadians to the natural gas pipeline system. Second, allow for eligibility of LNG and CNG projects to be brought forward to the Clean Energy for Rural and Remote Community Fund.

Recommendation 3: Drive Canada Forward with Natural Gas

Examine a suite of potential policy/programming measures to secure GHG emission reductions from the use of natural gas as a transportation fuel, including: providing upfront funding for fleets, assisting in joint investments to develop key refueling infrastructure at ports, rail depots and highways, support project funding for facility upgrades to ensure a safe workplace and work with provinces to leverage existing initiatives aimed at switching fleets to natural gas.

Recommendation 4: Support Low-Carbon End User Natural Gas Technologies

Allocate \$15 million over five years to expand funding to NRCan's Office of Energy Efficiency (OEE), the Office of Energy Research and Development (OERD) and CanmetENERGY to support industry in hybrid gas-electric heating, natural gas heat pumps, small scale residential and commercial CO2 capture and storage, and micro combined heat and power. This will in turn support federal codes and standards development, stated long term aspirational energy efficiency regulations to 2035 and a net-zero energy ready building code by 2030.

Recommendation 5: Cyber Security Skills Transfer for Industrial Systems

Ensure that the Canadian Centre for Cyber Security includes provisions for skills transfer between government and industry in the areas of industrial control systems.

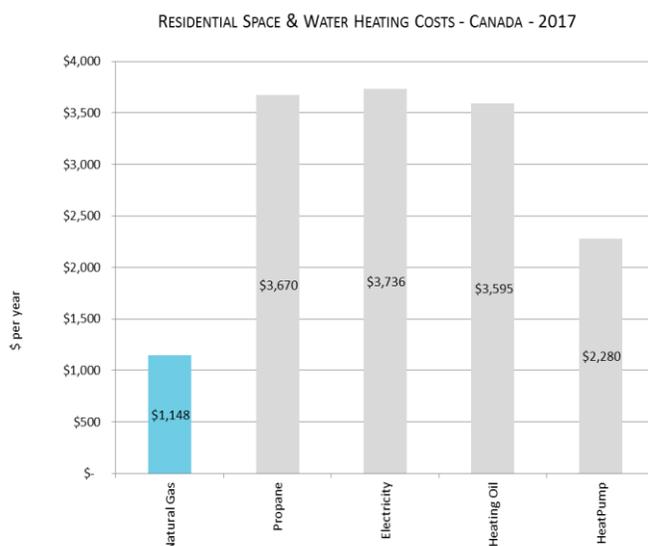
Recommendation 6: Improve Canada's Industrial Competitiveness

Work closely with industry, provinces and territories to solicit views and make informed decisions in Budget 2019 on measures to improve Canada's industrial competitiveness amidst a growing number of environmental regulations and policies.

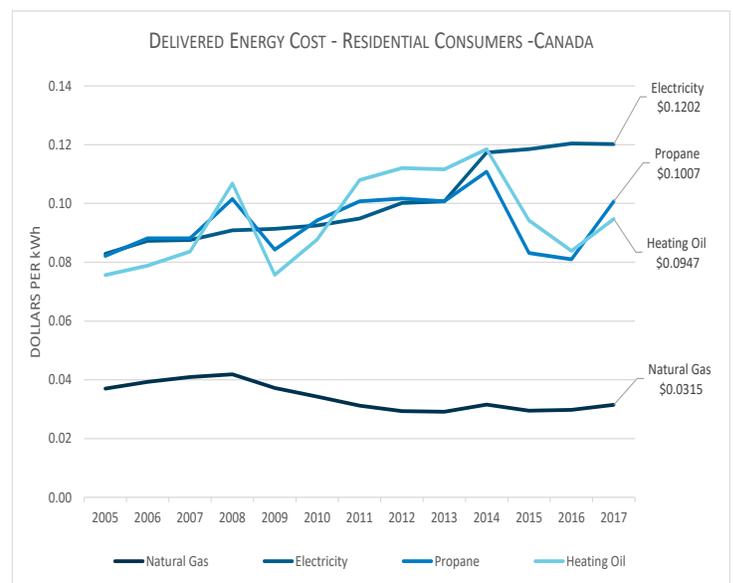
Section 1: Overview

Natural Gas Affordability – Supporting Canadian Competitiveness

Access to affordable energy is an important determinant for long term economic competitiveness. Canada is both a large producer and consumer of energy. Therefore, changes in energy costs disproportionately impact Canadians. Natural gas is Canada's most affordable fuel. As illustrated in Figure 1, a Canadian home using natural gas for space and water heating saves between \$1,000-\$2,500/year over other fuel choices. For homeowners, this money can be pocketed or reinvested into the Canadian economy. For the business owner or industrial facility this represents capital that can be invested in new equipment or to create jobs. Figure 2 shows delivered energy costs to consumers from 2005 to 2017. As illustrated, natural gas has averaged less than 50% of the cost of other energy sources since 2005 and is the only fuel that has reduced in cost since 2005.



Source: StatsCan, Kent Marketing, Canadian Gas Association



Section 2: Natural Gas Competitiveness Recommendations

1. Renewable Gas Competitiveness

Renewable gases (including renewable natural gas, hydrogen and synthetic methane) remain an untapped emission reduction opportunity for Canada. Clean energy programs have focused on renewable electricity and renewable liquid fuels markets. A growing number of countries (Italy, France, United States, etc.) are moving forward with policies to de-risk and advance renewable gas production and distribution. These countries are capitalizing on existing gas infrastructure and diversifying their low emission technology portfolios. At the same time, there is a growing realization, that large scale electrification of end use demand is neither cost effective nor technically feasible. Canada can join a growing global movement towards renewable gaseous solutions. Renewable gas funding support will offer Canada a host of benefits including: a pathway for natural gas companies to comply with the federal clean fuel standard; 10 megatonnes of GHG emission reductions in support of Canada's 2030 GHG targets; support for Canadian cleantech companies active in renewable gas commercialization; positioning Canadian companies as world leaders in low emission gas systems; and creating new economic partnership opportunities for Canadian

companies and feedstock supply holders (including forestry and agricultural operators, municipalities and Indigenous communities).

2. Rural and Indigenous Competitiveness

52% of Canadians lack access to the natural gas distribution network. Many of these end users are in rural communities and remote regions of Canada. Canada's rural communities include towns and villages not far from major city centres and many Northern and Indigenous communities. In both cases, rural and remote communities face unique energy challenges. Many rural regions are home to large energy users such as those in the agriculture sector. For remote regions, the geography, climate, and high energy prices pose other unique challenges. In both cases, natural gas offers a low emission energy solution. For rural regions, that solution is a pipeline expansion to connect to the existing gas network. In some cases, this may be an extension of less than 10 kilometers or, it may be up to 150 kilometers. For remote regions where the economics of a pipeline are not feasible, the natural gas solution is trucking liquefied or compressed natural gas (LNG or CNG) to the community.

For rural communities, a fund, supported by existing green or other infrastructure funding sources (e.g., Canada Infrastructure Bank) is a viable option. Gas pipeline expansion programs have been supported federally before. For remote regions, Budget 2016 allocated funding to NRCan for remote diesel displacement. CGA requests that the federal government allow LNG and CNG projects to compete for funding should this program be recapitalized or be underspent.

3. Transportation Competitiveness

Natural gas vehicles offer a ready-now solution to Canada's growing freight emissions challenge. With lower commodity costs and up to 25% lower greenhouse gas emissions, natural gas vehicles are already advancing productivity and competitiveness. Leading marine and ferry operators in Canada are currently deploying natural gas ships in British Columbia and Quebec. Over one half of all North American refuse vehicles purchased are powered by natural gas, and a growing number of transit agencies are using natural gas busses.

Despite the lower costs and emissions reductions potential, information, capacity building and funding support is required. Important federal support was provided in the 2016 and 2017 Budgets with \$62 million and \$120 million respectively allocated to support the deployment of low emission refueling infrastructure, including natural gas. We encourage these types of investments to continue, and recommend strongly that the funding available to Canada's medium and heavy duty vehicle fleet operators be expanded to include contributions to de-risking the incremental capital cost of a natural gas powered freight vehicle, marine vessel or bus over the diesel equivalent.

4. Housing and Business Competitiveness

In 2017, over six million homes and 500,000 businesses relied on natural gas in Canada. Canadian homeowners and small businesses require access to natural gas energy efficiency measures and new market-ready technology solutions. Over the last decade, Canada's natural gas utilities have invested nearly \$1 billion in their energy efficiency programs saving their consumers \$1 billion in energy costs and reducing GHG emission by 50 megatonnes. Looking to the next decade, utilities are focused on continuing existing programs, but are seeking collaboration to develop new natural gas solutions including hybrid heating, natural gas heat pumps, micro combined heat and power, and small scale residential/commercial carbon capture. Leadership through the OEE, the OERD and CanmetENERGY has been instrumental in providing program funding, data and analytic platforms, third party validated information and technology expertise. More can be done to leverage this relationship.

5. Infrastructure/Cyber Competitiveness

Canada's critical energy infrastructure systems require robust cyber security to ensure reliable services to Canadians. The recent establishment of a new Canadian Centre for Cyber Security alongside the Cyber Security Cooperation Program and the National Energy Infrastructure Test Centre will help improve and

protect cyber security in Canada and provide opportunities for collaboration, skill transfer and partnerships between government and the private sector. This collaboration must continue between government and the private sector to effectively manage cyber security risk.

6. Industrial/Manufacturing Competitiveness

65% of the natural gas consumed in Canada is in the industrial and power generation sectors. Natural gas is the largest source of energy for Canadian industry with natural gas delivered to over 20,000 industrial and power generation energy clients every day. These clients form the backbone of the industrial economy in Canada and span dozens of sectors from resource extraction, chemicals, mining and manufacturing. Canada is a leader in the movement towards a lower emissions economy. However, at current, the pricing of greenhouse gas emissions, a proposed clean fuel standard, methane regulations and new environmental assessment processes are combining to present significant increases in natural gas commodity costs. This in turn creates an uncertain and challenging investment climate.

Natural gas is particularly well positioned to support the government's low emission energy objectives. However, a more balanced and measured approach is required for Canada to remain competitive. We encourage the Government of Canada to consider these factors when moving forward on its priorities.

Appendix 1. Canadian Gas Association Members

