



CANADIAN INSTITUTE OF
PLUMBING AND HEATING

Partnerships for Net-Zero: Aligning Industry and Department Goals

Government-Industry Roundtable
Report

November 2023

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BACKGROUND

The construction industry has faced significant challenges over the past several years in terms of addressing a changing economic environment, labour shortages, and the federal government's commitment to reducing carbon emissions by 2030 and achieving net-zero emissions by 2050. In order to achieve this commitment, the federal government's actions have focused heavily on addressing the carbon emissions of new builds and retrofits, which has put our industry to be at the forefront of the low-carbon transition.

The transition to a net-zero economy requires a significant level of collaboration across federal departments, across levels of government, and between industry and government. The harmonization of regulatory frameworks across jurisdictions, cohesive and complimentary timelines, and an open and transparent communication process are critical to ensuring that the construction sector is adequately supported in this consequential re-imagining of how Canada does construction.

Over the past several years, the federal government has created several supports aimed at providing resources to industry and organizations working within the sector. These supports include the Deep Retrofit Accelerator Initiative, the Codes Acceleration Fund, additional funding within the Canada Infrastructure Bank's Green Priority area, and the Sectoral Workforce Solutions Program.

Additionally, the federal government announced in early 2022 that they would be developing and releasing the Canada Green Buildings Strategy (CGBS), in consultation with stakeholders, in early 2023. Our industry is eagerly awaiting the release of this strategy, as we believe that having a one-stop, comprehensive roadmap to reaching net-zero by 2050 is essential to ensuring that all stakeholders, jurisdictions, and consumers have the same understanding as to the timelines and next steps needed.

The commitment to developing the CGBS, as well as the additional supports provided by the federal government, show that the federal government acknowledges the challenges facing our sector, and we believe that these commitments demonstrate a willingness to collaborate with industry to address the practical and logistical hurdles that we need to overcome as a country to achieve net-zero in the built environment.

SECTOR

Over the past several years, the Canadian Institute of Plumbing and Heating (CIPH) – alongside partners in the industry such as the Mechanical Contractors Association of Canada (MCAC)– has hosted roundtables with civil servants from a range of departments and agencies, alongside stakeholder representatives from a variety of businesses and industry organizations. These roundtables aim to ensure awareness of industry priorities and create opportunities for interdepartmental and public collaboration.

On November 28th, CIPH hosted a roundtable that engaged four federal departments and agencies alongside stakeholders representing key businesses and organizations in the plumbing, heating, and construction industries. The event included presentations from the National Research Council, the Standards Council of Canada, and the Canadian Home Builders Association. The presenters then joined the roundtable, where discussions focused on creating a net-zero roadmap for so that both industry and government are aligned on timelines and priorities for regulatory harmonization, technological development, and consumer adoption. This conversation was inspired by CIPH’s May Roundtable, in which participants concluded that integrated pathways outlining steps to achieve the federal government’s net-zero commitments would be beneficial for both industry and government.

The discussion provided a unique opportunity for federal departments to communicate with each other on an issue that is typically worked on across government but within silos, and for key stakeholders to provide recommendations on ways to ensure that the expertise of industry is sought out when developing and implementing regulations.

A comprehensive, sustainable path forward is only possible when industry and all levels of government work together to develop a practical, cost-effective and innovative roadmap to solutions for all Canadians

The information that follows presents the informed perspectives and recommendations from roundtable participants and highlights the key concerns facing the skilled trades and the plumbing and heating value chain as we transition to net-zero.

PARTICIPANTS

GOVERNMENT PARTICIPANTS

1. National Research Council (NRC)
2. Natural Resources Canada (NRCan)
3. Standards Council of Canada (SCC)
4. Treasury Board Secretariat (TBS)

INDUSTRY PARTICIPANTS

1. Canadian Home Builders Association (CBHA)
 2. Canadian Institute of Plumbing and Heating (CIPH)
 3. Mechanical Contractors Association of Canada (MCAC)
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DISCUSSION QUESTIONS

1. What steps can be taken in the near future to reduce silos in departments?
2. How do you currently work with other levels of government and how can business organizations like CIPH be more helpful in promoting that collaboration?

OVERVIEW OF PRESENTATIONS

NATIONAL RESEARCH COUNCIL (NRC)

Un Update on NRC Research

A representative from NRC presented the roundtable with an overall update on NRC's current projects' focus. The following were highlighted:

- NRC Platform to Decarbonize the Construction Sector at Scale [LINK](#)
 - Strategic R&D projects to support the development and deployment of low carbon construction solutions at scale;
 - Research areas:
 - Low Carbon Built Environment Challenge program,
 - Construction Sector Digitalization and Productivity Challenge program, and
 - Low carbon regulatory framework.
- Low Carbon Built Environment Program [LINK](#)
 - A series of initiatives to support the development of low carbon construction tools, products and services;
 - Areas of focus:
 - Low carbon materials, products and systems,
 - Low carbon operations and maintenance solutions,
 - Carbon accounting, life cycle assessment (LCA) and benchmarking tools, and
 - Low carbon decision support tools.
- Construction Sector Digitalization and Productivity Challenge program [LINK](#)
 - A series of initiatives to support further modernization and digitalization of Canadian construction sector practices;
 - Areas of focus:
 - Accelerating innovation through performance-based regulation,
 - Digitalization of construction processes, and
 - Accelerating low-carbon solutions and retrofits through advanced construction practices.

OVERVIEW OF PRESENTATIONS

NATIONAL RESEARCH COUNCIL (NRC) (CONT'D)

Proposed Changes for the 2025 Edition of the National Model Codes

A representative from NRC also presented the proposed Changes to the upcoming edition of the National Model Codes. The presentation included highlighting the current and upcoming public reviews, with the current review open until December 18th 2023, and the upcoming Winter 2024 review open from February 20th-April 29th 2024. Additionally, it highlighted that there will be three major topics in the 2025 National Model Codes edition, with details provided below:

- Alteration of existing buildings:
 - Lighting (PCF 1858);
 - Electrical power systems (PCF 1861);
 - Service water heating systems (PCF 1860);
 - HVAC systems (PCF 1859);
 - Building envelope (PCF 1857);
 - Service water heating systems (PCF 1825);
 - HVAC systems (PCF 1828);
 - Fenestration, doors and skylights (PCF 1826);
 - Airtightness (PCF 1827);
 - Above-grade opaque assemblies (PCF 1829); and
 - Below-grade assemblies (PCF 1850).

- Energy efficiency requirements:
 - Prescriptive energy requirements for Tier 5 in Section 9.36;
 - Trade-off options for all tiers in Section 9.36;
 - New performance metric for small single-phase air conditioners and heat pumps (PCFs 1832 and 1833); and
 - Update performance metric for heat pump water heaters (PCF 2011).

- Operational GHG emissions:
 - Tiered performance requirements for buildings and houses (PCFs 2003 and 2004); and
 - Tiered prescriptive requirements for houses (PCF 2026).

OVERVIEW OF PRESENTATIONS

STANDARDS COUNCIL OF CANADA (SCC)

A representative from SCC presented an overview of the current focus of the SCC. They shared that the department is currently in the midst of a strategic renewal, and will be focusing on being stakeholder-driven, and are focusing on the following four pillars:

- Climate change adaptation and mitigation (focusing on collaboration and standardization);
- The digital economy and industrial transformation (focusing on productivity); and
- Supply chain stability (focusing on capacity).

CANADIAN HOME BUILDERS ASSOCIATION (CHBA)

Frank Lohmann, the Director of Building Science at CHBA, joined us to share his perspectives and provide a brief update on CHBA's current focus. Lohmann that Canada is below their annual targets for 2023 for what needs to be built in terms of housing, and that Canada is facing a perfect storm in terms of labour and inflation.

Additionally, he emphasized the need to focus on the "art of the possible"; that is to say, ensuring that government and industry is aligned, and then moving forward on the changes that can functionally be made.

NOSSUNSD

The discussion was shaped by the two guiding questions listed above, as well as the previous conversations that have been held regarding the need for regulatory harmonization and agreement across departments, jurisdictions, and between government and industry. This emerged within the discussion as a focus on timelines, and the difficulties that industry faces when jurisdictions adopt their own timelines, specifically in terms of bringing products to market and adopting new regulations. British Columbia was highlighted as a particularly challenging area, with the example provided that the province is encouraging jurisdictions to adopt individualized climate- and emissions-focused regulations. While this inspires the mentality of healthy competition, it brings forward the problem of manufacturing and distributing, as well as ensuring that technicians are educated in order to, in turn, educate consumers.

In terms of addressing this issue, participants discussed the idea of a dynamic chart that outlines the regulations and their timelines in all jurisdictions across Canada. This would ease the pressure on industry in terms of research and development and product manufacturing and distribution, and allow for industry to anticipate and meet the needs of consumers across the country. Additionally, it would help the government identify which jurisdictions may need support in meeting their net-zero goals, and which jurisdictions could be used as an example moving forward on both the federal and international stage.

Additionally, the government participants highlighted the work that their departments have been doing to break down long-standing silos. This work has been exemplified not only by participation in roundtables such as this, but by an increase in communication across departments. Ministerial mandate letters were credited for contributing to this development, with goals in alignment contributing greatly to the ability to communicate and work productively across departments.

In concluding the roundtable, it was highlighted that this roundtable is just one part of a vast and complicated conversation. Issues of labour, housing, and climate are intermingling to create a perfect storm, and the issues that they bring cannot all be solved at one table. In order to address this, it was suggested that a large-scale summit be held to bring together stakeholders from across the issue area, as well as government officials and politicians, to integrate the multitude of conversations that occur at roundtables such as this. This suggestion was met with support from many of the participants, and provided a path forward in terms of the next steps.

Government and industry benefit when working together. These conversations provide a unique opportunity to share the knowledge and experiences of our industry, while also hearing about the work that the government is doing across departments on this issue.

Based on the discussion, CIPH is presenting three recommendations in terms of the next steps from both industry and government. Each recommendation focuses on a unique way of addressing the challenges that we are facing: one focuses on how to continue these discussions so that they continue to be productive and move the conversation forward; one focuses on an action that the government – with the support of industry – can take; and one suggests a possible way increase the scale and scope of the conversations that we have had to date.

RECOMMENDATIONS

01

Ensure that representatives from additional departments and organizations (ex: Environment and Climate Change Canada, Infrastructure Canada, Employment and Social Development Canada, the Federation of Canadian Municipalities, among others) are present at these discussions.

02

Advocate for the development of a dynamic chart that outlines the timelines and commitments of all jurisdictions (federal, provincial/territorial, and municipal) in terms of their net-zero goals.

03

Look into holding a Summit with key stakeholders across industries, in partnership with government, to integrate this discussion into the larger conversation of the implications of the government’s net-zero commitments on the housing and construction industries.

CIPH would like to thank all participants for their contributions to this discussion. Our industry is at the forefront of the net-zero transition, and it is essential that government and industry continue to work closely together to address the challenges that we have been facing and will continue to face in the coming years as we approach 2050.

Founded in Montreal in 1933, the CIPH is a not-for-profit trade association that is committed to providing members with the tools for success in today's competitive environment. More than 283 companies are members of this influential Canadian industry association. They are the manufacturers, wholesaler distributors, master distributors, manufacturers' agents, and allied companies that manufacture and distribute plumbing, heating, hydronic, industrial PVF, waterworks, and other mechanical products. CIPH wholesalers operate more than 800 warehouses and showrooms across Canada. Total industry sales exceed \$9 billion annually and CIPH members have more than 20,000 employees from coast to coast.



MARKET TRANSFORMATION STATEMENT

CIPH supports market transformation towards a sustainable and effective lower carbon economy that allows consumers comfort and affordable choices while safeguarding health and safety. Our members' and industry's ability to provide practical and innovative solutions for present and future generations will assist Canadian governmental bodies in achieving climate change objectives, the conservation of our natural resources, the preservation and the protection of our existing built environment. Government and industry benefit when working together. Industry works best when:

- Consulted early in developing policies, pilot and incentive programs, data gathering, standardization and regulation.
- Our collective strength is harnessed to create a collaborative and coordinated approach.
- Given clear, manageable timelines, with appropriate commitment and advance notice.
- A necessary regulatory framework balances costs and measurable benefits; using validated data to support initiatives.
- We consider the whole building as a system.
- We understand the full business/supply chain infrastructure.
- Effective approaches are included for new and retrofit/replacement.