



WRITTEN SUBMISSION FOR THE PRE-BUDGET CONSULTATIONS
IN ADVANCE OF THE 2020 FEDERAL BUDGET

BY:

The Heating, Refrigeration and Air-Conditioning Institute of Canada (HRAI)

LIST OF RECOMMENDATIONS

1. Fully funding the Market Transformation Road Map for Energy Efficient Equipment in the Building Sector.
2. Create the conditions for a successful low-carbon transition through funding for skilled tradesperson employment and skills development by
 - a. Establishing a Workforce Training and Adjustment Fund for Skilled Tradespeople that aim to retrain or learn new skills that will deliver low-carbon solutions
 - b. Providing direct support to contractors that offer funding for their employees to upskill and retrain through HRAI-delivered programs.
3. Explore a program of incentives for greater uptake of heat pumps (GSHP and ASHP) as the most energy-efficient, low-carbon method for heating and cooling of homes and buildings.
4. Re-interpret the federal tax treatment of investments by commercial building owners in improved energy performance by moving from a capital improvement to an operational expense.

Introduction

Canada's built environment contributes 17% of our country's total emissions.

That is equivalent to 111 million tonnes of greenhouse gases per year. Primarily, these emissions result from electricity and other fuels that are used in buildings to heat or cool air and water.

The Heating, Refrigeration and Air-conditioning Institute of Canada (HRAI) is the national voice of contractors, manufacturers and distributors of products used in the heating, ventilation, air-conditioning and refrigeration (HVAC-R) industry, which employs nearly 50,000 Canadians while contributing over \$7 billion to the economy each year. Our members are playing an increasingly important role in realizing the aims of governments to address the climate emergency.

The importance of keeping homes, industrial buildings and commercial spaces comfortable for the people using them must be balanced with the importance of environmental concerns. Ensuring the best environmental outcomes are matched to the best economic opportunities for Canadian families and businesses is where HRAI is directing its recommendations for the 2020 federal budget.

Since the 2015 election, both the House of Commons and the Senate of Canada have taken a deep interest in the ways Canada's built environment affects carbon emissions and the important transition to a low-carbon economy. HRAI has had the opportunity to appear before both the House of Commons Standing Committee on the Environment and the Senate Standing Committee on Energy, the Environment and Natural Resources to discuss the essential contributions of new technology and training in the HVACR sector to reach Canada's climate change mitigation and adaptation needs.

We have identified barriers to adoption of new technology by consumers as one of the most pressing environmental issues facing the built environment. Quite simply, if the most energy efficient products are not approved for use quickly, or if products that would allow for the use of more efficient fuels are not available, businesses and households must opt for less environmentally friendly products. In addition to the products themselves, if a contractor does not have access to properly trained tradespeople to install or service equipment, they cannot encourage consumers to make the most environmentally friendly decisions.

While HRAI has made calls for similar changes in the past, the sense of urgency from the government to fund these initiatives has been lacking. Limitations that currently hold back the HVAC-R sector need to be taken seriously and acted on as quickly as possible to ensure new builds, upgrades and retrofits in Canada's building stock are encouraged, supported, and appropriately funded.

Fully funding the Market Transformation Road Map for Energy Efficient Equipment in the Building Sector

Addressing the climate emergency will require buy-in to solutions not just at the federal level, but also with territorial and provincial governments. Natural Resources Canada, in partnership with provincial and territorial governments has developed the **Market Transformation Road Map for Energy Efficient Equipment in the Building Sector**. The aim of the road map is to assist industry while making the marketplace ready for new technologies and building practices. These changes are of vital importance to limit the overall emissions of Canada's built environment and are the top priority for HRAI and its members.

The initiatives identified in the Road Map include codes development, support for adjustment training, product market-readiness demonstration processes and more, with the aim of paving the road to market acceptance for low-carbon energy-efficient products and services. **The investment required to fully fund the Roadmap is \$20 million over five years.**

Removing barriers and readying the marketplace for new technologies is essential from a cost-competitiveness standpoint for consumers. The government has an important role to play in making it easier for businesses and households to make good choices for the environment. That includes for fuel switching, especially when moving toward newer, more energy efficient products and technologies. As HRAI informed the Senate Committee on Energy, the Environment and Natural Resources:

"...reliance on natural gas in the heating sector is a challenge. It's so dominant and the cost per cubic metre of natural gas has never been lower. As long as we face those market conditions, we have a serious challenge trying to move people from fossil fuels to more friendly technologies. That's the biggest challenge facing the market."¹

Government cannot overlook that readying the marketplace also depends on having the right people, with the right skills in place, to help businesses and homes retrofit, upgrade and build new facilities that with lower emissions. These investments for businesses and tradespeople will also reflect the regionally varied needs that are in-demand locally and offered by institutions, associations and unions from coast-to-coast-to-coast.

¹ Senate Standing Committee on Energy, the Environment and Natural Resources. "Reducing Greenhouse Gas Emissions from Canada's Built Environment." November 2018.
https://sencanada.ca/content/sen/committee/421/ENEV/reports/ENEV_Buildings_FINAL_e.pdf

Retraining and upskilling for skilled tradespeople to support installation and service of new technologies and systems

The HVACR industry is an integral part of nearly every economic and social sector in Canada. Our members keep homes and offices comfortable, but they do so much more for the economy as a whole. They ensure climate management in the global supply chains that get agricultural products from farms to market; they provide refrigeration processes required for the advancement of science and medicine; they supply the advanced air conditioning required by commercial server rooms that keep Canada at the cutting edge of IT infrastructure and our telecommunications systems online.

None of this would be possible without adequately trained and certified tradespeople. It is important that we create the right conditions for a successful low-carbon transition by funding skills development, particularly in the HVAC-R sector.

Going to a college, polytechnic, or apprenticeship program gives tradespeople in HVAC-R the basic skills and knowledge to work in the industry. At the same time, in order to develop expertise in installation or service of the latest technologies, tradespeople must re-skill to deliver better low-carbon solutions for both business and household consumers. The needs of consumers are not only reflected in products, but in processes of heating and cooling water and spaces on the whole. The people who consult on heating and cooling systems, install them and service them need to know not only that the right products will be available to make the most environmentally friendly plans, but also that they have the right human resources capacity to take these projects on for their customers.

HRAI continues to propose the worthwhile investment of the federal government in a **establishing a Workforce Training and Adjustment Fund for Skilled Tradespeople that aim to retrain or learn new skills that will deliver low-carbon solutions**. Such a fund would help companies attract and retain skilled employees and ensure their staff qualifications are up-to-date with the newest products and processes. The investment would encourage businesses and tradespeople that face cost barriers to take part in new training opportunities. The fund will better position them to facilitate the market transformation that is needed to reduce GHG emissions from Canada's built environment over the mid-to-long-term.

Further, HRAI used to receive a subsidy for offering re-training and upskilling programs to tradespeople and contractors but that funding was cut in 2008. The valuable programming continued but participation rates dropped when funding for our courses was cut. HRAI's programs include 12 courses aimed at improving the skills and abilities of people on the front-line of improving energy efficiency in Canada. They range in cost between \$350 (member rate) for a one day, no certification course to \$1,215 (non-member rate) for 4-day, certificate-granting courses. All offer incredibly important skills for HVAC-R tradespeople, and all could scale to accommodate at least a doubling of participants each year.

As such, we are recommending that the government reinstate a subsidy that could be claimed by tradespeople, or contractors who invest in training their staff. We estimate **the government could double the total uptake of upskilling and certification provided by HRAI at a cost of less than \$3 million per year**, through an industry-led partnership with HRAI and its members.

Provision of a national program of financial incentives to support greater uptake of ground-source and air-source heat pumps

These technologies have become quite sophisticated in their ability to deliver low-cost, consistent heating even in the coldest climates. However, adoption of these technologies (as noted in the Market Transformation Roadmap) remains inhibited by the relatively high initial capital cost of investing in these solutions, especially in regions of the country where natural gas is available. A commitment of financial support (rebates) to building owners and homeowners for making investments in these technologies will help move the market and could deliver substantial reductions in carbon emissions across the country.

Re-interpreting the federal tax treatment of investments by commercial building owners in improved energy performance by moving from a capital improvement to an operational expense

Finally, retrofitting and upgrading facilities is a vital component of addressing the climate emergency. Outdated buildings could often benefit from upgraded heating and cooling systems, but the incentives for building managers are to limit overall investments over the long-term because capital improvements are not fairly treated by Canada's tax system. This is especially true given the strong potential for environmentally friendly improvements across a wide range of commercial and industrial building stock.

Allowing owners and managers the leeway to invest in new technologies and systems by classifying energy performance improvements as operational expenses should provide businesses with the incentives they need to upgrade. HRAI recommends, in line with recommendations from Efficiency Canada (then the Canadian Energy Efficiency Alliance), that the **government encourage investments by commercial building owners in improved energy performance by moving the investments from capital improvements to an operational expense.**