



INTERNATIONAL ASSOCIATION OF  
**HEAT AND FROST INSULATORS**  
AND ALLIED WORKERS

**Written Submission for the Pre-Budget  
Consultations in Advance of the 2019 Budget**

**By: International Association of Heat and Frost  
Insulators and Allied Workers**

## **Recommendations**

- 1. That the Government of Canada proceed with planned funding for the Union Training Innovation Program (estimated at \$25M for FY 18-19), which supports green trades, including mechanical insulation.**
- 2. Require the use of qualified, certified mechanical insulators on federal construction and maintenance projects designed to support energy efficiency (including retrofits to existing infrastructure and in the construction of new infrastructure).**
- 3. Ensure Canadian skilled tradespeople are given access to domestic job opportunities by working with labour groups (such as the Heat and Frost Insulators) to prevent misuse of the Temporary Foreign Worker Program.**

## Executive Summary

The focus of this year's pre-budget submissions and testimony is "Economic Growth: Ensuring Canada's Competitiveness." We are pleased that the federal government recognizes the role of Canada's building trades in growing the economy in the midst of a changing economic landscape. In the past, the Government of Canada has committed to supporting training and equipment for the skilled trades, particularly those who are working to innovate within the burgeoning green economy. Supporting the skilled trades directly invests in the growth of Canada's economy. Improving the quality of our domestic workforce acts as a safeguard within a competitive and unequal global labour market, an issue that is most salient in the current economic landscape.

Supporting heat and frost insulators goes hand in hand with the federal government's commitment to Ensure Canada's Competitiveness in a global context. By working with construction trades like ours, the federal government has the opportunity to improve productivity and competitiveness within the skilled trades. This directly contributes to economic growth that comes from within, while making progress on environmental objectives, including reducing greenhouse gas emissions (GHGs). We are grateful for the industry-relevant initiatives introduced in Budget 2018, including the Pre-Apprenticeship Program and Apprenticeship Incentive Grant for Women that provides funding to encourage exploration in trades, as well as the Union Training and Innovation Program (Budget 2016) that helps unions across Canada purchase new and innovative training equipment and materials.

It is also important to ensure that the money set aside for greening buildings is well spent, so that work is not being unnecessarily repeated in the future. For Canada's mechanical insulators, this means making use of qualified, certified tradespeople on all federal building projects. Supporting skilled trades that have been properly trained ensures that the work needed to upgrade buildings is done right, the first time.

By investing in education and training, the Government of Canada can help skilled tradespeople be more productive working in their communities, while strengthening the competitiveness of Canadian industry. By requiring the use of properly trained and certified skilled tradespeople on worksites, the federal government can enable a productive workplace by ensuring work contracted is completed professionally and sustainably.

With this in mind, the International Association of Heat and Frost Insulators and Allied Workers is recommending the following measures be taken in Budget 2018:

1. That the Government of Canada proceed with planned funding for the Union Training Innovation Program (estimated at \$25M for FY 18-19), which supports green trades, including mechanical insulation.
2. Require the use of qualified, certified mechanical insulators on projects designed to support energy efficiency (including retrofits to existing infrastructure and in the construction of new infrastructure).

3. Ensure Canadian skilled tradespeople are given access to domestic job opportunities by working with labour groups (like the Heat and Frost Insulators) to prevent misuse of the Temporary Foreign Worker Program.

### **What is Mechanical Insulation?**

Mechanical insulation is a practical, cost-effective solution to improving energy efficiency in new and existing buildings. Mechanical insulation (MI) reduces GHG emissions, saves money, and puts skilled tradespeople to work.

Mechanical Insulation (MI) restricts heat loss or gain for buildings, ultimately increasing the efficiency of heating and cooling systems. Mechanical system components that require insulation are primarily pipes, ducts, and equipment such as boilers, pumps, fans, etc. MI has existed for hundreds of years and while it is simple in design, it can greatly reduce emissions and energy loss from heating and cooling systems.

### **Who are Mechanical Insulators?**

Mechanical insulators are experts in the installation and maintenance of mechanical insulation systems. They are industry leaders in health and safety, through hazardous waste removal (such as asbestos) and fire prevention. There are approximately 7,000 qualified, certified mechanical insulators across Canada. The mechanical insulation industry also includes the mining & manufacturing sector. Fibres used in modern insulation are made from raw materials mined in Canada, and there are three plants in Ontario that manufacture this insulation. Mechanical insulation is a made-in Canada solution that puts skilled tradespeople to work and is an important component of the country's manufacturing and construction sector.

Mechanical insulators are certified and trained in quality assurance, insulation materials, construction safety, technical specifications, blueprint and detail drawings, and also receive introductory training about the inspection and certification process in municipal, provincial and federal jurisdictions.

### **Mechanical Insulation's Benefits**

- **GHG Reduction:** Properly installed and maintained mechanical insulation can reduce a building's GHG emissions by as much as 30%.
- **Reduced Energy Consumption:** Mechanical insulation systems are more cost effective than virtually any other effort designed to reduce energy use and operating costs. Insulation upgrades are proven to generate better results than more traditional efforts like changing windows, light bulbs, timers, etc.
- **Return on Investment (ROI):** Upon installation, cost recovery can be achieved in as little as 6 months and typically less than 2 years based on the ratio of the financial value of energy saved and the installed cost of the insulation.

- **Supports Canadian Manufacturers:** Canada's insulation manufacturing industry ships \$600M worth of product annually, 80% of which is domestic. Insulation manufactured in Canada directly supports \$1.4B in economic activity (through installation and construction), and the indirect impacts of economic activity generated by the fiberglass and rock and slag wool industry is over \$3B each year.

### **How Insulators can improve the Temporary Foreign Workers Program**

The Temporary Foreign Worker Program (TFWP) allows Canadian employers to hire foreign nationals to fill temporary labour and skill shortages when qualified Canadian citizens or permanent residents are not available. Employers often require a labour market opinion (LMO) from the government (ESDC Department) to hire a foreign worker. A positive LMO means that the employer has tried but has been unable to find a Canadian or permanent resident for the job, is offering a fair market wage and that the job offer is genuine.

One of the issues with the Temporary Foreign Workers Program is the extended time it takes to process and approve foreign workers. The International Association of Heat and Frost Insulators and Allied Workers can expedite this process by consulting directly with the government whenever an employer issues an LMO for work covered by their trade. Rather than leave the onus solely with ESDC to determine if there is a domestic Canadian worker available for the job, our union can provide specific numbers and expedite any LMO decisions. This will benefit both government and private sector efficiencies in the hiring process of Temporary Foreign Workers.

### **Why mechanical insulation is not consistently installed or maintained**

As a project nears completion, builders face tighter budget considerations. Other parts of the project may have gone unexpectedly over budget. Mechanical insulation specifications – one of the last components of a build - are often sacrificed in order to ensure the project does not go over budget. When faced with a choice of paying for proper insulation, which no one sees, or of delivering products such as interior painting, builders frequently choose the latter.

Mechanical insulation also requires regular inspection and maintenance to ensure its effectiveness. Many older buildings have missing or severely damaged mechanical insulation, and often existing insulation is no longer efficient. When mechanical insulation is removed to maintain heating and cooling systems, it is frequently not properly replaced, resulting in significant inefficiencies. While a building may have been properly insulated during initial construction, there is no guarantee that it remains insulated or efficient.

### **What case studies exist?**

#### *Energy Efficiency Case Studies*

**London Courthouse (London, Ontario):** Key findings from July 2015 audit found that while insulation was overall in good shape, bare pipe components cause year-round energy waste.

- Mechanical insulation upgrades would save \$10,000 - \$14,000 in annual energy costs.
- Installed cost of new insulation estimated at \$6,300 - \$9,600 - presenting a simple return on investment between 6 to 12 months.
- Upgrades to this site alone would eliminate 61 metric tons per year in GHGs.

**Western University (London Ontario):** Energy savings audit and work was conducted on a steam plant, medical sciences building, campus centre plus three other buildings.

- Projected annual energy (cost) savings: \$78,355.00
- Projected emission reductions (per year): CO<sub>2</sub> - 1,640,939 lbs; NO<sub>x</sub> - 3,312 lbs; CE: 447,168 lbs
- Payback Period: 9 months
- Cumulative Reductions (20 year building lifespan): GHG Emissions: 8,937 tons and Energy Cost Savings: \$1,259,374.00

#### *TFWP Case Study*

**Miramichi, New Brunswick:** The International Association of Heat and Frost Insulators and Allied Workers was made aware of the presence of foreign workers that were involved in an insulation project in New Brunswick. Our union recognized that there already existed a skilled and experienced pool of Canadian labour that was willing and able to perform the work in question.

- To the best of our knowledge, we were able to identify that the project lacked an official Labour Market Impact Assessment, which is a precondition to employing foreign workers.
- We had the employment statistics prepared to prove there was a domestic workforce capable and willing doing the work that foreign workers were hired for.

#### **How can the federal government support this green trade?**

The Heat and Frost Insulators and Allied Workers (the Insulators) have put forward several proposals for consideration that will help improve the competitiveness of the Canadian economy and support productivity in our skilled trade:

1. Continue to support union-based training programs (including a second wave of funding for the Union Training Innovation Program as a part of Budget 2019) which supports green trades, including mechanical insulation.
2. Require the use of qualified, certified mechanical insulators on projects designed to support energy efficiency (including retrofits to existing infrastructure and in the construction of new infrastructure).
3. Ensure Canadian skilled tradespeople are given access to domestic job opportunities by working with labour groups (like the Heat and Frost Insulators) to prevent misuse of the Temporary Foreign Worker Program.