

August 6th, 2014

Ms. Christine Lafrance
Clerk of the Standing Committee on Finance
House of Commons
Ottawa ON K1A 0A6
FINA@parl.gc.ca

RE: Pre-budget Consultation Submission

Dear Ms. Lafrance,

On behalf of the International Association of Heat and Frost Insulators and Allied Workers, I am pleased to provide our recommendations on budget priorities to the Standing Committee on Finance.

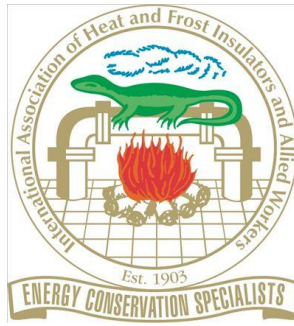
Our Association is comprised of experts in the installation and maintenance of mechanical insulation systems. The Association has over 5000 members and there are 15,000 insulators across Canada. All Journeymen members are Red Seal Certified who are also entrusted with the health and safety of both our mechanical insulators and our customers.

I would also like to request the opportunity to appear in front of the committee when it hears from witnesses either in Ottawa or in Winnipeg.

Best regards,

Vince Engel
International Vice President, Western Canada
International Association of Heat and Frost Insulators and Allied Workers

CC: James Rajotte, Chair, Standing Committee on Finance



Executive Summary

The International Association of Heat and Frost Insulators are experts in the installation and maintenance of mechanical insulation systems. The Association has over 5000 members and there are 15,000 insulators across Canada. All Journeymen members are Red Seal Certified and are also entrusted with the health and safety of both our mechanical insulators and our customers. We are a significant part of Canada's construction industry, which contributes billions to the Canadian economy annually.

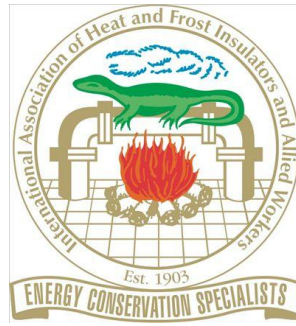
Mechanical insulation is a valuable energy efficiency technology that restricts heat loss or gain on mechanical systems. When installed properly, mechanical insulation will extend the life of mechanical systems and protect people moving through sites from extremely hot or cold surfaces. Mechanical insulation contractors also contribute to safety through installation of fire stop services as well as hazardous waste abatement.

Mechanical insulation has the following benefits

- **Reduces energy consumption:** Mechanical insulation systems save up to 500 times the energy and 750 times the emissions required in its production. It is more cost effective than virtually any other building system designed to reduce energy use and operating costs.
- **Quick return on investment:** Cost recovery can be achieved in as little as 6 months. Modest updates to older buildings, including many government buildings, have the potential to realize substantial cost savings both short and long term.
- **Efficient and environmentally sound:** Many private and public sector facility operators are not aware of the inefficiencies that exist in their buildings. Use of mechanical insulation saves energy and reduces greenhouse gas emissions by as much as 30%.
- **Creates jobs:** With over 15,000 contractors in Canada, there is potential to grow this specialized trade. With multiple insulation manufacturing facilities located across Canada, promoting its use will also support Canadian manufacturing jobs

We believe there is an opportunity to work with the Government of Canada to encourage further use of mechanical insulation in both new and existing commercial and industrial buildings, which would create jobs, increase energy efficiency and savings, and increase the productivity of the Canadian economy. Under the Budget 2015 themes of *ensuring prosperous and secure communities, including through support for infrastructure and maximizing the number and types of jobs for Canadians*, we submit the following recommendations for Budget 2015:

1. **The introduction of a tax credit for businesses that pursue the installation of mechanical insulation in new or existing (retrofit) commercial buildings or industrial facilities.**
2. **The promotion of energy efficiency audits in federally owned buildings, with the goal of finding energy and cost savings opportunities.**



The International Association of Heat and Frost Insulators and Allied Workers

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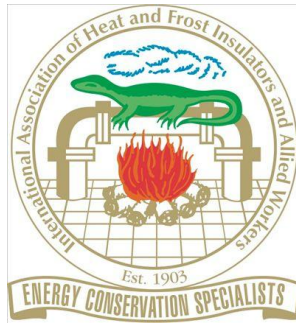
Insulation Contractors can range from small operations employing as few as 1 or 2 insulators up to larger contractors that employ hundreds of insulators on an ongoing basis. Thousands of insulators are employed in the maintenance of existing buildings and industrial facilities, and insulators are trained to install "firestop" materials that are a critical safety component of commercial buildings and industrial facilities. It is also worth noting that Red Seal Journeymen insulators are also fully qualified to handle the safe removal and remediation of asbestos, mold, lead, and other dangerous substances.

What is mechanical insulation and what are the benefits?

Mechanical Insulation consists of materials or a combination of materials that will restrict heat loss or gain on mechanical systems. Efficiency is optimized through both proper installation, and the correct type and thickness of mechanical insulation. Mechanical Insulation is utilized in commercial and institutional buildings as well as industrial sites of all kinds such as refining, manufacturing, mining, utilities, etc.

Benefits:

- **Reduces energy consumption:** Mechanical insulation systems save up to 500 times the energy and 750 times the emissions required in its production. It is more cost effective than virtually any other effort designed to reduce energy use and operating costs.
- **Quick return on investment:** Cost recovery can be achieved in as little as 6 months. Modest updates to older buildings, including many government buildings, have the potential to realize substantial cost savings short and long term.
- **Efficient and environmentally sound:** Many private and public sector facility operators are not aware of the inefficiencies to be found in their buildings. Use of mechanical insulation saves energy and reduces greenhouse gas emissions by as much as 30%. In addition, helping public sector buildings and private sector industrial facilities become more efficient, increases the productivity and fiscal sustainability of the Canadian economy.



- **Creates jobs:** With over 15,000 contractors in Canada, there is potential to grow this specialized trade. With multiple insulation manufacturing facilities located across Canada, promoting its use will also support Canadian manufacturing jobs.

Where has the installation of mechanical insulation been successful?

Case Study #1: University of Western Ontario (UWO) in London, ON

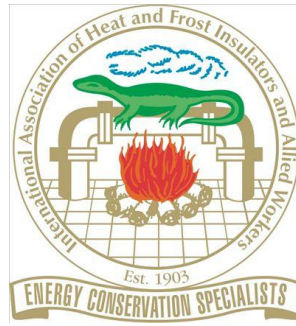
- E3 Ecology conducted a mechanical insulation energy savings analysis and implementation in the UWO Steam Plant, UCC, Medical Sciences, Spencer Engineering, Thompson Engineer and Wind Tunnel buildings.
- Results of the analysis and implementation:
 - Annual Energy Savings: \$78,355.00
 - CO2 Reductions: 1,640,939 lbs / year
 - NOx Reductions: 3,312 lbs / year
 - CE Reductions: 447,168 lbs / year
- E3 Ecology has conducted these projects for UWO since 2008 with the following results:
 - Green House Gas Emission Reductions: 8,937 tons
 - Payback Period: 0.87 years
 - Cumulative Energy Savings: \$1,259,374.00

Case Study #2: 25 Storey Residential Tower in Vancouver BC

- 10 year old building heated with natural gas
- A mechanical insulation audit and subsequent installation resulted in the following:
 - Estimated energy savings amounted to 320,000 kWh / year from replaced pipe insulation
 - Overall payback period was just under 2.7 years.
 - CO2 emission reductions estimated at 59 Tonnes /year
 - Average energy savings per square meter were 24.6 kWh / year
 - Energy savings = 14.6% of total annual use

Case Study #3: Montana State Pilot Program

- An assessment of mechanical rooms in 25 facilities pre-selected by the State of Montana personnel based on potential for energy savings resulted in the following:
 - Estimated energy savings amounted to 1.76 million kWh / year
 - Overall payback period was just over 4 years, with an annualized rate of return of 24%.
 - CO2 emission reductions estimated at 300 Metric Tonnes /year
 - Average energy savings per square meter were 14.5 kWh / year, while energy cost savings averaged \$0.463 per square meter.



Why should the Government of Canada support these asks?

- The mechanical insulation industry contributes to Canada's skilled trades agenda.
- Promotion of mechanical insulation encourages better conservation and energy efficiency practices with industry.
- Mechanical insulation has a proven and rapid cost recovery model.
- Without incentives to conduct energy efficiency audits, private and public sector decision-makers remain reluctant to install or properly maintain mechanical insulation.

What are our recommendations for Budget 2015?

Under the Budget 2015 themes of *ensuring prosperous and secure communities, including through support for infrastructure and maximizing the number and types of jobs for Canadians*, we submit the following recommendations for Budget 2015:

- 1. The development of a business tax credit for companies who pursue the installation of mechanical insulation in new or existing (retrofit) commercial buildings or industrial facilities.**
- 2. The promotion of energy efficiency audits in federally owned and managed public sector buildings, with the goal of finding energy savings opportunities.**

If new work is created for mechanical insulators through this tax credit program, we would commit to training more apprentices in the commercial sector. We believe more training would help reduce regional labour shortages while providing skilled training that would meet regional labour needs across Canada.

Conclusion

We look forward to working with the federal government on these and other initiatives. We believe that supporting the commercial and industrial building sectors can further Canada's environmental and conservation agenda while making a positive contribution to the economy.