

## **Submission by the Canadian Energy Efficiency Alliance to the House of Commons Standing Committee on Finance**

### **Pre-Budget 2014 Consultations**

#### **Executive Summary**

This submission by the Canadian Energy Efficiency Alliance (CEEA) addresses:

- ☉ CEEA and the role it plays;
- ☉ The importance of energy efficiency to the national agenda;
- ☉ A recommendation that the Government of Canada continue to recognize energy efficiency as an essential part of Canada's national agenda by maintaining the Office of Energy Efficiency within Natural Resources.

CEEA is leading a coalition representing stakeholders on both the ownership and supplier side of investment in energy conservation for the existing building stock across Canada. CEEA's proposal seeks clarity in the application of certain deductibility rules to enhance and broaden energy conservation by building owners in the commercial and rental sectors.

#### **About Us**

CEEA, the independent advocate for energy efficiency in Canada, is pleased to have this opportunity to submit its comments. CEEA works with governments and stakeholders to ensure energy efficiency is a priority for all sectors of the economy. CEEA is an effective voice for the industry and acts as a resource for policy makers, businesses, professionals, builders, manufacturers, consumers, energy companies and environmental groups.

#### **Why energy efficiency must be part of the Government of Canada's overall agenda?**

In October 2013 the International Energy Agency released its first report focussed on the energy efficiency marketplace, noting in 2011 its value as part of the global energy market was \$300B USD.

*IEA Executive Director Maria van der Hoeven said, "Energy efficiency has been called a 'hidden fuel', yet it is hiding in plain sight. Indeed, the degree of global investment in energy efficiency and the resulting energy savings are so massive that they beg the following question: Is energy efficiency not just a hidden fuel, but rather the world's first fuel?"*

A robust energy policy must include energy efficiency to support affordability for consumers, competitiveness for business, reductions of greenhouse gas emissions and the maintenance and expansion of jobs.

Energy efficiency makes economic sense for Canadians. For every \$1 of public dollars spent on energy efficiency \$6 of economic activity is generated. Provinces, such as Nova Scotia, quantify the costs and benefits of energy efficiency to ensure its cost-effectiveness. In BC it is estimated that efficiency creates 10-15 jobs per \$1M investment. By 2023 we expect to see at least 40,000 Canadians working in the energy efficiency marketplace.

In the end, energy is simply too valuable to waste. Energy efficiency is about getting the most out of every kilowatt hour or gigajoule produced. It is about eliminating energy waste and reducing costs for consumers.

Between 1990-2010 each sector of the Canadian economy benefitted from energy efficiency.

- ☉ **Residential** 36% = \$9B savings
- ☉ **Commercial / Institution** 30% = \$5.6B savings
- ☉ **Transportation** 24% Passenger = \$8.2B; freight = \$3.4B savings
- ☉ **Industrial** 20% = \$6.1B savings

### **Canadian consumers want energy efficiency**

As a key stakeholder, CEEA invested in a national survey conducted in 2013. Results show:

- ☉ 75% of Canadians believe that conserving energy is very important;
- ☉ 58% said they are doing some things to conserve energy, but will likely do more;
- ☉ Regardless of region, age, gender or income, a majority of Canadians intend to do more to conserve.

In March 2014, CEEA conducted a second national survey – this one focussed on the views of Canadian business towards energy efficiency. Results show:

- ☉ 61% of Canadian businesses report energy cost increases in the last year, but only 27% believe they are doing all they can to save energy; and
- ☉ 68% would support more stringent energy efficiency codes in building codes, even if it raised the cost of real estate.

Whether at home or at work, energy efficiency is important to Canadians.

### **Why should Canada invest in energy efficiency/conservation?**

Simply put - it is an efficient and effective platform for:

- ☉ Providing a national vision for energy efficiency in Canada that enhances provincial initiatives and a focus for the \$1B+ invested annually by utilities (BC utilities invest \$200M/yr.)
- ☉ The adoption, deployment and visibility of programs such as the new EnerGuide Rating System (ERS) and ENERGY STAR® labelling. CEEA's 2013 survey shows most Canadians acknowledge labels help in helping people conserve.
- ☉ Lowering costs through OEE administered initiatives. There are now regulations covering 74% of residential energy use, ensuring consumers benefit from efficient equipment.
- ☉ Working in partnership with provinces and the private sector to develop programs promoting efficiency e.g. The SMARTWAY Transportation partnership.
- ☉ Participation in the international discussions related to energy efficiency (e.g IEA).
- ☉ The development of model energy codes for buildings ensuring Canadian homeowners live in homes, and work in buildings, with the optimal building envelope tailored to our unique climate.

None of these activities can happen without the national platform provided by Natural Resources Canada Office of Energy Efficiency (OEE). It is the catalyst for provinces and territories to work cooperatively and ensure all citizens benefit. Much of this work is done through a network of committees that have representatives from all the provinces as well as utilities and the private sector – NRCan's OEE is the conductor that makes the individual efforts of each jurisdiction resonate in a coordinated and sensible manner.

CEEA contends that the OEE must remain as Canada's centre of expertise for energy efficiency and alternative fuels information; to strengthen and expand Canada's commitment to energy efficiency; and to provide expertise on policy objectives.

CEEA recommends the OEE be maintained beyond 2016 because:

- ☉ Energy efficiency is considered the "first fuel" and Canada needs to be part of that \$300B (USD) business and reap its benefits;
- ☉ Energy efficiency creates employment principally local jobs across Canada;
- ☉ A vast majority of Canadians, regardless of age, region or gender, want to conserve and the OEE helps them meet that goal;
- ☉ Canadian business supports the development of codes and standards. OEE ensures work places are built to the highest levels while addressing concerns with increasing energy costs.

There is now growing international trade opportunities for energy efficiency solutions, products and services. To ensure Canada can maximize that opportunity, expertise and knowledge that

exists at OEE is required to work with the Department of Foreign Affairs, International Trade, and Development. Navigant Research recently published a forecast suggesting global revenues for energy efficiency will grow from \$68.2B in 2014 to \$127.5B in 2023.

Finally we note that energy efficiency has been recognized by Canada's Minister of Natural Resources as a critical component of the G7 actions related to energy security and has thus become part of Canada's international obligations.

### **Canada-wide Benefits of the OEE**

Engineers, architects, technicians and design professionals are a key component of the energy efficiency industry. They are actively involved in the design of new buildings and industrial processes, and the ongoing renewal of existing buildings and industry.

CEEA Member, EnerQuality, has worked with OEE to deploy the ENERGY STAR® for New Homes (ESNH) Program and achieve great economic results. EnerQuality/OEE ESNH program participants have contributed over \$200M to Canada's GDP via the incremental construction and certification efforts in building homes to ENERGY STAR® standards. EnerQuality estimates, using Ontario construction job multipliers, over 3,500 person-years of employment have been created from the additional construction work in the 54,000+ Ontario homes ESNH certified over the last nine years.

OEE has played an essential role in these market transformation projects and continues to do so with ESNH, the ERS, and support of the National Energy Code (NECB). Other OEE capability building initiatives that drive responsible energy use include OEE training initiatives, housing equipment certification and software tools development. That collaborative work has resulted in successful market adoption throughout Ontario, where almost one third of housing starts in 2013 were certified under the ENERGY STAR® for New Homes (ESNH) Program.

The federal government plays a key role in supporting these efforts by updating energy codes for buildings on a cyclical basis; hosting the online ENERGY STAR® Portfolio Manager tool that provides a "miles per gallon" score for buildings, maintaining the ERS for houses, referenced by the Vancouver Building Bylaw for new homes and retrofits of existing houses, hosting the Canadian Industry Program for Energy Conservation (CIPEC) and providing training through the Dollars to Sense workshops across Canada. A west coast firm, CEEA member, RDH Building Engineering, with offices in British Columbia, Washington, Oregon and California extensively uses the Portfolio Manager tool to prioritize buildings for recommended energy efficiency improvements.

## Windows and Doors

CEEA member, JELD-WEN® identified the OEE as key to helping it map out its corporate strategy and building value for its Canadian operation. JELD-WEN® began in 1960 in the US with 15 employees. It is now a well-respected company with over 150 divisions and more than 20,000 employees worldwide, with plants spread around the world in 22 countries. These operations include manufacturing facilities, distribution and design centres

JELD-WEN® acquired its first Canadian operation in 1996 and now has approximately 1,300 employees in Canada – 50 in Langley, BC (Door plant), 75 in Edmonton (Door plant), 400 in Winnipeg (Door and Window plant), 300 in Toronto (Door and Window Plant), 450 in Quebec (Door and Window Plant) and 25 in Nova Scotia (Door plant).

From JELD-WEN®'s perspective as well as the fenestration industry at large, the OEE has transformed the market from producing windows at R2 to R5 (on the higher spectrum). With the help of the ENERGY STAR® program building awareness for energy efficiency, manufacturers went from installing clear glazing 10% of the time to installing high efficiency glazing 90% over a 10-year span.

JELD-WEN® went from **giving** energy efficient glazing away in promotions to being able to charge for the benefits of a better product with a real payback on the upgrade for consumers. The pull that OEE has had on the market has been tremendous, making high efficiency glazing and improvements in air tightness the norm for manufacturers. The real benefit is for consumers. Because the ENERGY STAR® criteria requires certification, it has improved the overall quality of product being produced in Canada.

Beyond JELD-WEN®, the industry leader, well over 500 fenestration manufacturers are based in Canada, the bulk being small to medium sized companies. The majority of manufacturers are in Ontario and Quebec with a strong industry in BC, Alberta and Manitoba as well.

## Insulation

CEEA member, the North American Insulation Manufacturers Association (NAIMA) Canada represents manufacturers of fibre glass, rock wool and slag wool insulation products doing business in Canada. NAIMA promotes energy efficiency and environmental preservation. Its members include: CertainTeed Insulation Canada, Johns Manville, Knauf Insulation, Owens Corning Canada and Roxul Inc.

NAIMA Canada works closely with the OEE and stakeholders to promote benchmarking programs and tools including the ERS for homes and the ENERGY STAR® Portfolio Manager for buildings, best practices and energy efficiency standards that are critical in helping Canadians address issues such as rising costs of energy and environmental impact.

The Canadian insulation industry ships some \$600M worth of product, of which approximately 80% is for the domestic market. The insulation manufactured in Canada supports an additional \$1.4B in economic activity through installation and construction.

Taking into consideration the indirect and induced impacts, the total economic activities generated by the fibre glass and rock and slag wool industry sums up to over \$3B each year. The industry directly employs over 2,675 highly trained people in good paying jobs across the country. Including installation, it supports over 7,700 jobs in total each year, and, accounting for other upstream and downstream related jobs supported by this economic activity, a total of some 17,000 jobs in Canada rely in some way on the insulation industry.

### **Canada's Utilities**

While electricity policy is within provincial jurisdiction, developing national platforms facilitates local utilities to effectively meet their conservation targets. The OEE partners with utilities to transform regional markets supporting ENERGY STAR® qualified furnaces, windows and water heaters; supporting provincial/territorial adoption of energy codes for buildings and advancing industrial energy efficiency (e.g., ISO 50001 standard). This has a direct impact on CEEA members such as SaskPower, Efficiency Nova Scotia, and Hydro One.