

On November 19, 2009 The GCABC held its annual general meeting. There were several speakers including Keith Sashaw of the VRCA; Mark Longmore of the Finishing Trades Institute of BC; Lindsay Langill Dean of the School of Trades at Thompson River University; Ray McGowan of the National Fenestration Rating Council; and David Bruce consultant to the Ministry of Energy Mines and Petroleum Resources.

The topics covered a financial outlook of the construction industry, an overview of the current state of the glazing apprenticeship program, as well as an update on upcoming regulatory changes.

It seems fitting that some special attention is given to the BC Energy Efficiency Standards Regulations. The Glazing industry should brace itself for significant changes that will become the law of the land effective January 1, 2011. The details of these new regulations have been captured in the companion article in this newsletter by David Bruce.

The Government of BC has been getting serious about energy conservation. Consider one of their key policy action statements: "Set an ambitious conservation target, to acquire 50% of BC Hydro's incremental resource needs through conservation by 2020". The Government foresees an energy shortfall by 2020 if British Columbians don't start using less energy. The consequences of this will be varied but there is one certainty: the cost of energy to the consumer will be expected to rise dramatically.

The glazing industry has been identified as a key player in the development of this policy action. Windows represent a significant opportunity to reduce mechanical heating load in winter, cooling load in summer, and electric lighting load during daylight hours. Windows account for one of the largest sources of heat loss during winter and heat gain during summer. For example, in a typical multi-unit residential building, 31% of heat loss is attributable to the glazing system while an additional 24% is due to air leakage.

This is not only a governance issue it is something that we as a society should be concerned with. Energy supply is a shared resource that is becoming scarce. It is incumbent upon us to appropriately manage these resources for ourselves and future generations to come. So, while it will become the law, as an industry we have a greater obligation to become part of the solution.

On a more pragmatic level there will be some things to watch for when the regulations take effect on January 1, 2011. Projects not covered by the energy efficiency criteria set forth in the building code will be dictated by the BC Energy Efficiency Standards Regulation.

This may become most manifestly evident on large re-glazing projects. Based on the age of many office buildings in downtown Vancouver, this could become a significant body of work for the local commercial glazing industry. The ASHRAE 90.1 requirements will not apply to these projects. Instead, the maximum allowed U-Value for metallic frame commercial windows will be 2.57 W/m²K per the Regulation.

New construction projects will be covered by ASHRAE 90.1 which means that glazing system thermal performance will be specified by the Owner. Presumably the glazing contractor will work together with the Owner to arrive at satisfactory performance levels that will integrate with the planned heating, cooling, and electrical demands of the building. However, we should expect that those values set forth in the Regulation will become the de-facto industry standards.

There will be no denying that all companies that wish to stay viable after January 1, 2011 will be affected by the minimum specified thermal performance targets set by the government. I believe that we should expect to see a revolution in the industry similar to the one that came about in the late 1970's with the advent of widespread use of double glazing in building construction.