



Canadian Advisory Committee on Energy Efficiency (CACEE)

September 7, 2017 - Afternoon Session

Toronto, Ontario



Agenda

1. Welcome and introductions
2. Roundtable - Jurisdictions update
3. Terms of Reference
4. Amendment 14: Alternate Efficiency Determination Method
5. One Mark for Two Purposes: Energy Efficiency Verification and Electrical Safety Certification
6. Market Transformation in support of the *Pan-Canadian Framework on Clean Growth and Climate Change*
7. Path Forward for Codes Development
8. Conclusion and Next Steps



2. Roundtable

- Jurisdictions to provide a short update on:
 - Regulating jurisdictions - Forward regulatory plans
 - Non-Regulating jurisdictions - Innovative work related to in equipment energy efficiency (e.g. market transformation initiatives)
 - Certification Bodies - Emerging trends in other collaborative sectors
 - SDO, Guests



Chair's update

- Regulatory Cooperation Council
- Pan-Canadian Framework on Clean Growth and Climate Change
- Energy Mines and Ministers Conference – recap previous day discussion



3. Terms of Reference

- Draft terms of reference distributed to all members, and no comments or concerns received.
- Next steps: adopt the Terms of Reference



4. Alternative Efficiency Determination Method

Purpose: Discuss Amendment 14 proposal to allow alternative methods to demonstrate compliance to the regulated test procedures and to understand the impacts on Certification Bodies.

- ✓ Certification bodies use **Engineered mathematical modeling** as an alternative to testing a product to the test procedure called up in Regulations
- ✓ More flexibility in the energy efficiency verification requirement!
- ✓ In line with options used in the U.S. in lieu of testing all models



4. What does AEDM mean for certification bodies?

- Would you be comfortable including this as part of your certification scheme?
- Would you consider modeling the U.S. AEDM or Alternate Rating Methods (ARM) programs?
- Any concerns regarding possible discrepancies between certification bodies?
- What do you need from NRCan to make this possible?
- Timeline to implement after Regulations come into force?



5. Energy Efficiency Verification and Electrical Safety Certification Mark

- March 2017: NRCan consulted with certification bodies asking for views on using one mark for both electrical safety and energy efficiency certification
- Replies from 4 certification bodies and the Standards Council of Canada
- Results:
 - SCC leaves use of the mark up to the accredited certification body
 - Some certification bodies have and use a common mark
 - Some certification bodies not favorable of using a common mark
 - Costly and time consuming to register another mark
 - Electrical safety and energy efficiency certification not always done by same certification body therefore there would be two marks anyway
 - Descriptor requirement: two descriptions would be required (electrical safety and energy efficiency) may not address “real estate” concern
- Conclusions:
 - One mark for energy efficiency verification and electrical safety can be used, and is beneficial
 - NRCan strongly encourages certification bodies to use a common mark for products where real-estate an issue



6. Market Transformation

- In August 2017, federal, provincial and territorial energy ministers released a market transformation strategy for residential windows, space and water heating
 - Outlines aspirational goals over the short-, medium- and long-term for ambitious but achievable energy performance levels
 - Identifies key barriers to market adoption and measures to overcome them
 - Goals support the Pan-Canadian Framework on Clean Growth and Climate Change

- Report serves as a basis to guide stakeholder engagement in developing road maps to achieve the aspirational goals - completion in spring 2018



6. Market Transformation

- Aspirational goals will significantly increase performance of these products, which are expected to result in product design and technology changes and new testing procedures
 - Residential window: increased push for technologies like smart or dynamic windows
 - Space heating: testing and verification in cold climate conditions
 - Water heating:
 - Testing and verification in cold climate conditions (heat pumps)
 - Consideration of changes to test procedure for electric water heaters to accommodate heat pump technology

- Hand out: aspirational goals for performance of windows, space and water heating



7. Path forward for codes development

Presentation by Mihailo Mihailovic, National
Research Council



Conclusions and next steps

