Approved Energy Simulation Software for LEED Canada

First released May 2010, last updated January 2013

The following document outlines the energy simulation software currently accepted for projects pursuing LEED Canada for New Construction and Major Renovations (NC) and LEED Canada Core and Shell (CS) certification.

The following software is currently approved energy simulation software for LEED Canada to demonstrate compliance for Energy and Atmosphere (EA) Prerequisite 2 and EA Credit 1:

- EE4
- eQUEST
- DOE-2
- EnergyPlus
- IES Virtual Environment
- Hourly Analysis Program (HAP)
- TRACE 700
- EnergyPro v5.1

Additional energy simulation software on the U.S. Department of Energy (DOE) Internal Revenue Service (IRS) approved list may be considered; please enquire to the CaGBC (info@cagbc.org) prior to using such software. The IRS approved list is available at: http://www1.eere.energy.gov/buildings/qualified_software.html.

Additional Guidance for EAp2/EAc1 compliance:

Compliance for EA Prerequisite 2 and EA Credit 1 is demonstrated through an independent review of the whole building energy simulation. The following compliance paths are available to LEED Canada NC/CS 1.0 and 2009 projects as listed below. For further guidance on documenting compliance, refer to the Guidance for Energy Modelling Compliance Documentation in LEED Canada.

1. Review and approval by Natural Resources Canada (NRCan):
   
   This compliance path is available for LEED Canada NC and CS 1.0, and LEED Canada NC and CS 2009 projects.
   
   - NRCan reviews are limited to EE4 energy model reviews. Note that as of April 2011 NRCan is no longer accepting new projects for review.

2. Review and approval by an independent 3rd party assessor:

   This compliance path is available for LEED Canada NC and CS 1.0, and LEED Canada NC and CS 2009 projects.

   - Independent 3rd party assessors can review energy models done in any of the above approved energy simulation software, provided the assessor was an approved Experienced Modeller (i.e. on CaGBC’s Experienced Modellers List, or prior to December 2011, on NRCan’s list of Experienced Consultants) when the review was conducted.
3. **Review and approval by CaGBC Reviewer:**

*This compliance path is available only for LEED Canada-NC and CS 1.0 projects.*

- The CaGBC Reviewers do not have the capability to review energy models done using all the above approved energy simulation software. The criteria for energy simulation software being accepted for CaGBC review is that the majority of the CaGBC Review Teams must have a copy of the software and the capability to review the energy model in both official languages (English and French). Here is the current list of the approved energy simulation software accepted for CaGBC Energy Review:
  - EE4
  - eQUEST
  - DOE-2

4. **Model prepared by a CaGBC Experienced Modeller (Review and approval by CaGBC Reviewer):**

*This compliance path is available for LEED Canada-NC and CS 1.0, and LEED Canada NC and CS 2009 projects:*

- An individual on CaGBC’s *Experienced Modellers List* may create energy models in any of the above approved energy simulation software. For this compliance path, a 3rd party review of the energy model(s) is not required. Note that energy models must be created by an individual while they are listed on the CaGBC’s *Experienced Modellers List*. Refer to the *List* for further details regarding the responsibilities and code of ethics assumed by the CaGBC Experienced Modeller.
- Refer to the LEED Canada NC and CS 2009 Letter Templates for submittal requirements for review by the CaGBC.