

Building Optimization: Beyond Energy Audits

Building owners are increasingly concerned with lowering building energy and maintenance costs in order to decrease operating costs. In addition, many building owners use energy conservation as part of a larger effort to create a “greener” facility. Unfortunately, these valuable goals are rarely achieved because traditional approaches to energy conservation, such as energy audits, fail to take a holistic approach to assessing building needs for equipment and operations resulting in contradictory recommendations, unrealized opportunities, and shelved reports.

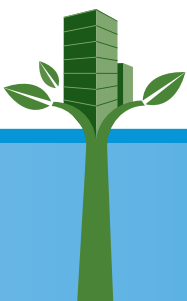
Building Optimization provides an effective, holistic approach to greening existing buildings that includes energy conservation, as well as renewable energy, water conservation, indoor air quality, and occupant comfort. Building Optimization further improves building performance by reducing operational, mechanical and technological inefficiencies, but it also trains building operators so that benefits continue over the long-term. The building owner ends up with a better building and a systematic plan for future upgrades and renovations.

Building Optimization combines the following services:

- energy system assessment
- building envelope assessment
- recommissioning
- water system assessment
- building performance monitoring
- sub-metering analysis
- solar energy assessment and system design
- sustainable facilities operations guidelines and training plans
- facility construction and retrofit support
- ventilation system evaluation

Building Optimization has several advantages:

- **See the Whole Picture:** Energy audits and other retrofit assessments typically look at reducing energy use through capital upgrades; however, this just tells part of the story. Indoor air quality, occupant comfort, water use, and building-integrated renewable energy opportunities are also important considerations when assessing building improvement opportunities.
- **Immediate Improvements:** Because Building Optimization includes recommissioning, many no- and low-cost changes can be made immediately. Capital cost recommendations can then be implemented using a planned, systematic approach.
- **One Consultant:** Enermodal offers all the services required to optimize an existing facility, from assessment and recommissioning, through energy modelling and retrofit implementation, to staff training. Using one consultant means that retrofits and operational adjustments are planned and conducted systematically.
- **LEED-EBOM certification:** Enermodal’s history of success in LEED certification means that our Building Optimization service results in successful achievement of up to 58 credits under the LEED-EBOM rating system. If an owner decides to certify, one consultant will deliver building improvements and certification in a cost-effective and timely manner.



LEED is the most recognized and prestigious green building rating system in North America. LEED Canada is administered by the Canada Green Building Council, which uses the rating system to designate buildings—Certified , Silver, Gold, and Platinum —according to the green features they incorporate.

**For more information or to arrange an interview,
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Enermodal Engineering is Canada's largest consulting firm exclusively dedicated to creating energy and resource efficient buildings and communities. With offices in Kitchener, Calgary, Edmonton, and Toronto, Enermodal is working on over 250 LEED (Leadership in Energy and Environmental Design) buildings across North America and is responsible for 40% of LEED Canada certified buildings.