RESEARCH & INNOVATION

A significant portion of our project work is dedicated toward finding new technical applications for residential, commerical and industrial settings. Through this work, we embrace partnerships and alliances with educational institutions, public sector entities, and private sector organizations to create high probability of project success.

In partnership with academic universities, IESC has developed and commercialized a multi-functional building-integrated photovoltaic (BIPV) glazing design as a more energy efficient substitute for standard glazing in new building construction or as a retrofit of existing structures.

IESC developed an industry-leading, greenhouse gas accounting and risk management tool called Encompass™. This methodology tool quantifies an organization's emissions and captures information on their direct and indirect GHG impact.
IESC provides detailed and easy-to-understand energy audits that meet or exceed the requirements set by ASHRAE Level I, II and III energy audits while accounting for the requirements of eligible energy audit incentive programs. Over the years, IESC has developed detailed templates for energy audits to include HVAC, lighting and water fixtures inventory and description.

IESC’s innovative design approach ensures energy efficiency and occupant comfort is optimized for each project. IESC utilizes the latest energy modelling software to develop a calibrated baseline that reflects the current energy performance of a building based on local weather data. The baseline model is then used to simulate major energy conservation recommendations and provide accurate energy savings estimates to the client.

IESC is a professional engineering firm registered in Ontario & Alberta, and has acquired extensive experience in dealing with engineering design projects. Using latest industry techniques, analytical tools, and standards, IESC ensures suitable design, tender development, contract administration and project management for all major building system projects.

IESC is an accredited GHG verifier with the American National Standards Institute (ANSI), a member of the International Accreditation Forum (IAF), in accordance with ISO 14065 for verifications related to GHG emissions and removals at organizational level in General, Manufacturing and Power Generation, Mining and Mineral Production, Chemical Production, Oil and Gas Extraction, Production and Refinery, and Waste Sectors, which allows us to meet the requirements of different GHG reporting regulations.

IESC has conducted reliable third party verifications for businesses, institutions, and NGOs for a variety of environmental and energy related projects ranging from energy efficiency retrofits to biomass fossil fuel displacement. We offer a personalized turnkey service which allows for timely, reliable and relevant verifications. Whether conducted for the voluntary or regulatory markets, IESC can assist you with verification services.

IESC's experts strive to design for buildings for better performance and energy efficiency. We have encouraged many clients to achieve their long-term sustainability goals and targets thorough planning, strategy and implementation. IESC also helps their client achieve higher certification ratings and leads the entire certification process for new and existing buildings.

Some of the services that are provided by IESC to its clients include:
- LEED® Green Building Rating System
- BOMA BESt Certification
- HQE International
- Passive House

Each renewable energy project led by IESC involves an initial on-site evaluation of various technology options. The subject property is screened to determine whether or not certain renewable energy systems are applicable for the given situation. Unlike traditional energy and power systems, to increase effectiveness, renewable energy requires strong synergies and planning around its surrounding environment. IESC completes a checklist of basic criteria which must be verified before recommending to a client whether they should proceed with a prefeasibility assessment of the subject property.