

SCOPE OF EXPERTISE

The Canadian Building Energy End-Use Data and Analysis Centre (CBEEDAC) is a group of researchers at the University of Alberta who work to analyze and gather data on the energy consumption of buildings, that is, for the residential, commercial and institutional sectors. CBEEDAC has expertise in areas such as:

- Energy consumed in buildings and the factors influencing energy efficiency
- Energy-related practices and behaviour of households, building managers, owners, builders, and occupants
- Building and environmental awareness
- Purchase and utilization of appliances and energy equipment (furnace, fridge...)
- Physical characteristics of buildings and their effect on energy use
- Billing of energy consumption and various topics related to utility companies
- Energy-related renovations and investments
- Effectiveness, measured or estimated, of government programs and other policies for reducing energy use in buildings
- Energy price evolution, awareness and the responsiveness of demand to energy price changes
- Organization of the energy markets

CONTACT INFORMATION

Contact us to:

- Inquire about our services
- Assess the quality and reliability of your energy-related data
- Provide energy-related data for cataloguing and storage
- Obtain advice on conducting energy-related surveys or on the collection of data
- Obtain analysis work carried out by experts in the field and at a minimum cost, through Master's and Ph.D. research.

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C A N A D I A N
Building Energy End-Use

DATA AND ANALYSIS CENTRE

commercial • residential • institutional

**A RESEARCH CENTRE AT THE UNIVERSITY OF
ALBERTA**

WHAT WE DO

The Canadian Building Energy End-Use Data and Analysis Centre (CBEEDAC) is a research centre operated by the Department of Economics at the University of Alberta with the support of Natural Resources Canada. In existence since 2002, the primary objective of CBEEDAC is to contribute to the collection and analysis of energy use data for buildings as well as to evaluate the impact of the residential, commercial and institutional sectors on energy consumption and the environment.

Specifically, the research activities of the Centre focus on obtaining a better understanding of the factors that affect energy use in the buildings. Based on these analyses, CBEEDAC assess energy efficiency and the potential for energy efficiency gains, and suggests how they can be achieved for different types of buildings.

CBEEDAC also works to identify and catalogue relevant sources of energy end-use data and relevant literature in order to build and maintain a bank of information that can be accessed by interested parties. Professionals, government agencies, industries and researchers can find many answers to their data need through CBEEDAC's online searchable meta-database of information, which lists a variety of resources concerning energy end-use. In this regard, CBEEDAC works to organize and assess existing data, identify information access barriers and improve the information gathering process.

DID YOU KNOW...

Analysis and research by CBEEDAC has yielded a number of interesting findings:

In many cases, buying an energy efficient fridge actually results in an increase in household energy consumption - the fridge being replaced often ends up as a storage fridge in a basement.

When buying modern, time-saving, appliances (a faster microwave for example), most of the time saved is allocated to activities that increase the electricity bill.

The price of electricity changes frequently, like the price of gasoline, but many fewer people are apparently aware of these changes.

Electricity bills do not always reflect actual electricity use, possibly resulting in over- or under-billing adjustments on future bills.

“Green” families, who exhibit energy saving behavior, are not necessarily the families who have the lowest energy consumption.

In rental housing, the room temperature in winter is almost always set higher when the heating is incorporated in the rent and paid by the landlord

Because of the ways in which energy-efficient equipment is utilized by users, engineering calculations of the energy saved by new technologies are often inaccurate.

WHAT WE CAN DO FOR YOU

Data documentation and archiving

- Archive databanks to facilitate future consultation and analysis
- Design and improve user's guides, technical notes and processing history for each databank
- Verification and quality assessment
- Recommendation to increase the value of a databank
- Guidance regarding the collection of information

Analytical Services

- Advice about the type of analysis to perform
- Estimate, forecast and/or calculate accurate energy-related measures
- Uncover surprising aspects of energy use
- Carry out statistical and econometric analyses
- Respond to specific inquiries and requests

Catalogue of information

- Online searchable meta-database
- Datasets, surveys, reports, articles
- Over 500 entries (in development)
- References, source, content, date and description of the documents

Newsletters

- Three newsletters per year
- Research results and new projects
- Updates on existing data and energy facts