

The Canadian Building Energy End-Use Data and Analysis Centre at the University of Alberta

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A national competition in 2001/2002 led to the establishment of CBEEDAC, a new Data and Analysis Centre created in cooperation with both the Department of Economics and the School of Business at the University of Alberta. It is one of four Canadian Data and Analysis Centres supported, in part, by Natural Resources Canada (NRCan) as part of their National Energy Use Database (NEUD) initiative.

The primary goal of the NEUD, an initiative begun in October 1991, is to expand and improve the existing knowledge on energy consumption and efficiency at the end-use level by establishing processes for the collection and analysis of data on energy consumption, on the characteristics of energy-using equipment and buildings, and on the behaviour and attitude of Canadian consumers with respect to energy use and the adoption of energy efficient technologies. This coordinated approach to data management is integral to the establishment of a sustained program of energy-use analysis and policy management, and to the advancement of our understanding of the drivers of energy end-use and related greenhouse gas emissions.

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As its name suggests, CBEEDAC is responsible for the collection and analysis of energy data related to the built environment, pertaining to the residential, commercial and institutional sectors. This newest Centre is the successor to previously separate residential and commercial Data and Analysis Centres.

Taken as a whole, the university-based data and analysis centres cover the four major sectors of buildings, agriculture, industry, and transportation:

- The Canadian Agricultural Energy End-Use Data and Analysis Centre (CAEEDAC) is housed at the University of Saskatchewan: <<http://www.usask.ca/agriculture/caedac/main/tpage.html>>
- Simon Fraser University is the host of The Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC): <<http://www.cieedac.sfu.ca/>>
- The Interdisciplinary Research Group on Mobility, Environment and Safety (GRIMES) is based at Université Laval: <<http://www.grimes.ulaval.ca/anglais/>>
- Finally, you can learn more about CBEEDAC by visiting our website at: www.ualberta.ca/~cbeedac <<http://www.ualberta.ca/~cbeedac>>

Working with data providers and users from all levels of government, the residential and commercial sectors, and the relevant Canadian and international research communities, the Centre supports a forum on strategic data collection and analysis, and facilitates an integrated approach to the assessment of energy-efficiency improvements and greenhouse gas emissions reductions in these sectors. As defined in its Business Plan, the core objectives of the Centre are:

- 1) To identify and catalogue relevant sources of energy end-use data and relevant literature and to assess deficiencies therein.
- 2) To establish, maintain and disseminate relevant databases.
- 3) To complete economic, statistical and technical analysis of energy end-use and energy-use technologies.
- 4) To build capacity through the development of a centre of expertise that will serve as a point of contact for sponsors and interested parties, and that will focus on the advancement of the training of business and economics graduate students in the area of residential, commercial and institutional energy end-use analysis.

CBEEDAC is currently comprised of members from the Department of Economics and the School of Business at the University of Alberta. The research expertise and interests of the directors David Ryan and André Plourde and research associates, Denise Young, Heather Eckert, and Mel McMillan, combined with the existing graduate studies programs, make the Centre well suited to enabling a multi-disciplinary approach to data management and to the analysis and improvement of knowledge of the drivers and implications of energy use in the building sector.

As with all other data analysis centres financed through the NEUD, a key focus of CBEEDAC's activities is the development and training of the next generation of energy end-use analysts. In the past year CBEEDAC has provided financial

assistance to eleven graduate students. In addition to providing such funding during the fall and winter terms, CBEEDAC also provides part-time assistance during the summer months to enable students to work on energy topics that fit in within the Centre's mandate, and which may form the basis of projects and papers directly linked to their degree requirements at the MA, MBA, or PhD level. The Centre thus provides direct financial support as well as training opportunities, access to data, and computing resources (such as specialized software programs) to students interested in working in the area of energy economics.

In addition to providing internal reviews for its funding partners, CBEEDAC produces reports on issues linked to energy use by the building sector, with a focus on technology and economics. Once made publicly available, these reports are posted on the Centre's website. Another major project for the Centre in the past year has been the construction of an online searchable MetaDataBase of building-related energy data resources. The objective of the project is to provide users with a comprehensive searchable resource of building energy data and associated literature. Access to the MetaDataBase is also available through the Centre's website.

CBEEDAC also produces tri-annual newsletters that document the activities of the Centre and contain articles on current topics in energy economics. Recent articles have covered such topics as *Residential Energy Use Changes: The Increasing Role of Appliances*, and in some cases reflect joint work involving graduate students. Copies of previous newsletters can be accessed from the CBEEDAC website. Should you be interested in being added to the mailing list to receive future newsletters, or if you wish to find out more about CBEEDAC or become involved with its activities, the Executive Director, Donna White, can be contacted by telephone at:(780) 492-4134 or email at: cbeedac@ualberta.ca.