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Alberta Innovates Technology Futures concludes study – homes using the PowerCost Monitor[™] reduced electricity consumption by 9% overall and up to 16.7% for those with electric hot water heaters.

Alberta Innovates in conjunction with ENMAX and EPCOR executed an 18 month real time electricity monitoring study in 2010 – 2011 in Calgary and Edmonton.

The three year electricity consumption data for all participants was normalized based on the weather and survey data using a statistical algorithm. The analysis of the data has provided the following conclusions:

• An overall reduction of about 9% in electricity consumption was observed for the participants when their electricity consumption during the study period was compared with their electricity consumption during the two-years prior to the study. This reduction is statistically significant at a 99% confidence level.

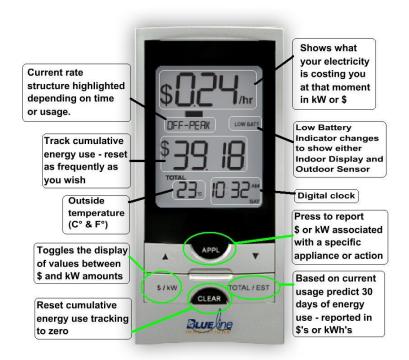
• Based on 2010 population statistics of RRO eligible households, the projected savings attributable to using real-time instantaneous feedback for Calgary and Edmonton would be 450,049 MWh, or the equivalent of the output of a 51 MW power plant operating continuously for a year. This would be equivalent to a 9.7% reduction.

• Households using air conditioning during summer showed lower percentage reduction in electricity consumption in summer as compared with that of the other participants whereas households using electric water heating and electric heating showed an overall higher percentage reduction in their electricity consumption, at 17% and 14% respectively.

• The study did not observe a decreasing tendency in energy saving measures as the study progressed towards the end. In fact, the study observed a positive change in the number of individuals per household changing their energy saving behaviour during the study. Other factors such as education, household age composition and income played significant role in the energy saving behaviour of Albertans.

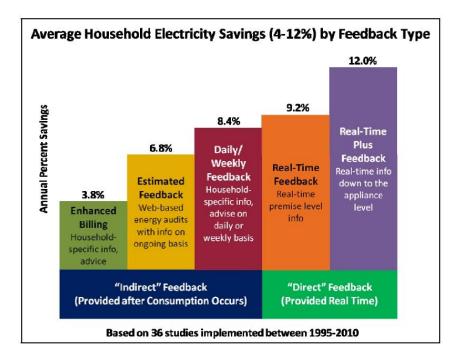
The study has further concluded that: (1) the electricity consumers valued real-time information about their electricity consumption; (2) they used that information in making informed choices for energy savings; and (3) a household consuming about 7,000 kWh electricity per year (average for the study participants) would save about 675 kWh during the same period.

A full copy of the 100pg research report is available http://albertatechfutures.ca/RDSupport/CarbonCaptureStorageandCleanEnergy/Energysavings.aspx "Blue Line's wireless monitor gave consumers instant information on their electricity consumption. That increased awareness, and the ability to see how they could trim their consumption by turning this or that off, helped people better manage their electricity use and costs," says Puneet Mannan of Alberta Innovates - Technology Futures who ran the Alberta real-time electricity monitoring study. Mannan added, "an average nine per cent reduction in electricity consumption among the sample households was achieved during the study period. The AITF study authors concluded use of this type of technology by all eligible household consumers in Edmonton and Calgary could result in savings equal to the one-year output of a 50 megawatt power plant".



Dr. Dean Mountain, Mountain Economic Consulting and Associates, Inc. who completed the study states, "based on the results of the Alberta Real-Time Electricity Consumption Monitoring Study, the projected overall reduction of electricity for Calgary and Edmonton, attributable to using the real time monitor, is 9.7%. Nearly 80% of the pilot participants indicated that the real-time monitor was easy to use and over 70% of the participants felt that using the real-time monitor heightened their awareness and actions toward energy use and implementation of conservation measures. In fact, the number of individuals in the household that changed their conservation habits, increased by 50% by the end of the study."

"We are delighted by the results" commented Peter Porteous, CEO Blue Line Innovations. "We have worked with over 125 utilities and have been included in countless research studies; the results are consistent and meaningful. The conclusion is straight forward – putting better information in the hands of home owners WILL make a tangible difference in their electricity consumption – the closer to real time the stronger the results. There is a terrific research report and visual from ACEEE that sums up millions of dollars in research <u>http://www.bluelineinnovations.com/documents/2010aceeeoverbrookfinal.pdf</u>



For more information about Blue Line Innovations and the PowerCost Monitor please visit <u>www.bluelineinnovations.com</u> or contact

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