



reliable power,
at low cost,
for generation

To our customers and residents across British Columbia:

These reports are the outcome of an intensive research project to identify some of the electricity savings available to BC Hydro customers.

Marbek Resource Consultants and their consultant team have carried out comprehensive technical reviews to develop the Conservation Potential Review (CPR 2007). An External Review Panel and BC Hydro's project team have made significant contributions through their reviews, suggestions and information. I want to thank everyone for their contribution and hard work over the 16-month study period.

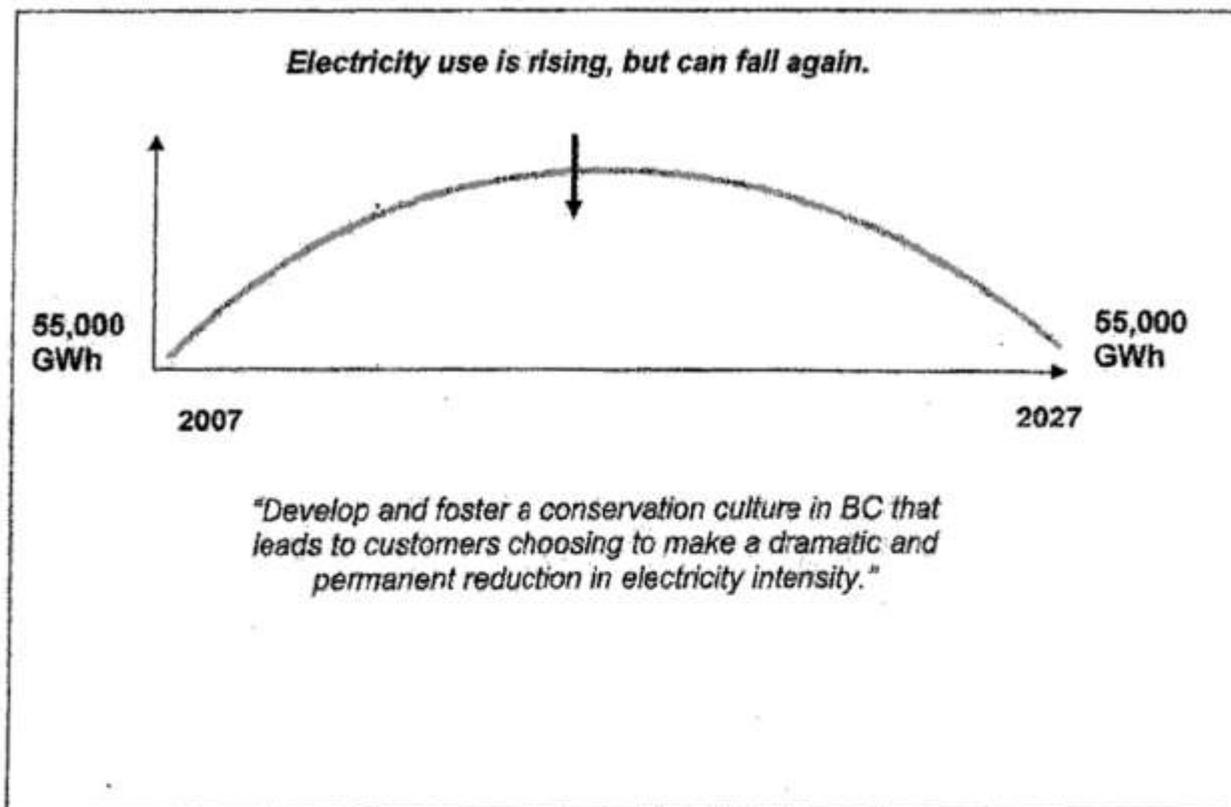
Although this review builds on the work of previous CPR studies, it goes much farther than previous studies in B.C. The researchers have adopted new techniques for energy modelling and used them for the first time to attempt to assess difficult topics including the potential for B.C. residents to reduce energy consumption through behavioural and lifestyle changes.

The CPR 2007 has identified almost 20,000 GWh/yr of energy savings that are economically viable by the year 2020. The study used a series of workshops to further estimate that approximately 50% of the economic energy savings or 10,400 GWh/yr could be achieved by the year 2020. While these findings support the target of 10,000 GWh/yr in 2020, as set out by the 2007 BC Energy Plan, they do not include additional savings within the study from lifestyle changes or additional savings opportunities outside of the scope of the study through supply-side efficiency improvements within BC Hydro and BCTC's systems, savings from emerging technologies beyond 2011 or step-changes in energy-efficient technologies.

The information in the CPR 2007 will be one of several inputs to developing BC Hydro's Demand-side Management (DSM) Plan - a plan to meet the 50% conservation target in the BC Energy Plan and to go further to lead British Columbia into a sustainable energy future for B.C.

Creating a conservation culture

Our goal is to develop and foster a conservation culture in BC that leads to customers choosing to make a dramatic and permanent reduction in electricity intensity; a visionary approach to energy use that will minimize the impact on the environment and ensure the province's electricity needs are met. Following this vision, we strongly believe that we can go beyond the 50% conservation target set out by the 2007 B.C. Energy Plan and lead a change such that in 2027 we would return to 2007 electricity consumption levels while allowing for growth and economic prosperity. In the short term, consumption will go up, but with concerted action we can bring it back down to the levels of 2007.



Making the right choices

In British Columbia, we have to understand that saving energy must be more than a technical solution. We must also address the issue of wasted electricity. We use more electricity per capita than almost anywhere else in the world. What would we save if everyone in B.C. lived in a green home and worked in a green building and all of our industries were among the most efficient in the world?

Such a future is possible. Some progressive European communities use 60% less electricity in their homes than comparable communities in B.C. without compromising quality of life. What seems like an amazing conservation feat is really quite possible – it's due to efficient lifestyle choices that are rooted within the culture. What kind of choices?

- Homes that are designed and sized to conserve resources, with technology such as smart meters to help us use energy more efficiently
- Communities and commercial buildings designed to use solar heat and light and to recover waste heat
- Buildings that generate their own energy, and feed excess energy to the utility grid

What these examples mean is that each household makes a choice to use significantly less energy. Efficient lifestyle and product choices can reduce electricity used in the home by

50% today and potentially even more with net zero energy homes. Commercial buildings can cut electricity use by at least 30% through efficient integrated design and operation – and more again is possible with distributed and self generation.

Living green at home and working green is really about smart, integrated, efficient building design and using resources with respect. A well insulated, draft-free space that controls solar gain is comfortable and efficient. Choosing appliances and lighting that meet our needs, while using less energy, shows our care for the environment.

Industry can play an important part, too. Current world leaders in industrial production are over 40% more efficient than most industries in B.C. With state-of-the-art technologies, processes, and operating practices, B.C. industries could reduce operating costs and strengthen our economy. If they do so, they can establish themselves as world leaders in energy efficient production.

Acting together for a solution

BC Hydro's traditional approach to demand-side management has succeeded in driving technological change. However, to accomplish our new vision for British Columbia we must go farther. We must engage British Columbians so that efficiency and conservation are a way of life and a way of doing business. It must become something we do as consumers, businesses and communities. It must become persistent and self-sustaining. Other countries live by a conservation culture, and we can do it, too.

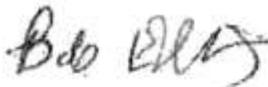
But a utility cannot do this alone. We are in a unique position to act as a catalyst for change in B.C., but we need communities to show their leadership and develop comprehensive and integrated sustainability plans that adopt the policy changes needed to encourage the right choices. Together, we can launch concrete actions that not only drive resource savings but also build the foundation for sustainable cities.

We want British Columbians to move toward this new vision. The CPR 2007 reports show that there are huge savings available that make economic sense. What remains is action.

We are creating a new DSM plan that not only directly acts upon many of the technical opportunities identified within the CPR 2007 but that also supports appropriate policies, new technologies, community engagement, education and leadership at all levels. We invite all British Columbians to embrace the vision and to join us in dialogue, commitment and action.

British Columbia now has the opportunity to join the world leaders in conservation and sustainability. We all contribute to the environmental problems of the world and it's now time for us to be leaders in the solution.

Regards,



Bob Elton

BC Hydro President and Chief Executive Officer