

## **Environmental Stewardship**

Manitoba Hydro operates one of the most reliable and sustainable power systems anywhere. We are continually working to meet the energy needs of present and future Manitobans in a way that protects the long-term integrity and productivity of our economy, our environment, our natural resources and safeguards human health.

In 1993, Manitoba Hydro became one of the first major corporations in Canada to adopt and publish its own principles of sustainable development. With a strong sense of responsibility we integrate environmental, economic and social considerations into decision-making at all stages of our projects. Any recommendation regarding major investments is measured against social, environmental and economic criteria.

Hydroelectric power generation remains the most environmentally sustainable and cost effective bulk electricity supply alternative, with virtually no emissions compared to coal or natural gas. These are qualities our customers, both in Manitoba and in export markets, value as they reduce the environmental impacts of their own operations.

Aside from being finite, energy production from fossil fuels results in by-products of combustion, or emissions. These emissions affect our environment. In contrast, renewable energy resources are constantly replenished naturally and will never be exhausted. Their use generally has a much lower environmental impact than that of conventional fuels. That is why the technologies that utilize them are often called green.

## Sustainability in action:

- Approximately 99 per cent of electricity generated by Manitoba Hydro is from renewable sources.
- Electricity exported by Manitoba Hydro displaces energy generated outside of Manitoba that would otherwise be produced by fossil-fuelled electric generating stations. In 2015, electricity exports from Manitoba reduced net global greenhouse gas emissions by an estimated 7,500 kilotonnes of carbon dioxide equivalent (CO<sup>2</sup>e). This is equivalent to removing nearly 1.6 million vehicles from the road.
- Manitoba Hydro supports many initiatives involving scientific research, environmental monitoring and development of best management practices, and education to foster an understanding of the health of lakes and waterways in Manitoba. This includes the Coordinated Aquatic Monitoring Program which is the largest holistic, ecosystem-based aquatic monitoring program in Manitoba.





- For construction of the Bipole III Transmission Project, Manitoba Hydro is funding local individuals to work alongside Environmental Inspectors to learn about environmental monitoring activities and act as a resource for local construction activities by sharing traditional knowledge of the area.
- Manitoba Hydro owns a fish hatchery which rears and stocks walleye and sturgeon in Manitoba waterways. During the 2014/15 year, approximately 541,000 fish were released.
- Manitoba Hydro is working with a number of agencies, including Manitoba Conservation, to ensure any new transmission facilities do not have a negative effect on the province's caribou population.
- In 2014/15 Manitoba Hydro recycled 1,993 metric tonnes of non-hazardous materials.
- In 2014/15, 2,479 pieces of computing equipment were donated or recycled.
- When construction of Wuskwatim Generating Station was complete, Manitoba Hydro planted approximately 271,000 trees on site and revegetated 770,000 square metres with native grass species.

- Manitoba Hydro offers online training courses to employees located throughout the province. Participation in an online course consumes an average of 90 per cent less energy and produces 85 per cent fewer CO<sup>2</sup> emissions per student than face-to-face courses. During the 2014/15 year, there were 24,243 accesses to online courses by employees. As well as saving time to travel, that saved 2,043,306 litres of fuel which translates into reduced CO<sup>2</sup> emissions — the equivalent of 1,000 cars taken off the road.
- Manitoba Hydro has integrated hybrid and electric vehicles into our fleet, including some hybrid bucket trucks into our field operations.
- Manitoba Hydro's head office building is one of the most energy efficient towers in the world. It was the first office tower in Canada to receive the prestigious Leadership in Energy and Environmental Design (LEED) Platinum rating.

