

Corporate Strategic Plan

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This photo, courtesy of Lawrence Janzen (Dorsey/Riel converter stations) shows the Riel terminal station on September 19, 2013 during commissioning of the bay and structure lights in the 230-kilovolt north yard. The Riel Reliability Improvement Initiative is key to Manitoba Hydro's commitment in maintaining a reliable supply of electricity.





Message from the President & CEO

Manitoba Hydro's Corporate Strategic Plan (CSP) is the primary tool for the Executive Committee and Manitoba Hydro-Electric Board to establish, communicate and drive corporate priorities and strategy within the organization. The CSP is dynamic and designed to reflect the evolving nature of the energy industry within which Manitoba Hydro operates. It will be updated and re-published every three years unless changes to the strategic direction prompt a need for an earlier revision.

Most people flip a switch or turn up the thermostat without much thought as to where the energy behind it comes from. In the past year we have initiated a discussion with customers to consider what lies behind the switch. To provide a reliable supply of electricity and natural gas to meet the current and future energy needs of the province we must invest to renew, upgrade and construct new infrastructure.

Our plan continues the proven strategy of developing this province's clean, renewable hydro resources and building interconnections to leverage the associated export sale opportunities while enhancing reliability. To meet the province's energy needs, the most economic options are pursued which continue to include aggressively pursuing demand side options. We are investing in a powerful future for Manitoba, ensuring the next generation will continue to enjoy the benefits of affordable, reliable and sustainable electricity when they need it.

As a Crown Corporation, Manitoba Hydro is committed to being an outstanding corporate citizen. We aspire to create positive relationships with our customers, employees and all stakeholders. The Corporation works closely with economic development agencies to attract new business, encourage expansion of existing businesses and to retain existing customers. Through purchasing, investments and job creation, Manitoba Hydro is a significant contributor to economic development in communities province-wide.

I am proud of our company and its achievements. I know the future promises to be an exciting and challenging one. I'm confident that our employees will continue to do what they've always done – take personal responsibility for their own contributions and embrace these new challenges head on.

A handwritten signature in black ink, appearing to read "Scott Thomson". The signature is fluid and cursive, with a long horizontal stroke at the end.

Scott A. Thomson, CA
President & CEO

Message from the President & CEO



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Category	Key Performance Indicators	Target
Safety	Lost Time Injury Frequency Rate	0.02 per 100,000 hours worked
	Days Away Frequency Rate	0.02 per 100,000 hours worked
	Recordable Injury Frequency Rate	0.02 per 100,000 hours worked
Financial Strength	Operating Profit Margin	15.0%
	Return on Assets	10.0%
	Debt to Capitalization Ratio	0.30
Customer Value	Customer Satisfaction	85%
	Service Quality	85%
	Complaint Resolution	95%
Aboriginal Relations	Aboriginal Employment	1.0%
	Aboriginal Training	100%
	Aboriginal Community Investment	\$100,000
Workforce Management	Employee Turnover	10.0%
	Employee Engagement	75%
	Employee Safety	100%
Protecting the Environment	Greenhouse Gas Emissions	100,000 tonnes
	Water Usage	100,000,000 litres
	Waste Recycling	50%
Demand Side Management	Smart Meter Penetration	90%
	Smart Thermostat Adoption	50%
	Smart Plug Adoption	20%

Vision

To be recognized as a leading utility in North America with respect to safety, reliability, rates, customer satisfaction and environmental leadership.

Mission

To provide for the continuance of a supply of energy to meet the needs of the province and to promote economy and efficiency in the development, generation, transmission, distribution, supply and end-use of energy.

Operating principles

Work together for the success of the organization as a whole, recognizing that all our activities are interrelated.

Establish long-term cooperative relationships with all employees, customers, suppliers and other stakeholders, aimed at achieving our shared Vision.

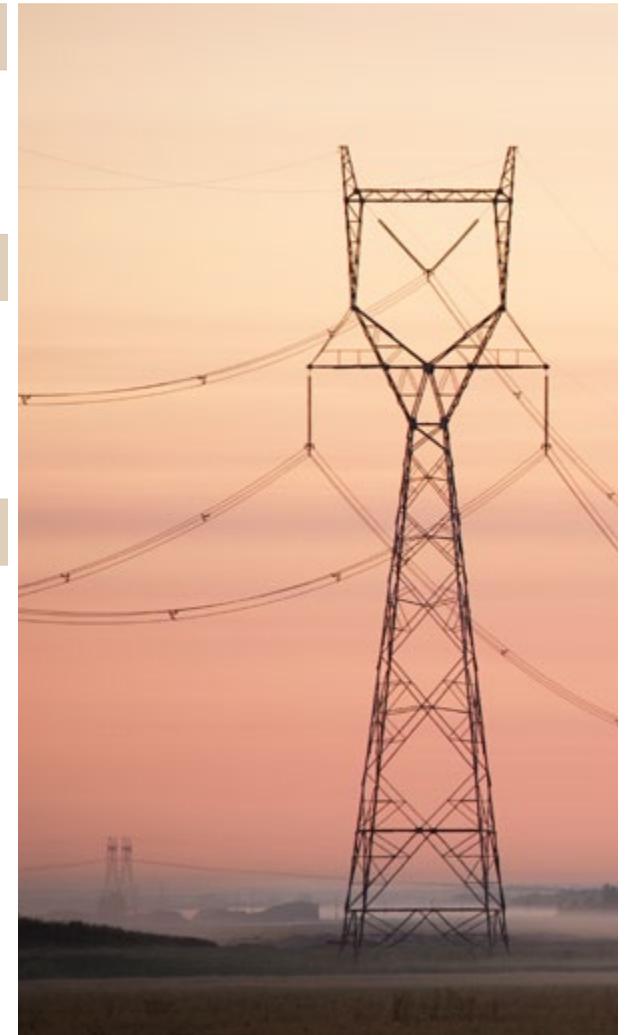
Create a working environment that removes barriers to effective performance and which fosters mutual respect, trust and open communication.

Promote a safety-focused culture in which all employees support and demonstrate safe work behaviors.

Provide opportunities for all employees to develop their full potential, recognizing people's inherent desire to do their best.

Measure outcomes, develop an understanding of the causes of variation from planned performance and take appropriate action.

Drive continuous improvement by identifying opportunities to streamline processes and improving efficiencies across the organization as a whole.



Above: 500-kilovolt tower at sunrise near Winnipeg's north Perimeter Highway and Highway 7.

Meeting Manitobans' long-term energy needs

Electricity

The Manitoba demand for electricity is continuing to grow and new energy sources are required. This is a direct result of Manitoba's continued economic growth through:

- Increases in population and related services;
- Higher average energy usage per residential customer;
- Continued Manitoba industrial and commercial customer expansion.

To meet this increased demand, Manitoba Hydro's plan continues to include aggressively pursuing demand side options and developing clean, renewable hydro resources. It also includes new transmission interconnection and distribution infrastructure to deliver power to Manitoba customers with enhanced access to export markets.

The plan includes:

- Power Smart* energy conservation programs (> 800 MW in planned cumulative capacity savings);
- Keeyask generation, 695 MW;
- Conawapa generation, 1 485 MW;
- Transmission associated with Keeyask and Conawapa;
- Investment in a significant portion of existing infrastructure to renew and upgrade the electric system to improve the reliability of supply.
- Additional transmission import/export capacity to Minnesota and Wisconsin;
- New major export sales.



* Manitoba Hydro is a licensee of the Trademark and Official Mark.

Left: One of three transformers moving through the streets of Winnipeg to the Riel station in Springfield. They were installed as part of Manitoba Hydro's reliability improvements on its 500-kilovolt line linking Manitoba and Minnesota.

Meeting Manitobans' long-term energy needs

Electricity (continued from page 4)

This plan, relative to alternative options:

- Results in the overall highest net benefits to Manitoba Hydro and lowest long-term domestic rates for Manitobans;
- Supports Manitoba Hydro's long-term fiscal health;



Above: About 96 per cent of the electricity Manitoba produces each year – 30 billion kilowatt-hours on average – is clean, renewable power generated at 15 hydroelectric generating stations on the Nelson, Winnipeg, Saskatchewan, Burntwood and Laurie rivers.

- Protects customer service by providing the highest level of system reliability and energy security;
- Supports risk management and flexibility to respond to changing conditions such as higher or lower load growth, uncertainty in level of future demand side management (DSM), changes in river flows due to climate change and additional export market opportunities;
- Provides the highest financial benefit and offers the highest socio-economic benefits (including employment and provincial economic growth) to Manitobans;
- Provides the most beneficial package of socio-economic impacts and benefits to northern and aboriginal communities through training, employment, business opportunities, income sharing and participation in environmental and socio-economic protection;
- Capitalizes on Manitoba's valuable endowment of renewable hydropower rather than imported non-renewable resources;
- Supports Manitoba's Clean Energy Strategy and sustainable development principles by providing clean renewable energy and a legacy for future generations.

The plan incorporates different pathways to allow for future flexibility in adjusting the plan based on changing conditions. A pathway consists of:

- A choice to embark upon an initial development plan today;
- A sequence of decision points that will occur in the future as information modifies or eliminates current uncertainties, such as price forecasts for natural gas and exports and approvals of new interconnections;
- Examples of alternative plans or changes to the initial plan that can be chosen to respond to emerging realities.

A pathway represents the initial decision to commit to one development plan at the outset but not an obligation to rigidly see that plan through regardless of circumstances. Load growth, Power Smart plans, export contracts, natural gas price forecasts, export price forecasts, greenhouse gas restrictions, capital cost estimates, interest rates and other parameters will be continually monitored and reviewed.

Decisions for future power generation and transmission and distribution system development will depend on the best information available at that time. If circumstances warrant, the plan will be modified at key decision points.

Meeting Manitobans' long-term energy needs

Natural gas

From a provincial perspective, the demand for natural gas in Manitoba is forecast to be relatively flat over the next ten years (from 2013) despite expected annual increases in the province's population. Increases in natural gas demand due to population growth are mainly offset by the energy savings achieved through investments in newer energy efficiency technologies and a trend of reduced use of natural gas water heating systems. However, some geographic areas within Manitoba are experiencing accelerated growth in natural gas demand where pipeline capacity and infrastructure must now be increased.

Natural gas plays a significant role in meeting Manitoba's energy needs – the demand for natural gas currently served by Manitoba Hydro's gas distribution system is the equivalent of approximately 1.4 times the size of the total hydro-electric generating system if expressed in equivalent energy terms.

During the next few years, Manitoba Hydro will be devoting a significant amount of effort in response to major changes in the North American supply and transportation markets driven by the challenges faced by TransCanada Pipelines and by recent regulatory orders by the National Energy Board. For the past decade, Canada's

dominant inter-provincial pipeline has experienced growing economic challenges as a result of declining gas shipments; this has led to dramatically escalating tolls to ship natural gas. Changes in geographic gas production and shipment patterns also require changes to gas distribution operations in order to preserve a reliable flow of gas to customers.

Similar to the electric side of the business, the natural gas distribution system is aging. A more rigorous approach to preserve the integrity of our pipeline assets and continued emphasis on public safety amplifies our commitment to develop comprehensive asset replacement programs. Our goal is to address these infrastructure requirements in order to continue to acquire and deliver natural gas to our customers in a safe, reliable and cost effective manner.



Left: Field worker from Gas Apparatus Maintenance and Control operates a valve at the gate station which supplies natural gas to the Selkirk Generating Station.

Meeting Manitobans' long-term energy needs

Natural gas (continued from page 6)

To meet our customers' future demand for natural gas, Manitoba Hydro's plan includes:

- Aggressively pursuing energy efficiency opportunities (> 100 million cubic metres of planned cumulative savings in gas demand);
- Educating customers on fuel choice alternatives as natural gas currently offers customers a more economic alternative in meeting their heating needs and results in economic benefits for Manitoba Hydro, the province and reduces global greenhouse gas emissions;
- Conducting a natural gas asset condition review, developing a long-term capital plan and re-investing in the existing natural gas system to manage capacity constraints and preserve gas system reliability;
- Studying and assessing possible future natural gas storage and transportation alternatives, including the potential to serve Manitoba from nearby production basins in North Dakota should the necessary pipeline infrastructure be developed;
- Monitoring and evaluating the potential for natural gas storage and/or production to be developed within the province.



Above and near left: Upgrading a gas service, including relocating and welding of gas lines by the Gas Distribution Maintenance Department.

Far left: As part of the CentrePort Canada project, installation of approximately three-and-a-half kilometers of 16-inch natural gas transmission pipeline around the new intersection was needed to accommodate the new traffic overpass at Saskatchewan Avenue and the Perimeter Highway.

Trends and factors influencing the North American energy markets

Customer service expectations

As we deliver electricity and natural gas to customers, we recognize that these are simply inputs to necessities such as heat and light. Due to society's increasing dependency on technology, service and reliability expectations of all customers have increased dramatically over the past decade. The level of service provided by the utilities sector will be expected to keep pace with the integration of technology into our daily lives and the need for instant access to information.

Industrial and commercial customers operating in an increasingly competitive global economy expect utilities to meet their needs with respect to service timelines, rates, power quality and reliability. Obtaining energy service in a timely manner at competitive rates is critical to their business models in order to remain strong competitive entities, while providing Manitoba Hydro with important domestic revenue and contributing to the broader Manitoba economy.

Economic factors

The North American economy continues a trend of slow economic growth. The province of Manitoba is growing, both in population and the broader economy. While Power Smart programs have been and will continue to be promoted to reduce customer energy usage, domestic energy demand is expected to grow in all sectors.

Historically low interest rates are beneficial in a period of capital investment and expansion. Financial markets will be continually monitored as Manitoba Hydro takes on new debt to mitigate risk and maintain financial strength. Over the longer term, interest rates are expected to rebound with the growth in the economy.



Above: Extreme and fluctuating weather conditions such as ice storms can cause ice to form on power lines. Crews use a technique called "ice-rolling" to remove the ice from power lines as quickly as possible to prevent equipment breakage and loss of power. Rollers attached to the end of long poles are pulled along the power lines cracking the ice off as they go.

Composition of energy supply

The need for new generation in the United States and Canada is expected to be driven by modest load growth and the replacement of a portion of the aging generation fleet. Electricity demand in both Canada and the United States will continue to increase over the resource planning horizon, with the majority of this growth driven by increased residential and commercial consumption.

Energy and environmental considerations and policies are and will continue to be major factors influencing resource choices

and market price for electricity. Global interest and attention to environmental issues and the effects of climate change could have profound impact on the energy industry and provide an opportunity for Manitoba Hydro.

Renewable Portfolio Standards (RPS) exist in many states to encourage the development of renewable electricity generation. These policies require a certain proportion of energy served to be delivered from eligible renewable sources. To the extent that these types of programs include Canadian

hydropower as an eligible resource, they would provide an additional incentive to buy electricity from Manitoba.

Recent developments in oil and gas extraction technologies have significantly increased the availability of these resources. The growth of shale gas production has resulted in an abundant new United States energy supply source. When combined with the economic slowdown, these factors have changed the long-term outlook for North American domestic natural gas prices and may impact both customer and utility options. While many utilities will choose to develop natural gas generation, they are likely to continue to seek out emission-free alternatives in order to diversify their portfolio of resources, mitigate expected natural gas price uncertainty and volatility, protect against future carbon price liabilities, and improve environmental performance.



Left: The Nelson River featuring Long Spruce Generating Station with Kettle Generating Station in the background.

Operational excellence

Operational excellence describes how Manitoba Hydro intends to meet its mandate. Key areas of focus provide clarity around our priorities and ensure that Manitoba Hydro is positioned for success.

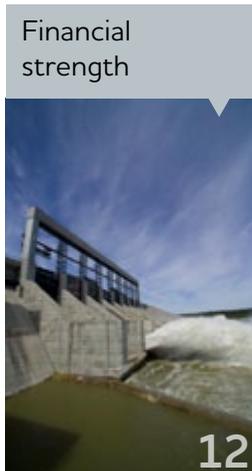
Top priorities include:

- Safety
- Financial strength
- Customer value
- Aboriginal relations
- Workforce management
- Protecting the environment
- Demand side management (DSM)

Corporate dashboard

Critical success factors, including corporate targets, are captured in the Corporate dashboard.

Corporate Dashboard		
	Critical success factors	Target
Safety in the workplace	Accident severity rate	< 12 days per 200,000 hours worked
	Accident frequency rate	< 60 accidents per 200,000 hours worked
	High risk incidents	0 incidents
Financial strength	Net income (\$mil) (\$ thousands)	As per budget
	OM&A costs (consolidated) (\$ thousands)	As per budget
	Capital expenditures - base	As per budget
	Capital expenditures - major projects	As per budget
Customer value	System average interruption duration (SAIDI)	< 116 minutes
	System average interruption frequency (SAIFI)	< 1.4 per year
	Customer satisfaction (CSAT)	> 8.4/10 customer satisfaction with overall service
Aboriginal relations	Aboriginal employment	36% overall
Protecting the environment	Progress towards environmental targets	Achieve all 3 targets
	Electric energy saved	214 GWh annual incremental savings
Demand side management	Electric capacity saved	200 MW annual incremental savings
	Natural gas energy saved	10 million cubic meters



Promoting safety in the workplace and in the actions of the public around our facilities remains a top priority and is Manitoba Hydro's most important goal. Manitoba Hydro is committed to continuously improving its safety performance and focusing on strategies to instill a safety and health culture in all corporate activities. In doing so, we intend to maintain a steady decline in both workplace accident severity and frequency rates.

Key areas of focus

- Create a consistent corporate 'Safety First' message targeted at preventing all incidents;
- Reinforce management, supervisory and worker accountability for a safe and healthy workplace;
- Redesign the Safety Training for Leaders program to meet the needs of both informal and formal leaders;
- Integrate risk assessment into all safety-related training programs;
- Provide employees with safety and wellness information and services;
- Mentor all employees to be qualified and well practiced in the use of safe work procedures;
- Deliver effective public education and safety programs to minimize public contacts.



Above: Manitoba Hydro promotes public safety in schools with a range of educational materials and programs.

Left: Job site planning meetings (frequently referred to as a "tailboard" meeting) are meetings held at the job site with all workers involved. They are held before the work begins and as required during the course of the work to ensure that all workers understand the hazards, risks, and procedures associated with the job.

Operational excellence

Financial strength

Maintaining financial strength is essential in order to make the necessary investments in infrastructure to continue to provide safe and reliable service to customers, financially withstand the risks and uncertainties that are inherent in our operations and to provide customers with long-term rate stability and predictability and avoid the need for large or sudden rate increases in the future. While the required investment in new and existing infrastructure is expected to place a certain degree of pressure on the Corporation's key financial targets, Manitoba Hydro is currently well positioned to make these investments and is committed to carefully managing its costs and balancing the need for reasonable rate increases with sensitivity to customer rate impacts and in doing so, maintain competitive rates for our customers.

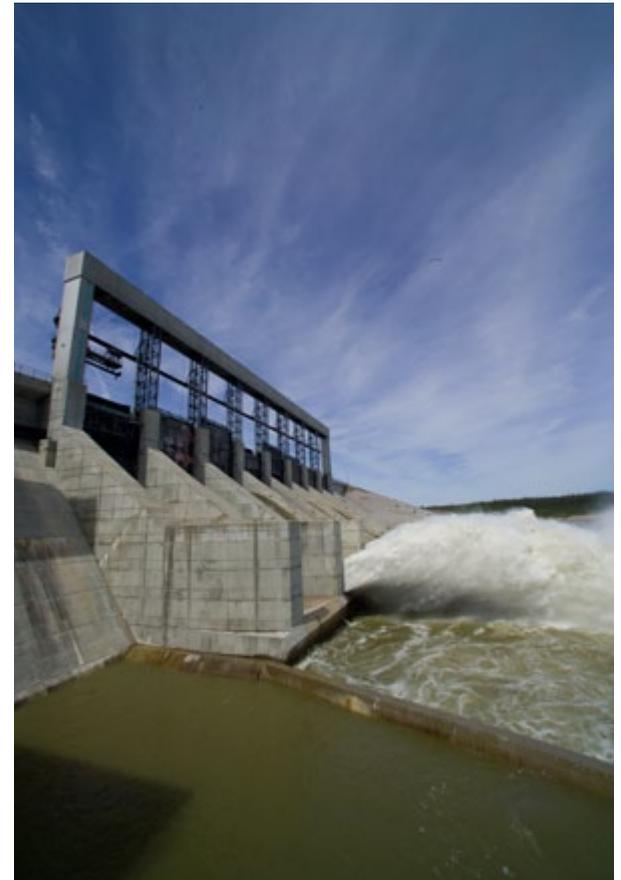
Key areas of focus

- Utilize resources efficiently and effectively to fulfill our mandate and provide maximum value to our stakeholders and ratepayers;
- Critically review all capital project proposals to ensure best value;
- Diligently manage capital projects to be on time and on budget, leveraging experience from past projects to improve upon capital cost estimating, and project and contract management;
- Aggressively pursue a balanced portfolio of domestic and profitable export sales to provide the highest financial benefits to ratepayers and all Manitobans over the long term;
- Fully justify and obtain Public Utilities Board approval for rate increases that will be necessary to achieve financial targets over the long term;
- Closely monitor economic factors, financial markets and energy markets to manage and mitigate financial risk.

Financial targets

The Manitoba Hydro-Electric Board approves financial targets to be considered in all major corporate decisions. These include:

- *Debt: Equity ratio 75:25*
- *Interest coverage ratio > 1.2*
- *Capital coverage ratio > 1.2 excluding major new generation and transmission*



Above: The spillway at Kettle Generating Station located on the Nelson River.

Operational excellence

Customer value

Providing excellent customer service, high system reliability* and affordable rates are fundamental in everything we do. We are a leader in promoting conservation, providing numerous Power Smart programs to assist customers in meeting their energy needs.

Key areas of focus

- “Keep the lights on and the gas flowing” with safe and reliable delivery of electricity and natural gas to customers through investment in existing infrastructure and system expansion;
- Assist customers in finding sustainable energy solutions to meet their needs, including fuel choice and energy efficient opportunities and thereby reducing their overall energy bills and impact on the environment;
- Provide predictable, fair and affordable rates for all Manitobans;
- Construct Bipole III to strengthen reliability of the electric system and provide energy security;
- Maintain compliance with applicable North American Electric Reliability Corporation (NERC) reliability standards and foster a culture of reliability excellence.

** Reliability performance is measured as the System Average Interruption Duration (SAIDI) and System Average Interruption Frequency (SAIFI). Our target is to remain in the top quartile when compared to other Canadian Utilities.*



Above: Promoting energy efficient windows.

Left: Downtown Winnipeg at night.

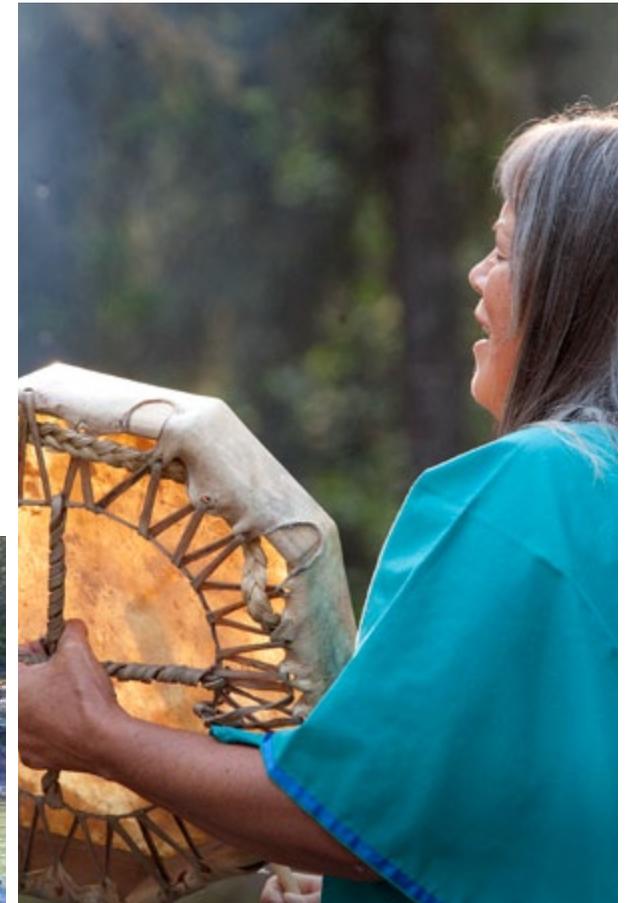
Operational excellence

Aboriginal relations

Engaging impacted Aboriginal communities in a positive way is vital to enhance working relationships.

Key areas of focus

- Address the adverse effects of our operations on Aboriginal communities;
- Continue to be a leading Canadian utility in Aboriginal representation through initiatives to recruit, develop and retain Aboriginal employees;
- Develop and maintain business relationships with Aboriginal businesses;
- Foster an appreciation of Aboriginal cultures in the workplace;
- Provide opportunities for Aboriginal participation in future development projects.



Above: A ceremony was held at Wuskwatim Cultural Centre to mark the river diversion.

Left: Gary Spence (Utility Worker) and Mark Sweeny (Manager), both of the Community Relations Department, and both members of the Cross Lake First Nation, conduct a shoreline inspection on Sipiwesk Lake.

Operational excellence

Workforce management

Attracting, developing and retaining a highly skilled and motivated workforce that reflects the demographics of Manitoba is critical to our success.

Key areas of focus

- Provide employee development programs to enhance employee technical, leadership and business skills;
- Maintain workplace diversity and inclusiveness programs;
- Align workforce planning with corporate priorities;
- Maintain leadership and technical continuity through effective succession planning;
- Promote Manitoba Hydro as an employer* of choice.



** Manitoba Hydro continues to be one of the best places to work in Canada. For the fourth consecutive year, the corporation is part of the Canada's Top 100 Employers list.*

As an employer of choice, Manitoba Hydro has been recognized as having among the best:

- Physical workplace;
- Work atmosphere;
- Health, financial and family benefits;
- Vacation and time-off;
- Employee communications;
- Performance management;
- Training and skills development;
- Community involvement.

Left: Employees participate in the 8th Habit course on leadership at 360 Portage Avenue.

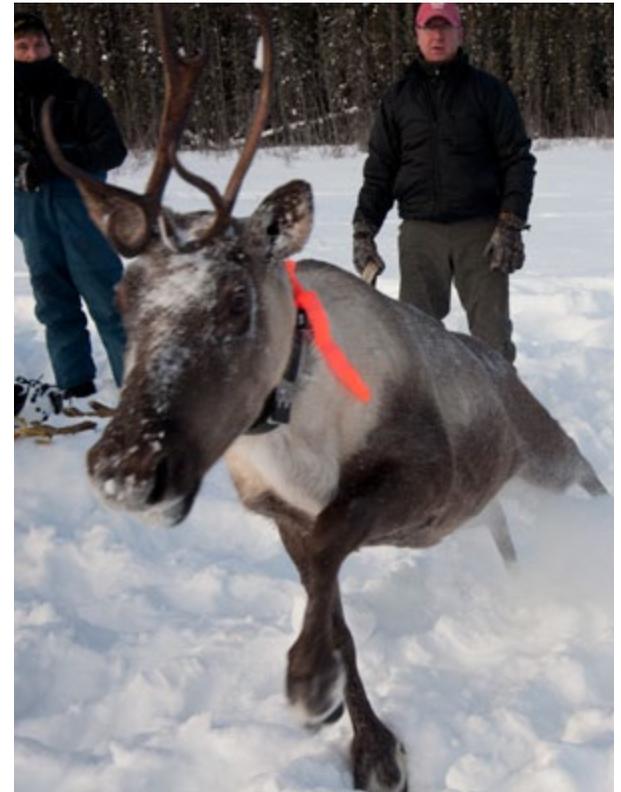
Operational excellence

Protecting the environment

Protecting the environment is an integral part of everything we do. We accomplish this by integrating environmentally responsible practices in all aspects of our business. Environmental protection is carried out with dedication to monitoring programs, climate change initiatives, and environmental research and development.

Key areas of focus

- Maintain and improve Manitoba Hydro's Environmental Management System (EMS) to conform with the ISO 14001 standard;
- Reinforce a culture of environmental awareness and the interaction between the corporation's activities and the environment;
- Participate in the development of evolving environmental regulations and climate change policies;
- Enhance public understanding of how Manitoba Hydro's hydroelectricity exports displace greenhouse gas emissions in other regions;
- Expand green procurement, green fleet and other potential opportunities;
- Plan and implement our projects to avoid or mitigate impacts on the environment;
- Conduct and support environmental research, monitoring and educational programs relevant to sustainable development and Manitoba Hydro's operations.



Above: Collaring caribou as part of the environmental assessment studies for Bipole III transmission line to understand the relationship between caribou, wolves and transmission lines.

Far left: Fall image of frosty plants near Wuskwatin Generating Station.

Near left: Nelson River Sturgeon Board employees from Split Lake First Nation and Thicket Portage collect data in support of research to help increase Manitoba's sturgeon population.

Operational excellence

Demand side management

As the province's population and economy continues to grow, demand side management (DSM) plays a key role in meeting Manitoba's future energy needs in a sustainable manner. These efforts assist customers in using energy more efficiently and result in overall lower energy bills.

Key areas of focus

- Develop, implement and promote Power Smart programs that aggressively pursue all economic energy efficiency opportunities for both electric and natural gas customers;
- Capture energy efficiency improvements through the advancement of codes and standards, service extension policies and rate structures;
- Promote the optimum use of electricity, natural gas and alternative renewable energy options in Manitoba;
- Assess customer load displacement options.



What is DSM?

DSM represents the actions taken to influence a customer to modify their pattern of energy usage. DSM focuses on how customers use energy to meet Manitoba's future energy needs. While energy efficiency is the largest component for Manitoba Hydro, DSM is broader in scope and pursues opportunities including:

- *conserving energy;*
- *the timing and level of energy consumption; and*
- *using the appropriate energy source based on the application (gas, electric, or other renewable resource).*

Top: The Brandon University's Healthy Living Centre was constructed to meet Power Smart design standards. The centre features a fitness area, two gymnasiums, a walking track and a sports medicine centre. In the fitness area, several state of the art machines operate only on user-generated energy, not from Manitoba Hydro.

Above: Promotion of commercial Power Smart programs.

Manitoba Hydro corporate dashboard

	Measure	Target
Safety	Accident severity rate	< 12 days per 200,000 hours worked
	Accident frequency rate	< 0.60 accidents per 200,000 hours worked
	Serious incidents	0 incidents
Financial strength	Net income (loss) (\$ thousands)	As per budget
	OM&A costs (consolidated) (\$ thousands)	As per budget
	Capital expenditures – electric operations – major new generation & transmission (\$ thousands)	As per budget
	Capital expenditures – electric & gas operations – major & base capital (\$ thousands)	As per budget
Customer value	System average interruption duration (SAIDI)	< 116 minutes
	System average interruption frequency (SAIFI)	< 1.4 per year
	Natural gas system reliability	99.99999964%
	Average unplanned natural gas outage duration	< 4.39 hours
	Number of customers affected by unplanned natural gas outages	< 177 customers
	Customer satisfaction (CSTS – Manitoba Hydro quarterly survey)	> 8.4/10 customer satisfaction
Aboriginal relations	Aboriginal employment	16% overall
Protecting the environment	Progress towards environmental targets*	Achieve all 3 targets
Demand side management	Electric energy saved	363 GWh
	Electric capacity saved	243 MW
	Natural gas energy saved	10 million cubic meters

* Environmental sub-targets:

- | | |
|---|---------------------------|
| a. Percentage of electricity generated in Manitoba from renewable resources | Target: $\geq 99\%$ |
| b. Total annual GHG emissions | Target: ≤ 520 kt |
| c. Repeat environmental audit findings | Target: 0 repeat findings |