

Carbon Neutrality - Achieving our 2010 goal

BMO's commitment

In **September 2008**, BMO publicly committed to being **carbon neutral in 2010**, with respect to energy consumption (electricity, natural gas, diesel, heating oil, etc.) and emissions associated with transportation (air and ground travel for business purposes).

BMO's plan

Step 1	Reduce and limit emissions from transportation and energy usage
Step 2	Purchase electricity from renewable energy sources
Step 3	Buy high-quality carbon credits to offset remaining emissions

Consumption Reduction Measures:

BMO has completed and continues to engage in energy audits – mechanical systems/lighting retrofits in a significant number of its branches and offices. We have also built four branches in Canada and four branches in the U.S. to meet Leadership in Energy and Environmental Design (LEED) certification standards for new construction, and improved the efficiency of our service fleet by adding hybrid vehicles.

Purchase of Renewable Energy:

BMO has purchased approximately 24,000 megawatt hours of 100% renewable electricity, enough to power 160 retail branches or offices across Canada. In 2010, we also signed a three-year contract to purchase more than 91,000 megawatt hours of 100% renewable energy from wind turbines, which will provide electricity for the majority of our United States facilities. Approximately 40% of BMO's total emissions footprint is mitigated through our use of renewable energy.

Carbon Offsets:

BMO purchases high quality-carbon offsets to neutralize the remaining emissions. With an initial commitment of \$10 million over five years, BMO became one of the founding investors in the Greening Canada Fund, the first voluntary carbon emissions reduction fund exclusively aimed at Canadian corporations. The fund provides direct access to greenhouse gas emission offset credits and helps BMO invest in Canadian-based emission reduction projects. (Examples on pg 2)

What are renewable energy sources?

Renewable energy sources include: wind turbines, solar, low-impact and hydroelectricity. These sources are cleaner than non-renewable fossil fuel-based sources such as coal or oil as they are naturally replenished. They are often referred to as 'clean' or 'green' electricity.

By purchasing electricity from renewable sources, BMO is supporting the development of renewable energy sources.

Emissions verification

BMO engaged Morrison Hershfield, an accredited third party, to provide reasonable assurance as to the completeness and accuracy of BMO's stated greenhouse gas emissions.

The calculations to determine the achievement of our carbon neutrality goal were completed internally by our Environmental Sustainability Group.

Were there challenges?

Yes. BMO is a large organization that occupies approximately 14.5 million square feet of real estate space, so the amount of annual activity associated with calculating our carbon footprint is enormous. One challenge is ensuring the correct inventory of properties (approximately 1800 different properties including office towers, branches and ATMs), then gathering the utilities consumption for each of them, and quantifying emissions from several provinces and states. We use several different types of energy, so footprint calculation is a complicated process. Proper calculation also includes ground and air transportation elements.

Here are some of the projects BMO's investment in the **Greening Canada Fund** has helped support:

Toronto District School Board (TDSB) (community-based credits)

TDSB has invested in energy-efficiency measures in 237 schools. These energy efficiency measures have reduced on-site combustion of natural gas and electricity consumption. The carbon-offset credits are derived from both natural gas and electricity savings.

The largest energy-efficiency measures include:

- Mechanical retrofits, such as more efficient boilers
- Newer, more efficient building automation systems
- Newer, more efficient lighting

Proceeds from the sale of carbon credits to the Greening Canada Fund will be directed to the TDSB's Environmental Legacy Fund, which will finance new TDSB environmental initiatives.

St. Felicien Cogeneration Project (private sector credits)

The St. Felicien Cogeneration Project is a biomass-fired project located in the Lac St. Jean region of Quebec. It uses wood waste as fuel to generate thermal energy for surrounding industries as well as generating 21 MW of electricity for delivery to the Quebec grid. The project generates carbon credits by diverting methane-producing biomass from landfill, thereby avoiding the methane emissions.

Merom Farms Ltd. (private sector credits)

Merom Farms Ltd. operates a 36-acre, family-owned greenhouse farm operation in Abbotsford, British Columbia. Their primary products are yellow and orange peppers. They generate carbon credits through the displacement of natural gas consumption and the reduction of landfill methane due to diversion and combustion of biomass on-site.

Hamilton Community Energy (HCE) (community-based credits)

HCE is a division of Hamilton Hydro Services Inc., a corporation wholly owned by Hamilton Utilities Corporation, which is a private corporation owned by the City of Hamilton. HCE operates a natural gas-fired district energy facility in downtown Hamilton that supplies thermal heating and cooling and domestic hot water to institutional, multi-residential and commercial buildings and also generates 3.3 MW of electricity supplied to the Ontario grid. The project generates credits by displacing older, less efficient energy systems comprised of boilers and chillers previously deployed in each client building, as well as displacing, in part, coal-fired generation through its supply of electricity to the grid.

Commission Scolaire Marguerite-Bourgeoys (CSMB) (community-based credits)

CSMB, located on the West Island of Montreal, is one of the largest and oldest school boards in the Montreal area, with over 40,000 students. The school board has embarked on a number of energy efficiency measures, including:

- building automation control systems
- new high-efficiency natural gas boilers
- switching from oil to natural gas as a fuel
- cooling system upgrades

The carbon credits generated are primarily due to reduced oil and natural gas consumption.

Aéroport de Montreal (community-based credits)

Aéroport de Montreal is a not-for-profit entity that manages Pierre Elliott Trudeau Airport and Mirabel Airport. The carbon credits generated are due to the replacement of the main boilers and the installation of new cooling chillers at Pierre Elliott Trudeau Airport, which reduced consumption of oil, natural gas and electricity.

City of Guelph (community-based credits)

The City of Guelph's Eastview landfill has a gas-collection system that sends collected methane gas to an on-site electrical generation facility, creating approximately 2.75 MW of electricity at peak. Methane is destroyed by being consumed in the electrical generator's engines. The City is considering directing the proceeds generated by the transaction with the Greening Canada Fund towards upgrading the existing landfill gas collection system to enable more methane to be collected and destroyed.