

ECO⁵: Energy Management

Objective: To implement a holistic approach for reducing energy and costs, enhancing thermal comfort and mitigating environmental impacts.

Energy management program

Following the International Organization for Standardization (ISO) principle for continual improvement, BMO adopts a holistic approach to strategic energy management through the efficient use of energy – a high-priority resource. Energy consumed by the buildings we manage and occupy accounts for the bulk of BMO's carbon footprint. Our commitment to energy and water efficiency recognizes multiple benefits such as cost savings as well as emission reductions. These can also lead to employee comfort and productivity enhancements in many cases. Some of the ways we are implementing energy management to continually improve our performance are highlighted below.

Benchmarking

With about 1,800 facilities in North America and worldwide, BMO begins with a baseline energy assessment of the portfolio's performance. Benchmarking then compares a facility's energy use index to other facilities of the same type and in a similar location or climate zone, and ranks the facility relative to the best in class. The baseline assessment and benchmarking identify energy-intensive facilities and enable target-setting for further energy efficiency improvements.

Technical assessments

As part of BMO's energy planning, we conduct technical assessments and energy analyses to evaluate the performance of facility equipment, processes and systems against designed performance levels or best available technology for potential energy savings in both existing facilities and new construction. The output of these technical assessments is a concrete implementation plan for energy efficiency and advanced technologies to capture energy savings and environmental benefits.

Capital asset renewal

BMO strives to incorporate energy efficiency into our capital asset renewal strategies as equipment nears the end of its useful life. Energy-efficient upgrades enable facility modernization, energy code compliance and life cycle cost benefits. New construction and major renovation of BMO facilities follow design guidelines for energy efficiency. To

date, we have implemented many energy efficiency measures related to control systems, building envelope (walls, windows and roof), heating, ventilation and air conditioning (HVAC), electrical distribution, lighting, mechanical equipment and water systems in our retail space, offices, data centres and critical facilities. Over the years, a number of our facilities have been registered for Leadership in Energy and Environmental Design (LEED) or other similar certifications. BMO also seeks and applies for available energy-saving rebate and incentive programs to help defray capital costs and promote energy efficiency in our organization.

Facility operation and maintenance

Effective operation and maintenance (O&M) is one of the most cost-effective methods for generating substantial no-cost or low-cost energy savings. We implement O&M best practices in control strategies (including HVAC and lighting), sequence of operation, optimized schedules and temperature setpoints and setback. We also carry out preventive and predictive maintenance, diagnostic monitoring, service contracts (supporting energy management, and O&M assessments. Our energy awareness program is also important to gain support from employees and help shape sustainability initiatives. BMO frequently communicates using digital displays, emails and corporate reports to share targets, progress and results with staff.

Workplace transformation

BMO has embarked on workplace transformation strategies to create a more flexible workplace design, support collaboration across business and functional teams, and increase the efficiency and utilization of the bank's real estate footprint. Workplace transformation initiatives also present an opportunity to integrate new transformed spaces with energy efficiency and sustainability investments. Energy efficiency strategies such as greater use of daylighting and lesser space requirements are some of the trends for integrated workplace office design and management systems.

Monitoring and evaluation

BMO uses a utility management program as well as spreadsheet software tools to track, maintain and report electricity, gas, water and other utility usage. This helps us assess progress of energy management programs and plan future energy-saving projects. BMO also measures, analyzes and manages greenhouse gas emissions in accordance with the Greenhouse Gas (GHG) Protocol for reporting climate-related data to sustainability frameworks such as CDP, Dow Jones Sustainability Index (DJSI) and other frameworks.

Renewable energy purchases

While proactively managing our generated carbon emissions through energy efficiency and other operational initiatives is the keystone of our strategy, we supplement that strategy through the purchase of renewable energy certificates (RECs) as well as high-quality voluntary carbon offset credits. In the United States, 100% of the electricity used in facilities we own is offset by RECs and green electricity products. In Canada, about 12% of our electricity needs in 2017 were met through the purchase of environmental attributes from emissions-free sources.