Why choose high-performance curtain wall systems?
Replacing or retrofitting an existing curtain wall system is a long-term investment that offers substantial energy savings, along with other advantages. Take this opportunity to carefully evaluate the many options available, using Manitoba Hydro’s modelling incentive. We offer up to $3,000 to model your curtainwall system, which enables you to optimize glass, frame and spandrel details.

Once you’ve decided to replace or retrofit your curtain wall system, you’ve already accounted for most of the cost in the framing system, glazing, spandrel panels and labour. Upgrading to a high-performance system adds very little incremental cost, making the upgrade cost effective.

In addition to the modelling incentive, financial incentives offered by Manitoba Hydro’s Commercial Building Envelope Program for curtain wall renovation and retrofit projects offset some of the capital cost. The incentive increases with higher performance systems. High-performance glazing will increase your building’s value, provide essential occupant comfort, and yield long-term energy savings—money which can be re-invested back into your business.

What is a curtain wall?
For the purposes of the Commercial Building Envelope Program, a curtain wall is defined as a continuous exterior wall cladding system that spans two or more floors.

The windows in a curtain wall are referred to as vision panels, while the opaque sections (usually insulated) are referred to as spandrel panels.
Advantages of improving an existing curtain wall system:

- reduce heating and cooling loads;
- reduce air leakage;
- improve thermal performance of the building envelope;
- a cohesive, modern building aesthetic;
- potential for increased daylight in the work or living environment;
- increase property value;
- increase comfort and functional space near windows.

The Commercial Building Envelope Program’s financial incentive for replacing or retrofitting your existing curtain wall system is based on U-value. The U-value is the rate at which heat is transferred through the system. Program incentives are available for improved curtain wall systems (vision and spandrel sections) with an area weighted U-value of less than 2.0. Please refer to the Program Guide for information on how area-weighted U-value is determined.

### INCENTIVE FACTOR

<table>
<thead>
<tr>
<th>Project type</th>
<th>U-value requirement</th>
<th>Incentive factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renovation (curtain wall)</td>
<td>less than 2.0</td>
<td>$150/m²/U</td>
</tr>
</tbody>
</table>

Modelling assistance: up to $3,000 per project

Funding is available for assembly modelling as a way to verify the thermal performance of the system and determine energy savings.

### CALCULATING YOUR INCENTIVE

For a building with a net curtain wall area (including frame, glazing, and spandrel area) of 100 m² and weighted U-value of 1.2, the incentive amount would be $12,000. Please refer to the Program Guide for information on how area-weighted U-value is determined.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Incentive per m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base U-value</td>
<td>Overall U-value</td>
<td>U-value difference (C = A - B)</td>
<td>Net window area including frame (m²)</td>
<td>Incentive factor ($)</td>
<td>Incentive (C x D x E)</td>
</tr>
<tr>
<td>2.0</td>
<td>1.2</td>
<td>0.8</td>
<td>x 100</td>
<td>x $150</td>
<td>$12,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$120/m²</td>
<td></td>
</tr>
</tbody>
</table>

For more information on energy efficiency programs, contact your Manitoba Hydro account representative or:

Phone: 204-360-3676 (Winnipeg) or 1-888-624-9376
Email: cbep@hydro.mb.ca
Visit: hydro.mb.ca/your_business

Program guidelines and incentive levels are subject to change without notice. October 2018.