## Sustainable Building Highlight:

# Learning Resource Commons (LRC)

The LRC is Humber's new main entrance and the gateway to the North Campus. It is located at the front of the North Campus, and connects to buildings N, J and H. It was designed and built to LEED Silver Standard. By the numbers:

### Roof

- A 100 kW photo voltaic (PV) array is located on the building's roof. The array is composed of 481 PV modules which cover a total area of 774 m2. The PV system ties directly into the building's electrical distribution system, it is used to supplement power being drawn from the local utility grid to serve the building.
- The PV system generates 141,700 kWh/year, which equates to an energy cost of \$19,918.05 or 7.28% of the estimated building annual energy cost.
- The remaining usable roof space is vegetated (947m<sup>2</sup>)

#### Water

- Low flow and sensored fixtures are installed throughout the building, resulting in the building using 43.48% less water than the baseline building. That is saving 8,200 L of water per day.
- Drought resistant landscaping requires no irrigation
- Only non-invasive plant species used

#### **Indoor Environmental Quality**

- Low VOC materials (paints, coatings, adhesives, sealants) were used in building construction
- All flooring systems in the building comply with the following standards as applicable:
  - o FloorScore
  - o GreenGuard
  - o Green Label Plus
- Low-mercury lamps used in all lighting fixtures
- Improved air quality and safety for visitors
- Building is designed to comply with ASHRAE 55 Thermal Environmental Conditions for Human Occupancy

#### **Energy Efficiency**

- Building uses 36% (+7% renewable energy) less energy than the reference building. This equates to 7,066,686 MJ saved each year.
- Occupancy sensors are located throughout the building to reduce power consumption by lights.

#### **Recycled and Regional Materials**

- 20% recycled content in building construction materials. Top contributors (by cost):
  - o Rebar
  - o Carpet tile
  - o Aluminum
  - Concrete
  - o Steel
- 43% of construction materials are sourced locally (within 800 km)
- 94% of construction waste was diverted from landfills



Toronto, ON M9W 5L7 humber.ca/sustainability

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