Jeanne & Peter Lougheed Performing Arts Centre is a unique 580-seat venue intended to celebrate our cultural achievements and provide access to performing arts in Camrose. The theatre is home to Canada’s largest integrated photovoltaic cell array, which blankets the entire 70-foot fly tower, including the north face. It is also the first theatre in North America to use entirely LED lighting, including the stage lights and those on the interior and exterior of the building.

Certifications & Awards

4 Green Globes (71%)
Date certified: May 2016

Alberta Construction Magazine
Institutional Project of the Year under $50 million 2014

Conservation

35% ↓ LESS ENERGY USE

<1.5 m³ PER M² ANNUALLY

80% ☀ PRIMARY SPACE RECEIVES DIRECT AMBIENT DAYLIGHT

Green Features

LED LIGHTING

BUILDING-INTEGRATED SOLAR

GLAZED WINDOWS REDUCE HEATING AND COOLING NEEDS

See following pages for details

Building-integrated photovoltaic installation funded by Envision, UAlberta’s Energy Management Program.
The first theatre in North America to use entirely LED lighting, including the stage lights and those on the interior and exterior of the building.

ENERGY
- High-efficiency boilers
- High-efficiency lighting
- Uses 35 per cent less energy compared to a model building meeting minimum code compliance. 
  *Model based on the MNECB 1997 energy budget*
- Features the largest building-integrated photovoltaic cell system in Canada. Solar panels cover the entire 70-foot fly tower, including the north face.
- It is the first theatre in North America to use entirely LED lighting, including the stage lights and those on the interior and exterior of the building.

ENVELOPE
- Low thermal emissivity glass reduces heating and cooling needs.
  *Window glazing: U-value 2.38*
- Building assemblies and materials were selected for their durability and low maintenance requirements.
- Building orientation and window-to-wall size ratios optimize daylighting.
- Walls and roof built with high R-value materials.
  *Roof materials: R 40. Wall materials: R 21.*
- Direct ambient daylight reaches 80 per cent of the primary space.

CONSTRUCTION & DEMOLITION MATERIALS
- Building materials are low-VOC emitting.
  *Volatile Organic Compounds can cause health problems when inhaled or consumed.*
- A life-cycle assessment of environmental burden and embodied energy was done for foundations, floor assembly, walls and other materials.
- Materials with recycled content were used in construction.
- Regionally-sourced materials were used in construction.
- Materials made from renewable sources were used in construction.
Jeanne and Peter Lougheed Performing Arts Centre

LOW-IMPACT DEVELOPMENT
• The building was constructed on an existing serviced site, limiting the need for new infrastructure.
• At least 30 per cent of impervious surfaces (such as those made of asphalt) will be shaded to avoid creating a heat island.
• Low-NOx boilers and furnaces are used to avoid or minimize air emissions, effluents and other harmful substances.
• Ventilation system does not use any ozone-depleting, CFC-based refrigerants.
• Indoor air quality is monitored for CO₂

WATER
• Water is conserved with low-flow faucets, toilets and showerheads.
• Drought-tolerant plants require minimal irrigation.

EDUCATIONAL PROGRAMMING
• Plans are in place to educate and create awareness about solar photovoltaic technology through multimedia within the facility, as well as via the web.

CAMPUS-WIDE PROGRAMS AND POLICIES
• The Building Automation System adjusts temperature depending on weather and occupant schedules.
• Buildings are cleaned using high efficiency machines to save resources and ozonated water to avoid harsh chemicals in the indoor environment.
• All cleaning products used on campus are third party green certified.
• Grounds are landscaped with native and drought tolerant plants in mulch beds to minimize irrigation in Alberta’s hot, dry summers.