

Renewable  
Energy



Energy-Efficient  
Technologies



# Leading the Way

## Bissell Centre

Being part of the Corporate Climate Leaders Program gave clarity of focus and access to a cohort of people working towards the same goals. Learning and sharing implementation ideas and challenges was valuable to both challenge and affirm our ideas and plans.



**LOUISE TRAYNOR**  
Chief Operating Officer



### Background

Bissell Centre has been operating in Edmonton's inner city since 1910. Bissell Centre helps people who are homeless find homes, provides emergency food and clothing, supports families by offering free childcare and family support services, enables employment and life skills training, and empowers people to lead prosperous lives.

Bissell Centre recognizes that individuals and families experiencing poverty are hardest hit by climate change. For this reason, they have taken action to reduce energy poverty within their community through their new initiative, **Greening Bissell**.

## CLIMATE ACTION HIGHLIGHTS



### Renewable Energy

Bissell Centre installed 78 solar panels on the rooftop of one of their sites, meeting 19% of the building energy demands.



### Energy-Efficient Technologies

Bissell Centre converted all lighting in their building to LEDs, upgraded their water heater, and improved heat and insulation efficiency.



### Workplace Training and Education

Bissell Centre partnered with their contractor and trained participants in their casual work program to install their solar array.



Corporate Climate Leader since  
**2018**



2017 Baseline Year Emissions  
**2,602 Tonnes of GHGs**



### Targets

**15% GHG emission reduction  
by 2025 from 2017 baseline**

**22% GHG emission reduction  
by 2035 from 2017 baseline**



# Renewable Energy

## Bissell Centre



**Greening Bissell: Solar Panel Installation Training Program**

### PROJECT OUTCOMES

The PV system is comprised of **78 photovoltaic modules**, with 6 used for the purpose of training new cohorts. The system is expected to achieve:



**22.6 Tonnes**  
of GHGs reduced/year



**27,000 kWh**  
of electricity generated/year



**19%**  
of the Centre's energy demands met

In March 2020, Bissell Centre set out to become more resilient by reducing energy costs, while offering their community employment pathways into low-carbon industries. After discovering that nearly 90% of their casual labour program participants were former oil and gas workers, Bissell Centre decided to partner with a contractor and invest in training for some of Edmonton's citizens to complete the solar panel installation. In a collaborative effort with Newo Global Energy, Bissell Centre completed a **25 kW photovoltaic (PV)** system on their roof. To date, Bissell Centre has trained three cohorts of individuals on the practical skills to install a solar array.

### PARTNERSHIPS



Bissell Centre partnered with:

- [CIP](#), [EcoCity Edmonton](#), and Energy Efficiency Alberta to finance the solar panel installation and training programs.
- [Newo Global Energy](#) to provide solar panel installation training to participants in their casual labour program, and to design and supervise the installation. Newo ultimately hired 6 trainees over the course of the project.

### IN THE NEWS



Learn more about the first phase of **Greening Bissell**:

- [CTV NEWS](#)
- [Episode 64 - EcoCity Edmonton - The Well Endowed Podcast](#)
- [Newo Global Energy Story](#)

### PROJECT BENEFITS



Public  
Demonstration of  
Organizational Values



New Employment  
Opportunities  
for the Community



# Energy-Efficient Technologies

## Bissell Centre



### Greening Bissell: Building Envelope and Energy Efficiency Upgrades

Bissell Centre conducted an energy audit on their Community Space building to measure the site's current energy efficiency level and used this information to identify their greatest opportunities to reduce building related emissions. To improve energy efficiency, Bissell Centre converted all lighting in their building to LEDs, upgraded the water heater, and increased the building's energy performance through actions such as replacing or sealing inefficient doorways and windows.

As part of the second phase of **Greening Bissell**, the Centre has conducted energy audits on four additional sites. Bissell Centre has also started to secure the funding necessary to upgrade the building envelope and lighting at their Thrift Shoppe.

## PARTNERSHIPS



Bissell Centre partnered with:

- [Faithful Footprints](#) and [EcoCity Edmonton](#) to finance the energy audits and building envelope energy upgrades.
- [Newo Global Energy](#) to conduct detailed energy audits of all Bissell sites to provide a clear understanding of potential building upgrades.

## PROJECT OUTCOMES

Bissell Centre is confident that the Community Space Building will see cost savings from areas such as increased electricity efficiency as well as heat and insulation efficiency in future years. The Centre estimates to see a full ROI for these building upgrades **within three months**.



14.07

tCO2 reduced  
since 2017



\$2,416.93

In total cost savings  
From 2017-2019

## UPCOMING PROJECTS

### Building Efficiency Training

Bissell Centre is expanding its greening employment program in the summer of 2021 to offer basic building efficiency and conversion education, and hire those trainees to improve the building efficiency of their four recently audited facilities. Bissell Centre hopes to upgrade all sites using this approach to establish a more resilient community in Edmonton.

## PROJECT BENEFITS



Public  
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New Employment  
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