

CASE STUDY: Solar-powered Community Hubs | TEA & Bathurst-Finch Unison Hub

Engaging residents in local renewable energy opportunities

TEA and the Bathurst-Finch Unison Hub worked together to explore carbon emission reduction and green building opportunities via solar panels. This project would provide not only a low carbon energy source, but also energy cost savings, resident engagement with climate action, and a model for low-carbon community buildings.

The Bathurst-Finch Hub was originally designed to be able to support a solar array on the roof. This kind of future-proofing should be an important consideration during the initial design phase of community hub buildings.

OBJECTIVES

- Co-develop a financing model that minimizes risk and does not create a financial burden
- Collaborate to create methods to overcome systemic barriers and disincentives, including:
 - Fixed delivery charges on hydro bill that limits savings
 - High connection costs that make small systems less viable
 - Lack of easy access to a turnkey model which reduces administrative burden on the hub
 - Complexities and uncertainties around maintenance obligations and system performance
- Increase capacity and connections to explore a wide variety of financial and technical support





THE BLUEPRINT

Technical support

To aid in the financial and technical considerations of the project, the Hub, supported by TEA, successfully secured:

- A technical and cost assessment from a sustainable energy company to estimate project costs and future savings from energy use reduction.
- An initial grant from a local energy company (Bullfrog Power) to support installation.
- A proposed equipment lease to own offer from a renewable energy co-op to cover a portion of costs as a third party owner of the panels until the costs are paid off.
- An energy audit from the City of Toronto (Navigation Services) to identify energy saving solutions.
- Consultation from an architect (Hillditch Architects) on energy optimization strategies.
- The beginning of a low-interest loan application to the City of Toronto Renewable Energy Loan Program. (This program had to be discontinued due to COVID-19 complications.)

OUTCOMES:

An innovative and fairly unestablished model for community climate action, this project did not have a linear, straight-forward process. It was very challenging to identify financially viable options for the

Hub to acquire a solar array. More flexibility in payback periods from funders and financiers could result in more viable solar projects, and help to overcome challenges with calculations of return on investment from energy savings. In addition, the COVID-19 pandemic exacerbated an already challenging situation due to reduced program-specific funding and limited resources.

Hub Staff re-prioritized immediate needs of the Bathurst-Finch Community (such as food security and access to public health information) and put their energy towards initiatives that created more opportunities for social connection (such as Climate Ambassador Training). It was necessary for TEA to play a technical support role to move things forward while Hub staff were deeply engaged in community-related COVID-19 needs.

TEA and the Bathurst-Finch Unison Hub are still committed to the success of this project and are exploring solutions (as of August and September 2021) such as:

- Low-cost financing options with the Beaches Renewable Energy Co-op
- Fundraising campaigns
- Green and community bonds

SPOTLIGHT ON GREEN ENERGY CONNECTIONS

In the search for additional funding and support, TEA also explored connections with:

- Investors and financiers, including credit unions, energy companies, green bonds, and energy co-operatives
- Grantmakers, including private foundations and government grants



WITH
SUPPORT
FROM:



Learn more about the *Accelerating Climate Action Through Community Hubs* project

www.torontoenvironment.org/community_hubs