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# First Nation Community Buildings Retrofit Program

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## Webinar Participation (including audio)

- To interact, click the “Show Conversation” icon (message bubble symbol) to submit a written question or click on the “Raise hand” icon (hand symbol) at the top of the application window to indicate to the host you would like to speak
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- This webinar is conducted according to the [IESO Engagement Principles](#)

# Agenda

- Engagement and Design Process
- Key Engagement Takeaways
- Program Overview
- Program Participation Process
- Next Steps



# Engagement and Design Process

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# Key Engagement Takeaways

(From Oct-Dec 2020 engagement feedback)

# Key Engagement Takeaways

- Generally, communities are aware of energy efficiency and available programs, however, communities have different needs, opportunities, and priorities when it comes to energy efficiency
- Most commercial and institutional buildings are owned and operated by the band council
- Communities are interested in energy efficiency and bill savings across a variety of building types

## Key Engagement Takeaways (cont'd)

- Community challenges that should be addressed in the program include:
  - Difficulty accessing sufficient funds for implementation of energy efficiency projects
  - Demonstrating the long-term financial and community benefits of energy efficiency upgrades (the “business case”)
  - Identifying specific retrofit opportunities in buildings
  - Identifying and securing contractors to purchase materials and/or install retrofit projects
  - Managing the installation process



# First Nation Community Buildings Retrofit Program Overview

## Program Overview

- Building on the feedback, the IESO will be launching a new program targeted at energy efficiency upgrades in band-owned buildings on reserve, the “**First Nation Community Buildings Retrofit Program**”
  - A “Virtual Energy Manager” will provide technical assessment and project support, at no cost to communities
  - Each participating community will receive up to \$100,000 investment in energy efficiency projects

## Program Overview (cont'd 2)

- “Virtual Energy Manager” Technical Support includes:
  - Energy Benchmarking – all band-owned buildings, based on energy data provided by community
  - Energy Assessments – in-person audits of up to four buildings
  - List of eligible project opportunities (with estimated energy savings, costs, and timing requirements) to help inform project selection by band council
  - Oversight of installation process and post project reporting

## Program Overview (cont'd 3)

- IESO will provide up to \$100,000 in funding for eligible projects identified in the Energy Assessment and selected by the band council that include:
  - Energy saving equipment that is offered through a Direct Install Track and/or Community Install Track, depending on the type of project.
  - Detailed Engineering Study by a third party to scope more complex projects in the Community Install Track (up to \$10,000 out of the \$100,000)

# Direct Install Track vs. Community Install Track

## Direct Install Track

IESO oversees the installation including procurement of equipment

Standard direct-install efficiency measures (lighting, controls, thermostats, window air conditioners, fan motors, power strips)

Projects identified in the Energy Assessment

Does not require a Detailed Engineering Study

Projects funded from \$100,000 per community budget

*Benefit:* standardized measures, streamlined approach, faster project implementation

## Community Install Track

Community does the installation (community can contract with a third party)

Customized measures (e.g. variable frequency drive, arena cooling)

Projects identified in the Energy Assessment

May require a Detailed Engineering Study (up to \$10,000 funded from the per community budget)

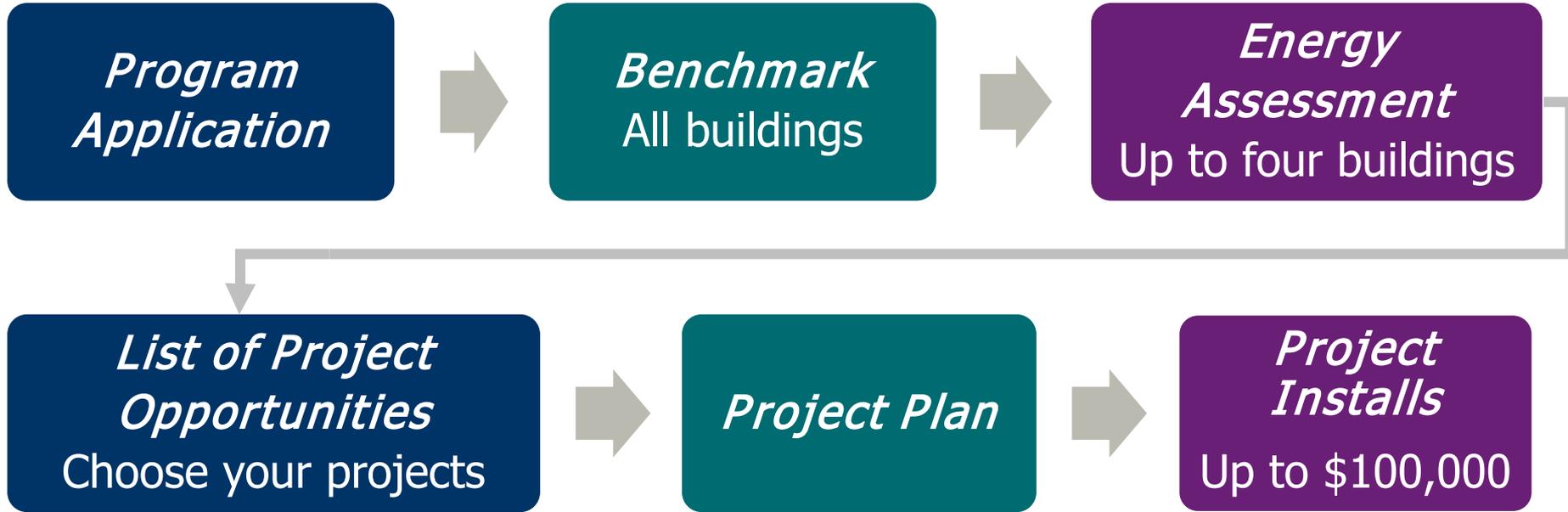
Projects funded from \$100,000 per community budget

*Benefit:* specialized projects requiring more detailed technical expertise



# Program Participation Process

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# Program Application

## Eligibility

- All grid-connected First Nation Communities in Ontario
- Upgrades for band-owned buildings

## Application Requirements

- Identify Community Coordinator
- Band Council Resolution (BCR)
- Provide building energy data for benchmark analysis

## Community Coordinator Responsibilities

- Community member identified by the band council to act as liaison with the IESO
- Support the IESO's Service Provider (e.g. provide building energy data, provide contractor access to buildings)

# Benchmark all Band-Owned Buildings

## Purpose

- Identifies which buildings use the most energy relative to other similar buildings and have the most opportunity for the greatest savings
- Use benchmark information to select buildings for the in-person Energy Assessment

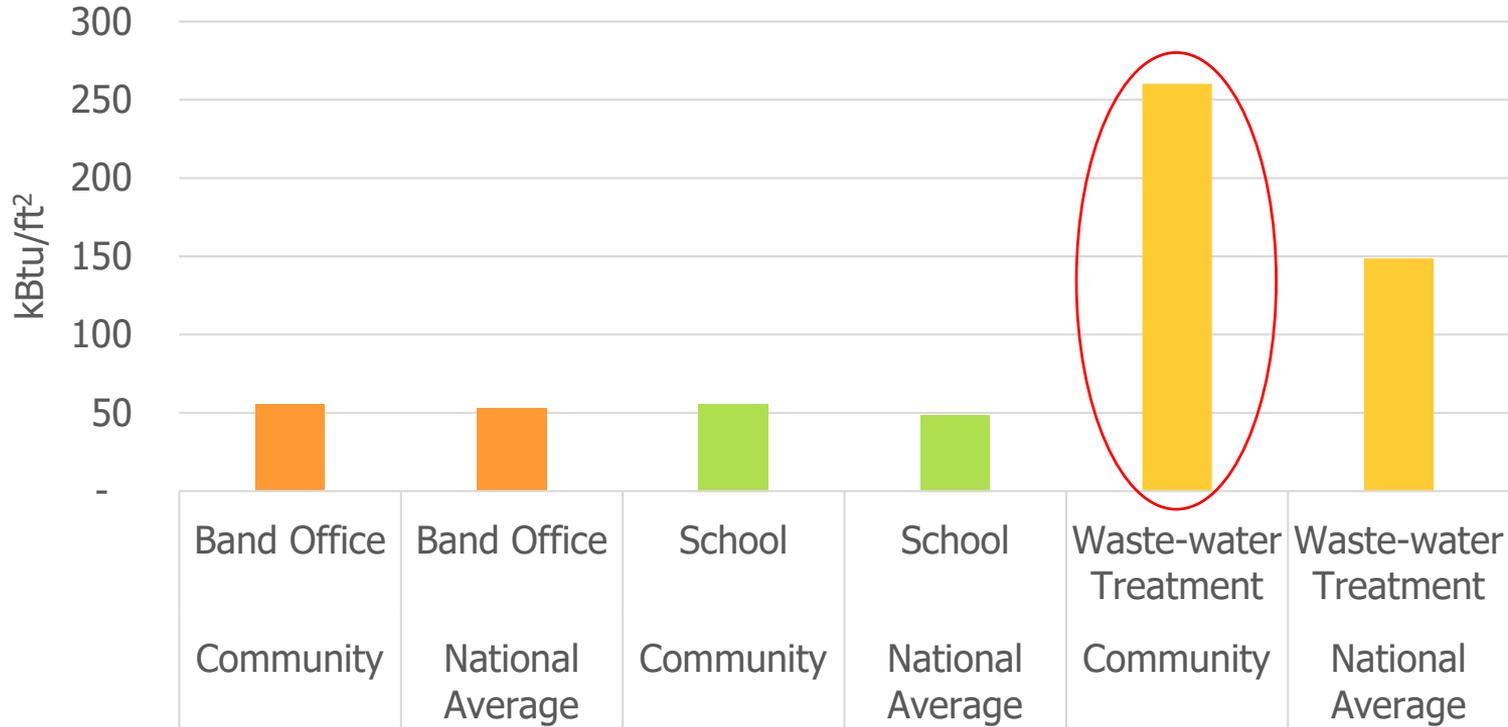
## Benchmark Metrics

- Electricity use per floor space (kWh/m<sup>2</sup>)
- Energy for heating per floor space ([heat fuel]/m<sup>2</sup>)
- Energy Costs per floor space (Cost/m<sup>2</sup>)

## Data Requirements

- 12 consecutive months of electricity, heating fuel, and bills

# Benchmark – Example that identifies big energy users



# Energy Assessment (up to Four Buildings)

## Pre-Site Visit Interview

- Historical studies (e.g. energy plans), audits, or assessments
- Known energy efficiency opportunities
- Community building priorities
- Data availability (e.g. access to metered data vs. energy bills)
- Identify potential challenges to project implementation

## Site Visit (Facility Walk Through)

- Purpose: identify practical projects for implementation
- Observe and collect information and data on systems of interest
- Obtain input from facility staff as appropriate
- Identify additional low-cost/no-cost opportunities
- Supported by Project Coordinator

# List of Project Opportunities

*List of Project Opportunities*



*Direct Install Track*



*Community Install Track*



Band council chooses which project opportunities to pursue, up to the \$100,000 cap

# List of Project Opportunities – Example (estimated from past projects, may not apply to your buildings)

Project	Electricity Savings (kWh / year)	Bill Savings (\$/year)	Project Cost (\$)	Project Timing	Install
<b>Band Office</b> Interior Lights	18,000 kWh/year	\$2,750	\$16,000	Spring 2023	Direct Install Track
<b>School</b> Interior Lights	22,000 kWh/year	\$3,300	\$26,000	Summer 2023	Direct Install Track
<b>School</b> Exterior Lights	11,000 kWh/year	\$1,600	\$12,750	Summer 2023	Direct Install Track
<b>Waste Water Treatment</b> VFD	50,000 kWh/year	\$7,400	\$47,000	Fall 2023	Community Install Track

# Project Plan Details

## Community Install Track

- May be informed by a Detailed Engineering Study (DES)
- Measures, shipping, storage, labour cost
- Detailed project schedule – shipping, storage, installs
- Milestone payments for project costs (outlined in the Participation Agreement)
- Plan details supported by the IESO

## Direct Install Track

- Detailed project schedule
- Shipping/Storage/Logistics

## Approval

- Approved by the band council and by the IESO (Project Plan applies to both Tracks)

# Project Installation and Follow Up

- Post-project
  - IESO's vendor will follow-up and provide support to ensure that measures have been installed and are being operated according to specifications
  - IESO's vendor will recommend considerations for long-term operations and maintenance





# Next Steps

# Next Steps

## **Program Materials (Late Summer 2021)**

- Prior to launch, IESO will publish all program documents and application materials

## **Program Launch (Fall 2021)**

- IESO will be accepting program applications in the fall



# Indigenous Energy Support Programs

# Indigenous Energy Support Programs continued



Indigenous Energy Support Programs promote participation in the energy sector by supporting community capacity building.



In 2020, 61 Indigenous communities and organizations applied across the province – seven of which are taking part for the first time.



Continued collaboration and engagement with First Nation communities to understand and support future needs.

# Indigenous Energy Support Programs

- Indigenous Community Energy Plan (ICEP)
- Education and Capacity Building Program (ECB)
- Indigenous Energy Projects Program (IEP)
- Community Energy Champion Program (CEC)

Application window is open until August 6, 2021 at 11:59 pm EDT.

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# Contact Us

**Please visit our website for more information:** [www.ieso.ca/funds](http://www.ieso.ca/funds)

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# Questions?