

Energy Performance Program

Customer Presentation

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Agenda

- Why Energy Performance Program?
- How did Energy Performance Program Come About?
- Program Overview
- Eligible Measures
- Baseline Energy Models
- Advantages & Considerations
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- Targeted Customers
- Customer Experience
- How to Participate?



The IESO is working in collaboration with LDCs to implement this new program which offers customers yet another option in the energy management toolbox.

Retrofit Program

HPNC Program

LDCs Local Programs

Process and Systems Program

Energy Performance Program

Why Energy Performance Program?

- The Pay for Performance concept promotes operational and behavioural changes to achieve energy efficiency, alongside capital investment projects - this approach promotes a more holistic and ultimately more effective approach to energy management.
- Move from incenting projects to incenting energy management.
- Due to the whole-building performance approach, there is no need for individual project M&V
- The Energy Performance Program streamlines the application process for customers by enabling them to directly apply to IESO for facilities throughout the province.

How did Energy Performance Program Come About?

- In June 2016, the Ministry of Energy directed the Independent Electricity System Operator (IESO) to develop and centrally deliver a new pay-for-performance conservation incentive program for customers with facilities across multiple LDC service territories.
- Program design strongly influenced by input from multi-site customers, LDCs, and energy services companies, and the experience with a successful 18-building pilot.
- Program launched December 21, 2016.

Program Overview

- Program provides customers with Commercial & Institutional facilities located in multiple LDC service territories with the opportunity to receive energy efficiency incentives on a pay-for-performance basis.
- Participants receive \$0.04/kWh of sustained savings every year for up to four consecutive years.
- Savings measurement and verification (M&V) is performed at the whole-building level, comparing metered consumption to the baseline established by a building-specific energy model.
- For each Pay-for-Performance Period, the Performance Incentive for each Facility will be limited by maximum savings equal to 20% of the annual electricity consumption for the period used to establish the Facility's Baseline Energy Model.

Program Overview Cont'd

- Individual Facility with historical annual consumption $\geq 1,500,000$ kWh, and available 24 months of hourly metered data.
- Up to 5 buildings can be aggregated into a single energy model (with annual consumption $\geq 1,500,000$ kWh).
- Commit buildings to participate for at least two years and plan to realize at least 5% energy savings per building;
- Participating buildings are ineligible for other Save on Energy programs (with exception of Energy Manager incentives).
- Participants are entitled to receive a Modelling Incentive of \$1,500 for each accepted Facility, up to a maximum of \$15,000 for 10 Facilities.

Eligible Measures

- Eligible Measures are any Measures implemented in a Facility (including equipment retrofits, controls installation, system, recommissioning, and behavioural initiatives) but specifically excluding:
 - any Measures that are behind-the-meter generation projects that **do not** meet the requirements of the IESO's Behind-the-Meter Generation Project Rules.
 - any Measures involving fuel-switching that do not meet the IESO's Fuel Switching Guidelines.
 - projects through the IESO Feed-in Tariff (FIT) Program and micro-FIT Program (e.g. behind-the-meter renewable generation).

Baseline Energy Models

- Baseline Energy Models are developed through regression analysis of historical interval meter data with weather, hours of operation, or other appropriate independent variable data.
- A single Facility may have model subtypes for weekdays vs weekends, heating season vs. cooling season, etc.
- Models must be validated using a posted tool that compares daily consumption predicted by the model against actual measured consumption during a historic period.
- Customers are free to use the tool of their choice (Excel, RETScreen, specialty energy software, etc.) to derive the model (i.e. formula).

Advantages & Considerations

Advantages

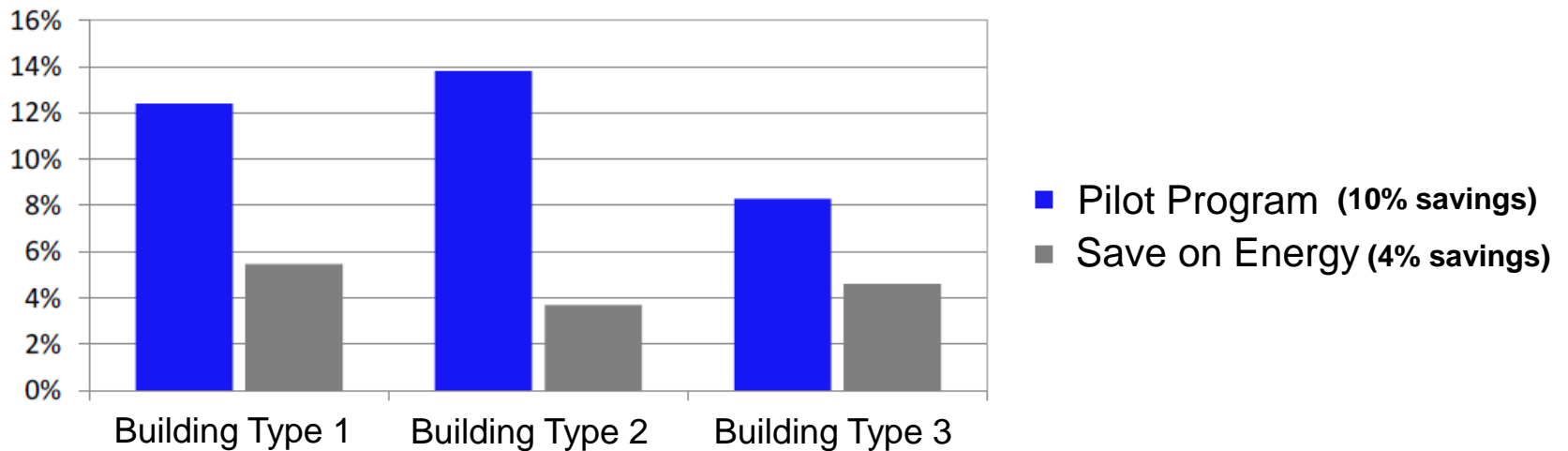
- Multi-year, whole-building approach enables full capture and incentivize savings from O&M measures
- Centralized Application administration and review processes
- Single incentive application and savings M&V process for multiple projects vs multiple Retrofit applications
- Higher overall incentive if savings maintained, performance will be assessed annually relative to an original established baseline.
- Customers are compensated for energy savings at the same rate regardless of which initiatives are pursued, and the incentive is not capped by the project costs.

Considerations

- Must have ability to maintain the savings over multiple years
- Unable to participate in other Save on Energy programs (with exception of Energy Manager incentives).
- Incentive paid annually

P4P Pilot program - Result

Percentage of Electricity Savings by Incentive Program



18 Buildings in the P4P Program - One Application

Buildings in the Save on Energy Program – 329 Applications

Testimonial

“The pay-for-performance approach allowed us just to do the right thing knowing that we would be rewarded for it”

-P4P Pilot Participant

Targeted Customers

- Commercial Real Estate
- Retail
- Regional Municipalities
- Multi Unit Residential Buildings
- University/Schools

What Makes a Facility a Good Candidate?

- Minimum 2 years hourly electrical interval data is available.
- Daily energy consumption can be reliably predicted based on weather, hours of operation, or other quantifiable variables.
- Data for relevant variables is accessible/verifiable.
- Consistent energy use patterns to establish baseline energy consumption (model) against which savings can be measured.

What Makes a Customer a Good Candidate?

- Organization commitment to energy management and/or continuous improvement.
- Possess or are willing to implement performance monitoring systems.
- Experience with energy savings projects with a history of participation in the Save on Energy program.
- Focus on operational/behavioural savings.

Customer Experience

Step 1

- Customer applies to Program with Baseline Energy Models for applicant Facilities

Step 2

- IESO reviews Baseline Energy Models and confirms Applicant eligibility

Step 3

- IESO countersigns Participation Agreement to execute

Step 4

- Participants receive Modelling Incentive Payment

Step 5

- 12-month Pay-for-performance period begins and Participant implements Eligible Measures.

Step 6

- Participant submits Savings Report and details of implemented Measures

Step 7

- IESO reviews Savings Report and confirms Participant incentive

Step 8

- Participant receives incentive

(Steps 5, 6,7 and 8 repeated on an annual basis up to 4 years)

How to Participate?

To apply for the Energy Performance Program, submit the following documents to energyperformanceprogram@ieso.ca:

- A signed Agreement
- A completed Application Form
- Minimum two Facility Application Forms for facilities located in the service territories of different LDCs.
- A Baseline Energy Model for each Facility Application as described in the Program's M&V Procedures and validated using the Baseline Energy Model Validation Reports Tool.

Program webpage: <https://saveonenergy.ca/Business/Program-Overviews/Multi-Site-Customers/Energy-Performance-Program.aspx>

Questions?

Thank you

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