



Custom Retrofit Program Guidelines

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efficiencyns.ca



1. Program Description

The Custom Retrofit program (“Retrofit”) provides eligible organizations with technical and financial support to help them conduct scoping and feasibility studies and implement technical improvements in their facilities using a customized and flexible approach. The Retrofit delivery process is structured in a way that enables participation regardless of the project phase as long as implementation has not yet started. Retrofit is meant to meet a wide range of participant requirements and support a variety of energy efficiency initiatives.

2. Eligibility Criteria

2.1. Participant Eligibility

A Participant must be a Non-Residential Customer or a Farm Operation that has not yet entered a binding agreement to acquire the Measures or services required to install the Measures, except in the case where the Participant can demonstrate to ENS’s satisfaction that the Participant intended to apply to the Retrofit Program prior to entering into a binding agreement.

2.2. Facility Eligibility

- a) Institutional, non-profit, commercial (including multi-unit residential), or industrial facilities served directly or indirectly by Nova Scotia Power Inc.
- b) Facilities consume at least 350,000 kWh annually (exceptions made at the discretion of ENS, particularly for onsite generation/renewables projects)
- c) Multiple smaller facilities may be grouped for a project (e.g. schools)

2.3. Project Eligibility

- a) Projects save electrical energy (“energy savings”) or reduce the utility peak demand (“demand savings”)
- b) Electrical energy and demand savings from the project cannot exceed the actual usage provided by Nova Scotia Power Inc.

- c) Energy saving projects produce a minimum 15,000 kWh of electrical energy savings per year
- d) Projects have a simple payback period of no less than 1 year, and no greater than 15 years before ENS incentives

2.4. Measure Eligibility

- a) Measures save electrical energy or reduce utility peak demand
- b) Energy-saving technology is not prescribed (has an applicable rebate through a prescriptive program)
- c) Common measures include HVAC, refrigeration, compressed air, motors and motor controls, and renewables

2.5. Eligible Costs

Eligible costs are expenses incurred by participants to complete approved studies or projects. The following are eligible Custom costs:

- Engineering costs (consultant or in-house staff)
- Equipment purchase and delivery costs
- Installation and commissioning labour

Program staff use eligible costs, which may apply to reference cases and proposed cases, to calculate projects' incremental costs and may affect projects' implementation incentives. Contingency amounts (i.e., additional budget allowances for cost overruns) are not considered eligible project costs. Supporting documentation to verify the costs will be required (estimates, quotes, invoices, etc.). Sales tax is not considered an eligible cost.

2.6. Eligibility Rationale

Retrofit's eligibility criteria limits overlap with other ENS programs and ensures the program focuses on BNI (Business, Non-Profit, Institutional) customers in Nova Scotia. The measures included within

the program represent the best investment for Nova Scotia ratepayers, in terms of cost-effective energy-use reduction.

3. Program Incentives

3.1. Scoping Study Rebate

Rebates are available to cover 50% of the cost of a scoping study, up to a maximum of \$1,000. The scoping study must be completed no more than three months prior to the submission of the rebate application. Scoping studies must be approved and signed by a Professional Engineer (P.Eng). In addition to the scoping study and completed rebate application, a copy of an invoice showing the scoping study has been paid for by the customer is required. The rebate application details the information required to be detailed in the study.

3.2. Feasibility Study Incentives

\$15,000, up to 100% of study cost, upon pre-approval

3.3. Implementation Incentives

Implementation incentives are calculated as the maximum of the following, where the energy and demand savings values come from the study findings:

- Energy Savings: \$0.15/kWh
- Utility Peak Demand Savings: \$250/kW

Subject to the following limitations:

- Simple payback isn't reduced to less than one year
- Up to 50% of project incremental costs
- Any study incentives will be deducted from the implementation incentive
- Maximum incentive for Custom is \$750,000 per project.

One customer may implement more than one project; but the total amount ENS will offer to any customer in a given funding year is limited and at ENS's discretion.

ENS pays implementation incentives after measuring and verifying savings. If the verified savings are within 85 percent of those estimated in the CPA, the participant will receive the full incentive. If the verified savings are less than 85 percent of what was estimated, then ENS reserves the right to prorate the final incentive. The measurement and verification approach will be determined prior to the project commencing and ENS will work with the customer and consultant in establishing the M&V plan.

4. Program Process

4.1. Feasibility Study

A study is required to determine the viability of every Custom Retrofit project, there are two options:

1. Complete the study with funding from Efficiency Nova Scotia:
 - a. In partnership with a consultant, fill out the 'Custom Retrofit Project Application – For Projects Seeking a Feasibility Study Incentive' and send to Efficiency Nova Scotia for approval.
 - b. Once application is approved, carry out the Feasibility Study and complete within 6 months.
 - c. Upon completion, submit study and the invoice from the consultant for review and approval.
 - d. Once approved, feasibility study incentive will be issued as follows:
 - i. 50% if the project does not move forward
 - ii. 100% if the project moves forward to a signed Custom Project Agreement (CPA)
2. Complete the study without funding, or use an existing study:
 - a. Fill out the 'Custom Retrofit Project Application – For Projects Not Seeking a Feasibility Study Incentive' and send to Efficiency Nova Scotia for approval with supporting documentation if a study is already complete.

- b. Efficiency Nova Scotia will review application and confirm eligibility for the Custom Retrofit Program.
- c. Once approved, if study is not yet complete, complete the study and submit for review.
- d. The study will be reviewed by Efficiency Nova Scotia to determine if it meets the requirements for use in determining an implementation incentive.

For either option, please refer to the Feasibility Study Guide and Checklist for what information is to be included to be used for determining an implementation incentive.

4.2. Project Implementation

1. Efficiency Nova Scotia will use the information from the study to create a Custom Project Agreement (CPA). If there are measures included in the study that will not be advanced, inform the Project Engineer.
2. Review, sign, and return the CPA to the Project Engineer within 30 days. This is the contract with Efficiency Nova Scotia that outlines the agreed upon incentive, the required measurement & verification, and terms and conditions.
3. Implement the project as per the CPA, any delays beyond the project completion date must be communicated to the Project Engineer to remain eligible for the full incentive.
4. Complete the measurement & verification as specified in the CPA. See Section 5.0 – Measurement & Verification for additional details.
5. A site visit by Efficiency Nova Scotia may be conducted.
6. Submit M&V report to Project Engineer for review, and upon acceptance the incentive will be issued. If the verified savings are less than 85% of the expected amount, the incentive may be prorated.
7. After project completion, projects may be reviewed by Efficiency Nova Scotia's third-party evaluator. This could include a thorough technical review, participant surveys, and a site visit. Complying with the requests of the evaluator are essential for the continuity of the Custom program and refusal may impact the ability for future participation in Efficiency Nova Scotia's programs.

5. Measurement & Verification

Measurement and Verification (M&V) is the process of planning, measuring, collecting, and analyzing data for the purpose of verifying and reporting energy savings resulting from the implementation of Energy Efficiency Measures (EEMs).

Measurement and Verification is a critical component of all Custom projects completed with Efficiency Nova Scotia. This Measurement and Verification (M&V) Guide has been developed to help consultants, energy managers, and program staff translate M&V best practices into successful projects.

Please refer to the full Measurement and Verification Guide for additional information on M&V requirements for Custom Retrofit projects.

6. Conditions for Payment

All measurement and verification along with reporting requirements must meet expectations prior to payment. ENS will conduct a review of all documentation for completeness and accuracy, and at its sole discretion, will determine if the program requirements have been met. While ENS will make a reasonable effort to process the files and payment in a timely fashion, due to varying resource availability throughout the year, processing may take up to 2 months.

7. Program Definitions

Select terms used in these guidelines are defined as follows:

Application The Custom Retrofit Project Application, either for projects seeking or not seeking a Feasibility Study Incentive. The Application is to be jointly completed between the Participant and their chosen Consultant, and approved by Efficiency Nova Scotia staff.

Base Case To determine gross savings, a base case is established providing detailed information about the reference (e.g., pre-existing or standard) measure or equipment chosen to be compared with the efficient measure or equipment. For the reference measure or equipment, the

base case may include such information as the hours of operation, wattage, and the base consumption.

Custom Project Agreement (CPA) A contractual agreement between Efficiency Nova Scotia and the Participant that outlines the agreed upon incentive, the required Measurement & Verification, and terms and conditions of the Custom Retrofit Project.

Demand Savings Demand Savings refer to Utility Peak Demand Savings, which are defined as the average reduction in demand (kW or kVA) during non-holiday weekdays between 5-7 pm, December through February.

Effective Useful Life (EUL) The period an energy efficiency measure is expected to be in service and provide energy and/or peak demand savings.

Eligible Costs Eligible costs are expenses incurred by Participants to complete approved studies or Custom Retrofit Projects. A list of eligible project costs is provided in this Guideline document.

Energy Savings First-year electricity savings (kWh) which result from the Custom Retrofit Project as outlined in the CPA and verified through the M&V process.

Equipment Life The number of years installed equipment will operate before it fails.

Estimated Incentive The anticipated implementation incentive to result from the successful completion of the Custom Retrofit Project. If the verified savings are less than 85% of the expected amount, the incentive may be prorated.

Evaluation Efficiency Nova Scotia hires a third-party evaluator on an annual basis to conduct an impact and process evaluation on our programs. Completed Custom Retrofit Project may be reviewed, which includes a thorough technical review, participant surveys, and a site visit.

Evaluator As a regulated utility, Efficiency Nova Scotia hires a third-party evaluator to conduct the Evaluation. In addition to this, the Nova Scotia Utility and Review Board hires a verifier to oversee the Evaluator's work as an extra assurance, providing ratepayers with confidence that Efficiency Nova Scotia's programs are meeting targets.

Facility The institutional, non-profit, commercial (including multi-unit residential), or industrial building(s) in which the Custom Retrofit Project will occur.

Interactive Effects Effects on the energy consumption of other systems in the building/facility (such as heating and cooling) due to the installation of an energy efficiency measure.

Measure An energy efficiency measure which saves electrical energy and/or reduces utility peak demand

Measurement & Verification (M&V) The process of planning, measuring, collecting, and analyzing data for the purpose of verifying and reporting energy and/or demand savings resulting from the Custom Retrofit Project.

Participant The Non-Residential Customer or Farm Operation that is undergoing the Custom Retrofit Project as outlined in the CPA.