

DETAILED GUIDE FOR APPLICANTS

# OPTER



## Optimization Program for Refrigeration Systems

Supermarkets

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## Introduction

The first objective of the Optimization Program for Refrigeration Systems (OPTER) in supermarkets is to reduce greenhouse gas (GHG) emissions originating from the refrigeration activities of infrastructures by encouraging the introduction of high-performance technologies.

The selected approach aims to:

- reduce the quantity of refrigerants used, particularly through the installation of secondary loops;
- encourage the use of more environmentally friendly refrigerants;
- further the integration of refrigeration, heating, and ventilation systems that support the reduction of greenhouse gas (GHG) emissions produced by the building's heating equipment.

## 1. ELIGIBILITY

### 1.1 Applicants

Only the owners of the refrigeration installations are eligible for this program.

Companies offering energy-saving services, mechanical system management services, consultants, energy distributors, and other service providers cannot take the place of their clients, or receive financial assistance in the place of the applicant. However, these enterprises may file a request for financial assistance if the owner invests them with a power of attorney.

### 1.2 Infrastructures

To be eligible, a building must:

- be used for commercial purposes;
- house refrigerated installations (cold rooms, refrigerated counters, or others) that serve to preserve food (supermarket or equivalent);
- contain interior heated areas and a closed machinery/service room;
- be equipped with a mechanical system (heating, ventilation);
- be equipped with an independent refrigeration system;
- be located in the province of Quebec.

New construction projects as well as projects involving major renovations and the replacement of existing infrastructures are eligible.

Infrastructures that were the subject of a financial contribution from a public organization in the last five years for the purchase and installation of a system similar to those covered by this program are not eligible.

### 1.3 Projects

Projects will need to show a minimum reduction<sup>1</sup> potential of 100 tons of CO<sub>2</sub> equivalent per year in GHG<sup>2</sup> emissions to be eligible. These savings will need to be generated by the measures arising from these three approaches:

- reduce synthetic refrigerant loads through the use of secondary fluids and/or other strategies;
- integrate the heating/ventilation/air conditioning systems with the refrigeration system (HVAC-R) by optimizing the recovery of heat waste from the refrigeration system to meet the building's heating needs. At least 50% of the heat rejected by the refrigeration system must be recovered. This percentage takes into account the capacity of the heat recovery equipment. It also considers the existing equipment and the equipment that will be installed within the scope of the project for which a request for financial assistance was filed;
- adapt to Nordic climate conditions while optimizing control strategies.

### 1.4 Costs

Eligible costs are limited to those linked to the purchase of the equipment required to create one or several of the following functions:

- recover the energy from the desuperheater, the subcooler, and the condenser (heat exchangers, heat pumps, etc.);
- use the recovered energy (heat exchangers, heat pumps for the pre-heating and heating of spaces, pre-heating and heating of domestic water, supply of thermal energy to adjacent buildings, etc.);
- store the thermal energy necessary to get the most out of the recovered energy
- cost of the pipelines for thermal energy storage;
- cost of the pipelines and of the related pieces of equipment used to distribute and release heat;
- cost of the piping required to install the secondary loops;
- improve the energy efficiency of the refrigeration system by subcooling the refrigerant (exterior air cooling, pre-heating of fresh air etc.).

<sup>1</sup> When dealing with new constructions, the reduction is referred to as "avoided" GHGs while renovations made to existing buildings reduce the quantity of GHGs emitted.

<sup>2</sup> The project's potential for reducing GHG emissions is an estimate made for the specific purposes of the program. This potential is established on the basis of the features of the reference building.

Some other pieces of equipment may be eligible (such as systems and instruments used for operation, control, monitoring, diagnostic, and measuring purposes) when they are required within the framework of an eligible project and generate GHG savings.

The following costs are not eligible under the financial assistance program:

- costs related to the installation of the eligible equipment;
- costs related to the equipment generating reductions in electric kWhs but not in GHGs;
- costs related to supplementary and backup heating systems;
- costs related to the purchase of replacement parts;
- labour costs related to the dismantlement of existing systems;
- federal and provincial taxes paid for the purchase of equipment;
- all expenses incurred prior to the date of acceptance by the Agence. The commitment date of an expense incurred by the applicant shall be considered as the date on which a contract of purchase is signed or an order slip is issued;
- any other cost that is not mentioned as eligible at the previous item.

## 2. POWERS AND OBLIGATIONS

### 2.1 Powers and obligations of the Agence

The Agence may:

- refuse a request for financial assistance if it does not meet the program's criteria or if the program's budget has been used up;
- end the program or modify it without prior notice;
- request modifications and additional information from the applicant;
- give greater priority to and accept projects that have a greater impact on GHG reduction;
- advocate projects based on the reduction potential of GHG emissions.

The only future obligation of the Agence is to grant the financial assistance specified in the agreement that will be reached with the applicant. The Agence cannot, at any time, be held responsible for any damage or prejudice of any nature resulting from this program.

### 2.2 Obligations of the applicant

The applicant must:

- complete the implementation project no later than twelve (12) months after the effective date of the agreement;
- inform the Agence of any other form of financial assistance received or requested for the implementation project;
- notify the Agence, without delay, of any change affecting the execution of the project in a written report. The Agence will decide on the pertinence of the modifications and on the continuation or non-continuation of financial assistance based on the terms already defined in the agreement;
- accept to disclose information related to the implementation as prescribed under the agreement that will be signed with the Agence.

## 3. FINANCIAL ASSISTANCE

### 3.1 General

The Agence grants financial assistance for implementation projects that are eligible and accepted under the criteria described at item 1.3 and as per the agreement that will be signed with the Agence. However, if the applicant requests or receives financial assistance from other sources than those specified on the *Financial Assistance Request Form* the amount of financial assistance prescribed by the agreement could be revised downward based on the criteria.

As the available budget is limited, the amounts will be granted based on the date on which the requests for financial assistance are received and deemed valid by the Agence until the available budget is used up. The currency used to calculate and present accounting and financial data must be the Canadian dollar.

### 3.2 Amount granted

The calculation of the financial assistance contribution granted by the Agence within the framework of the implementation project corresponds to the lesser of the following amounts:

- financial assistance calculated according to the reduction<sup>1</sup> potential of GHG emissions related to the project<sup>2</sup>;
- purchase cost of eligible equipment.

Under no circumstances shall the granted financial assistance exceed \$125,000.

<sup>1</sup> When dealing with new constructions, the reduction is referred to as "avoided" GHGs while renovations made to existing buildings reduce the quantity of GHGs emitted.

<sup>2</sup> The project's potential for reducing GHG emissions is an estimate made for the specific purposes of the program. This potential is established on the basis of the features of the reference building.

### 3.3 Financial assistance payment

The financial assistance contribution will be divided into two payments:

- the first payment corresponds to 80% of the granted financial assistance made after the Agence has accepted the final equipment report confirming the installation of all pieces of equipment (see 4.3 – Implementation and Equipment report update;
- a second payment corresponds to the residual amount of financial assistance made after the Agence has accepted the final report. Acceptance is based on the results obtained from the building after one year of operation and on the receipt of a declaration concerning financial assistance received from other sources (see 4.4 – Post-implementation follow-up and Final report).

Prior to receiving each of these financial assistance payments, the applicant must have presented the Agence with an invoice.

To avoid any delays in payment, the following information must appear on the invoice:

- the name of the applicant to whom the assistance is granted;
- the number of the agreement assigned by the Agence;
- invoice date;
- a description of the costs and the total amount confirmed by the Agence (amount of the financial assistance payment);
- amount of the invoice.

Payment is issued upon presentation of invoices and within thirty (30) days following the receipt of the applicant's invoice.

### 3.4 Declaration of other financial contributions

The applicant must clearly list all sources and amounts of financial assistance received or requested in relation to the implementation project on the *Financial Assistance Request Form*. During the project, the applicant must inform the Agence, without delay, of any other form of financial assistance that was requested or received that does not appear on the applicant's request.

However, the financial assistance amount granted by the Agence can be combined with assistance from complementary programs offered by energy distributors or by other government ministries and agencies. Should this be the case, the sum total of the different forms of financial assistance received for the eligible measures may, under no circumstances, exceed the costs allowable under the terms of this program. The financial contribution of the Agence will be adjusted to factor in the other amounts received, when applicable.

The financial assistance process is divided into five phases:

PHASE 1 – Complete the request for financial assistance and file the request with the Agence

PHASE 2 – Signature of the agreement

PHASE 3 – Implementation and Equipment report update

PHASE 4 – Post-implementation follow-up and Final report

PHASE 5 – Payment of financial assistance

### 4.1 Complete the request for financial assistance and file the request with the Agence

The applicant must define the possible energy saving and GHG reduction measures that can be carried out by his implementation project through the use of high-performance refrigeration equipment. The request for financial assistance must be made after the project design phase is completed or sufficiently advanced to specify the required pieces of equipment but before the purchase of said equipment.

#### Documents to be supplied by the applicant

To present a request for financial assistance, the applicant must:

- fill out the *Financial Assistance Request Form* and send it to the Agence (one original paper copy with the applicant's signature and one electronic copy) while making sure that all the required documents are attached to the form. An electronic version of the form and its related documents are available on the Web site of the Agence at: [www.aee.gouv.qc.ca](http://www.aee.gouv.qc.ca);
- fill out the implementation spreadsheet that presents the proposed system. The implementation spreadsheet is also available on the Web site of the Agence at: [www.aee.gouv.qc.ca](http://www.aee.gouv.qc.ca);
- attach the refrigeration schedule, the ventilation plan, and other pertinent diagrams;
- provide an estimate of equipment costs by completing the equipment report;
- provide the technical descriptions of the submitted pieces of equipment;
- provide any other document that needs to be submitted with the *Financial Assistance Request Form* as specified on the form. The applicant must be sure to provide all necessary documents for his financial assistance request to be valid.

The Agence may ask the applicant for additional information in order to establish the eligibility of his request for financial assistance.

### Filing the request for financial assistance (Applicant)

The *Financial Assistance Request Form* and the attached documents must be sent to the Agence by mail AND by e-mail.

BY MAIL:

Agence de l'efficacité énergétique

OPTER - volet supermarchés

Direction générale des secteurs résidentiel, des affaires et institutionnel

5700, 4<sup>e</sup> Avenue Ouest, RC

Québec (Québec) G1H 6R1

BY E-MAIL:

opter\_supermarches@aee.gouv.qc.ca

### Confirmation of receipt by the Agence

The Agence confirms the receipt of the financial assistance request in writing to the applicant. The Agence also informs the applicant of the name of the project manager that will be in charge of his file. The applicant can then directly contact the project manager assigned by the Agence to find out about the status of his file.

### Evaluating the applicant's request for financial assistance

Upon receipt of a valid request for financial assistance, the Agence evaluates its eligibility according to the criteria defined in the present document under item 1 – Eligibility.

At this stage, the Agence can ask the applicant for additional information or can refuse a financial assistance request that is incomplete.

### Confirming the acceptance or the refusal of a request for financial assistance

The acceptance or the refusal of a request for financial assistance is communicated in writing to the applicant within a usual delay of three (3) weeks following the receipt of the complete file by the Agence.

Once the Agence has accepted the project, the applicant can proceed with purchasing the equipment accepted for the implementation project.

### 4.2 Signature of the agreement

If the implementation project is accepted, the applicant and the Agence must sign the agreement put together by the Agence containing the description, the objectives, and the costs of the project as well as the amount of financial assistance that is granted.

### 4.3 Implementation and Equipment report update

The applicant carries out the implementation project. The contact person of the applicant must notify the Agence without delay of any changes made to the project during its execution in a written report. Should this be the case, the Agence will judge the pertinence of the changes in order to maintain, increase, or withdraw financial assistance contributions, according to the terms already laid down in the agreement.

At the end of the implementation phase, the applicant must file the following documents with the Agence:

- one copy of the paid invoices for the equipment that was purchased;
- the final equipment report signed by a professional and by the applicant confirming that the installation of the equipment is completed and complies with the agreement concluded by both parties.

### 4.4 Post-implementation follow-up and Final report

The applicant must conduct a post-implementation follow-up on the equipment over a period of one year of operation as stipulated in the agreement entered into with the Agence.

The applicant must provide the Agence with the final report by the deadline specified in the agreement. This report contains:

- the title and number of the agreement;
- the dates of the operating period;
- a portrait of the operating schedule;
- a description of the problems encountered during the operating period, when applicable;
- the quantity of refrigerant that was added to the system during the course of the period (to help quantify leaks; activity reports can also be required);
- one copy of all the energy bills (electricity, natural gas, propane, oil, etc.) for the period;
- a declaration of the amounts of financial assistance received from or currently being processed by other financial assistance programs.

If the applicant neglects to provide the required documents within the prescribed deadlines, the Agence can cancel the granted financial assistance and demand reimbursement for the amounts of financial assistance that have already been paid.

