



# Participant's Guide

## Energy Efficiency Program – Energy Diagnosis and Implementation

Major Industries

Feasibility Studies and Implementation



November 4, 2020  
(Revised December 1, 2022)



# Imagine energy differently

As part of its Energy Efficiency Plan, Énergir offers grants to its customers through its energy efficiency programs to help them reduce their natural gas consumption and their greenhouse gas (GHG) emissions.

This *Participant's Guide* is intended for customers who wish to participate in the grants for Feasibility Studies and Implementation Incentives.

The *Guide* includes the steps to follow to make a request for financial assistance, as well as the admissibility criteria. The *Guide* also includes the forms required to make a request for financial assistance.

Énergir encourages participants to submit their requests electronically, along with the supporting documentation.

## Major Industries



For more information

### For more information, please consult:

- Your Major Industries representative;
- The Énergir DATECH team of engineers

### To submit a request, or for any administrative information regarding an application:

#### By e-mail:

[energyefficiency@energir.com](mailto:energyefficiency@energir.com)

#### By telephone:

514 598-3410





Definitions

# Definitions

Below are definitions of the various terms used in this Guide.

**Additional cost:** The difference between the implementation costs (material acquisition, installation and engineering work) of the efficiency scenario and those of the reference scenario. In the case where the reference scenario corresponds to the existing situation and there are no implementation costs, additional cost corresponds to the implementation costs of the energy efficiency scenario.

**Efficiency scenario:** This scenario includes the energy efficiency measures that are the subject of the request for financial assistance.

**Eligible expenses:** Additional cost of the measures or project.

**Energy efficiency measure (EEM):** A measure implemented with a view to increasing the energy performance of equipment, a system or building, by reducing its natural gas consumption compared with the reference scenario.

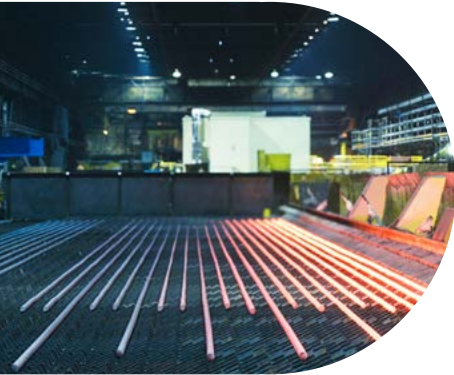
**Large-scale project:** A large-scale project is a project for which annual natural gas savings are estimated at 500,000 m<sup>3</sup> and over at the time of the request for admissibility.

**Marginally free energy:** Thermal energy released that would normally be lost or discharged without being used. Once the equipment to capture it is in place, this energy is considered free from a marginal point of view (versus energy sold by an energy distributor that is not free).

**Mechanical compression refrigeration systems:** A mechanical compression refrigeration system basically comprises a motor, a compressor, a cooler, a condenser, an expansion valve and an evaporator that transfers heat from one place to another. Heat pumps are essentially mechanical compression refrigeration systems. They act as exchangers of so-called active heat since they have a motor. The electrical energy consumed by the motor is usually in the form of heat, which is discharged to the condenser.

**Monetary savings:** Reductions in the cost of energy recorded during the monitoring period, compared with the reference scenario.

## Major Industries



### Definitions

**Payback period (ROI):** Length of time required before the value of the annual natural gas savings associated with the measure are equal to the eligible expenses for the project.

$$ROI = \frac{\text{Eligible expenses of energy efficiency measure attributed to natural gas}}{\text{Annual natural gas savings (\$) associated with the measure}}$$

$$ROI = \frac{\text{Eligible expenses of energy efficiency measure attributed to natural gas}}{\text{Annual amount saved in m}^3 \times \text{unit costs of natural gas (Transportation + Load balancing + Inventory + Distribution + Supply + SPEDE (Cap \& Trade System))}^1 \text{ avoided cost}}$$

<sup>1</sup> Unit costs of natural gas are established based on the average of the 12 months preceding the request for financial assistance for the implementation. Customers who supply their own services may use their specific prices on condition that these are justified by supporting documentation and that they were in effect at the time the request was submitted. When these are not available, the costs published by Energir will serve as the reference.

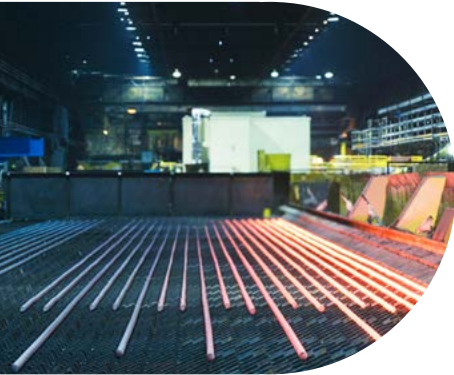
For customers who are not considered major emitters under SPEDE, the SPEDE avoided cost corresponds to the charge for the SPEDE service. Customers considered major emitters may use an estimate of their own SPEDE avoided cost on condition that it is documented and justified.

**Reference scenario:** The reference scenario corresponds to the situation before implementation of the energy efficiency measures, if it is shown that the existing situation could be maintained (i.e., systems and equipment still functional after several years).

In the case where the existing situation cannot be maintained (i.e., end-of-life systems or equipment or before being replaced) or in the case of new construction or a new installation, the reference scenario corresponds to the system or equipment that could have been installed, according to standard market practice in energy efficiency.

**Renewable thermal energy/known technologies:** Air/aerothermal, ground/geothermal, solar/panels for heating water or air for walls or roofs.

**Unused waste heat:** Waste heat coming from an essential or unavoidable activity that is lost (stale air, processes, combustion products, motors/compressors/chillers, lighting, servers...)



Description and objective



## Description and objective

The grants are aimed at identifying and implementing energy efficiency measures for rationalizing the consumption of natural gas that are not eligible for any other Énergir energy efficiency program.

The **Feasibility Studies** component helps defray part of the cost of a feasibility study covering energy efficiency measures. The study will be carried out by an engineering consulting firm registered by Énergir. The list of firms is available on [Énergir](#). The study may also be carried out by an engineer in the employ of the customer.<sup>1</sup>

The **Implementation of Energy Efficiency Measures** component is aimed at rationalizing the consumption of natural gas through measures not eligible for one of Énergir high-efficiency equipment programs.

These measures will have been studied and evaluated beforehand by an engineer member in good standing of the *Ordre des ingénieurs du Québec (OIQ)*, or under the direction and immediate supervisor of an engineer with full practice rights in Québec, before being submitted to Énergir for analysis and approval.

The measures studied and/or implemented must comply with the regulations and laws applicable in Québec, in particular those dealing with air quality and environmental protection, as well as with the provisions of the Natural Gas and Propane Installation Code (B149.1).

Payment of the financial assistance should not be interpreted as a guarantee to the customer with regard to the feasibility study, the energy simulation, or the implementation of the measures. That responsibility lies with the engineer responsible for the analysis.

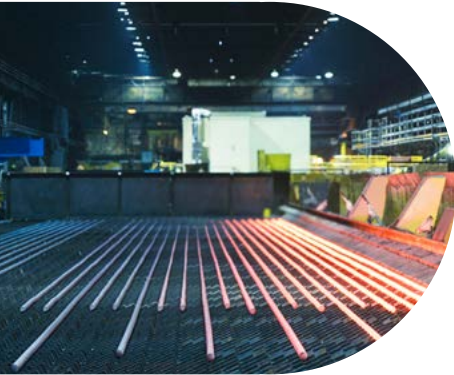
Customers who would like to participate must complete the appropriate forms included in this Guide and send them to Énergir Energy Efficiency, along with the supporting documentation.

<sup>1</sup> An Énergir major industries advisor is covered by Rates D<sub>4</sub> or D<sub>5</sub>. Affiliated accounts may also be included. Business customers covered by either Rates D<sub>1</sub> or D<sub>3</sub> are not eligible except for accounts affiliated with major industries.

Affiliated accounts are companies covered by Rates D<sub>1</sub> or D<sub>3</sub> whose energy supply is managed by a company covered by Rates D<sub>4</sub> or D<sub>5</sub>, or whose location is the same as that of a company covered by Rates D<sub>4</sub> or D<sub>5</sub>. Affiliated companies must be part of the same legal entity.

If you have any questions, please contact your Sales Representative. To find out about the grants Énergir offers its business customers, please consult: [energir.com/en/business/grants/energy-efficiency-programs/](http://energir.com/en/business/grants/energy-efficiency-programs/)

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# Feasibility Studies Grant

This grant helps defray part of the cost of a feasibility study covering energy efficiency measures.

## Study orientations

Registered firms are invited to analyze and study the potential energy savings for all forms of energy consumed by Énergir customers admissible to the grant. However, the potential natural gas savings must be as great, if not greater, than the relative portion of the customer's total energy consumption that natural gas represents at the time of the study.

For large volumes, the study must focus first on measures using gas technologies. It may cover performance, optimization or modernization measures. The savings for other forms of energy may be studied as well, as long as the cost of the study, agreed to by the customer, includes that provision.

The financial assistance from Énergir may be adjusted to reflect the natural gas savings portion of the total energy savings identified in the study.

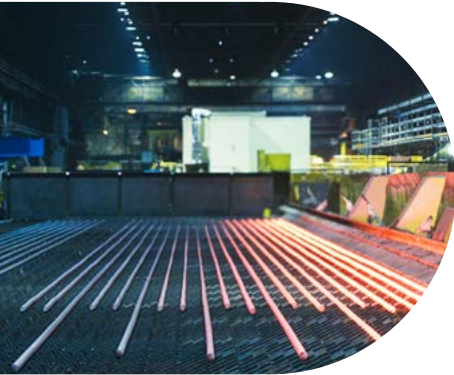
Feasibility Studies



Maximum period of time for completion (Feasibility Studies)



## Major Industries



## Feasibility Studies

## Financial assistance<sup>1</sup>

The financial assistance Énergir offers its major industries customer<sup>2</sup> is as follows:

The amount is the lesser of:

- 50% of the cost of the study before taxes, or
- \$50,000 per account number and per annual financial assistance.

Énergir may authorize more than one feasibility study per fiscal year for the same account number, when the major industry client's facilities warrant the request.

Examples of situations where Énergir may accept more than one application for the same account number in a given fiscal year include the following:

- An industrial complex with at least two deliverable output production buildings
- A plant that contains several distinct areas and consumes significant amounts of natural gas. More specifically, plant sections that can be defined by reporting entities, such as a department with an independent operating budget, or with process parameters deemed to consume significant amounts of natural gas.

Requests to carry out more than one feasibility study per fiscal year must have been approved by Énergir in advance. Each additional feasibility study request approved by Énergir is eligible for a new \$50,000 financial assistance limit.

## Contribution from other organizations<sup>1</sup>

Any participant enrolled in other financial assistance programs to carry out feasibility studies must declare any amount received or to be received by other energy distributors or government entities for the same project to Énergir. Énergir will pay the customer the financial assistance accorder under this grant, net of any contribution from other distributors or entities for the same project, such that the portion payable by the customer represents at least 25% of the costs related to this study.

Feasibility studies covered by financial assistance from *Transition Énergétique Québec (TEQ)* are not eligible for financial assistance from Énergir.

<sup>1</sup> These terms and conditions apply to requests for financial assistance for Feasibility Studies received after November 4, 2020. Requests received before November 4, 2020 are covered by the terms and conditions in effect at the time of the request.

The date of receipt of request for financial assistance for Feasibility Studies corresponds to the date Énergir received Tab 1.

<sup>2</sup> A major industries customer meets at least one of the following criteria:

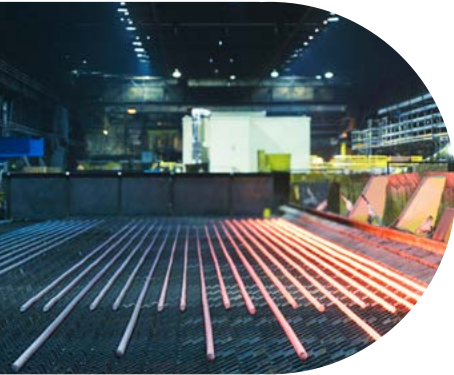
- Natural gas consumption is above 3,650,000 m<sup>3</sup>/year;
- Distribution rate is D<sub>4</sub>, D<sub>5</sub> or a dual distribution rate;
- Account is affiliated\* with a major industries customer.

\* An affiliated account is an Énergir customer subject to Rate D<sub>1</sub> or D<sub>3</sub> whose energy supply management is handled by a major industries customer or whose location is the same as a major industries customer. Affiliated companies must be part of the same legal entity as the major industries customer with which they are affiliated.

If in doubt, please communicate with your Sales Representative. For Énergir programs offered to major industries customers, consult: [energir.com/en/major-industries/energy-efficiency-programs/energy-efficient-programs/](https://energir.com/en/major-industries/energy-efficiency-programs/energy-efficient-programs/)



## Major Industries



## Feasibility Studies

## Admissibility criteria

### 1. Be an Énergir Major Industries customers

Eligible activity sectors are the:

- institutional sector;
- industrial and commercial sector.

### 2. The study must be done by a registered firm or by an engineer in the employ of a customer designated as the “participating company”

Registered firms are firms with one or more engineers specializing in energy efficiency that can support Énergir customers in identifying and implementing energy efficiency projects. Having already carried out energy efficiency projects for Énergir customers, and with access to information about the energy efficiency grants offered, these firms are well placed to guide customers and facilitate their participation in Énergir’s energy efficiency grant programs.

Énergir has made a directory of registered firms available to its customers. This directory is meant to be a tool to help customers identify and find contact details of firms that offer energy efficiency services. None of these firms is a subsidiary or partner of Énergir, and making this directory available in no way certifies, attests to, or guarantees the quality of the services offered by these firms.

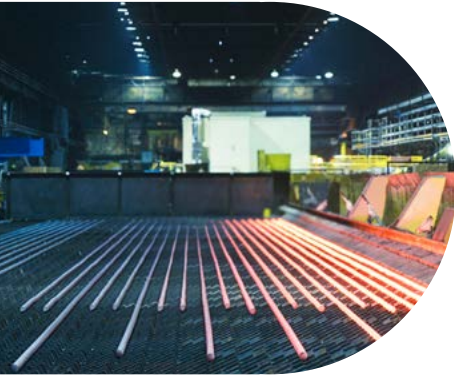
- To consult the [list of registered firms](#)
- To register your firm, send an e-mail to: [energyefficiency@energir.com](mailto:energyefficiency@energir.com)

All feasibility studies must be carried out and/or verified by an engineer member in good standing of the *Ordre des ingénieurs du Québec*.

### 3. The request for financial assistance must be submitted before the study is carried out

All requests for financial assistance for feasibility studies must be submitted before the start of the analysis, accompanied by the **Request for admissibility (Tab 1)** and the **service proposal** from a registered engineering firm. The maximum time allowed for carrying out a study is six months from the date of acceptance by Énergir.

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## Feasibility Studies

#### 4. The specifications and proposal must be respected

The feasibility study submitted to Énergir must respect the specification items described below, where applicable. The proposal must contain, but not be limited to, the scope of the mandate, the measures to be studied, the personnel who will participate in the study, with details of their fees (hourly rate, tasks, number of hours). Énergir does not necessarily want to impose a standard format standard on all firms or on all customer participants; however, the feasibility studies must meet the minimum conditions. A [Preparation Guide](#) for feasibility studies is provided for this purpose by Énergir. Also, any measure studied but not recommended must be described in the same way as the measures recommended in the study and under Tab 3.

#### 5. Measures that call for substituting natural gas by another form of energy are prohibited

Given that this financial assistance is principally aimed at the efficient and rational use of natural gas, measures for substituting natural gas by another form of energy, whether for strictly economic or short-term reasons, or for any other reason, are not admissible and must not be included in the report. Should they be included, the application will be refused without any possibility of modification. Some substitution measures may be included in the report after agreement with Énergir and before the study is carried out.

#### 6. The facilities or buildings covered by the feasibility study must not have been the subject of a similar study in the preceding five years

In the case where the facilities have been modified since the date of the last study, or the scope of the new study is so different as to make the conclusions of the earlier study obsolete or inapplicable, Énergir may, with supporting evidence, authorize the customer to participate.

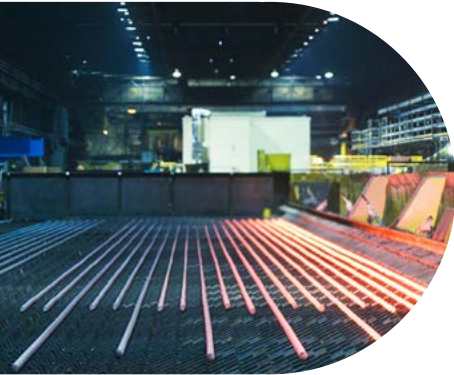
#### 7. Multi-building requests may be submitted on one form

The grant request has been adapted for different scenarios, namely:

- a) Request for one building that has its own Énergir account number;
- b) Request for multi-buildings where each building has its own Énergir account number (e.g., school commission, chain of restaurants, etc.);
- c) Request for multi-buildings where one or more buildings do not have an Énergir account number (e.g., a boiler room supplying several buildings with steam). In this case, only the buildings whose natural gas consumption can be metered individually may be included in the grant request.

A maximum of 20 buildings may be included on the same form.

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**8. Modernization should not be the main focus of the recommendations**

Measures aimed at the modernization of natural gas equipment or the building envelope should not be the main focus of the study recommendations. The objective of the study is primarily to identify possibilities other than replacing an obsolete technology by a more efficient one covered by other Énergir energy efficiency programs.

**9. Rate optimization should not be the main focus of the recommendations**

**10. A preliminary version of the feasibility study is mandatory in order to obtain a grant**

A preliminary report must be submitted to Énergir before the final version is submitted to the customer. A [Preparation Guide](#) has been produced that we strongly recommend you follow.

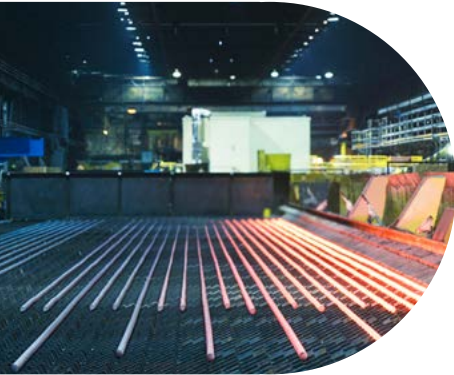
**11. The measures studied must comply with laws and regulations**

The measures studied and/or implemented must comply with the regulations and laws applicable in Québec, in particular those dealing with air quality and environmental protection, as well as with the provisions of the Natural Gas and Propane Installation Code (B149.1).

Feasibility Studies



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## Feasibility Studies

### Items from specifications

1. Description of building (year built, floor area and usage)
2. Description of building's energy systems
3. Details of energy consumption and costs<sup>3</sup>
4. Verification of any contractual agreements covering rate and contract obligations and analysis of impacts on customer
5. Inventory of energy improvements proposed

The measures recommended should be grouped into four categories:

- load reduction (performance measure);
- optimization (repair, maintenance, retrofitting, simple measures);
- modernization measures<sup>4</sup> (replacement by more modern energy-efficient equipment);
- building envelope measures (if applicable).

Each measure proposed, whether recommended or not, should include the following details:

#### 5.1 Description of each improvement and drawing (drawings optional)

When applicable, describe:

- a) the reference scenario
- b) the efficiency scenario

Please refer to the definitions page for more information.

#### 5.2 Investment required:

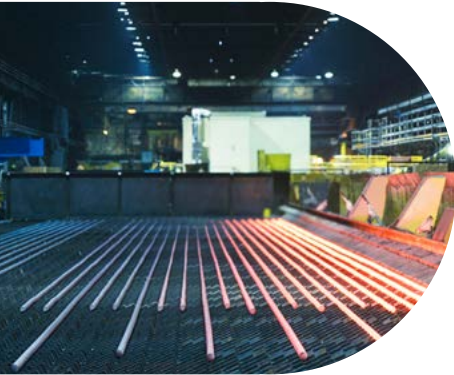
- work (details of estimates should be provided to Énergir, as indicated in the [Preparation Guide](#));
- engineering and fees;
- grants and tax measures (if offered and applicable).

Énergir requires estimates of the additional costs related to the proposed energy efficiency measures. To do so, please refer to the form showing the costs of each measure: **Detailed Report of Costs (Tab 2)**.

<sup>3</sup> Indicate the total cost of natural gas used to make the calculations of profitability and the prices of other energy sources, as described on page 19 of this Guide.

<sup>4</sup> Recommendations that concern specific Énergir energy efficiency programs should be identified in order to avoid double counting.

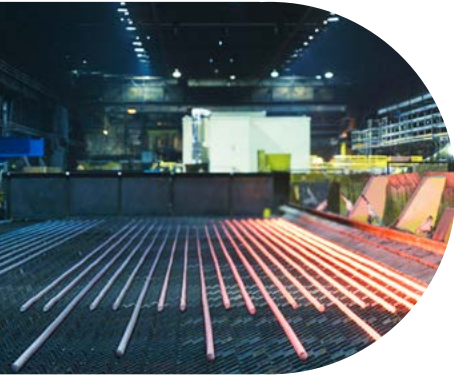
## Major Industries



### Feasibility Studies

- 5.3 Energy savings (provide detailed calculations of savings)
- 5.4 Calculations of cost-effectiveness, including ROI (payback period), using the calculation method shown on page 19.
- 5.5 Useful life of improvement and net savings over its useful live
- 5.6 Environmental impact
  - reduction in greenhouse gas emissions: quantity per year.
- 5.7 Other non-energy benefits (if applicable)
6. Timetable for the implementation of the measures
7. Training and/or awareness raising plan for managers and personnel (if applicable)
8. Recommendations with respect to performance guarantees (if applicable)
9. Appendices (information on technologies, grants, etc.)

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# Implementation of Energy Efficiency Measures

This grant is aimed at the rationalization of natural gas consumption that is not covered by any other Énergir energy efficiency program.

## Financial assistance<sup>1</sup>

The financial assistance accorded under this grant is based on the activity sector, as well as on the payback period, calculated by measuring energy efficiency before any grant. This amount is then applied to the volume of natural gas saved for the first year following implementation of the energy efficiency measures. However, the payback period must not be less than one year (three years in the institutional sector) once the amount of the Énergir grant has been deducted from the cost of the measures. Énergir will send a letter indicating the financial assistance for the whole project. The customer will then have one year from the date of that letter to implement the measures.

Implementation of Energy Efficiency Measures

	Payback period <sup>1</sup>			
	Less than 1 year	1-3 years	3 - 20 years	20 years or more
Industrial/ Commercial	Not eligible	\$0.30/m <sup>3</sup>	\$1.00/m <sup>3</sup>	Not eligible
Institutional	Not eligible	Not eligible	\$1.00/m <sup>3</sup>	Not eligible

Maximum period of time for completion (Implementation of Energy Efficiency Measures)



The maximum amount of financial assistance may not be higher than the lesser of **\$1,000,000** or **50%** of the total implementation costs before taxes (estimated project additional cost), including the cost of equipment and installation cost.

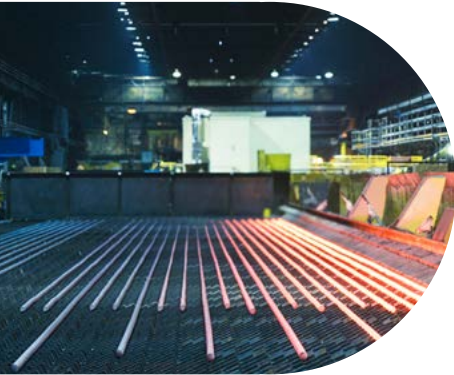
Requests for less than **\$1,000** are not admissible.

Measures for which the simple payback period (ROI) is less than one year (3 years in the case of institutions) or beyond 20 years are not eligible. However, Énergir encourages reporting such measures so all the savings resulting from the project can be calculated.

<sup>1</sup> These terms and conditions apply to requests for financial assistance for Feasibility Studies received after November 4, 2020. Requests received before November 4, 2020 are covered by the terms and conditions in effect at the time of the request.

The date of receipt of request for financial assistance for Feasibility Studies corresponds to the date Énergir received Tabs 1, 2 & 3.

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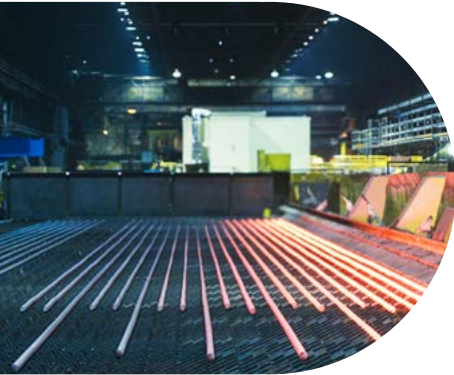
The maximum amount of **\$1,000,000** is paid only once for the first year, but financial assistance may be accorded for other measures in subsequent years. The amount accorded is determined based on the date the request for financial assistance (Step 1) is received; however, the maximum annual amount is recognized based on the date of payment, which respects Énergir's fiscal year. The amount accorded may be revised once the supporting documentation has been received.

Even though the request must cover new measures, Énergir will accept requests for measures already being implemented, provided that the work began after the January 1 preceding the start of Énergir current fiscal year and that the work had not been completed at the time the request was made.

Énergir fiscal year starts on October 1 and ends September 30. However, all applications must be submitted by September 15 at the latest, or they will be carried over to the following fiscal year.

### Implementation of Energy Efficiency Measures

## Major Industries



### Implementation of Energy Efficiency Measures

## Admissibility criteria

- 1. Be, or be about to be, an Énergir major industries customer<sup>2</sup>, or if there is new construction at customers subject to Rates D<sub>4</sub> or D<sub>5</sub>**

Eligible activity sectors are the

- institutional sector;
- industrial sector.

Note that for about-to-become customers the financial assistance will be paid once their Énergir account number has been issued.

- 2. The energy savings measure must relate to the consumption of natural gas**

Any energy savings measure that has a direct or indirect impact on the consumption of natural gas may be eligible, provided that its aim is not to substitute natural gas by another source or to eliminate it. Also, the measure must not be similar to a technology covered by other Énergir energy efficiency programs, regardless of its level of energy efficiency.

- 3. These measures must be recommended by a registered firm or by an engineer in the employ of the customer.**

All measures must be recommended and justified either by a technical-economic feasibility study, a report, or any other pertinent document signed by an engineer member in good standing of the *Ordre des ingénieurs du Québec*.

Such documents must come from one of the following:

- a firm listed on Énergir's directory of [registered firms](#)
- an engineer in the employ of the customer.

- 4. The recovery of thermal energy (heat) from sources other than natural gas are accepted under certain conditions.**

Énergir accepts measures such as geothermal or air energy or heat recovery from sources other than natural gas under certain conditions:

- 4.1. The thermal energy recovered must be: i) marginally free, AND ii) come from unused waste heat or renewable thermal energy.<sup>3</sup>**

<sup>2</sup> A major industries customer is an Énergir customer who shows at least one of the following characteristics:

- Natural gas consumption is above 3,650,000 m<sup>3</sup>/year;
- Distribution rate is D<sub>4</sub>, D<sub>5</sub> or a dual distribution rate;
- Account is affiliated\* with a major industries customer.

\* An affiliated account is an Énergir customer subject to Rate D<sub>1</sub> or D<sub>3</sub> whose energy supply management is handled by a major industries customer or whose location is the same as a major industries customer. Affiliated companies must be part of the same legal entity as the major industries customer with which they are affiliated.

<sup>3</sup> While thermal solar energy is considered a renewable thermal energy, it is excluded from this grant since Énergir already offers a specific grant for solar energy.



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### Implementation of Energy Efficiency Measures

#### 4.2. Unused waste heat must be generated on the premises from the implementation of energy efficiency measures.

However, measures aimed at the recovery of waste heat from a water distribution system between the buildings (urban system) could be eligible under certain conditions. Where applicable, such measures must be submitted in advance to an Energy Efficiency Advisor for analysis.

#### 4.3. The thermal energy recovered must lead to a reduction in natural gas consumption, regardless of usage (heating, hot water, ventilation, process).

#### 4.4. If a mechanical compression refrigeration system (e.g., heat pump) is utilized to recover unused waste heat, the portion of electrical energy consumed by the compressor motor must be deducted from the total of recovered energy in the calculation of energy savings.

Énergir only recognizes net savings. Also, if the same mechanical compression refrigeration system is used for air conditioning open space, the system must be included in the reference scenario and the costs associated with its purchase and installation may not be recognized as eligible expenses.

#### 4.5. If the implementation of an energy efficiency measure avoids the installation of a natural gas appliance, the cost of installing that appliance must be estimated and included in the reference scenario when calculating eligible expenses and the payback period (ROI).

#### 4.6. The consumption of natural gas following implementation of the energy efficiency measures must ensure the cost-effectiveness of the connection and represent at least 30% of natural gas consumed before the project was undertaken.

#### 4.7. A preliminary version of the study describing the energy efficiency measures, as well as the calculations of the energy savings, must be submitted to Énergir for approval by the consulting engineer before being presented to the customer.

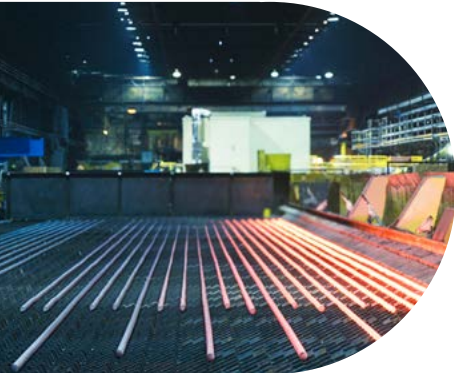
Énergir reserves the right to interpret the terms and conditions of the grant and to revise and validate the hypotheses and parameters of the calculation of the energy recovery measures presented.

### 5. The natural gas savings must be supported by calculations

The detailed calculations must be done or verified by an engineer in good standing of the *Ordre des ingénieurs du Québec*.

The justification for the savings must be based on current and anticipated operating conditions. For new buildings, the hypotheses proposed for estimating the reference consumption of natural gas must be submitted and must reflect current industry practices. The calculations must be made in accordance with recognized engineering methods.

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Implementation of Energy  
Efficiency Measures

**6. A measure covered in the request for financial assistance that is part of a series of measures must be appropriately documented**

The costs and savings must be identified separately for each measure in the same project.

**7. Measures covered by other Énergir energy efficiency programs must be distinct from the other energy savings measures**

If a measure is combined with the replacement of an appliance covered by the Énergir Business Efficient Appliances Program, then the savings related to that measure must be separated from those stemming from replacing the appliance. The same applies to measures encouraged by other Énergir energy efficiency programs.

**8. Measures covering boilers can be accepted**

Measures aimed at installing boilers with a capacity of over 5 MM Btu/h as well as measures aimed at optimizing existing boilers, regardless of their capacity, may be accepted.

For the installation of boilers with a capacity below 5 MMBtu/h, the Énergir Efficient Appliances Program applies.

**9. Performance measures that do not require any expenditure on equipment or products are not eligible**

**10. Maintenance measures (replacement as a result of a breakage; repairs) are not admissible**

**11. The measures implemented must comply with laws and regulations**

The measures studied and/or implemented must comply with the regulations and laws applicable in Québec, in particular those dealing with air quality and environmental protection, as well as with the provisions of the Natural Gas and Propane Installation Code (B149.1).

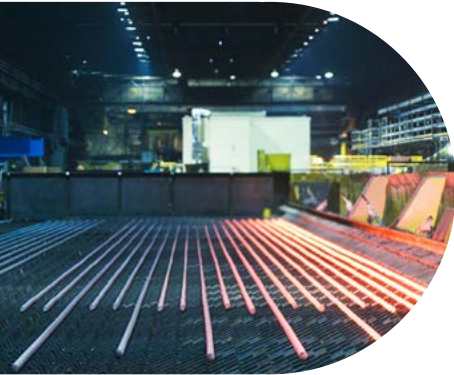
**12. Any participant covered by another financial assistance program to carry out the project must declare any amount received or to be received for the same project to Énergir**

Énergir will pay the customer the financial assistance accorded under this grant, net of any contribution from other organizations for the same project, such that the portion payable by the customer represents at least 25% of the costs related to the project.

**13. Handling of file for customers using the competitive make-up gas service**

Customers who use the competitive make-up gas service are eligible for the grant, but the volume allowable must be calculated pro rata based on consumption over the 12 months preceding the request. The financial assistance is paid at the end of the work, on receipt of

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supporting documentation. However, if the customer and equipment covered by the energy savings measure do not consume more natural gas at the time of the request for payment, the payment will be held back until the natural gas consumption volume is restored. The maximum time allowed before the financial assistance is paid is one year.

**14. Calculation of ROI (payback period)**

$$\text{ROI} = \frac{\text{Eligible expenses of energy efficiency measure attributed to natural gas}}{\text{Annual natural gas savings (\$) associated with the measure(s)}}$$

That is

$$\text{ROI} = \frac{\text{Eligible expenses of energy efficiency measure attributed to natural gas}}{\text{Annual volume saved in m}^3 \times \text{unit costs of natural gas (Transportation + Load balancing + Inventory + Distribution + Supply + SPEDE (Cap \& Trade System) avoided cost)*}}$$

\* Unit costs of natural gas are calculated based on the average of the 12 months preceding the month of the request for financial assistance under this grant. Customers who provide their own services may use their specific prices on condition that these are documented in supporting documentation and that they are in effect at the time the request is made. When these are not available, the prices published by Energir will serve as the reference.

For customers not considered high emitters under the Cap & Trade System, the SPEDE avoided cost corresponds to the rate "SPEDE service." Customers who are considered high emitters may use an estimate of their own SPEDE avoided cost as long as it is documented and justified.

**15. Monitoring of savings is mandatory for all projects representing annual natural gas savings of 500,000 m<sup>3</sup> and over (large-scale project)**

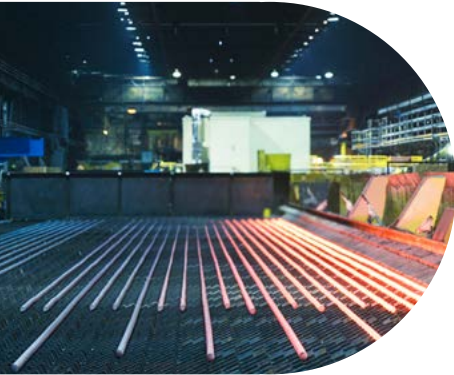
For more details, please refer to the "Savings Monitoring" section in this Guide.

Implementation of Energy Efficiency Measures

Maximum period of time for completion



Implementation of Energy Efficiency Measures



## Mandatory step in monitoring savings

This step is mandatory for participants in the Implementation of Energy Efficiency Measures Grant whose project represents annual natural gas savings of 500,000 m<sup>3</sup> and over (large-scale project).

For customers with potential annual natural gas savings of 500,000 m<sup>3</sup> and over, Énergir requires participants to submit a **Savings Monitoring Plan (Appendix 2)**, outlining the energy savings.

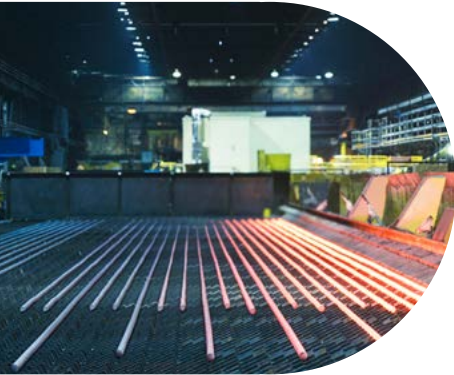
Énergir must receive a **Savings Monitoring Report** at the start of the project that includes various data for monitoring the savings generated by the measures implemented.

From the date indicated on the letter with the payment of financial assistance for implementing the measures, the customer has 12 months to submit the **Savings Monitoring Report (Appendix 3)** presenting the results obtained, as well as any variations noted from the savings calculated initially.

Additional financial assistance will be paid to the participant under the savings monitoring grant.

Savings Monitoring

## Major Industries



## Savings Monitoring

### Financial assistance

The additional financial assistance offered by Énergir under this grant is meant to cover the professional fees charged, as well as the measuring equipment required, to monitor the energy savings. **The financial assistance paid applies only to large-scale projects.**

The amount of this additional financial assistance is limited to 80% of the expenses related to carrying out the monitoring and may not exceed \$15,000.

The eligibility of the expenses, and the amount of the additional financial assistance for monitoring the savings, must be approved by Énergir.

The additional financial assistance will be paid to the participant after the **Report on Savings Monitoring (Appendix 3)** has been approved by Énergir.

### Contributions from other organizations

Any customer who is participating in another financial assistance program for carrying out the monitoring agrees to declare any amount received and/or to be received to Énergir. Énergir will pay the customer the financial assistance envisaged under the Savings Monitoring Grant, less the contribution(s) from other organizations for the same monitoring, so that the total contributions received do not exceed 100% of the expenses related to carrying out the monitoring.

### Requirements

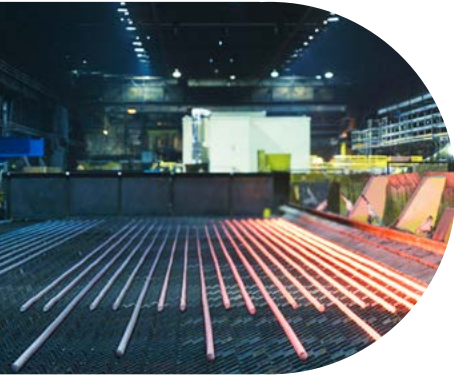
In addition to complying with the admissibility conditions, as well as with the terms of participating in the Implementation component, large-scale projects must meet the following requirements:

1. Mandatory savings monitoring is addressed at customers who are participating in the Énergir Implementation of Energy Efficiency Measures Grant and whose projects have potential savings of 500,000 m<sup>3</sup> and over.
2. Customers must have made a prior request for financial assistance under the Implementation of Energy Efficiency Measures Grant, accompanied by a **Savings Monitoring Plan (Appendix 2)**.
3. The **Savings Monitoring Plan** must be submitted to Énergir for approval before its implementation.
4. The **Savings Monitoring Plan** must be carried out or verified by a member in good standing of the *Ordre des ingénieurs du Québec*.
5. The savings monitoring must respect the elements in the **Savings Monitoring Plan (Appendix 2)**. While Énergir does not wish to impose a standard format on all participants, it does want to ensure that the various elements included in the plan are covered.

#### Principal elements in the Savings Monitoring Plan

- a. Objective of Savings Monitoring Plan
- b. Description of key parameters
- c. Description of proposed methodology

## Major Industries



- d. Procedures for analysis and calculations
- e. Monitoring period
- f. Costs and fees

Once the measures have been implemented, are operational, and the monitoring period completed, the customer must submit the **Savings Monitoring Report (Appendix 3)** to Énergir for approval.

7. The **Savings Monitoring Report (Appendix 3)** must include all the references used for the calculations, the measurement data, as well as details of the calculation methods employed.
8. **The calculations** must have been done or verified by a member in good standing of the *Ordre des ingénieurs du Québec*.
9. The savings monitoring must be carried out during the period indicated in the **Savings Monitoring Plan**. It is important to carefully choose a representative period for the final use of the measure (heating, air conditioning, process). For example, for measures affecting heating or air conditioning, a complete heating cycle should be monitored. For measures related to processes, two weeks of monitoring the savings might be judged sufficient.

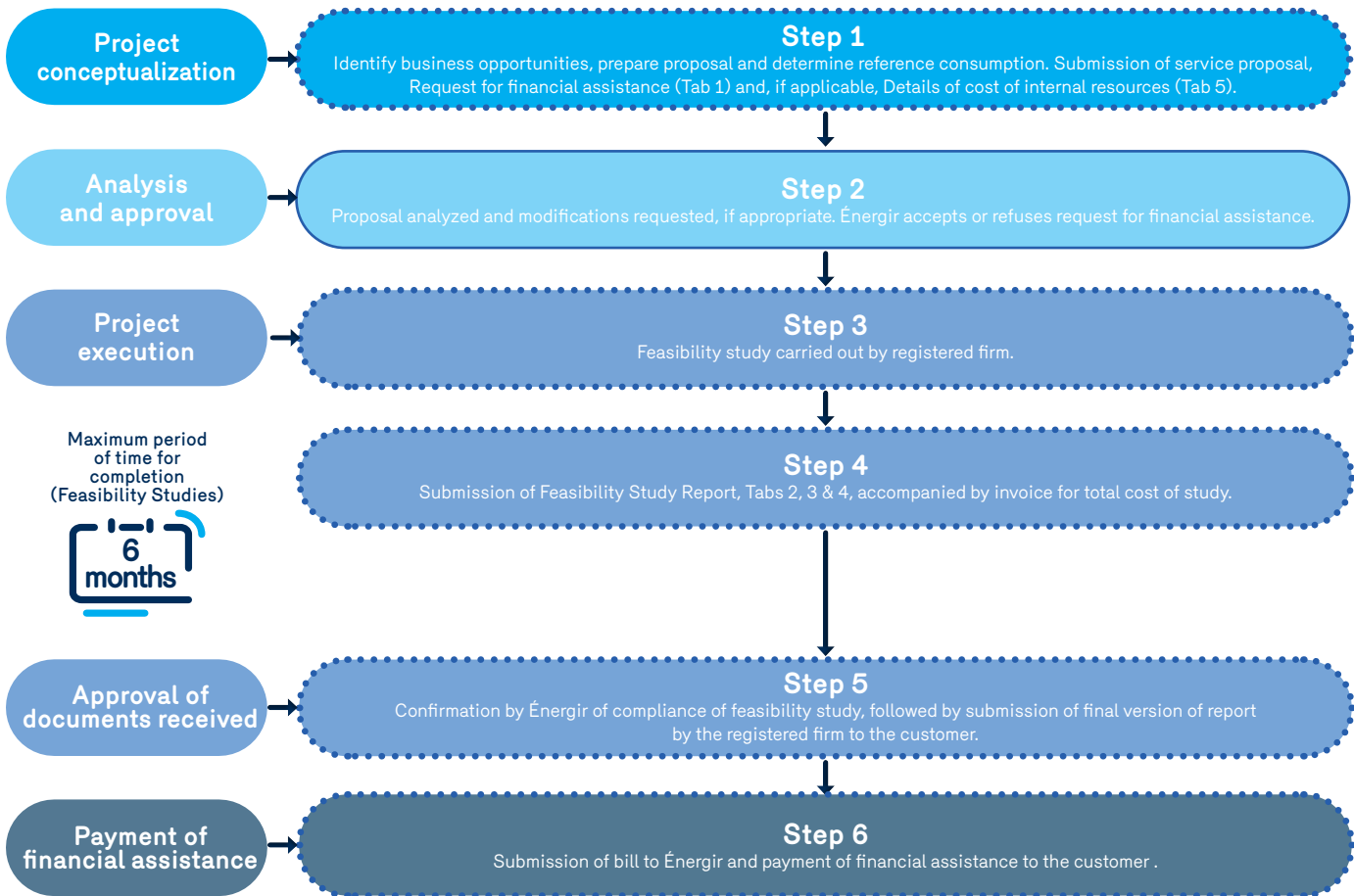
**The results of the monitoring will have no impact on the financial assistance received under the Implementation of Energy Efficiency Measures Grant.**

Énergir requests that participants use a method that takes into account the context and particularities specific to their project in order to evaluate the energy consumption levels after implementation of the project. That method may be based on the International Performance Measurement and Verification Protocol (IPMVP)<sup>4</sup> **or any other appropriate approach.**

## Savings Monitoring

# Feasibility Studies

## Steps to follow (table)



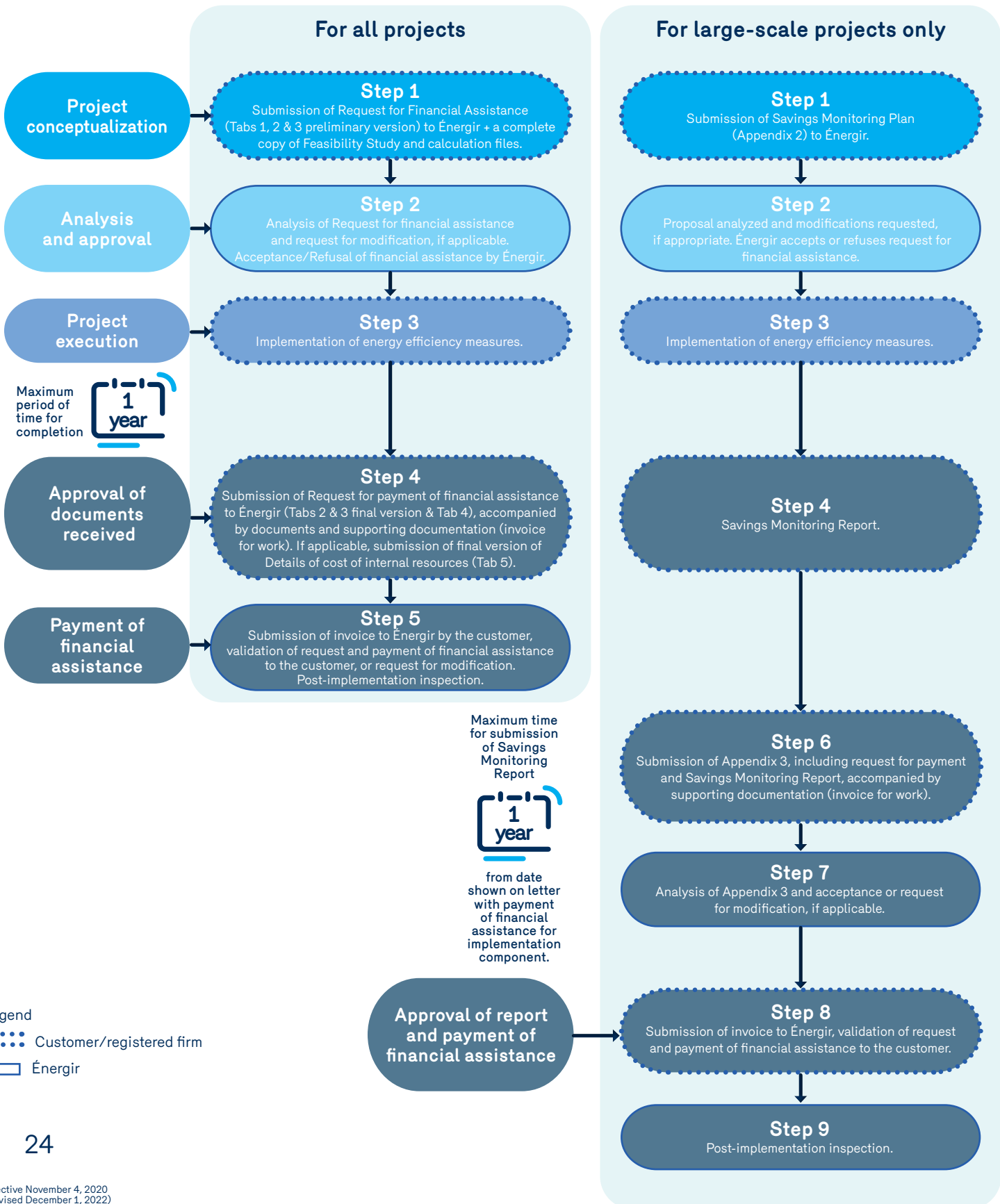
Legend

Customer/registered firm

Énergir

# Implementation of Energy Efficiency Measures

## Steps to follow (table)







Steps to follow

# Steps to follow

## Feasibility Studies

### Step 1

#### Submission of request for financial assistance to Énergir

The financial assistance is intended for Énergir major industrial customers who would like to have feasibility studies done. As a first step, the customer submits a request for financial assistance to Énergir by completing the **Request for admissibility (Tab 1)** and the **Details of cost of internal resources (Tab 5)**, if applicable.

The application must be accompanied by a complete proposal from the registered firm, or the participating company, that includes a brief description of the measures to be analyzed in the feasibility study and an indication of the amount of financial assistance the customer expects to receive.

In submitting the application, the customer declares having read the admissibility criteria.

### Step 2

#### Analysis of proposal and request for modification (if applicable); acceptance

Énergir analyzes the request for financial assistance based on the admissibility criteria and confirms in writing its acceptance (or refusal) of the request for financial assistance, the amount accorded, the deadline for completion, as well as a reminder of the execution criteria and specifications to be respected.

The customer agrees that Énergir may request details from the registered firm, or its own engineer, regarding the content of the proposal and make modifications, but without changing the cost of carrying out the study.

### Step 3

#### Feasibility study carried out

The registered firm, or the participating company, has six months from the date Énergir agrees to pay the financial assistance to carry out the feasibility study in accordance with the proposal and specifications.

### Step 4

#### Submission of study to Énergir, along with documents and supporting documentation for approval

The registered firm submits the **Feasibility Study Report**, signed by an engineer member of the OIQ, which shows the date of completion, the identity of the professional who carried out or approved the report, and the engineer's OIQ number. A copy of the calculations must be attached if they were not included in the feasibility study.



### Steps to follow

The customer agrees that Énergir may request the registered firm to make modifications to the study so that it respects the specifications and the service proposal. As well, the **Detailed report of costs (Tab 2)** and the **Summary of measures covered by the Request for financial assistance (Tab 3)** must be submitted, ensuring that the fields “Customer authorization” and “Validation by engineer” have been completed.

The customer also completes the Transmittal Form to submit the documents and supporting documentation with the **Request for payment of financial assistance (Tab 4)**. This must also be accompanied by a copy of the invoice sent by the registered firm to the customer, showing the total cost of the feasibility study, including the applicable taxes (GST & QST).

For participating companies, if the customer’s internal resources have collaborated in carrying out the study, a final version of Tab 5 (Details of cost of internal resources) is also required.

## Step 5

### Registered firm submits Feasibility Study to the customer

Énergir analyzes the report and if it is considered satisfactory, i.e., it respects the eligibility criteria, as well as the specifications, the registered firm sends a final version of the results of the feasibility study to the customer.

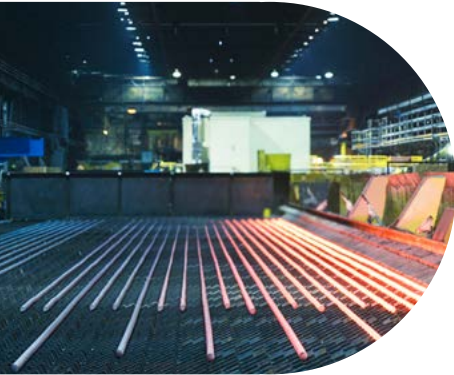
If the scope of the study was modified when underway, or if the study is considered unsatisfactory by Énergir, then Énergir reserves the right to ask the registered firm to make certain modifications to the study.

## Step 6

### Payment of financial assistance to the customer

**6.1 An invoice must be sent to Énergir to claim the amount of financial assistance, including the applicable taxes (GST & QST).**

**6.2 If the report is considered satisfactory, i.e., it respects the eligibility criteria, as well as the specifications, and all the documents have been received, Énergir so advises the customer and issues a cheque.**



### Steps to follow

## Implementation of Energy Efficiency Measures

### Step 1

#### Submission of request for financial assistance to Énergir

The financial assistance is intended for Énergir major industrial customers and about-to-become customers who would like to implement the energy savings measures proposed in a technical-economic feasibility study or other document recognized by the grant. As a first step, the customer submits a request for financial assistance to Énergir by completing the **Request for admissibility (Tab 1)**.

Along with the Request for Admissibility, the customer must also include a complete copy of the Feasibility Study and the calculation files that describe the measures covered by the request, accompanied by a preliminary version of the **Detailed report of costs (Tab 2)** and the **Summary of measures covered by the request for financial assistance (Tab 3)**.

For projects representing annual natural gas savings of 500,000 m<sup>3</sup> and more, the customer must also include the **Savings Monitoring Plan (Appendix 2)** with the request. Please refer to the Savings Monitoring Plan for more details.

In submitting the application, the customer declares having read the admissibility criteria.

### Step 2

#### Analysis of request for financial assistance and project documents/acceptance

Énergir analyzes the request for financial assistance based on the admissibility criteria and confirms in writing its acceptance (or refusal) of the request for financial assistance, the amount accorded, the deadline for completion, as well as a reminder of the execution criteria.

The customer agrees that Énergir may request details from the firm responsible about the scope of the request for financial assistance and the project documents, or make modifications to them, without, however, changing the implementation costs.

For projects representing annual natural gas savings of 500,000 m<sup>3</sup> and more, Énergir will analyze the **Savings Monitoring Plan (Appendix 2)** and confirm its acceptance or refusal of the Savings Monitoring Plan in writing.

### Step 3

#### Energy savings measures implemented

The customer has one year from the date Énergir agrees to pay the financial assistance to implement the measures approved by Énergir. The customer must advise Énergir if this deadline cannot be respected. Beyond that deadline, Énergir reserves the right to refuse payment of the financial assistance for implementation of the measures.

The measure, as approved by Énergir, must be implemented in its entirety. However, if the measure is implemented differently or modified, the participant must complete the appropriate form, as described below.



### Steps to follow

## Step 4

### Submission of request for payment of the financial assistance to Énergir, along with documents and supporting documentation

The customer completes the **Request for payment of financial assistance & implementation certification (Tab 4)**. This request must be presented within a year following the date indicated on the letter agreeing to the original request.

The request must be accompanied by the following documents:

- a copy of invoice sent to the customer by the supplier of the goods provided or services rendered;
- The final version of the **Detailed report of costs (Tab 2)** and the **Summary of measures covered by the Request for financial assistance (Tab 3)**, reflecting the actual costs for acquiring and installing equipment and services rendered.

## Step 5

### Validation of request and payment of financial assistance to customer or request for modification

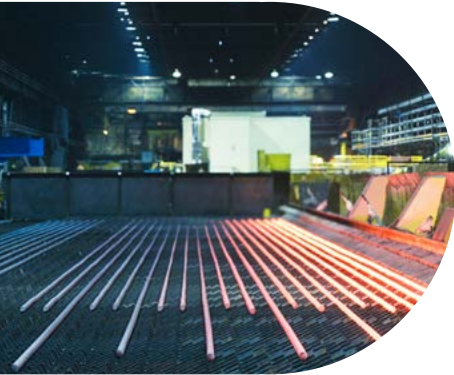
The customer must send a copy of the invoice to Énergir to claim the amount of financial assistance, as well as the applicable taxes (GST & QST).

Énergir analyzes the measures implemented and if the file is considered satisfactory, i.e., it respects the execution criteria, Énergir so advises the customer and issues a cheque.

If the scope of the measures was modified during implementation, then Énergir reserves the right to ask the customer to make certain modifications and to put the payment of the financial assistance on hold until the modifications have been implemented.

### Post-implementation inspection

An inspection visit in the 12 months following implementation of the measures will be done by Énergir. Énergir will select the participants whose work will be inspected and will contact the resource-person identified under **Tab 1** to set a date for the inspection. During the inspection visit, the customer's resource person must be able to show the Énergir representative conducting the inspection evidence that the measures for which Énergir has paid financial assistance have indeed been implemented. If this inspection reveals that the measures have not been implemented, the customer agrees to immediately reimburse the financial assistance accorded by Énergir.



### Steps to follow

## Mandatory additional steps in savings monitoring for large-scale projects only:

### Step 6

#### Submission of Appendix 3 (Savings Monitoring Report) and Request for payment to Énergir

After payment of the financial assistance for the measures implemented, the customer has 12 months to submit a **Request for payment** with the **Savings Monitoring Report (Appendix 3)**, presenting the results obtained, as well as any variations noted from the savings calculated initially.

The request must be accompanied by a copy of the invoices from the suppliers of goods provided or services rendered for savings monitoring only.

### Step 7

#### Analysis of Appendix 3 and request for modifications, if applicable/acceptance

Énergir analyses **Appendix 3 (Savings Monitoring Report and Request for payment)** and confirms in writing its acceptance (or refusal) of the financial assistance and the amount granted.

### Step 8

#### Validation of request and payment of financial assistance to customer

The customer must send a copy of the invoice to Énergir to claim the amount of financial assistance for savings monitoring, as well as the applicable taxes (GST & QST).

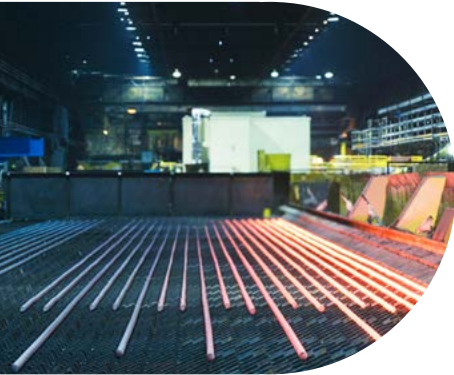
Énergir analyzes the measures implemented and if the file is considered satisfactory, i.e., it respects the execution criteria, Énergir so advises the customer and issues a cheque.

### Step 9

#### Post-implementation inspection

An inspection visit in the 12 months following implementation of the measures will be done by Énergir. Énergir will contact the resource person identified under **Tab 1** to set a date for the inspection. During the inspection visit, the customer participating in the Implementation of Energy Efficiency Measures component must be able to show the Énergir representative conducting the inspection evidence that the measures for which Énergir paid financial assistance have indeed been implemented.

If this inspection reveals that the measures have not been implemented, the customer agrees to immediately reimburse the financial assistance accorded by Énergir.



Forms

## Forms

To avoid any software incompatibility that could arise with some files, it is strongly recommended that you save the forms on your computer before opening and then completing them.

### Feasibility Studies

New form (Excel format) 

**The Feasibility Studies form has the following tabs:**

**Before the work – new Request for admissibility**

- 0. Execution steps
  - 1. Request for admissibility
- Service proposal must be attached at the same time as Tab 1.

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**After completion – Request for payment**

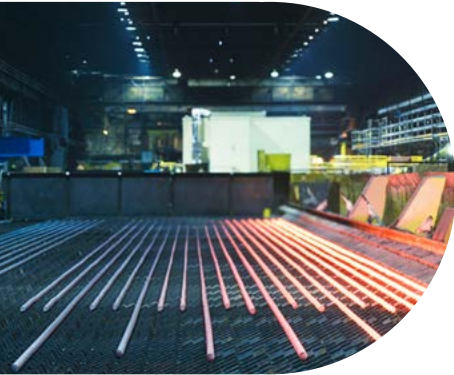
- 2. Detailed report of costs
- 3. Summary of measures covered by the request for financial assistance
- 4. Request for payment of financial assistance
- 5. Details of cost of internal resources (for participating companies only)

Appendix 1 – Invoice template

A copy of the Feasibility Study, calculations (if not included in the study) and the invoice sent to the customer by the registered firm must be attached at the same time as Tabs 2, 3, & 4.

Following approval of the request by Énergir, the customer must send an invoice to Énergir for payment of the financial assistance.

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Forms

# Forms

To avoid any software incompatibility that could arise with some files, it is strongly recommended that you save the forms on your computer before opening and then completing them.

## Implementation

New form (Excel format)

**The Implementation form has the following tabs:**

**Before the work – new Request for admissibility**

- 0. Execution steps
- 1. Request for admissibility
- 2. Detailed report of costs – preliminary section
- 3. Summary of measures covered by the request for financial assistance – preliminary section
- Appendix 2 – Savings Monitoring Plan (for large-scale projects)

A complete copy of the Feasibility Study and/or calculation files must be attached to the request.

**After completion – Request for payment**

- 2. Detailed report of costs – final section
- 3. Summary of measures covered by the request for financial assistance – final section
- 4. Request for payment of financial assistance
- Appendix 1 – Invoice template

A copy of the invoices from the suppliers of the goods provided or services rendered related to the measures implemented must be attached to the request.

**After savings monitoring – large-scale projects**

- Appendix 3 – Savings Monitoring Report and Request for payment (large-scale projects)

A copy of the invoices from the suppliers of the goods provided or services rendered related to savings monitoring must be attached to the request.

## Business

Preparation Guide

**Preparation Guide**

Preparation Guide – Studies and Implementation



## Major Industries

# Appendix

## Treatment of applicable taxes

### Studies and implementation

As an enterprise registered for GST and QST and as a beneficiary of financial assistance offered under the above grant, we wish to inform you that in order to comply with the *Excise Tax Act* (GST) and the *Act respecting the Québec sales tax* (QST), an invoice addressed to Énergir must be submitted claiming the total amount of the financial assistance accorded.

In order for Énergir to make the payment, the invoice must be presented in due form and contain the following information:

- name of beneficiary of financial assistance (the customer);
- address where work was carried out;
- address of Énergir;
- number and date of invoice;
- description: *Financial assistance related to Feasibility Studies and Implementation*;
- amount of financial assistance claimed and indicated in letter of acceptance from Énergir;
- taxes payable on amount of financial assistance: GST and QST;
- beneficiary's GST and QST account numbers;
- indicate file number shown on acceptance letter.

Your accounting and tax specialists will be able to give you more details concerning this specific procedure and the tax treatment of the financial assistance. Please do not hesitate to consult them.

To submit a request or for any administrative information regarding an application:

**By e-mail:**

[energyefficiency@energir.com](mailto:energyefficiency@energir.com)

**By phone:**

514 598-3410