



Energy Efficiency Program – Energy Audit and Implementation

Participant's Guide

Business and Major Industries Markets

Energy Management System Grant



Imagining energy differently

As part of its Global Energy Efficiency Plan, Énergir offers its customers grants through its energy efficiency programs. These are aimed at helping them consume less energy and make better use of it, particularly by improving their energy productivity with natural gas.

This Participant's Guide is for customers seeking a grant to implement an energy management system. It outlines the procedures and eligibility criteria.

Énergir encourages participants to submit their applications and the supporting documents electronically, or to submit an administrative information request for file tracking to: efficaciteenergetique@energir.com.

For more information, please consult:

- Your Énergir advisor or representative
- Engineers in Énergir's DATECH group
- [Énergir's web page](#)

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Definitions

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

Energy performance indicator (EPI): Information used to assess a company's energy performance with regard to natural gas.

Continuous measurement: This type of measurement requires the installation of permanent equipment to better assess the natural gas consumption of the entire plant or part of the plant through regular monitoring. Tools must also be implemented to store data resulting from continuous measurement and convert it into useful information. The term "energy management information system (EMIS)" is sometimes used to refer to continuous measurement.

Benchmark scenario: The benchmark scenario corresponds to the existing situation before efficiency measures were implemented, if that situation could be maintained.

In the event that the existing situation cannot be maintained (e.g. equipment or systems reaching the end of their life or that need to be replaced) or in the case of a new construction or installation, the benchmark scenario corresponds to the equipment or system that could have been installed in accordance with current energy market practices.

Efficient scenario: This scenario includes energy efficiency measures and is the subject of the financial assistance application.

Energy management system (EMS): This is a continuous improvement process aimed at setting energy savings targets and measures, including steps for implementing and monitoring those measures through methods such as continuous measurement.

Significant energy use (SEU): This is a mode or type of energy use (e.g. a process, machine or auxiliary system) that accounts for a significant portion of natural gas consumption or has considerable potential to improve the energy performance of natural gas.

4 The participation conditions have been in effect since October 1, 2019. However, Énergir reserves the right to modify or terminate the program at any time without prior notice. Énergir also reserves the right to interpret the terms and conditions of the financial assistance grant.

Description and objectives

Implementing an energy management system (EMS) allows for energy savings through behavioral and operational changes at all levels of an organization, from senior management to staff on the floor. Over time, it transforms the very culture of the organization with regard to reducing energy waste and energy intensity.

Énergir wishes to support its industrial customers who decide to implement an EMS, not only by offering financial assistance, but also by providing technical support through its sales representatives and its DATECH group engineers. The main purpose of the technical support provided by Énergir is to identify solutions to specific problems at a stage considered critical by customers. Thanks to its participation at all stages of implementing an EMS project, Énergir ensures that its customers successfully implement it.

Five phases of implementing an EMS

The technical support and financial assistance provided by Énergir under the EMS Grant are broken down into five key phases. Table 1 summarizes the type of support Énergir provides at each stage of implementing an EMS. The terms and conditions for financial assistance for Énergir's EMS Grant are described in the following sections.

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Table 1: Key phases and support provided by Énergir under the EMS Grant

Key phases	Technical support	Financial assistance ¹
Customer awareness-raising: Present the scope and benefits of an EMS and Énergir's services.	✓	N/A
Audit: Review current energy management practices and recommend solutions.	✓	\$25,000 ²
Commitment decision: Obtain the commitment of senior management to develop, implement and monitor the EMS.	✓	N/A
Development and implementation of the EMS: Establish an action plan for the implementation of the EMS, including a strategy for continuous measurement and for the deployment of energy savings measures; implement the EMS action plan and monitor planned measures.	✓	\$150,000 ²
Monitoring energy savings: Periodically perform the necessary analysis to quantify the energy savings associated with the EMS.	✓	\$175,000 ³

¹ Maximum financial assistance

² Up to 50% of eligible costs.

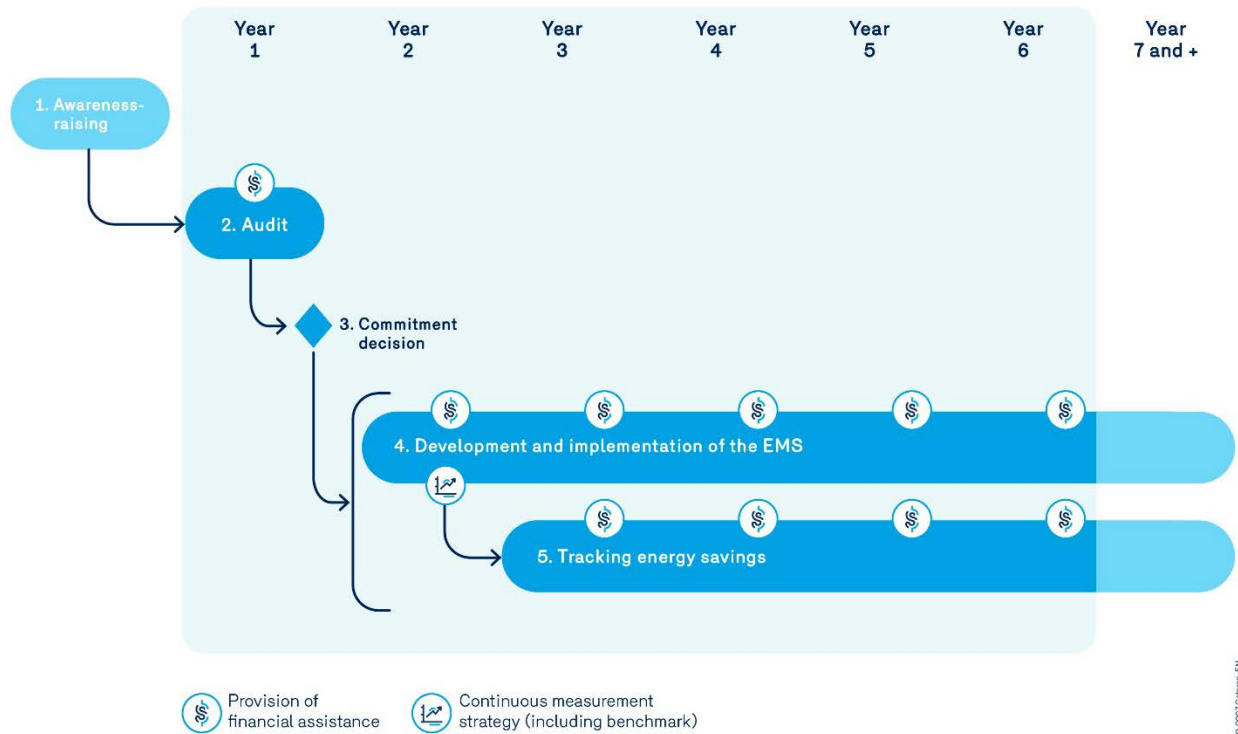
³ \$0.10/m³ of natural gas saved over four years.

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The diagram below illustrates over time the various phases of an EMS project and the key moments when Énergir will provide financial assistance to participating industrial customers.

Diagram 1 – Phases of an EMS project and Énergir financial assistance

Steps in an EMS project and Énergir financial assistance



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Special clause

Énergir's EMS Grant is currently being offered as part of a pilot project. Énergir reserves the right to modify or terminate the program at any time without prior notice. However, all applications for participation previously accepted by Énergir before the end of the grant will be processed.

Énergir reserves the right to interpret the terms of the grant, taking into account any conditions that may be established by the Régie de l'énergie.

Eligibility criteria

- The applicant must be an Énergir customer or be in the process of becoming one.
- The financial assistance is intended for industrial buildings. Any application for a building intended for another use will be subject to a special review by Énergir.
- The financial assistance is for owners of buildings or groups of buildings with a natural gas consumption of at least 2,000,000 m³ per year. With Énergir's exclusive approval, some buildings with an annual natural gas consumption of less than 2,000,000 m³ may be eligible.
- Measures aimed at replacing one energy source with another are excluded.
- Rate optimization measures are not eligible.
- Measures eligible for other grants of Énergir's existing energy efficiency programs are excluded from the EMS Grant.
- All phases of the grant must comply with the standards and regulations in effect.
- The financial assistance application must be submitted prior to the completion of the work and the related forms must be duly completed and compliant.

Description of phases

Phase 1 – Awareness-raising

This first phase of an EMS project gives Énergir the opportunity to explain the scope and benefits of such a system and the types of financial and technical support it offers participating customers. During this phase, Énergir also provides technical support.

To begin the process of participating in this grant, customers must complete the **Notice of Interest**, in which they inform Énergir of their intention to participate in the EMS Grant.

Phase 2 – Audit

Objective and scope

The audit phase aims to:

1. Paint a picture of the natural gas consumption of the participating customer's facilities
2. Review current energy management practices to identify and improve strengths and weaknesses
3. Establish an **overview** of the continuous measurement strategy and method for estimating energy savings
4. Provide a **summary** of potential natural gas savings and natural gas savings measures associated with an EMS, primarily aimed at improving operations
5. Develop an **outline** of the EMS implementation of improvement plan, a timeline and the costs associated with its development, implementation and follow-up

Note: Participation in the audit phase is not required to obtain financial assistance from Énergir related to the development and implementation of an EMS or to monitor energy savings associated with the system. However, applicants will need to demonstrate that they have all the information indicated in **Appendix A** of this guide.

Financial assistance

The financial assistance offered by Énergir and granted in a single payment covers part of the cost of the audit phase. It corresponds to the lesser of the following amounts:

- \$25,000;
- 50% of eligible expenses.

Eligible expenses

Eligible expenses may include fees charged by external consultants and internal specialists, as well as the costs of purchasing and installing equipment required to complete this phase.

Steps of the audit phase

Table 2: Steps of the audit phase

Steps	Description of steps
1. Financial assistance application	<ul style="list-style-type: none"> Participating customers apply for financial assistance from Énergir by completing the <u>Request for eligibility (Form I)</u>, which is available on Énergir's website. This application must be accompanied by the external service proposal for performing the audit, if applicable. This service proposal must contain, but is not limited to: the scope of the mandate, the names of participants in the audit phase and their roles, and a breakdown of their fees (e.g. hourly rate, tasks, number of hours). Énergir does not impose a standard format on external firms or participating customers for the audit phase report. However, it must contain the information set out in Appendix A. By submitting the application, the customer declares to have been made aware of the eligibility criteria for the EMS Grant.
2. Analysis of the financial assistance application	<ul style="list-style-type: none"> Énergir analyzes the financial assistance application based on the eligibility criteria, objectives and scope of the audit phase. Énergir confirms in writing the acceptance or refusal of financial assistance, the amount granted, the maximum timeframe and a reminder of the conditions for performing the work at this stage. The customer gives their consent to Énergir to ask them or the external firm to provide details as to the content of the documents submitted and/or to make changes to them.
3. Execution of the work	<ul style="list-style-type: none"> From the date Énergir agrees to provide financial assistance, the customer has six (6) months to complete the audit phase.⁴
4. Presentation of the report	<ul style="list-style-type: none"> The participating customer submits a draft of the audit phase report to Énergir before applying for financial assistance and gives their consent to Énergir asking them or the external firm to provide details as to the content of the audit and/or to make changes to it.
5. Financial assistance payment	<ul style="list-style-type: none"> As soon as Énergir deems the diagnosis report satisfactory, the participating customer can submit the <u>Detailed list of eligible costs and request for payment (Form II)</u> for the audit, which is available on Énergir's website. The form must be accompanied by the following documents: <ul style="list-style-type: none"> The final version of the audit report If applicable, a copy of the invoice given to the customer by the external firm, indicating the total cost of the audit phase plus applicable taxes (GST and QST) An invoice submitted by the applicant to Énergir to claim the amount of financial assistance, as well as applicable taxes (GST and QST) Applicants are invited to consult Appendix D in this guide for the treatment of applicable taxes.

⁴ Important: In the event that this deadline cannot be met, the customer should notify Énergir as soon as possible. After this six-month period, Énergir reserves the right to refuse the financial assistance payment for the audit phase.

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Phase 3 – Commitment decision

During the third phase, the participating customer obtains a commitment from the senior management of their company to develop, implement and monitor the EMS.

During this phase, Énergir can only provide technical support to participating customers, so as to help them convince their superiors of the merits of implementing such a system in their organization.

Phase 4 – Development and implementation of the EMS

Objective and scope

This phase aims to:

1. Develop and deploy an action plan for implementing EMS improvements (e.g. creating an energy management committee) and energy savings measures aimed primarily at improving operations (e.g. training and awareness-raising activities for employees explaining the energy impact of their measures).
2. Establish and implement a continuous measurement (including the benchmark scenario) and data collection strategy for EPIs, as well as a method of assessing energy savings from the use of natural gas.
3. Track measures planned as part of the EMS

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Financial assistance

Financial assistance is divided into two parts: the first is for continuous measurement and the second is for the other EMS Grants.

Table 3: Description of financial assistance offered as part of the development and implementation phase

Continuous measurement	Other EMS Grants
<ul style="list-style-type: none"> The financial assistance offered by Énergir corresponds to the lesser of the following amounts: <ul style="list-style-type: none"> \$75,000 50% of eligible expenses Financial assistance payments can be made over a maximum period of 5 years. 	<ul style="list-style-type: none"> The financial assistance offered by Énergir corresponds to the lesser of the following amounts: <ul style="list-style-type: none"> \$75,000 50% of eligible expenses Financial assistance payments are made as follows: <ul style="list-style-type: none"> First payment for the first year: 50% of eligible costs up to \$50,000 Four (4) other annual payments: 50% of eligible costs up to the maximum amount of \$75,000

Eligible expenses

Below are the eligible expenses for the development and implementation phase:

Table 4: Description of eligible expenses

Continuous measurement	Other EMS Grants
<ul style="list-style-type: none"> Cost of purchasing, installing and commissioning (by internal and external specialists) continuous measurement equipment related to natural gas consumption. Cost of purchasing, installing and commissioning (by internal and external specialists) the tools required to store measurement data and convert it into information. 	<ul style="list-style-type: none"> Costs related to internal specialists (including the energy manager and other members of the energy committee) responsible for the development, implementation and improvement of the EMS (number of hours and hourly rates). Costs of consulting services to institute energy management within the company and to ensure that the company's specialists truly take charge of EMS-related activities. Costs associated with the ISO 50001 certification process, if applicable.

¹² The participation conditions have been in effect since October 1, 2019. However, Énergir reserves the right to modify or terminate the program at any time without prior notice. Énergir also reserves the right to interpret the terms and conditions of the financial assistance grant.

Steps of the EMS development and implementation phase

Table 5: Steps of the EMS development and implementation phase

Steps	Description of steps
<p>1. Financial assistance application</p>	<ul style="list-style-type: none"> The participating customer applies for financial assistance from Énergir by completing the Request for eligibility (Form I), which is available on Énergir's website, or by updating it, if applicable. This form is available on our dedicated website. This request must be accompanied by the audit phase report or documents containing the information set out in Appendix A. By submitting the application, the customer declares to have been made aware of the eligibility criteria for the EMS Grant and formally commits to investing the resources necessary to implement the EMS.
<p>2. Analysis of the financial assistance application</p>	<ul style="list-style-type: none"> Énergir analyzes the financial assistance application based on the following: <ul style="list-style-type: none"> Compliance with the above eligibility criteria Proper completion of the audit phase Customer's commitment to implementing an EMS approach Accuracy and relevance of the information provided by the customer in the forms submitted Énergir confirms in writing the acceptance (or refusal) of financial assistance, the amount granted, the maximum timeframe for execution and a reminder of the conditions for performing the work at this stage. The customer gives their consent to Énergir to ask them or the external firm hired to provide details as to the content of the documents submitted and/or to make changes to them.
<p>3. Execution of planned work</p>	<ul style="list-style-type: none"> As of the date Énergir agrees to provide financial assistance, the customer begins the work planned. Énergir will communicate with the participating customer periodically to ensure that the project is carried out properly and to determine the technical support it can offer. In addition, Énergir will participate in at least one meeting per year of the customer's energy committee.
<p>4. Presentation of deliverables</p>	<ul style="list-style-type: none"> The participating customer submits the following deliverables to Énergir before applying for financial assistance for the development and implementation phase for each year of the project, if applicable: <ul style="list-style-type: none"> Report presenting the various items in Appendix B, or documents containing the information set out in Appendix B. The report or written confirmation of the commissioning of continuous measurement equipment. An example of the contents of the report is presented in Appendix C. Reports of all energy committee meetings held during the year for all the years in which the development and implementation phase continues. The participating customer gives their consent to Énergir to ask them to provide details as to the content of the deliverables and/or to make changes to them. From the date Énergir agrees to provide financial assistance, the customer has a maximum of eighteen (18) months to present the deliverables or an update of them.

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Steps	Description of steps
<p>5. Financial assistance payment</p>	<ul style="list-style-type: none"> • As soon as Énergir deems the deliverables satisfactory, the participating customer can submit the Detailed list of eligible costs and request for payment (Form II), which is available on Énergir's website, for the development and implementation phase. • The form must be accompanied by the following documents: <ul style="list-style-type: none"> ○ The final version of the report presenting the various items in Appendix B or documents containing the information set out in Appendix B. ○ If applicable, a copy of the invoice given to the customer by the external firm, indicating the total cost of services rendered plus applicable taxes (GST and QST). These services include, among other things, the purchase and installation of continuous measurement equipment and the tools required to store measurement data and convert it into information. ○ An invoice submitted by the applicant to Énergir to claim the amount of financial assistance, as well as applicable taxes (GST and QST) • Applicants are invited to consult Appendix D for the treatment of applicable taxes.

Phase 5 – Monitoring energy savings

Objective and scope

This phase aims to:

1. Periodically conduct the necessary analyses to determine improvements in energy use associated with energy savings measures implemented
2. Communicate energy performance improvement results to senior management and employees
3. Update eligible savings measures and the benchmark scenario annually

Financial assistance

The financial assistance offered by Énergir corresponds to the lesser of the following amounts:

1. \$175,000 over a maximum period of four (4) years
2. \$0.10/m³ of natural gas saved following the implementation of one or more eligible energy efficiency measures after a maximum continuous measurement period of one year.

This financial assistance is provided on an annual basis over a maximum period of four (4) years.

From the date of acceptance of the first deliverables for the development and implementation phase, the participant has four (4) years to apply for financial assistance to monitor natural gas energy savings.

Note: Financial assistance for the savings monitoring phase can only be paid annually if new eligible energy savings measures are put in place each year.

Eligible energy savings measures

The following energy savings measures are eligible for financial assistance under the energy savings monitoring phase:

- Measures to change certain behaviors that do not require any expenditure on equipment or products
- Maintenance-related measures
- Capital measures not eligible under other Énergir programs

Steps of the energy savings monitoring phase

Table 6: Steps of the energy savings monitoring phase

Steps	Description of steps
<p>1. Presentation of the deliverable</p>	<ul style="list-style-type: none"> • Before submitting an application for financial assistance, the participating customer submits the energy committee's annual report every year to Énergir, if applicable. • This report should include, at a minimum, the following items: <ul style="list-style-type: none"> ○ A review of the objectives and results of each EPI ○ A list of eligible energy savings measures already in place and future measures ○ Natural gas savings realized ○ Method and calculations justifying the savings • The participating customer gives their consent to Énergir to ask them to provide details as to the content of the deliverable and/or to make changes to it.
<p>2. Financial assistance payment</p>	<ul style="list-style-type: none"> • As soon as Énergir deems the deliverables satisfactory, the participating customer can submit the Detailed list of eligible costs and request for payment (Form II), which is available on Énergir's website, for the savings monitoring phase. • The form must be accompanied by the following documents: <ul style="list-style-type: none"> ○ The final version of the energy committee's annual report ○ If applicable, a copy of the invoice given to the customer by the external firm, indicating the total cost of services provided plus applicable taxes (GST and QST) ○ An invoice submitted by the applicant to Énergir to claim the amount of financial assistance, as well as applicable taxes (GST and QST) ○ Applicants are invited to consult Appendix D in this guide for the treatment of applicable taxes.

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Combined financial assistance

The financial assistance offered by Énergir under the EMS Grant can be combined with financial assistance from complementary programs offered by other energy distributors or government agencies for the same expenses, with the exception of Transition énergétique Québec.

The combined financial assistance must not exceed 75% of natural gas costs for the audit and development and implementation phases of the EMS. If necessary, Énergir will provide the customer with reduced financial assistance based on contributions from other agencies and attributable to each phase so that the portion payable by the customer represents at least 25% of the costs.

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Appendix A: Information to be provided in an audit report – Audit phase of the EMS

The audit report to be submitted as part of the audit phase of the EMS Grant must contain the following information:

Description of the current situation

- Energy consumption and costs
- Measurement and data storage systems
- Data analysis and reporting systems
- Organizational capacity to manage the various systems

Recommendations for improving the current EMS

- Objectives of the EMS, including the perspective of the different levels of the organization
- Establishment of the energy account center (ECC) structure to determine the controllable areas in which energy will be managed
- Preliminary strategy to achieve energy savings by controlling the implementation of significant energy uses (SEUs)
- Evaluation of existing meters and identification of new meters required for operational control by ECCs and SEUs
- New meters/sensors required to create natural gas-specific energy performance indicators (EPIs)
- Changes/requirements for the data collection and storage infrastructure
- Definition of the reporting system for the organization's various levels of management, oversight and operations
- Integration of energy management activities within existing management systems to ensure a systematic conversion of information into cost-saving measures
- Determination of the training required for the implementation of the EMS

Profitability analysis

- Estimated costs for the implementation plan, equipment, installation and support services
- Estimated potential natural gas savings and any other economic benefits
- Methods and assumptions used for these estimates

Next steps

- A description of the next steps.

Appendix B: Information to be provided – Development and implementation phase of the EMS

As part of this phase, the applicant must be able to provide the following information:

- Reduction in natural gas consumption targets for each energy performance indicator (EPI) specific to this type of resource for each of the significant energy uses (SEUs) selected for the project
- The dashboard model for monitoring EPIs
- The strategy for carrying out continuous measurement:
 - The objective for continuous measurement of savings:
 - Describe the purpose and expected outcomes of energy efficiency measures related to the EMS (i.e. primarily measures aimed at improving operations).
 - Description of the proposed method:
 - Describe the desired savings monitoring approach.
 - Describe the measurement perimeter within which monitoring will be carried out.
 - Specify points to be monitored and equipment for continuous measurement and data storage, as well as its commissioning.
 - Description of key parameters:
 - Describe the benchmark scenario: consumption, demand, operating conditions, etc.
 - Describe the efficient scenario: consumption, demand, operating conditions, etc.
 - Describe the conditions that could impact the achievement of objectives: static factors, periods of occupancy, temperature record, building characteristics, etc.
 - Define condition changes where all energy consumption measurements will be adjusted.
 - Analysis procedures and calculations:
 - Clarify the exact data analysis procedure, algorithms and assumptions to be used for each energy-saving measure.
 - Define the mathematical models, their terms and variables (regressions, degree days...).
 - Provide the calculation file in Excel.
 - Monitoring period: Specify the monitoring period, which must be representative of the measure applied (heating, ventilation, process, etc.).
- A record outlining planned and implemented measures to reduce natural gas consumption
- The EMS deployment schedule over a period of five (5) years, including the schedule of energy committee meetings and the schedule for acquiring and installing continuous measurement equipment
- A list of energy committee members (including the name of the energy manager) and their roles and responsibilities
- A cost estimate for all planned activities

Appendix C: Sample report on the commissioning of continuous measurement equipment

The applicant must be able to provide the following information:

- A brief description of the progress made regarding continuous measurement equipment, if it differs from the initial project
- A description of the problems encountered when commissioning continuous measurement equipment, if applicable
- A list of the main pieces of equipment that were replaced or decommissioned
- A list of new equipment installed, including the manufacturer's name and serial number on each manufacturer's nameplate.

Appendix D: Treatment of applicable taxes

As a company registered for GST and QST and a recipient of financial assistance under the EMS Grant, Énergir wishes to inform you that in order to comply with the *Excise Tax Act* (GST) and the *Act respecting the Québec sales tax* (QST), you must send us an invoice, bearing Énergir's name, for the total amount of financial assistance you received.

To make the payment, the invoice must be properly drawn up and contain the following information:

- Name of the financial assistance recipient (customer)
- Address where the planned work will be carried out
- Énergir's name as the grant-making organization
- Invoice number and billing date
- Description: Financial assistance for the EMS Grant
- Amount of financial assistance requested and indicated in Énergir's acceptance notice
- Taxes owing on the amount of financial assistance: GST and QST
- Recipient's GST and QST registration number
- Reference to the file number on the acceptance letter

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This invoice must be forwarded to one of the following addresses, along with the **Request for payment of financial assistance**:

By email:
efficaciteenergetique@energir.com

By mail:
Énergir
Carbon Market
and Energy Efficiency
1717 Du Havre Street
Montréal, Québec H2K 2X3

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Your accountant or tax professional will be able to provide you with further details about this specific procedure and the tax treatment of financial assistance. We encourage you to consult them.