Form I - Conditions and Declaration of Intent

Optimizing boiler systems

As part of its Global Energy Efficiency Plan, Énergir provides its customers with grants to help them reduce their natural gas consumption.

This document is intended for Énergir's current customers and those in the process of becoming a customer who want to perform boiler room optimization work by adding thermal insulation to equipment and accessories, installing a micromodulation system and combustion oxygen trim on a boiler, and/or installing an economizer.

This document explains the conditions of the Boiler Room Optimization program (the "Program") and allows the customer to declare their intention to participate.

To submit an application or for any administrative information related to files in progress, you can reach us:

by email: energyefficiency@energir.com

or by phone: 514-598-3410



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Boiler system optimization or Implementation

Financial assistance under the "Boiler system optimization" and "Implementation" programs cannot be stacked for the same measure. However, the participant may choose which program to apply for in the case of projects involving an economizer, micromodulation system, combustion oxygen trim, and/or the thermal insulation of equipment and accessories.





Calculation of grant amount

Thermal insulation on equipment and accessories

Financial assistance to add thermal insulation on equipment and accessories is provided in the table below. The grant amount depends on the type of insulated equipment and the diameter of the equipment's pipework fitting.

Equipment	Financial assistance for thermal insulation of equipment and accessories Diameter of fitting on pipework			Unit	t Maximum amount			
	< 1"	1" to 2"	> 2" up to 4"	> 4" to 6"	< 6"		aillouilt	
Control valve	\$200	\$300	\$550	\$1,000	\$1,300			
Pressure reducing valve	\$200	\$300	\$550	\$1,000	\$1,300	Per unit	75% of eligible costs ² up to	
Isolation valve	\$60	\$200	\$550	\$1,100	\$1,550			
Shut off valve	\$100	\$400	\$1,000	\$1,500	\$2,200			
Separator	\$300	\$500	\$900	\$1,550	\$2,000			
Filter	\$30	\$150	\$400	\$800	\$1,100			
			Fixed amount				\$100,000/ year	
Condensate pump			\$1,500			-		
Heat exchanger			\$2,000			Per unit		
			\$/ft²					
Reservoir			\$25/ft²			Per ft ² of		
Other equipment with Énergir's approval			\$25/ft²			insulation		

IMPORTANT: Diameter corresponds to the size of the equipment's pipework fitting.

Pipe insulation

System type	Financial assistance Nominal pipe diameter			Unit
	<= 1"	1" to 4"	> 4"	
Hot water and thermal fluid system	\$12	\$13	\$22	\$/ft of insulated
Steam system	\$16	\$21	\$31	length

The maximum financial assistance for the thermal insulation measure of equipment, accessories, and/or piping is 75% of eligible costs, up to a maximum of \$100,000 per year.



Micromodulation and combustion oxygen trim

Financial assistance is as follows:

• Micromodulation system: \$30,000 per boiler

• Combustion oxygen trim: \$10,000 per boiler

The grant cannot exceed 75% of eligible costs.2

Economizer

Financial assistance to install an economizer is provided in the table below. The amount depends on the type of economizer (standard or condensing), its location (integrated or not), and boiler capacity.

	Financia			
Boiler	Standard (1 stag	e)	Condensation (1 or 2 stages)	Maximum amount
capacity	Non-integrated (installed on stack)	Integrated	Non-integrated (installed on stack)	
< 150 BHP	\$200/BHP	\$70/BHP	\$300/BHP	75% of eligible costs ² and
150 to 300 BHP	\$150/BHP	\$50/BHP	\$250/BHP	a maximum of \$300,000 for a non-integrated economizer; \$150,000 for
> 300 BHP	\$100/BHP	\$30/BHP	\$200/BHP	an integrated economizer

Contributions from other organizations

Any participating customer who receives financial assistance from another program agrees to disclose all amounts received from other energy distributors or government agencies in connection with the same project. Énergir will issue a reduced program grant based on the contribution amounts of other organizations for the same project, so that the customer's portion of the project costs is at least 25% of the total.



Conditions

General

- 1. Be an Énergir customer or in the process of becoming one.3
- 2. Work in one of the following business lines:
 - Commercial sector
 - Multi-rental property sector (four or more dwellings)
 - Institutional sector
 - · Industrial sector
- 3. Submit an application to Énergir before undertaking your boiler room optimization project by filling out the form on page 7.
 - Énergir considers the work started on signature of the first contract to carry out the project.
- The measure must be installed according to manufacturer recommendations and must comply with applicable laws and regulations.
- 5. Financial support for the "Boiler Optimization" and "Implementation" grants cannot be stacked for the same measure.
- 6. Requests for less than \$1,000 are not eligible.

Thermal insulation on equipment, accessories and/or pipes

General conditions for the insulation measure

- 1. Insulation on steam traps is not eligible for funding under this program.
 - Steam trap insulation is subsidized through the Steam trap maintenance grant.
- 2. The system on which the thermal insulation is installed (steam, hot water, or other thermal fluid) must operate at a temperature above 49°C (120°F). The installation of insulation on other types of systems does not qualify for funding under the Boiler Optimization program, but may qualify for an Implementation grant.
- 3. The steam, hot water or thermal fluid system must be primarily natural gas-fired (>50%).4
- 4. Énergir will not fund insulation on the same equipment twice. Any exceptions must be pre-approved by Énergir.
 - The participant must ensure that the subsidized insulation does not become damaged by (i) temperatures that are too high for the equipment being used, (ii) inclement weather, or (iii) any other reason.
- 5. Only equipment that can be insulated qualifies for the grant. Equipment that is not functioning properly when insulated or whose insulation could cause inconvenience is not eligible for the grant. It is the customer's responsibility to be informed.
- 6. The choice between removable or rigid insulation is the customer's responsibility.

Specific Conditions for the Insulation of Equipment and Accessories

- Insulation must have a minimum value of R-4 (at fluid temperature).
 - If this information is unavailable, the insulation used must be 1-inch (25.4 mm) thick.
- 2. Equipment and accessories not listed in the financial assistance table on <u>page 2</u>, are subject to Énergir's approval prior to receiving financial assistance.

Specific Conditions for Pipe Insulation

- 1. Comply with all applicable laws and regulations.
- 2. New constructions and building extensions are not eligible. Therefore, the piping must be existing in order to qualify for the grant.
- 3. Existing piping must not have been insulated within the past 12 months. Damaged insulation is considered existing insulation; therefore, its replacement is not eligible for the grant.

Adding a micromodulation system and combustion oxygen trim

- 1. The steam or hot water boiler must be existing to be eligible for the grant.
 - The boiler must be at least 3 years old.
- 2. The boiler must be fired by natural gas distributed by Énergir for at least 2,000 hours/yr.⁵
- 3. The boiler must be certified after micromodulation system is installed.⁵
 - Certification is not mandatory when installing a combustion oxygen trim system only.
- 4. A combustion test is required **before** and **after** installation of the micromodulation system and/or oxygen trim.
- 5. The boiler must have a micromodulation system to be eligible for the oxygen trim grant.



³ For applicants in the process of becoming an Énergir customer, they must have a signed contract with their sales representative and an assigned Énergir account number in order to take advantage of this grant program.

⁴ Cases that do not meet this criteria may be submitted to Énergir for discussion.

⁵ The Régie du bâtiment states that an existing gas-fired appliance must be recertified when an air/fuel control device is replaced with any other air/fuel control device.

Economizer

- The boiler must be steam-powered to qualify for the grant (new or existing).
 Hot-water boilers do not qualify.
- 2. The boiler must be fired by natural gas distributed by Énergir, for at least 2,000 hours/yr.⁵
- 3. The boiler on which the economizer is installed must not have received a Mid-efficiency boiler grant.
- 4. The boiler must not have an economizer, unless it is at the end of its useful life and needs to be replaced.
 - The addition of a 2nd or 3rd stage to an existing economizer does not qualify for funding under the Boiler optimization program. However, it may be eligible for an Implementation grant if the necessary terms and conditions are met.
- 5. For a condensing economizer, a constant cold water source is needed to ensure condensation.
- 6. A combustion test is required **before** and **after** the economizer is installed.
 - If the economizer is integrated into a new boiler, only **post-installation** combustion testing is required.



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Steps

Pre-work

Step 1

The customer sends Form I – Conditions and Declaration of Intent (before work starts) to Énergir.

Step 2

Énergir sends an acceptance or refusal email to the customer. The customer has one year from the date the acceptance email is sent to complete the boiler room optimization work and send the completion documents to Énergir (Form II and supporting documentation).⁶ In the case of insulation for equipment and accessories that are not listed in the financial aid table presented on page 2, the customer must submit a request for approval to Énergir before carrying out the work.

Note: The acceptance email to the program received by the customer following the submission of this form does not constitute an approval.

Step 3

Customer performs boiler room optimization work.

Post-work

Step 4

The customer submits:

- Form II Steam Boiler System Calculator and Request for Payment (after the work): for **steam boiler** optimization work, and/or
- Form II Hot Water Boiler System Calculator and Request for Payment (after the work): for hot water boiler optimization work or for insulation measures on a thermal fluid system.

Form II allows up to 4 boilers to be included in the same application. However, all boilers must supply the same steam or hot water system. If the boilers power separate systems, complete one Form II for each system. The form must be accompanied by the following supporting documentation:

- A copy of the invoice for the work;
- A photograph of the boiler's nameplate showing the boiler's make, model, capacity, and other nominal information.⁷ Photo is not required for the thermal insulation measure.

For thermal insulation:

- The characteristics of the insulation (via the manufacturer's technical specifications) including, at a minimum, its thermal resistance at fluid temperature (or thickness of insulation if thermal resistance is unavailable) and the type of insulation material installed;
- Photos taken before and after pipe insulation must be submitted to Énergir. In certain cases, an Énergir representative may visit the site to verify that the pipe insulation qualifies for the grant.

For a micromodulation system:

- Technical specifications of the equipment;
- A combustion test before and after the installation of the equipment;
- Proof of boiler certification after the equipment is installed.

For the addition of a combustion oxygen trim system:

- Technical specifications of the equipment;
- A combustion test before and after the installation of the equipment.

For an economizer:

- Technical specifications of the equipment;
- A combustion test conducted before and after installation (after installation only in the case of a new boiler with an integrated economizer).

Step 5

Énergir analyzes the file and requests changes if necessary. Énergir will confirm, in writing, the acceptance or refusal of the financial assistance and the grant amount.

Step 6

Customer submits an invoice to Énergir to claim the grant amount plus applicable taxes.

Step 7

When the file is deemed complete and in accordance with the terms and conditions of the program, Énergir will issue the cheque and notify the customer.

Step 8

Énergir reserves the right to conduct an inspection visit at the project site. If the inspection reveals that reported boiler room optimization work has not been implemented, the customer agrees to reimburse Énergir immediately for the funding provided.

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⁶ After this deadline, Énergir reserves the right to deny eligibility for financial assistance.

⁷ If the nameplate is outdated or illegible, please provide all supporting documentation needed to validate the requested information.

Form I - Conditions and Declaration of Intent

Optimizing boiler systems

* Mandatory fields are outlined in red.

Section 1 – Applicant Information	
Customer information	
* Company name:	
* Québec Enterprise Number (NEQ – Enterprise Register):	
* Contact person name:	* Title:
* Office phone:	Cell phone:
* Email:	
Address where project will be carried out ¹	
* Building (or company) name:	
* Type of construction: O New building	
* Building's Énergir account number:	
* Building address:	
* City:	Province: Québec * Postal code:
Section 2 – Measures covered and confirmation of eligibility	
* Type of work involved:	
* Type of work involved: © EEM1: Thermal insulation of equipment and accessories	○ EEM3: O₂ sensor
© EEM1: Thermal insulation of equipment and accessories	 ○ EEM3: O₂ sensor ○ EEM4: Economizer
EEM1: Thermal insulation of equipment and accessoriesEEM2: Micromodulation	○ EEM3: O₂ sensor○ EEM4: Economizer
© EEM1: Thermal insulation of equipment and accessories	-
EEM1: Thermal insulation of equipment and accessoriesEEM2: Micromodulation	○ EEM4: Economizer
 ○ EEM1: Thermal insulation of equipment and accessories ○ EEM2: Micromodulation * Has the work been completed?² ○ Yes ○ No 	○ EEM4: Economizer
 ○ EEM1: Thermal insulation of equipment and accessories ○ EEM2: Micromodulation * Has the work been completed?² ○ Yes ○ No Please fill out only those sections that correspond to the measurement 	○ EEM4: Economizer

General conditions for the insulation measure:

- Insulation on steam traps is not eligible for funding under this program.
- The system on which the thermal insulation is installed (steam, hot water, or other thermal fluid) must operate at a temperature above 49°C (120°F).
- The steam, hot water or thermal fluid system must be primarily natural gas-fired (>50%).
- Énergir will not fund insulation on the same equipment twice. Any exceptions must be pre-approved by Énergir.
- Only equipment that can be insulated qualifies for the grant.
- The choice between removable or rigid insulation is the customer's responsibility.

Specific Conditions for the Insulation of Equipment and Accessories:

- Insulation must have a minimum value of R-4 (at fluid temperature).
- Equipment and accessories not listed in the financial assistance table on <u>page 2</u>, are subject to Énergir's approval prior to receiving financial assistance.



¹ If the facilities or buildings have different Énergir account numbers, please submit a separate funding application for each Énergir account number.

² The work does not have be completed to submit a Declaration of Intent to participate in the program.

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* Mandatory fields are outlined in red.

Section 2a - EEM1 Thermal insulation

Specific Conditions for Pipe Insulation:

- Comply with all applicable laws and regulations.
- New constructions and building extensions are not eligible. Therefore, the piping must be existing in order to qualify for the grant.
- Existing piping must not have been insulated within the past 12 months. Damaged insulation is considered existing insulation; therefore, its replacement is not eligible for the grant.

Section 2b - EEM2 Micromodulation and EEM3 Combustion oxygen trim

- By checking this box, you confirm that the terms listed below, as well as all conditions set out in this form, will be respected:
 - The program's terms and conditions must be met.
 - The boiler (steam or hot water) must be existing to be eligible for the grant (at least 3 years old).
 - The boiler must be fired by natural gas distributed by Énergir, for at least 2,000 hours/yr.
 - The boiler must be certified after the micromodulation system is installed.
 - A combustion test before and after installation of the micromodulation system and/or oxygen trim is required.
 - The boiler must have a micromodulation system to be eligible for the oxygen trim grant.

Section 2c - EEM4 Economizer

- By checking this box, you confirm that the terms listed below, as well as all conditions set out in this form, will be respected:
 - The program's terms and conditions must be met.
 - The boiler must be steam-powered to qualify for the grant (new or existing).
 - The boiler must be fired by natural gas distributed by Énergir, for at least 2,000 hours/yr.
 - The boiler on which the economizer is installed must not have received a Mid-efficiency boiler grant.
 - The boiler must not already have an existing economizer, unless it is at the end of its useful life and needs to be replaced.
 - For a condensing economizer, a constant cold water source is needed to ensure condensation.
 - A combustion test before and after installation of the economizer is required. If the economizer is integrated into a new boiler, only post-installation combustion testing is required.



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Section 3 - Customer signature

By entering my name below and emailing this form to Énergir,3 I hereby notify Énergir of my intention to participate in this grant program, for facilities located at the address indicated on this form.

I acknowledge that I have read the terms and conditions of the grant as set out in this document and confirm that these terms and conditions will be respected. I declare that the information provided in all documents submitted as part of my participation in this grant program is accurate and complete.

I acknowledge that any misrepresentation could result in a full refund of the grant provided by Énergir.

Énergir reserves the right to modify or terminate the grant program at any time without notice. Énergir also reserves the right to interpret the terms of the program. Please note that this grant program will automatically end if the Régie de l'énergie shuts down the program or changes it in such a way that Énergir is no longer authorized to grant the financial assistance provided for by the program.

* Customer's company name:
* Customer's contact person:
* Title:
* Date:
dav/month/year

By email: energyefficiency@energir.com



