



for Gaz Métro Customers

---

## COMMISSIONING REPORT

SOLAR HEATING PROGRAM

For the installation of solar air or water heating collectors

*Write in block letters*

Section A. Applicant (To be completed by the Applicant)											
Gaz Métro Account N°:	<table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td></tr></table>										
Is this a solar air or water project? <input type="checkbox"/> air <input type="checkbox"/> water											
Applicants' Name :	Telephone: ( ) -										
Organization's Name:											
Project Installation Address :											
Is a building permit required for this project? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, when was it issued and by what party? Date: / / (yyyy/mm/dd) Issuing by: If no, please explain why it was not required.											
Explain how the installed system differs from the planned system as presented in your approved application. <ul style="list-style-type: none"><li>• Brand and model of collector:</li><li>• Size of collector or number of collectors:</li><li>• Major equipment added or removed:</li><li>• Location:</li><li>• Costs:</li><li>• Other:</li></ul> Attach an explanatory sheet, if necessary.											
Who supplied the solar collector(s)? <ul style="list-style-type: none"><li>• Business Name:</li><li>• Name:</li><li>• Telephone: ( ) -</li></ul>											
Who installed the solar collector(s)? <ul style="list-style-type: none"><li>• Business Name:</li><li>• Name:</li><li>• Telephone: ( ) -</li></ul>											
When was the system commissioned? / / (yyyy/mm/dd)											
Section B. Commissioner Information (To be completed by the Commissioner)											
Salutation: <input type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Commissioner's Name:										
Telephone : ( ) -	Business Name:										
Professional designation (identify at least one): <input type="checkbox"/> professional engineer <input type="checkbox"/> certified engineering technologist <input type="checkbox"/> CanSIA certified installer											

**Section C. Project Information (To be completed by the Commissioner)**

**C. 1 Sketch**

Attach a detailed sketch of the solar heating system which includes the dimensions of the collector(s), the collector layout, and system interface with the auxiliary heating system (if applicable).

**C. 2 Building**

Where was the heating system installed within the structure of the building?

Describe the primary use of the building.

Describe the building.

Building footprint (area):            m<sup>2</sup>

x Building height:                    m

= Building volume:                    m<sup>3</sup>

Other:

Describe any shading affect (e.g. adjacent buildings, tall trees)

**C. 3 Solar system**

Provide a general description of the system, including safety features.

Attach an explanatory sheet, if necessary.

Is the solar system part of a larger project?    Yes    No

If yes, explain:

Attach an explanatory sheet, if necessary.

What type of solar system is it?

new installation

retrofit

expansion

Does the solar system include any refurbished components?    Yes    No

If yes, list refurbished components:

Attach an explanatory sheet, if necessary.

Percentage use of the solar system:

    % direct space heating

    % make-up air heating

    % ventilation air heating

    % destratification

    % industrial process heat

    % space heating/ventilation

    % hot water for general use (e.g. washrooms and showers)

    % industrial process

    % heating for swimming pool

    % other (please specify)

The above percentages must total 100 %.

<b>C. 4 Collector(s)</b>			
Collector manufacturer:			
Collector model:			
Individual collector gross dimensions:			
Collector #1) Length:	(m) x Width:	(m) = Gross area:	(m <sup>2</sup> )
Collector #2) Length:	(m) x Width:	(m) = Gross area:	(m <sup>2</sup> )
Collector #3) Length:	(m) x Width:	(m) = Gross area:	(m <sup>2</sup> )
Attach a list, if necessary.			
Total collector gross area :		(m <sup>2</sup> )	
Number of collectors :			
Collector slope: (degrees from horizontal)			
Collector azimuth (orientation) : (degrees east or west of south)			
Total airflow rate of the collector : (litres/second)			
<b>Collectors for solar air heating only:</b>			
Color of collectors :			
What is the minimum supply air temperature?		(°C)	
What is the maximum useful temperature?		(°C)	

<b>Section D. Evaluation</b>
Please enumerate the steps taken in your evaluation of the system from which you concluded that the system is deemed commissioned.
Attach an explanatory sheet, if necessary.
Describe how you believe the installation adhered to good engineering practices.
Attach an explanatory sheet, if necessary.
<b>For packages solar water systems only:</b>
Has the system met the current installation standard: CAN/CSA F-383? <input type="checkbox"/> Yes <input type="checkbox"/> No
Please explain :

**SECTION E:**

- **FILL IN PART (A) FOR WATER HEATING**
- **FILL IN PART (B) FOR AIR HEATING**

<b>Section E. (A) Budget – Water Heating Collectors</b>		
<b>E. 1(A) Finals Costs of finished project (excluding taxes)</b>		
Please list all costs before taxes. List new equipment costs only. Do not list recycled or refurbished equipment.		
<b>Solar Water Heating Components</b>	<b>Supplier</b>	<b>Cost</b> (all taxes are excluded)
Collectors		
Collector rack and/or support components		
Piping and pipe insulation between the collectors and the auxiliary heater (detail the list)		
Solar heat exchanger(s)		
Solar heat storage equipment (detail the list):		
Photovoltaic components used to power solar system pump(s)		
Solar pump(s)		
Solar system controller		
Other (explain)		
<b>Equipment cost Subtotal:</b>		
<b>Solar Water Heating System Project Implementation</b>	<b>Supplier</b>	<b>Cost</b> (all taxes are excluded)
Project feasibility, design, and simulation		
Permits (exclusively for solar system installation). Please list them:		
Project management		
Installation labour		
Shipping		
Commissioning		
<b>Implementation cost Subtotal:</b>		
<b>TOTAL PROJECT COST</b>		
Total solar system cost per m <sup>2</sup> of collector area:		(\$/m <sup>2</sup> )

Section E. (B) Budget – Air Heating Collectors		
E. 1 (B) Final Costs of finished project (excluding taxes)		
Please list all costs before taxes. List new equipment costs only. Do not list recycled or refurbished equipment.		
Solar Air Heating Components	Supplier	Cost (all taxes are excluded)
Collectors		
Collector rack and/or support components		
Ducting from collector to interface with auxiliary heater		
Insulation on eligible ducting (i.e., ducting from collector to interface with auxiliary heater)		
Dampers		
Collector fan(s)		
Photovoltaic components used to power solar system equipment		
Solar system controller		
Other (explain)		
<b>Equipment cost Subtotal:</b>		
Solar Air Heating System Project Implementation	Supplier	Cost (all taxes are excluded)
Project feasibility, design, and simulation		
Permits (exclusively for solar system installation). Please list them:		
Project management		
Installation labour		
Shipping		
Commissioning		
<b>Implementation cost Subtotal:</b>		
<b>TOTAL PROJECT COST</b>		
Total solar system cost per m <sup>2</sup> of collector area:		(\$/m <sup>2</sup> )

**Section F. Consent and Signatures (To be signed by the Applicant and the Commissioner)**

I, \_\_\_\_\_, (write the name in block letters) the **Commissioner**, attest that:

- section B and C are true and accurate;
- I have described the steps taken during the commissioning of the system;
- the system appears to have been installed in accordance with professional engineering practices and safety requirements; and
- the system is operational.

Signed: \_\_\_\_\_

Dated: \_\_\_\_\_ Location: \_\_\_\_\_

I, \_\_\_\_\_, (write the name in block letters) the **Applicant**, attest that:

- the project has been completed as stated within this Commissioning Report.

Signed: \_\_\_\_\_

Dated: \_\_\_\_\_ Location: \_\_\_\_\_

**TO SUBMIT YOUR FILE**

**Gaz Métro - Energy Efficiency Fund**

Social community Programs

1717 du Havre

Montreal, Quebec

H2K 2X3

By fax: 514 719-8207

**For more information, contact us**

Montreal area: 514 529-2216

Elsewhere in Quebec: 1 866 529-2216

[www.fee.qc.ca](http://www.fee.qc.ca)

[info@fee.qc.ca](mailto:info@fee.qc.ca)