

## CDI -2008 Application Form Commercial Deployment Incentive for a Solar Water Heating Project

*Please print*

**Important:**

**This application must be signed by the Applicant. The Applicant must attest that they have read the Program's Guidance Document and that they understand the Program's Terms and Conditions.**

Only completed applications will be processed. In the event that NRCan requires clarification about the data presented in this application, the Applicant will have 30 days to respond. If the data is not remitted within 30 days the file will be closed.

**Please note that construction on your solar project may not begin until a Contribution Agreement is signed by both you and Natural Resources Canada. Otherwise the Contribution Agreement will be void and no funds will be paid.**

By submitting this application the Applicant consents that the Government of Canada may use the data herein for planning, reporting, and auditing purposes. Once a Contribution Agreement is executed the Government of Canada may release or publish the name of the recipient, type of system installed, location of installation, projected system output, contribution amount and the expected or actual date of commissioning of the system.

Instructions on how to complete this form can be found in the Guidance Document.

Section A. Applicant – owner of installed system and intended recipient of NRCan funding		
Salutation: <input type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Preferred Language: <input type="checkbox"/> English <input type="checkbox"/> French	
First Name:	Last Name:	
Title:		
Business/Institution Name:		
Applicant's Mailing Address:		
City:	Province/Territory:	Postal Code:
Telephone: (    )	Fax: (    )	
E-mail Address:	Cellphone: (    )	
Type of Business:		
The onus is on the Applicant to provide proof of his or her legal Business Status. A copy of the Proof of Business Status must be attached to this application.		
Please indicate the type of Proof of Business Status provided and include the number or code below:		
<input type="checkbox"/> GST no.: _____ <input type="checkbox"/> Provincial business registration no.: _____		
<input type="checkbox"/> Municipal permit: _____ <input type="checkbox"/> Rental lease: _____		
<input type="checkbox"/> Other (specify): _____		
What is the <b>NAICS 2007</b> (North American Industry Classification System) industry code for your business? _____ Call Statistics Canada at 1-800-263-1136 to verify code. Or find code on the Statistics Canada website: <a href="http://www.statcan.ca/english/Subjects/Standard/naics/2007/naics07-menu.htm">http://www.statcan.ca/english/Subjects/Standard/naics/2007/naics07-menu.htm</a>		

Will you rent or lease the solar system to a third party? If yes, attach a copy of your contract. <input type="checkbox"/> Yes <input type="checkbox"/> No
Will you sell the energy from your solar system? If yes, attach a copy of your contract. <input type="checkbox"/> Yes <input type="checkbox"/> No
Where proponents receive more than 50 per cent of their organization's funding from the Province of Québec, as required by the Québec law M30, their contribution agreements must be with l'Agence de l'efficacité énergétique du Québec. This requires that proponent information on this application be shared with l'Agence de l'efficacité énergétique du Québec.
Does your organization receive more than 50 % of its funding from the Québec government? <input type="checkbox"/> Yes <input type="checkbox"/> No
Do you agree that NRCan can share this data? <input type="checkbox"/> Yes <input type="checkbox"/> No
Select your estimated annual business revenues. <input type="checkbox"/> < \$5 million = small <input type="checkbox"/> \$5-25 million = medium <input type="checkbox"/> > \$25 million = large
Select the number of employees you have. <input type="checkbox"/> <50 = small <input type="checkbox"/> 50-200 = medium <input type="checkbox"/> >200 = large
How long has the applicant been in operation? <input type="checkbox"/> More than 5 years <input type="checkbox"/> 3-5 years <input type="checkbox"/> Less than 3 years
Select a business category and describe your main business function. <input type="checkbox"/> Aboriginal _____ <input type="checkbox"/> Academic _____ <input type="checkbox"/> Federal facility _____ <input type="checkbox"/> Government (not federal) _____ <input type="checkbox"/> NGO _____ <input type="checkbox"/> Utility _____ <input type="checkbox"/> Industry _____ <input type="checkbox"/> Other (explain) _____

<b>A.1 Eligibility</b>
<b>A.1.a Eligible Organizations - Please identify the type of organization that you belong to.</b>
Is the applicant an owner of a Canadian business or industry doing business in Canada? <input type="checkbox"/> Yes <input type="checkbox"/> No
Is the applicant a representative of a public institution? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, which of the following apply? <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Municipality <input type="checkbox"/> Other (please identify) _____
Is the applicant a representative for a federal facility? <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>A.1.b. Eligible Buildings</b>
What type of building will the system be installed in? <input type="checkbox"/> Commercial <input type="checkbox"/> Institutional <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> In part residential <input type="checkbox"/> Mixed use (explain) _____
If the building is used in part for residential occupancy, which of the following apply? <input type="checkbox"/> buildings located in Remote Communities that are used for commercial, industrial, or institutional purposes exceeding 50%; <input type="checkbox"/> building has a common entrance; and <input type="checkbox"/> building has at least four above ground storeys, or <input type="checkbox"/> building exceeds 600 m <sup>2</sup> in building footprint

<b>Section B. Proposed Project</b>
<b>B.1.a Sketch</b>
Applicants must attach a detailed sketch of the solar heating system which includes the dimensions of the collector(s), collector layout and system interface with the auxiliary heating system (if applicable).

**B.1.b Simulation Output Report**

Applicants must attach a simulation output from one of the computer programs below showing expected performance, input assumptions, and geographical location.

Simulation Output Report generated using:  F-Chart     WATSUN     RETScreen     T-Sol  
 Polysun     Enerpool     TRNSYS

**B.1.c Environmental Assessment**

These questions allow NRCan to complete a preliminary screening to determine if the project will need an environmental assessment. Select all that apply. The installed system will:

- increases the footprint or height of the building by more than 10%
- increases the footprint of the building by 25 m<sup>2</sup> or more
- involves any construction within 30 m of a body of water
- involves the likely release of a polluting substance into a body of water
- none of the above

**B.2 Project Building - where the solar system will be installed**

Project Address:

City:	Province/Territory:	Postal Code:
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Project Name: (if applicable)

Where will the collector(s) be installed in relation to the building? Please provide details:

Is the building owned by the Applicant?  Yes  No  
If not, describe the relationship of the Applicant to the building owner.

If the applicant is not the owner of the building, proof of permission to install the solar system on the building must be provided. Is this permission attached?  Yes  No

Is a building permit required for this project? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, has it been obtained? <input type="checkbox"/> Yes <input type="checkbox"/> No
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Issuing body:	Date of issue: (yyyy/mm/dd)
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If no, explain why:

Describe the primary use of the building (e.g. chicken barn, storage, rental unit, etc.)

The solar system will be installed on:  an existing building     a building expansion     a new construction  
Building footprint (area): \_\_\_\_\_ m<sup>2</sup> x Building height: \_\_\_\_\_ m = Building volume: \_\_\_\_\_ m<sup>3</sup>  
Other:

Describe any shading that may affect sun exposure to the solar collectors at any time of year (e.g. adjacent buildings, tall trees).

Does the building have access to either the North American natural gas pipeline network or electrical power grid? Select all that apply:  
 yes, natural gas pipeline network     yes, electrical power grid     no, neither

Estimated annual heating load to which the qualifying solar system will contribute: \_\_\_\_\_ (GJ/year)

Expected contribution of the solar system: \_\_\_\_\_ (%)

If load is not known, what is the annual energy cost? \_\_\_\_\_ (\$/year)

**B.3 Solar System – General**

Is the solar system part of a larger project?  Yes  No  
If yes, explain: (You may attach an explanatory sheet if necessary.)

Is the solar system a:  new installation;  retrofit; or  expansion

Does the solar system include any recycled components?  Yes  No  
If yes, list recycled components: (You may attach a list if necessary)

Does the solar system include any refurbished components?  Yes  No  
If yes, list refurbished components: (You may attach a list if necessary)

Percentage use of the solar system:

\_\_\_\_\_ % 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%

What is the planned date that the system will be commissioned? \_\_\_\_\_ (yyyy/mm/dd)

**B.4 Collector(s)**

Have you chosen a collector from the list approved by NRCAN?  Yes  No

Collector Type: Must select one.  Unglazed  Glazed flat-plate  Glazed evacuated tubes  
 Integral storage  Concentrating

Collector manufacturer:

Collector model:

Individual collector gross areas, as per the Accepted Collector List:

Collector #1) Gross area: \_\_\_\_\_  
Collector #2) Gross area: \_\_\_\_\_  
Collector #3) Gross area: \_\_\_\_\_

You may attach a list if necessary.

Number of collectors: \_\_\_\_\_ Total collector gross area: \_\_\_\_\_ (m<sup>2</sup>)

Collector slope: \_\_\_\_\_ (degrees from horizontal)

Collector azimuth (orientation): \_\_\_\_\_ (degrees east or west of south)

Total collector design flow rate: \_\_\_\_\_ (litres/second)

## B.5 Solar System – Technical Data

### **Estimated Annual Savings**

Solar system energy output: \_\_\_\_\_ (GJ/year)

Auxiliary heating system annual efficiency: \_\_\_\_\_ (%)

Displaced energy: \_\_\_\_\_ (GJ/year) =  $[energy\ output] \div [auxiliary\ heating\ system\ annual\ efficiency]$

Type(s) of fuel being displaced (e.g. light fuel oil, propane, natural gas, electricity): \_\_\_\_\_

Current unit cost of fuel(s) being displaced: \_\_\_\_\_ (\$/GJ)

Displaced energy savings: \_\_\_\_\_ (\$/year) =  $[displaced\ energy \times unit\ cost]$

### **System Type**

What type of system is it? Must select one.

glycol closed-loop    drain back    thermosiphon    other (please specify): \_\_\_\_\_

### **Fluid Type**

glycol    water    other (please specify): \_\_\_\_\_

If glycol, indicate dilution rate: \_\_\_\_\_ % glycol \_\_\_\_\_ % water

### **Heat Exchanger Information**

Function:  collector to storage    storage to load

Type: \_\_\_\_\_

If external, provide heat transfer rate: \_\_\_\_\_ (W/°C)

If internal, provide the following:

Total heat exchanger area: \_\_\_\_\_ (m<sup>2</sup>)

Material type: \_\_\_\_\_ (e.g. copper, stainless steel, etc)

Wall thickness: \_\_\_\_\_ (mm)

Internal diameter: \_\_\_\_\_ (mm)

Other information as required: \_\_\_\_\_

### **Solar Energy Storage (if applicable)**

Total storage capacity: \_\_\_\_\_ (litres)

Number of tanks: \_\_\_\_\_

Capacity per tank: \_\_\_\_\_ (litres)

### **Pool (if applicable)**

Type of pool:  indoor    outdoor

Pool surface area: \_\_\_\_\_ (m<sup>2</sup>)

Percentage of pool area that is shaded: \_\_\_\_\_ (%)

Annual pool operation: Start date: \_\_\_\_\_ (mm/dd) End date: \_\_\_\_\_ (mm/dd)

Is there an auxiliary heater?  Yes    No

What is the set point of the auxiliary heater? \_\_\_\_\_ (°C)

Period of pool blanket use: Start date: \_\_\_\_\_ (mm/dd) End date: \_\_\_\_\_ (mm/dd)

### **Hot Water Load Information (if applicable)**

Hot water consumption: \_\_\_\_\_ (litres/day)

Describe any seasonal variation in consumption. \_\_\_\_\_

Average cold water temperature: \_\_\_\_\_ (°C)

What is the hot water set point temperature? \_\_\_\_\_ (°C)

<b>Section C. Proposed Project Budget</b>		
<b>C1. Planned Budget (excluding taxes)</b>		
Please list all costs <b>before</b> taxes. List new equipment costs only. Do not list recycled or refurbished equipment.		
<b>Solar Water Heating System Components</b>	<b>Supplier</b>	<b>Costs</b> (excluding GST & PST)
Collectors		
Collector rack and/or support components		
Piping and pipe insulation between the collectors and the auxiliary heater:		
Solar heat exchanger(s)		
Solar heat storage equipment:		
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 Costs</b>	<b>Supplier</b>	<b>Costs</b> (excluding GST & PST)
Project feasibility, design, and simulation		
Permits (exclusively for solar system installation): Please list them:		
Project management		
Installation labour		
Shipping		
Commissioning		
<b>Project Cost Subtotal:</b>		
<b>TOTAL PROJECT COST</b>		
Total solar system cost per m <sup>2</sup> of collector area		\$ _____ / m <sup>2</sup>

**C2. Additional Financial Contributions**

Will the solar system benefit from any other funding? If yes, list funding sources below.  Yes  No

List all funding from governmental sources other than this program:

Organization	Program Name	Amount (\$)
<b>Total other governmental funding:</b>		

List all funding from other sources:

Organization	Program Name	Amount (\$)
<b>Total non-governmental funding:</b>		

**C3. Additional In-kind Contributions**

Will the project receive any in-kind contributions?  Yes  No If yes, list all in-kind contributions below:

Organization	Contribution	Amount (\$)
<b>Total in-kind contributions:</b>		

**C.4 Anticipated Incentive from NRCan's *ecoENERGY for Renewable Heat* program**

Complete the following equation using data from the Accepted Collector List with the Dollar Value rate from the Incentive Rate Table, as they pertain to your completed project. The performance factor attributed to your selected collector will be valid as of the date of reception of your CDI-2008 application.

Performance Factor x Incentive Rate x area = anticipated incentive amount

Performance Factor	Incentive Rate	Area of Collector (m <sup>2</sup> )	Anticipated Incentive Amount (\$)

**Section D. Project Representative**

NRCan may not discuss your application or disclose the status of your project to any persons not identified as your delegated Project Representative. In the event that your application is approved, and if during the course of your project you would like to change your Project Representative list, you may do so by submitting a written amendment to NRCan.

**D.1 Contacts**

For information about the project, NRCan may also contact the following Project Representative(s):

- Project Manager     System Supplier     Proxy

<b>D.1.a Project Manager (if applicable)</b>		
Salutation: <input type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Preferred Language: <input type="checkbox"/> English <input type="checkbox"/> French	Title:
First Name:		Last Name:
Business Name:		
Mailing Address:		
City:	Province/Territory:	Postal Code:
Telephone: (    )		Fax: (    )
E-mail Address:		Cellphone: (    )
<b>D.1.b System Supplier</b>		
Salutation: <input type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Preferred Language: <input type="checkbox"/> English <input type="checkbox"/> French	Title:
First Name:		Last Name:
Business Name:		
Mailing Address:		
City:	Province/Territory:	Postal Code:
Telephone: (    )		Fax: (    )
E-mail Address:		Cellphone: (    )
<b>D.1.c Proxy (if the application was completed by someone other than the applicant)</b>		
Salutation: <input type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Preferred Language: <input type="checkbox"/> English <input type="checkbox"/> French	Title:
First Name:		Last Name:
Business Name:		
Mailing Address:		
City:	Province/Territory:	Postal Code:
Telephone: (    )		Fax: (    )
E-mail Address:		Cellphone: (    )

<b>Section E. Partner Programs</b>
Applicants from Ontario, Saskatchewan and British Columbia may be eligible for provincial solar heating incentives. By selecting one of the boxes below you authorize NRCAN to share information about your proposed project, with provincial counterparts. Applicants wishing to apply for provincial incentives must sign and attach the following forms to this application:
<p><b>Ontario</b> applicants:</p> <input type="checkbox"/> A signed OSTHI Consent and Release Form <a href="http://www.mei.gov.on.ca/english/pdf/conservation/OSTHI%20Consent%20and%20Release%20Form.pdf">http://www.mei.gov.on.ca/english/pdf/conservation/OSTHI Consent and Release Form.pdf</a>
<p><b>Saskatchewan</b> applicants:</p> <input type="checkbox"/> A signed SHIFT Natural Gas Consent Form; and <a href="http://municipalities.src.sk.ca/images/programs_and_funding/SHIFT-Waiver-Energy.pdf">http://municipalities.src.sk.ca/images/programs_and_funding/SHIFT-Waiver-Energy.pdf</a>
<input type="checkbox"/> A signed SHIFT Electricity Consent Form. <a href="http://municipalities.src.sk.ca/images/programs_and_funding/SHIFT-Waiver-Electrical.pdf">http://municipalities.src.sk.ca/images/programs_and_funding/SHIFT-Waiver-Electrical.pdf</a>
<p><b>British Columbia</b> applicants:</p> <input type="checkbox"/> A signed SolarBC Consent and Release Form <a href="http://www.solarbc.ca/sites/default/files/Consent_and_Release_Form_0.doc">http://www.solarbc.ca/sites/default/files/Consent_and_Release_Form_0.doc</a>



## Section F. Checklist for Attachments

Please ensure that all of the following documents are included with your application:

- Proof of Business Status
- Proof of Permission from building owner(s) to proceed (if applicable)
- Detailed sketch of the proposed system
- Simulation Output report
- Copy of the contract to sell the heat (if applicable)
- Copy of the rental or leasing contract for the equipment (if applicable)
- OSTHI, SHIFT and SolarBC consent forms (if applicable)
- Description of multiple collectors (if applicable)
- Supplementary documents, photos, or plans that you deem helpful in describing the proposed project.

Identify all attachments as Supplementary Information, labeled with the Applicant's name, phone number, and the project location.

In the event that the project is approved, NRCan will provide a file number for future reference. This file number must be included on all future correspondence.

## Section G. Consent and Signature

I, \_\_\_\_\_ the Applicant (please print name), have read the Guidance Document and understand the Terms and Conditions of this program. My application for the Commercial Deployment Incentive is complete and accurate.

As per Section D, I designate my Project Representative(s) as: \_\_\_\_\_,  
\_\_\_\_\_ and \_\_\_\_\_.

I authorize the Government of Canada to use the information contained herein for planning, reporting, and auditing purposes.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_ Signed at (location): \_\_\_\_\_

Was this application completed by the Applicant?  Yes  No

If no, this application was completed by the following **proxy**:

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_ Signed at (location): \_\_\_\_\_

## Section H. Submission

Please mail this completed Application form to:

ecoENERGY for Renewable Heat  
Renewable and Electrical Energy Division  
Natural Resources Canada  
Room 150, 615 Booth Street  
Ottawa, Ontario K1A 0E9

For more information, contact:

E-mail: [ecoENERGYRHP@NRCan.gc.ca](mailto:ecoENERGYRHP@NRCan.gc.ca)  
Tel.: 1 800 O-Canada (1 800 622-6232)  
Fax: 613-943-6517

**IMPORTANT: MISSING INFORMATION WILL DELAY THE PROCESSING OF YOUR APPLICATION.**