

Manitoba Geothermal Energy Incentive Program

Grant Application Guide and Form for District Geothermal System Owners

Provincial Grant

A provincial grant for eligible new district geothermal systems installed after January 1, 2009 based on the designed geothermal system capacity, calculated as follows:

- \$120 per 1000 BTU for first 300,000 BTU threshold;
- \$70 per 1000 BTU for incremental BTUs.

Note: The maximum incentive grant is \$150,000 per district geothermal system.

Program Eligibility

To be eligible, a district geothermal system must be geographically separate and independent and serve one or more of the following types of buildings:

- Commercial and institutional buildings;
- Municipal buildings;
- Multi-unit residential buildings;
- Mixed-use commercial/residential buildings; or
- Single detached homes.

Key Requirements

To qualify, a district geothermal system must meet these requirements:

- Located in Manitoba and serve buildings that are situated on permanent foundations.
- Serve a minimum of three detached buildings where each eligible building (excludes single detached and attached homes) requires a minimum 100,000 BTU for either heating or cooling.
- If the district geothermal system serves single detached homes or attached homes, or both, must provide
 - a minimum 300,000 BTU for heating and cooling;
 - at least three individual buildings;
 - each single detached or attached home must require no more than 50,000 BTU.
- Sized for heating and cooling loads in accordance with CSA Standard CAN/CSA-C448 and/or ASHRAE for energy estimating methods and for heating, ventilation and air conditioning design practices for the occupancy and location. The applicant must submit a Manual J Calculation or equivalent calculation with the Application Form to document the system size and simultaneously to document the separate costs of the heat pumps and installation costs of the geothermal system.
- Technical design of the heat pump system design and/or its specifications, including the earth connection (i.e. loop), MUST be approved by a Professional Engineer as required per regulations and/or building code.
- Installer/contractor must be accredited by the Manitoba Geothermal Energy Alliance (MGEA) at the time of the installation.
- Installation must meet building code and CSA Standard CAN/CSA-C448 – “Design and Installation of Earth Energy Systems.”

How to Apply

Please submit your completed and signed Grant Application Form, along with the necessary supporting documentation (see “Supporting Documents”).

For assistance in completing the Grant Application form, see your Accredited MGEA Installer.

Mail to:
Manitoba Geothermal Energy Incentive Program
Science, Technology, Energy & Mines
1200-155 Carlton Street
Government of Manitoba
Winnipeg, MB. R3C 3H8

Program Terms

Eligibility

The application must meet the Program Eligibility and Key Requirements and must be submitted by the earlier of

- 3 months after commissioning the system, or
- 3 months after occupying the buildings.

Equipment/Property Schedule

Qualifying Geothermal System:

A new installed geothermal heat pump system that is formed from new equipment that meets the standards set by the Canadian Standards Association for design and installation of earth energy systems, including such equipment that consists of:

- Underground piping,
- Energy conversion equipment,
- Control equipment, and/or
- Equipment designed to interface with other heating equipment;

But NOT including the following:

- A building or part of a building,
- Equipment used to heat water for use in a swimming pool,
- Energy equipment that backs up equipment,
- Equipment that distributes heated air or water in a building, and/or
- A heat pump with a full load coefficient of performance (COP), as rated in accordance with the International Standards Organization standard 13256-1 for water-to-air and brine-to-air heat pumps, and standard 13256-2 for water-to-water and brine-to-water heat pumps, of
 - Less than 3.3 for closed loop design, or
 - Less than 3.6 for an open loop design.

No warranty by Manitoba

Manitoba does not provide any warranty for the installed system and is not liable for any damage or injury resulting from the installation or use of the system covered by the grant application.

Applicants should discuss warranty (against manufacturing defects affecting safety, system performance, etc.) with the manufacturer and installer/contractor.

Inspection

Applicant must provide all relevant documents requested by Manitoba.

The Government of Manitoba reserves the right to inspect and evaluate the newly installed geothermal heat pump equipment at the installed property at any reasonable time for verification of the purchase and installation prior to issuing a grant and/or within 12 months after receipt of the final application.

Emissions Credits

The applicant agrees that the Government of Manitoba has the right to claim and to own any emission reduction (greenhouse gas) credits that may result from the geothermal heat pump system(s) installed.

Repayment

Any applicant who fails to meet the Program Terms must repay the full grant amount.

Supporting Documents

All applications must include the following documentation:

- a completed and signed Grant Application form;
- an itemized invoice indicating the make and model of the installed heat pump;
- evidence of payment;
- evidence of heat pump coefficient of performance (COP) fulfillment:

- For ISO Standard 13256-1 (water-to air and brine-to-air heat pumps): An AHRI “Certificate of Product Ratings” that confirms fulfillment of the minimum COP requirement. This certificate can be found in the AHRI Directory of Certified Product Performance at the following AHRI web site:
<http://www.ahridirectory.org/ahridirectory/pages/wbahp/defaultSearch.aspx>
 - For ISO Standard 13256-2 (water-to-water and brine-to- water heat pumps): Third-party laboratory and/or third-party testing documentation.
- a declaration of completion from the MGEA accredited installer.

Changes to Program

Manitoba may change the Program without notice. But, any change will not affect any application with all required documents received by Manitoba before the change comes into effect.

Installation

The applicant is responsible for selecting, purchasing and installing the equipment. All installations must comply with existing standards.

Equipment must be installed by an accredited MGEA contractor/installer in accordance with the Building Code, applicable CSA standards and applicable ASHRAE guidelines for earth energy systems and the manufacturer’s recommendations.

Restrictions

An incentive grant is available only for complete new geothermal systems (excludes repairs and/or component replacement of existing systems).

If a home or building is serviced by a district geothermal system, the building owner is not eligible for other geothermal grants (excludes the Manitoba Green Energy Equipment Tax Credit) from Manitoba unless otherwise indicated.

No more than one incentive grant is allowed for each eligible project.

Commercial buildings are buildings designed, built, and operated for any use other than residential, and intensive service agriculture and/or livestock agriculture use (i.e. barns), including everything from schools to hospitals, offices to grocery stores. These buildings can be dedicated to a single, homogeneous use such as a corporate headquarters, or they can be a complex combination of rooms for public interaction, space for commercial activity, classrooms, workspaces, cooking and dining facilities, and even living quarters, such as those found in dormitories.

Environment

The applicant must obtain all licenses, approvals, certificates, orders and permits required for the installation and operation of the district geothermal systems by statute, regulation, bylaw or government policy.

The applicant is responsible for recycling or disposing of any equipment or material replaced under this Program.

Processing

Provincial incentives will be paid to property owners upon application and verification that:

- the project meets the Program Eligibility;
- the applicant has met Program Terms;
- the project has been completed as approved.

Projects are funded first-come, first-served based on the date of approval of a completed application and subject to the availability of Program funds.

It is anticipated that grants will be paid within 90 days of the date Manitoba receives an application.

Manitoba Green Energy Equipment Tax Credit

The Manitoba geothermal grant program complements the Manitoba Green Energy Equipment Tax Credit. For your reference, a copy of *The Green Energy Equipment Tax Credit Regulation* can be found at the following webpage: <http://web2.gov.mb.ca/laws/regs/pdf/i010-186.08.pdf>. The Manitoba Tax Assistance Office will assist on matters pertaining to the Manitoba Green Energy Equipment Tax Credit.



Manitoba Geothermal Energy Incentive Program (MGEIP) Grant Application Form

All applications must be completed, signed and accompanied by the required supporting documentation.

A. Applicant Information

Organization (if any): _____

Name: _____

Mailing Address: _____

City / RM: _____ Province: _____ Postal Code: _____

Phone No: Day _____ Evening _____

Street address or legal description of the installed geothermal system (if different from above):

City / RM: _____ Province: _____ Postal Code: _____

B. Grant Application

B1. Application Type: Residential - new home located in a natural gas service area OR District Geothermal

Note: A home is considered new construction up to 12 months after the building permit was issued.

B2. If Residential, New Single Detached Home OR New Attached Home with Individual Entrance (i.e. duplexes, triplexes, row housing)

B3. Total Geothermal System Cost \$ _____

C. Geothermal Heat Pump System Information

(Obtain this information from your Manitoba Geothermal Energy Alliance (MGEA) accredited installer)

C1. System Installation Date: _____ Building Permit Date: _____

Note: To be eligible for the an incentive grant, the installation of the geothermal system must have been completed after January 1, 2009. (This is separate from the Manitoba Green Energy Equipment Tax Credit, which is available for eligible geothermal systems installed after April 4, 2007.)

C2. Heat Pump ISO COP: _____ System Size (Tons): _____

C3. Heat Pump Manufacturer: _____ Model: _____

C4. Heat Pump Type: Water-to-air/brine-to-air OR Water-to-water/brine-to-water

C5. Hot Water Desuperheater: Yes No

C6. Individual Building Loop OR District Loop

C7. If Individual Building Loop, please select Ground Loop Type: Vertical Horizontal Lake Loop Open Loop

C8. If Vertical or Horizontal Loop Type, please indicate the total length of loop in feet: _____ AND No. of boreholes: _____ OR Not Applicable

C9. If applying for a residential incentive grant, does an individual ground loop serve only the home? Yes No OR Not Applicable

C10. If applying for a district geothermal grant, please list:

(a) total number of buildings served by the district geothermal system: _____

(b) the delivered Heating Geothermal BTUs and delivered Cooling Geothermal BTUs for each building _____

(c) Not Applicable

C11. Heating/Cooling Distribution Type: Forced Air OR Hydronic (circulated fluid)
OR Combination – Forced Air & Hydronic

C12. Total BTUs delivered from the Geothermal System: _____

E. Contract/Installer Information

E1. MGEA Accredited Installer: _____

E2. MGEA Accredited Installer Company Name: _____

E3. Installer/Contractor Contact Name: _____

The following supporting documentation must accompany this application:

- (1) An itemized invoice indicating the make and model of the installed heat pump;
- (2) Evidence of payment – For example, a copy of an itemized invoice with a signed statement of payment in full from the vendor; and/or a signed receipt of payment; and/or an itemized invoice along with a processed cheque or financial institution report indicating payment or proof of debit or credit card transaction; and/or an itemized invoice along with a signed loan document from a utility or financial institution;
- (3) Evidence of heat pump coefficient of performance (COP) fulfillment:
 - a. If you have installed a water-to-air or brine-to-air heat pump (ISO Standard 13256-1), you must include an AHRI "Certificate of Product Ratings" that confirms the geothermal heat pump equipment meets the minimum COP requirement. This certificate can be found in the AHRI Directory of Certified Product Performance at the following AHRI web site:
<http://www.ahridirectory.org/ahridirectory/pages/wbahrp/defaultSearch.aspx>

- b. If you have installed a water-to-water or brine-to-water heat pump (ISO Standard 13256-2), you must include third-party laboratory documentation and/or third-party testing documentation that confirms the geothermal heat pump equipment meets the minimum COP requirement.

(Contact your Manitoba Geothermal Energy Alliance (MGEA) accredited installer for more information.)

F. Applicant's Signature

I apply to the Government of Manitoba for a grant under the Manitoba Geothermal Energy Incentive Program. I have read, I understand and I accept the program eligibility and program terms.

I confirm that:

- § I own the Installed Geothermal System and the building in which it is installed.
- § The geothermal system was installed by an accredited Manitoba Geothermal Energy Alliance (MGEA) Installer at the time the contract was assigned to the installer (this requirement will be in effect as of April 1, 2009).
- § The Government of Manitoba may use and rely upon this information in reviewing my application and for related purposes.
- § All statements in this application are true and complete.

Name of Applicant (PRINT): _____

Signed: _____ Date: _____

For complete information regarding the Manitoba Geothermal Energy Incentive Program, please refer to the Application Guide posted on the Government of Manitoba website, www.manitobaenergy.ca.

Submit this application along with the required supporting documentation to:

Attention: Manitoba Geothermal Energy Incentive Program
Manitoba Science, Technology, Energy and Mines
1200-155 Carlton Street
Winnipeg, MB R3C 3H8