

Welcome to the Green Ontario Fund Online Orientation - For Ground Source Heat Pumps

Before you begin please plan on 15 minutes of undisturbed time to complete the Orientation.

Use the Next and Back buttons to navigate through the screens. On question screens, you will need to select the correct answer to advance forward.



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What Ground Source Heat Pump Rebates are available through the GreenON Rebates Program?

Rebate details: ground source heat pumps

Eligible Measure	Participant Rebate
Closed Loop Ground Source Heat Pumps – Horizontal or Pond Loops	<p>\$2000/horizontal or pond loop ton</p> <p>plus \$750 for desuperheater;</p> <p>plus \$1500 for domestic hot water;</p> <p>plus \$1500 for enhanced performance with COP exceeding 4.0</p> <p>Up to a maximum Participant incentive of \$15,000</p>
Closed Loop Ground Source Heat Pumps – Vertical Loops	<p>\$3000/vertical loop ton</p> <p>plus \$750 for desuperheater;</p> <p>plus \$1500 for domestic hot water;</p> <p>plus \$1500 for enhanced performance with COP exceeding 4.0</p> <p>Up to a maximum Participant incentive of \$20,000</p>
Heat Pump Replacement for Existing Ground Source Heat Pump System	<p>\$750/heat pump ton</p> <p>Up to a maximum Participant incentive of \$4500</p>
Ground Loop Repair or Replacement for Existing Ground Source Heat Pump System	<p>\$750/loop ton</p> <p>Up to a maximum Participant incentive of \$4500</p>

What are the details to determine if a Ground Source Heat Pump is eligible for a rebate?

Eligible equipment details: ground source heat pumps

Measure	Measure eligibility
Closed Loop Ground Source Heat Pump Horizontal or Pond Loops	<ul style="list-style-type: none"> • Closed Loop Water to Air System must meet minimum 17.1 EER and 3.6 COP; • Closed Loop Water to Water system must meet minimum 16.1 EER and 3.1 COP (For Multi-stage models, EER and COP value shall be calculated as follows: $EER = (\text{highest rated capacity EER} + \text{lowest rated capacity EER})/2$ and $COP = (\text{highest rated capacity COP} + \text{lowest rated capacity COP})/2$)
Closed Loop Ground Source Heat Pump Vertical Loops	<ul style="list-style-type: none"> • Must obtain Environmental Compliance Approval (ECA) if vertical closed loop system extends more than 5 meters below the ground • Vertical loop boring shall be undertaken by the qualified licenced driller as per the Ontario Regulation 98/12 under the Environmental Protection Act • Closed Loop Water to Air System must meet minimum 17.1 EER and 3.6 COP • Closed Loop Water to Water system must meet minimum 16.1 EER and 3.1 COP • For Multi-stage heat pumps, EER and COP values shall be calculated as follows: $EER = (\text{highest rated capacity EER} + \text{lowest rated capacity EER})/2$ and $COP = (\text{highest rated capacity COP} + \text{lowest rated capacity COP})/2$

Eligible equipment details: ground source heat pumps cont.

Measure	Measure eligibility
Heat Pump Replacement of an Existing GSHP System	<ul style="list-style-type: none">•The existing heat pump of an existing GSHP system is minimum 20 years of age and has reached to the end of its life.•Closed Loop Water to Air System must meet minimum 17.1 EER and 3.6 COP•Closed Loop Water to Water system must meet minimum 16.1 EER and 3.1 COP.
Ground Loop Repair or Replacement of Existing GSHP System	<ul style="list-style-type: none">•The existing ground loop of an existing GSHP system is minimum 20 years of age and has clearly demonstrated non-performing issues associated with the existing ground loop.•The repair or replacement of the ground loop of the existing GSHP system shall be undertaken by the qualified ground loop installers and the replacement parts or materials must be new and comply with ANSI/CSA/IGSHPA C448 Series-16 standards.

Project documentation details: What details do you as a contractor need to collect from each installation to complete your application?

Project documentation: general customer information

- Receipts and photos of all products installed (before and after photos)
- Itemized invoices with per unit cost for the product and for the installation of the product
- **General home info:**
 - Customer Name (First and Last)
 - Customer Installation Address
 - Customer Billing Address (for provision of incentive cheque, if different from installation address)
 - Customer Electric Utility Account Number
 - Does the home have a Central Air Conditioning System (CAC) -Y/N
 - Approximate square footage of the house
 - Approximate age of the house
 - Existing heating energy source (electricity/natural gas/propane/other)
 - Type of heating system (i.e. baseboards, forced air furnace, air source heat pump, ground source heat pump etc.)
 - Age of existing heating source
 - Type of cooling

Project documentation: Scenario 1- new ground source heat pump

- Installer/Technician
- Is the heat pump replacing Central Air Conditioner (CAC) - Y/N
 - If yes, provide existing CAC manufacturer, brand, model and serial numbers
 - Age of existing CAC
- Installed Equipment:
 - Loop type (horizontal, pond or vertical)
 - Copy of Environmental Compliance Approval (ECA) for the vertical ground loop that extends more than five meters below the ground
 - Brand
 - Equipment model, serial numbers
 - AHRI number
 - EER
 - COP
 - Total Loop Tons (BTUHs)
 - Upload proof of purchase and photo of installation

Project documentation: Scenario 2- heat pump replacement

- Is it a replacement of an existing GSHP system?
 - If yes, provide the age of the existing heat pump and the ground loop capacity
 - Issues identified with the existing heat pump
 - Brand, model, serial number, year of manufacture
- Installed heat pump, brand, model & serial number
- AHRI#
- EER
- COP
- Total Loop tons (BTUH)
- Upload proof of purchase and photo of installation

Project documentation: Scenario 3- ground loop repair/replacement

- Is it a repair or replacement of an existing ground loop of an existing GSHP system?
 - If yes, provide the existing ground loop capacity, age, heat pump capacity,
 - Issues identified with the existing ground loop.
- Installed ground loop parts and material quantities (tons), brand, model, serial number, if applicable.
- Upload proof of purchase and photo of installation

Contractor Requirements for Ground Source Heat Pumps

- 313A or 313D refrigeration and air conditioning licence (issued by Ontario College of Trades)
- Ensure at least one designer at each company undertakes International Ground Source Heat Pump Association (IGSHPA) Residential Designer Training
- All installers are required to undertake IGSHPA Accredited Installer Training
- Please note: Contractors that can provide evidence of completion of the following courses/certifications, may be considered for immediate registration in the GreenON Rebates Program provided that the Contractor completes the IGSHPA Installer and Designer Training requirements outlined above within 180 Days of initial registration:
 - Design certification from the Canadian GeoExchange Coalition (CGC) or IGSHPA within the past 10 years and installer certification from the Canadian GeoExchange Coalition (CGC); and
 - Proof of at least six residential installations in the last four years (subject to verification check at the sole discretion of the Program Administrator)

In summary, ground source heat pumps are eligible for a rebate when...

- Addition of new GSHP or replacement/repairs of GSHP meet eligibility details
- Installation occurs in an existing detached, semi-detached, or row town home OR in a new custom home in Ontario
- Installation is completed by a Participating Contractor of the GreenON Rebates Program
- All required project documentation is included in the application

If you or your technicians have questions

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