

U.S. Department of Energy
Energy Information Administration

**Form EIA-902
ANNUAL GEOTHERMAL HEAT PUMP MANUFACTURERS SURVEY**

This report is **mandatory** under the Federal Energy Administration Act of 1974 (Public Law 93-275). Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For further information concerning sanctions and data protections, see the sanction provision and the provisions concerning the confidentiality of information in the Instructions. **Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.**

THE REPORTING PERIOD FOR THIS SURVEY IS THE CALENDAR YEAR _____

For glossary and instructions, please refer to the instructions for this form.

1.0 IDENTIFICATION DATA

1.1 Respondent Identification:	<Company Name>	<Company ID>
Current Address of Principal Business Office		Current Address of Preparer's Office (If different than principal address)
(a) Street Address: _____		(a) Street Address: _____
(b) City: _____		(b) City: _____
(c) State/U.S. territory or possession: _____		(c) State/U.S. territory or possession: _____
(d) Zip Code: _____		(d) Zip Code: _____

1.2 Provide the name, title, and contact information for the principal people in your company to whom questions should be addressed regarding this submission.

(a) Preparer's Supervisor Name: _____	(a) Preparer's Name: _____
(b) Title: _____	(b) Title: _____
(c) Telephone: _____	(c) Telephone: _____
(d) Fax: _____	(d) Fax: _____
(e) E-mail: _____	(e) E-mail: _____

2.0 MANUFACTURING STATUS

2.1 During the current reporting period, did your company: (Mark as appropriate)

(a) Manufacture and ship geothermal heat pumps?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
(b) Cease manufacturing but continue to ship geothermal heat pumps?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
(c) Import and ship geothermal heat pumps?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
(d) Manufacture and export geothermal heat pumps?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Note: If you answered "Yes" to any part of question 2.1, please complete the remainder of this form. If you answered "No" to all parts of question 2.1, please complete questions 2.2 & 7.0 and submit this form electronically using EIA's secure Internet Data Collection (IDC) system.

2.2 If you answered "No" to all parts of question 2.1, do you plan to manufacture, import, export, or ship geothermal heat pumps in the future?
If yes, when? _____ (year) Yes No

3.0 MANUFACTURER AND MARKETING DATA

3.1 Mark the appropriate box or boxes to indicate all the geothermal heat pump-related activities in which your company was engaged during the survey year. Mark only those that apply to your geothermal heat pump-related activities.

- (a) Geothermal heat pump manufacturing
- (b) Geothermal heat pump or system design
- (c) Prototype geothermal heat pump development
- (d) Prototype systems development
- (e) Wholesale distribution
- (f) Retail distribution
- (g) Installation
- (h) Manufacture of system components-other than those used for geothermal heat pump assembly
- (i) Other (describe): _____

3.2 If you are planning to introduce a new geothermal heat pump-related product in the next calendar year, please check the appropriate box.

- (a) ARI-320 Water-Source Heat Pumps
- (b) ARI-325 Ground Water-Source Heat Pumps
- (c) ARI-330 Ground Source Closed-Loop Heat Pumps
- (d) ARI-870 Direct Geoexchange Heat Pumps
- (e) Other - describe _____
- (f) Non-geothermal Heat Pump System Components- describe _____

3.3 Please enter the number of person-years expended in your company in geothermal heat pump-related activities during the survey year.
_____ person-years (For clarification of "person-year" see the instructions.)

3.4 What percentage of your company's total sales revenue do geothermal heat pump-related activities compose?

- (a) 90 – 100%
- (b) 50 – 89%
- (c) 10 – 49%
- (d) Less than 10%

Company Name:

Reporting Period (Calendar Year)

4.0 GEOTHERMAL HEAT PUMP SHIPMENT DATA. For each type of geothermal heat pump manufactured or imported, and shipped, enter the data for this reporting period.						
ITEM	TYPE OF HEAT PUMP					TOTAL Geothermal Heat Pumps (f) Total = (b) + (c) + (d) + (e)
	ISO-13256-1 ¹					
	ARI-320 Total ² (a)	ARI-320 GHP Only ³ (b)	ARI-325/330 (c)	ARI-870 (d)	Other (Non-ARI Rated) (e)	
4.1 Number of Heat Pumps						
4.2 Total GHP Shipments (total rated capacity in tons)						
4.3 Total Value of GHP Shipments (dollars)						
4.4 Average Cooling (EER)						
4.5 Average Heating (COP)						
4.6 Domestic Shipments by Sector (total rated capacity in tons)						
(1) Residential						
(2) Commercial						
(3) Industrial						
(4) Electric Power						
(5) Transportation						
(6) Total domestic shipments by sector ⁴						
4.7 Domestic Shipments by End Use (total rated capacity in tons)						
(1) Hot Water						
(2) Ice Melt						
(3) Pool Heating						
(4) Process Hot and Cool Water						
(5) Space Heating and Cooling						
(6) Triple Function: Heating, Cooling, and Hot Water						
(7) Total domestic shipments by end use ⁴						
4.8 Imports (total rated capacity in tons)						
4.9 Exports (total rated capacity in tons)						

¹ARI/ISO Standard 13256-1 Certification Program, which replaced ARI Standard-320, 325, and 330.

²Do not include total number of ARI-320 in total GHP in item 4.1 (e).

³In this column, only report ARI-320 units connected to ground, ground water, or surface water connection for heat exchange. Do not include units connected to a boiler and/or cooling tower.

⁴Domestic shipments equal to total GHP shipments in item 4.2 minus exports in item 4.9.

4.12 Domestic Shipments by Customer Type (total rated capacity in tons).

Tons
(Domestic Shipments)

(a) Exporters	
(b) Wholesale Distributors	
(c) Retail Distributors	
(d) Installers	
(e) End - Users	
TOTAL	

5.0 SYSTEMS DATA

5.1 Of the geothermal heat pump shipments reported in 4.2 (f), how many complete systems were shipped _____ (number of systems)?

5.2 Of the geothermal heat pump shipments reported in 4.2 (f) enter the total rated capacity that were sold as part of complete systems _____ (tons)?

5.3 What was the value of complete systems shipped in question 5.1 _____ (dollars)?

6.0 GEOGRAPHIC DATA

6.1 Please check the box for each State/U.S. territory or possession in which you manufactured/imported. Report the total geothermal heat pumps shipments (total rated capacity in tons) in item 4.2 (f) that your company manufactured in the State/U.S. territory or possession listed below under Code 01-78, this indicates manufacture from the State/U.S. territory or possession. If some geothermal heat pumps were imported from another country, please indicate under Code 00 the total rated capacity and report details about the country of import in question 4.10.

Geothermal Heat Pumps Imported State Code or Manufactured in the State (Tons)	Geothermal Heat Pumps Imported State Code or Manufactured in the State (Tons)	Geothermal Heat Pumps Imported State Code or Manufactured in the State (Tons)
00 <input type="checkbox"/> Imported _____	22 <input type="checkbox"/> Louisiana _____	41 <input type="checkbox"/> Oregon _____
01 <input type="checkbox"/> Alabama _____	23 <input type="checkbox"/> Maine _____	42 <input type="checkbox"/> Pennsylvania _____
02 <input type="checkbox"/> Alaska _____	24 <input type="checkbox"/> Maryland _____	44 <input type="checkbox"/> Rhode Island _____
04 <input type="checkbox"/> Arizona _____	25 <input type="checkbox"/> Massachusetts _____	45 <input type="checkbox"/> South Carolina _____
05 <input type="checkbox"/> Arkansas _____	26 <input type="checkbox"/> Michigan _____	46 <input type="checkbox"/> South Dakota _____
06 <input type="checkbox"/> California _____	27 <input type="checkbox"/> Minnesota _____	47 <input type="checkbox"/> Tennessee _____
08 <input type="checkbox"/> Colorado _____	28 <input type="checkbox"/> Mississippi _____	48 <input type="checkbox"/> Texas _____
09 <input type="checkbox"/> Connecticut _____	29 <input type="checkbox"/> Missouri _____	49 <input type="checkbox"/> Utah _____
10 <input type="checkbox"/> Delaware _____	30 <input type="checkbox"/> Montana _____	50 <input type="checkbox"/> Vermont _____
11 <input type="checkbox"/> D.C. _____	31 <input type="checkbox"/> Nebraska _____	51 <input type="checkbox"/> Virginia _____
12 <input type="checkbox"/> Florida _____	32 <input type="checkbox"/> Nevada _____	53 <input type="checkbox"/> Washington _____
13 <input type="checkbox"/> Georgia _____	33 <input type="checkbox"/> New Hampshire _____	54 <input type="checkbox"/> West Virginia _____
15 <input type="checkbox"/> Hawaii _____	34 <input type="checkbox"/> New Jersey _____	55 <input type="checkbox"/> Wisconsin _____
16 <input type="checkbox"/> Idaho _____	35 <input type="checkbox"/> New Mexico _____	56 <input type="checkbox"/> Wyoming _____
17 <input type="checkbox"/> Illinois _____	36 <input type="checkbox"/> New York _____	60 <input type="checkbox"/> American Samoa _____
18 <input type="checkbox"/> Indiana _____	37 <input type="checkbox"/> North Carolina _____	66 <input type="checkbox"/> Guam _____
19 <input type="checkbox"/> Iowa _____	38 <input type="checkbox"/> North Dakota _____	72 <input type="checkbox"/> Puerto Rico _____
20 <input type="checkbox"/> Kansas _____	39 <input type="checkbox"/> Ohio _____	78 <input type="checkbox"/> Virgin Islands (U.S.) _____
21 <input type="checkbox"/> Kentucky _____	40 <input type="checkbox"/> Oklahoma _____	<input type="checkbox"/> Other U.S. territory or possession (Specify) _____

Total _____

6.2 Please check the box for each State/U.S. territory or possession to which you shipped/exported. Report the total geothermal heat pumps shipments (total rated capacity in tons) in item 4.2 (f) that your company shipped to the State/U.S. territory or possession listed below under Code 01-78, this indicates shipments to the State/U.S. territory or possession. If some geothermal heat pumps were exported to another country, please indicate under Code 00 the total rated capacity and report details about the country of export in question 4.11.

State Code	Geothermal Heat Pumps Exported or Shipped to a State (Tons)	State Code	Geothermal Heat Pumps Exported or Shipped to a State (Tons)	State Code	Geothermal Heat Pumps Exported or Shipped to a State (Tons)
00	<input type="checkbox"/> Exported _____	22	<input type="checkbox"/> Louisiana _____	41	<input type="checkbox"/> Oregon _____
01	<input type="checkbox"/> Alabama _____	23	<input type="checkbox"/> Maine _____	42	<input type="checkbox"/> Pennsylvania _____
02	<input type="checkbox"/> Alaska _____	24	<input type="checkbox"/> Maryland _____	44	<input type="checkbox"/> Rhode Island _____
04	<input type="checkbox"/> Arizona _____	25	<input type="checkbox"/> Massachusetts _____	45	<input type="checkbox"/> South Carolina _____
05	<input type="checkbox"/> Arkansas _____	26	<input type="checkbox"/> Michigan _____	46	<input type="checkbox"/> South Dakota _____
06	<input type="checkbox"/> California _____	27	<input type="checkbox"/> Minnesota _____	47	<input type="checkbox"/> Tennessee _____
08	<input type="checkbox"/> Colorado _____	28	<input type="checkbox"/> Mississippi _____	48	<input type="checkbox"/> Texas _____
09	<input type="checkbox"/> Connecticut _____	29	<input type="checkbox"/> Missouri _____	49	<input type="checkbox"/> Utah _____
10	<input type="checkbox"/> Delaware _____	30	<input type="checkbox"/> Montana _____	50	<input type="checkbox"/> Vermont _____
11	<input type="checkbox"/> D.C. _____	31	<input type="checkbox"/> Nebraska _____	51	<input type="checkbox"/> Virginia _____
12	<input type="checkbox"/> Florida _____	32	<input type="checkbox"/> Nevada _____	53	<input type="checkbox"/> Washington _____
13	<input type="checkbox"/> Georgia _____	33	<input type="checkbox"/> New Hampshire _____	54	<input type="checkbox"/> West Virginia _____
15	<input type="checkbox"/> Hawaii _____	34	<input type="checkbox"/> New Jersey _____	55	<input type="checkbox"/> Wisconsin _____
16	<input type="checkbox"/> Idaho _____	35	<input type="checkbox"/> New Mexico _____	56	<input type="checkbox"/> Wyoming _____
17	<input type="checkbox"/> Illinois _____	36	<input type="checkbox"/> New York _____	60	<input type="checkbox"/> American Samoa _____
18	<input type="checkbox"/> Indiana _____	37	<input type="checkbox"/> North Carolina _____	66	<input type="checkbox"/> Guam _____
19	<input type="checkbox"/> Iowa _____	38	<input type="checkbox"/> North Dakota _____	72	<input type="checkbox"/> Puerto Rico _____
20	<input type="checkbox"/> Kansas _____	39	<input type="checkbox"/> Ohio _____	78	<input type="checkbox"/> Virgin Islands (U.S.) _____
21	<input type="checkbox"/> Kentucky _____	40	<input type="checkbox"/> Oklahoma _____		<input type="checkbox"/> Other U.S. territory or possession (Specify) _____
Total _____					

7.0 **COMMENTS** – Enter comments in the space provided.