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GEOTHERMAL HEAT PUMPS: Technology Transfer Publications

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KEY WORDS

geothermal brochures, geothermal case studies, geothermal heat pumps, ground source heat pumps, HVAC, heating, cooling

PROJECT BACKGROUND AND STATUS

Geothermal heat pumps (GHPs) used in the residential and commercial heating cooling and water heating market have demonstrated that this technology can save significant amounts of energy and save customers money. A series of brochures, case studies and fact sheets have been developed and distributed to assist in increasing the awareness of GHPs. These publications have been funded by DOE, DoD and IGSHPA. DOE and DoD jointly fund the development and production of these publications. IGSHPA pays for printing and any additional development costs for the documents shown below.

The following is the status of these publications:

Publication	Percentage of Work Completed	Date of Completion
Brochures		
School Brochure	100% completed	1-15-95
Commercial Brochure	100% completed	5-5-95
Residential Brochure	100% completed	11-9-95
Utilities Brochure	50% completed	Early 1996
A&E Brochure	50% completed	Early 1996
Case Studies		
Gait House Case study	100% completed	9-1-95
Park Chase Case study	99% completed	Early 1996
Paragon Case study	95% completed	Early 1996
Phillip Russell House Case study	50% completed	Early 1996

Publication	Percentage of Work Completed	Date of Completion
Fact Sheets		
Financing Fact sheet	100% completed	11-8-95
Loop Design Fact sheet	30% completed	Early 1996
Plastic Pipe Selection Fact sheet	0% completed	Early 1996

PROJECT OBJECTIVES

Project objectives are to produce brochures to introduce the GHP concept to specific audiences, to produce case studies to assist in convincing individuals the viability of GHPs in their industry, and to produce fact sheets which give answers to technical considerations. All these are for the purpose of increasing the number of building customers, installers, developers, engineers and architects who have first hand knowledge of the technology and its potential benefits.

Technical Objectives

- Provide the readers access to information about specific topics in the field of geothermal heat pumps.
- Provide a set of successful case studies that will stimulate readers to further investigation and a greater level of confidence in the technology. Provide concise information about specific technical considerations.

Expected Outcomes

- Increased number of users and suppliers involved in the technology.

APPROACH

The approach was to offer a series of brochures, case studies and fact sheets that would cover GHP applications for residential, commercial, and institutional buildings.

Information for each of the publications was obtained from all viable sources. The pertinent topics were written and then edited by both IGSHPA staff and external sources in pursuit of accuracy, clarity and meeting the objective of the publications.

RESEARCH RESULTS

To date, brochures sold or distributed to utilities and at national teleconferences include approximately 15,000 school, 12,000 residential, 8,000 commercial brochures, 7,000 financing fact sheets, and 5,000 Gait House case studies.

FUTURE PLANS

The remaining publications will be finished. Future plans include creating Web pages on the internet that address the same market areas, utilizing the materials in the brochures, case studies and fact sheets.

INDUSTRY INTEREST AND TECHNOLOGY TRANSFER

Response has been excellent on the brochure series. They are being bought and distributed in large numbers. Utility companies particularly order large amounts.

An indication of the interest level is demonstrated in that numerous industry company's request permission to reuse information, drawings, and photographs from the brochure and fact sheet series.

REFERENCES

Copies of the brochures, case studies and fact sheets are available from the International Ground Source Heat Pump Association.

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