

May 1980



MASTER

Solar Information User Priority Study

William W. Belew Barbara L. Wood





Solar Energy Research Institute A Division of Midwest Research Institute

1617 Cole Boulevard Golden, Colorado 80401

Operated for the U.S. Department of Energy under Contract No. EG-77-C-01-4042

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Printed in the United States of America Available from: National Technical Information Service U.S. Department of Commerce 5285 Port Royal Road Springfield, VA 22161 Price: Microfiche \$3.00 Printed Copy \$5.25

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SERI/TR-751-472 UC CATEGORY: UC-58c

MASTER

SOLAR INFORMATION USER PRIORITY STUDY

WILLIAM W. BELEW BARBARA L. WOOD

MAY 1980

PREPARED UNDER TASK NOS 8133, 8420.14 As a part of the solar Information Needs Assessment Study

Solar Energy Research Institute

A Division of Midwest Research Institute

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FOREWORD

This report identifies for each solar technology those members or potential members of the solar community who, either currently or in the future, will require solar information. In addition, it rates each user's relative need for information within the next three years. This information will be used as input for subsequent studies that will identify specific user needs information. These studies, in turn, will be the basis for information product and data base development for the Solar Energy Information Data Bank (SEIDB). In addition, they will be input for the Technical Information Dissemination (TID) Program.

This study was performed under Contract No. EG-77C-01-4042, FY79 Task Number 8133.

Paul Notari, Chief

Information Dissemination and Outreach Branch

Approved for:

SOLAR ENERGY RESEARCH INSTITUTE

Herbert B. Landau, Division Manager Information Systems Division

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ACKNOWLEDGEMENTS

The authors appreciate the technical advice received from the Mid-American Solar Energy Complex, the Northeast Solar Energy Center, Western Sun, and the National Solar Heating and Cooling Information Center. The following persons at the Solar Energy Research Institute (SERI) provided valuable technical advice or review:

F. Baylin Building Systems

• SERI 🕴 🕯

K. Brown Industrial Applications and Policy

B. Bryant Program Planning

S. Christmas Policy Analysis

B. Copeland Solar Thermal Research

M. Cotton Industrial Applications and Policy

M. DeAngelis Industrial Applications and Policy

D. DeBlasio PV Analysis and Evaluation

B. Farley Industrial Applications and Policy

D. Feasby, Branch Chief Industrial Applications and Policy

D. Feucht, Division Manager Photovoltaics Division

J. Finegold Systems Development

S. Flaim Agriculture and Transportation Group

G. Gross, Acting Branch Chief Material Research

B. Gupta, Branch Chief Solar Thermal Program M. Holtz, Branch Chief Buildings Systems

D. Horgan Agriculture and Transportation Group

B. Inman Biomass Program

D. Kearney, Acting Division Manager Solar Thermal, Ocean, and Wind Division

P. Ketels Buildings Applications and Policy

R. Koontz Buildings Applications and Policy

C. Kutscher Solar Thermal Engineering Development

R. Larson Community and Consumer Branch

K. Lawrence Environmental and Social Impacts Group

A. Levary Solar Thermal Program

T. Marle Information Dissemination and Outreach

T. Milne, Branch Chief Biomass Thermal Conversion and Exploratory Research

S. Nagy PV Analysis and Evaluation

P. Notari, Branch Chief Information Dissemination and Outreach



T. Reed Biomass Thermal Conversion and Exploratory Research

C. Reinhardt Information Dissemination and Outreach

B. Shelpuk, Branch Chief Ocean Systems Program

F. Shoemaker Building Applications and Policy

R. Snyder Building Applications and Policy

K. Touryan, Deputy Director

I. Vas, Acting Branch Chief Wind Energy

R. Vories Community and Consumer Branch

P. Weis Utility Applications and Policy

B. Witholder Utility Applications and Policy

N. Woodley, Division Manager Utilities and Industry Division

C. Wyman Solar Thermäl Research

The authors would also like to thank the following for their participation in the peerreview process.

J. F. Banas Sandia Laboratory

R. Barbieri Jet Propulsion Laboratory

Gerald E. Bennington MITRE Corporation

Steven A. Bluhm Jet Propulsion Laboratory

Beverly Berger U.S. Department of Energy

Robert Cohen U.S. Department of Energy

D. M. Dodge Rockwell International Virgil L. Dugan Sandia Laboratory

Dave Eissenberg Oak Ridge National Laboratory

Larry H. Gordon National Aeronautics and Space Administration

Tom Hamilton Jet Propulsion Laboratory

R. Nichols Hazelwood Global Marine Development, Inc.

Terry S. Healey Rockwell International

R. Bruce Hook Tennessee Valley Authority



5

R. Channing Johnson MITRE Corporation

J. A. Leonard Sandia Laboratory

Edward S. Lipinsky Battelle Laboratory

Michael Lotker The Synectics Group

L. C. Newman MITRE Corporation

Alessio Mezzina Brookhaven National Laboratory

Scott Noll Los Alamos Scientific Laboratory

Dr. George Pezdirtz U.S. Department of Energy, Director Energy Storage Systems Norman F. Sather Argonne National Laboratory

Donald G. Schueler Sandia Laboratory

Frank B. Smith Solar Thermal Test Facilities Users Association

Lawnie H. Taylor U.S. Department of Energy

R. Thresher Oregon State University

Vincent Truscello Jet Propulsion Laboratory

Donald L. Wise Dynatech Research and Development Company

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TABLE OF CONTENTS

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	Page
Introduction	1
Scope	2
Methodology	2
Use of Priority Rankings in SEIDB Planning	3
Special Considerations in Interpreting the Priority Ratings	3
Solar Information User Classification System Level 1-User Groups Level 2-User Classes Level 3-Target Audiences	4 4 4 5
Definition of Target Audiences	5

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LIST OF TABLES

.

Page

Table 1.	Priority of Information Users for Active Solar Heating and	
	Cooling Systems	7
Table 2.	Priority of Information Users for Passive Solar Systems	15
Table 3.	Priority of Information Users for Photovoltaic Systems	23
Table 4.	Priority of Information Users for Solar Thermal Electric	
	Power	31
Table 5.	Priority of Information Users for Industrial Process Heat	37
Table 6.	Priority of Information Users for Biomass Energy Systems	45
Table 7.	Priority of Information Users for Wind Energy Systems	53
Table 8.	Priority of Information Users for Ocean Energy Systems	61
Table 9.	Priority of Information Users for Advanced Solar	
	Storage Systems	67

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INTRODUCTION

It is generally agreed that the solar community needs information immediately. To address this need, on 26 October 1974, Congress mandated that a Solar Energy Information Data Bank (SEIDB) be created to provide information to the members of the solar community. The Information Systems Division (ISD) at SERI is responsible for the design, development, and coordination of this information network. To disseminate information about solar energy, the ISD is building data bases, collecting solar information, and preparing and distributing information products and services.

In the past decade information scientists have studied many organizations responsible for data collection and information product development. A consistent finding of this research is that a key to the successful, efficient operation of such an organization is to design the entire system with the potential information user in mind. It is essential that development of information products and data bases be targeted for specific users rather than merely developed spontaneously. The information users, their information needs, and the priority of those needs must all be identified before effective information products and services can be developed efficiently. To ensure that SEIDB is responsive to the high-priority information needs of the solar community, the Information Market Research Section of ISD is performing the following tasks:

- 1. Defining the community of solar information users,
- 2. Setting priorities as to which groups of information users have the most important near-term information needs,
- 3. Determining the near-term information needs of the high-priority users,
- 4. Determining the information channels that can be effectively used to reach the high-priority users,
- 5. Determining what high-priority information needs are being met fully by existing products and services, and
- 6. Recommending additional, targeted, cost-effective information products and services to meet high-priority needs.

This document presents the results of the first two tasks: First, identifying for each solar technology those members or potential members of the solar community who will need solar information; second, describing the relative importance of meeting the <u>near-term</u> information needs of each group of information users. This document provides guidelines to SEIDB planners as to who might be using the SEIDB and whose near-term needs are the most important. Since this document specifies only near-term priorities, it will need revision as the status of each technology changes and as additional data become available. It is currently anticipated that this report will be updated every two years and that every attempt will be made to increase the quantity of inputs to this process of determining priorities. In future editions these ratings will be expanded to give both near-term and long-term priorities for each major application within a technology (e.g., for photovoltaics separate ratings will be given for remote systems, residential systems, intermediate-load centers, and central systems).

A set of nine additional reports describes the results of the third and fourth steps. These reports document the high-priority information needs and the most familiar information channels for each of 86 groups that were surveyed by telephone. To produce final information product recommendations, data from these reports are combined with other



user needs data obtained from many diverse sources: contacts with SERI specialists; review of the Annual Operating Plans, Institutional Plans, and Program Plans of DOE and SERI; reviews of other solar literature; development of an "information user profile" database from mailing list response cards; information user panels; direct contacts with members of the solar community at conferences, training sessions, etc.; visits to headquarters of national associations of users; and feedback provided by users of existing information products. This investigation of user needs will determine (along with the priorities) which new information products and services the SEIDB network—and other solar information outreach organizations—should be preparing for and disseminating to the solar community.

SCOPE

Tables 1 through 9 list the groups of solar information users and the priority ranking of each user group for each of the following solar technologies or applications:

- Active Solar Heating and Cooling
- Passive Solar Heating and Cooling
- Photovoltaics
- Solar Thermal Electric Power
- Industrial Process Heat
- Biomass Energy Systems
- Wind Energy Systems
- Ocean Energy Systems
- Advanced Solar Storage Systems

For the purpose of this document, Advanced Solar Storage Systems are defined as including those concepts for energy storage other than low-temperature, diurnal, sensible heat storage (e.g., rock beds, water walls, masonry walls). Included are such means for energy storage as: phase change materials, photochemical, electrochemical, hydrogen production, long-term heat sensible storage (solar ponds, aquifers), super-conducting magnets, fly wheels, pumped hydroelectric, compressed air, high-temperature sensible heat storage, and industrial waste heat recovery and storage systems.

METHODOLOGY

The following method was used to develop these lists. For each technology, a preliminary list of potential information users was developed by the Information Market Research Section of the Information Systems Division. Each list was then reviewed by:

- approximately three SERI experts in that field;
- three additional SERI experts with a broad knowledge in all solar fields; and
- experts from The National Solar Heating and Cooling Center, the Northeast Solar Energy Center, the Mid-American Solar Energy Center, and Western Sun. The Southern Solar Energy Center was contacted but elected not to participate.

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Each reviewer (for a list of the people involved, see the Acknowledgements) was given ` the following instructions:

The attached sheets are preliminary, unprioritized lists of groups of potential users ...

First... please add any additional potential user groups of which you are aware.

Second, please assign priorities to all user groups... The criterion for prioritization should be based upon the importance (to the speedy, economic use of solar) of getting a particular user group the solar information it will need in the next three years. Please assign <u>each</u> user group one of the following ratings:

- A absolutely necessary to provide information (to this group) in the next three years.
- B very important ...
- C important...
- D moderately important ...
- E not at all important ...

The responses were tabulated by calculating the average rating given to each group.

Once these preliminary ratings were completed, the results were reviewed for each technology by the appropriate SERI program manager. Additionally, these results were sent both to DOE program managers and to over 25 experts in the solar community (see Acknowledgements) for peer review. Based upon their comments, the ratings have been revised to compile this final document. These priority ratings are given in Tables 1 through 9.

USE OF PRIORITY RANKINGS IN SEIDB PLANNING

The rankings assigned to each group determine what priority should be given to that group in the development of SEIDB information products and databases. The needs of all groups receiving an A or B priority will be given immediate attention within the means of manpower and funding as specified in the SERI Annual Operating Plan for the Information Systems Program. The needs of all groups receiving C or a lower ranking will be accommodated as the availability of funding allows.

SPECIAL CONSIDERATIONS IN INTERPRETING THE PRIORITY RATINGS

In interpreting the priority ratings given each user group, the following points should be considered:

• The highest priority was given to the group whose receipt of (or failure to receive) solar information would have the greatest impact upon the rapid commercialization of that solar technology.

• Ratings were based upon near-term information needs, specifically those needs that should be met within the next three years. As the various technologies progress, some groups that are currently important (e.g., PV researchers) will become less important while some of the groups that are not currently as important (e.g., homeowners with PV systems) will become more important.

• Priority assignments did not consider whether a group was already receiving sufficient solar information. The adequacy of existing information will be considered later when the specific information needs of high-priority groups are compared to both potential and existing information products or services.

- Priority assignments did not consider either the type and the amount of information needed or the method of delivering the information. Only the importance of meeting the needs was considered.
- The priorities implicitly considered the size of one group as compared to another.
- The priorities assigned are based upon a national average viewpoint of these groups. For some groups these priorities could vary from state to state (or even community to community).
- There was a great initial tendency on the part of the reviewers to assign almost <u>all</u> groups an A priority. When faced with a choice of which of two ratings to give a group, the authors assigned the lower rating. To do otherwise would have ignored the practical limitations imposed by program funding.
- It has been commented that it is difficult to assign a realistic priority for a group without having a specific information product in mind. To the authors it seems much more difficult to make programmatic decisions as to which products to design without knowing which groups have the highest priority needs.

SOLAR INFORMATION USER CLASSIFICATION SYSTEM

To best understand the roles of different users, it is important to assign information users who have similar needs to common groups. This grouping by roles allows development of efficient, targeted information products to meet needs of specific users without inundating other members of the solar community with unnecessary information. In this regard, the following user classification system has been employed for each solar technology (see Tables 1-9.)

Level 1 - User Groups

An information User Group is the most basic category of users who can be combined under one definitive title (e.g., civil engineers). A single user group should be addressable by many <u>specific</u> information products. The purpose of defining distinct information user groups is to identify a single set of users who can be served by the same information product (e.g., civil engineers' handbook).

Level 2 - User Classes

An information User Class is a set of information user groups that have many common distinguishing characteristics (e.g., solar facility or system designers). A single user class should be served by many general information products. The purpose of defining SERI 🌘

separate information user classes is to identify sets of two or more groups of users who can be served by similar information products (e.g., solar heating and cooling system design models).

Level 3 – Target Audiences

A Target Audience is a set of information user classes that have some common distinguishing characteristics (e.g., researchers). A single target audience should be served by one or more distinct information products. The purpose of defining separate information user target audiences is to identify broad sets of users who can use the same generic types of information products (e.g., scientific bibliographies).

DEFINITION OF TARGET AUDIENCES

All solar information users fall within one or more of five target audiences that are used in Tables 1-9 and are defined as follows:

- 1.0 <u>Researchers</u> those who actively research, develop, test, or appraise new technologies in solar energy.
- 2.0 <u>Applications Technologists</u> those who translate research and results into marketable equipment and services. This classification includes manufacture, distribution, design, installation, and maintenance of solar systems or components.
- 3.0 Facilitators those whose actions can directly affect the commercialization of solar energy, either positively or negatively. Examples of facilitators include congressmen who can pass legislation giving incentives; lobbyists who can influence legislation; state energy offices that can initiate demonstration projects; and EPA that can forbid construction of a solar satellite receiver station at a specific site.
- 4.0 Users or Prospective Users those individuals or organizations who have already applied or may apply solar energy technologies in their operations.
- 5.0 <u>General Public</u> those individuals or organizations who, though not likely to use solar energy in the near future, can influence the course of solar energy through political influence. This audience will tend to be uninformed about solar technologies; many members will need the most elementary education.

Although a group may perform in several functional classifications, only its <u>principal</u> classification is used. Some users, however, will legitimately fall into several categories. For example, some utilities may participate in DOE-sponsored solar research (Researchers), other utilities may purchase wind energy conversion systems (Users), and yet other utilities may oppose congressional shifting of DOE funds from nuclear projects to solar projects (Facilitators). In such a case the group would be listed in all relevant classifications.



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TABLE 1. PRIORITY OF INFORMATION USERS FOR ACTIVE SOLAR HEATING AND COOLING SYSTEMS

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		Target Audiences ^a C	Priority of Needs Over Next Three Years ^b
1.0	Resea	archers	
	1.1	DOE-Funded Researchers and Developers	
		Contractors National Laboratories	C C
	1.2	Non-DOE, Federally-Funded Researchers and Develo Department of Housing and Urban Development (H	pers UD) C
	1.3	Nonfederally-Funded Researchers and Developers	
		Universities	C
		Solar Manufacturers	В
		Trade Research Associations	
		Electric Power Research Institute (EPRI)	B
		Gas Research Institute	В
		Independent Research Organizations	C
		Utilities	C
2.0	Appli	cations Technologists	
	2.1	Active SHAC or SHAC-Related Manufacturers	
		Hot Water Systems Manufacturers	В
		Collector Manufacturers	В
		Component Manufacturers	В
	2.2	Active SHAC Facility or System Designers	
		Architects	Α
		System Designers/Engineers	À
		Architectural/Engineering Design Firms	Α
		Mechanical Engineers	С
		Heating, Ventilating, and Air Conditioning	
		(HVAC) Engineers	Α
	2.3	Builders, Developers, or Contractors	
		Homebuilders, Developers	Α
		General Contractors	В

TABLE 1. PRIORITY OF INFORMATION USERS FOR ACTIVE SOLAR HEATING AND COOLING SYSTEMS

^aTarget Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups. ^bA is the highest priority, E the lowest.

ACTIVE SOLAR HEATING AND COOLING SYSTEMS (continued)

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	Architectural/Engineering Construction Firms Mechanical Engineering Contractors	A C
	Plumbing Contractors	A
	Construction Engineers	С
2.4	Active SHAC Installers and Maintainers	٨
	Cerpenters	n D
	Plumbers	B
	Electricians	D
	HVAC Installers	D
	Sheet Metal Workers	Α,
	Solar Maintenance Workers	в ′
	Construction Workers	D
	Roofing Contractors	С
2.5	Active SHAC Equipment Distributors	´ A
2.6	Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using an Active SHAC System	
	Operation Managers Planners	D C
Facil	itators	
3.1	Legislators and Staff	
	Congressmen	В
	Congressional Committee Staff	A
	State Legislators	B. D
	National Conference of State Legislators	В
3.2	Local Government Organizations	
	County Government Officials	B
	Local Government Officials	В
	Municipal Planners	В
	Tax Assessors and Officials	C
3.3	Government Solar-Active Organizations	•
	DOE-Conservation and Solar Energy (Case)	A
	DOE-Energy Information Administration (EIA) DOE-Regional Solar Energy Centers (RSECs)	▲
	DOE/HUD-National Solar Heating and Cooling	л
	Information Center (NSHCIC)	Α
	DOE—Regional Energy Offices	c

ACTIVE SOLAR HEATING AND COOLING SYSTEMS (continued)

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	DOE—Energy Extension Service United States Department of Agriculture (USDA)	Α
	-Cooperative Extension Service	В
	USDA—Other	В
	HUD	Α
	Department of Labor (DOL)—Comprehensive Employment and Training Act (CETA)	В
	Tennessee Valley Authority (TVA)	Α
	National Center for Appropriate Technology (NCAT)	B
	State Governors' Offices	B
	State Energy Offices	B
	State Solar Energy Offices	R
	Municipal Energy Offices	B
	Mullelpar Energy Offices	Б
3.4	Government Solar-Concerned Organizations	
	General Services Administration (GSA)	С
	Department of Defense (DOD)	С
	Small Business Administration (SBA)	D
	Internal Revenue Service (IRS)	С
	Council on Environmental Quality (CEQ)	C
	Department of Commerce (DOC)	D
3.5	Nongovernment Solar-Active Organizations	
	Solar Trade Associations	В
	Solar Professional Societies	B
	Solar Public Interest Groups	B
	Solar Lobbyists	В
3.6	Nongovernment Solar-Concerned Organizations	
	Community/Home Improvement Associations	В
	Public Interest Organizations	В
	Environmental Organizations	В
	Chambers of Commerce	C
	Nonsolar Professional Societies	B
	Nonsolar Trade Associations	В
	Farmer Co-ops	C
	Farmer's Education and	C
	Cooperative official of America	Ç
3.7	Regulatory, Codes, and Standards Community	-
	Environmental Protection Agency (EPA)	D D
	American Society of Heating Definitionating and	D
	American Society of nearing, Reingerating, and	R
	American National Standards Institute (ANSI)	B
	Ruilding Officials and Code Administrators (ROCA)	D
	Council of American Ruilding Officials (CARO)	
	International Conference of Building Officials	
	(ICBO, Southern Building Code Congress (SBCC)	В
		-

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ACTIVE SOLAR HEATING AND COOLING SYSTEMS (continued)

	American Society of Mechanical Engineers (ASME) Better Business Bureaus Building Inspectors	B C B
3.8	Utility Community Electric Power Companies Gas Utilities National Association of	C C
	Regulatory Utility Commissioners State Utility Commissions Utility Trade Associations	C C D
	DOF-Bonneville Power Administration Tennessee Valley Authority (TVA)	C B
3.9	Financial Community Bankers Venture Capital Brokers Government Loan Agencies Stockbrokers	A B D
3.10	Legal Community	С
3.11	Real Estate Community Agencies Salesmen Appraisers	C B B
3.12	Insurance Community Management Agents Actuaries	C B C
3.13	Educational Community High School Science Teachers University Faculty Vocational Instructors Career Counselors Seminar Organizers and Instructors	B B C C
3.14	Information Intermediaries Federal Technical Libraries Industrial Technical Libraries Academic or Nonprofit Technical Libraries Public Libraries Federal Information Centers On-Line Information Services Bookstores Film Distributors	C B B B A D

ACTIVE SOLAR HEATING AND COOLING SYSTEMS (concluded)

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3.15	5 Media Newspapers and Magazines Technical and Trade Journals Television Radio Book Publishers Newspaper Farm Editors of America	B B B B B B B B B B B B B B B B B B B
3.16	 Labor Organizations Carpentry Unions Construction Unions Sheet Metal Workers' International Association (SMWIA) Plumber Unions Electrical Unions 	D C B C D
4.0	Users or Prospective Users	
4.1	Government, Commercial, or Industrial Users Department of Defense (DOD) GSA—Public Building Service U.S. Department of Agriculture (USDA) Other Federal/State/Local Agencies Owning or Holding Titles to Buildings Owners of Large Buildings New Retrofits Owners of Small Buildings New Retrofits	A A A A B C B B B
4.2	Residential or Farming Users Homeowners Custom Homes Speculative Houses Retrofits Farmers, Ranchers Pool Owners Mobile Home Owners	A B A B D
5.0	General Public	
	Secondary School Students College Students Adults	B B B

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TABLE 2. PRIORITY OF INFORMATION USERS FOR PASSIVE SOLAR SYSTEMS

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		Target Audiences ^a	Pr Over	iority o Next Th	f Needs ree Years ^b
1.0	Resear	chers			
	1.1	DOE-Funded Researchers and Developers			
		Contractors		Α	
		National Laboratories		В	
	1.2	Non-DOE, Federally-Funded Researchers and Develo	pers		
		Department of Housing and Urban Development (H	IUD)	В	
	1.3	Nonfederally-Funded Researchers and Developers			
		Universities		С	
		Solar Manufacturers		В	
		Trade Research Associations		.	
		Electric Power Research Institute (EPRI)		B	
		Gas Research Institute		C	
		Utilities		c	
2.0	Applic	ations Technologists			
	2.1	Passive or Passive-Related Manufacturers			
		Passive Equipment Manufacturers		В	
		Prefabricated Home Manufacturers		B ·	
		Mobile Home Manufacturers		С	
•		Building Materials Manufacturers		B	•
	2.2	Passive Facility or System Designers			
		Architects		Α	
		System Designers/Engineers		Α	
	•	Architectural/Engineering Design Firms	•	Α	
,		Mechanical Engineers		A	
		Heating, Ventilating, and Air Conditioning		-	
		(HVAC) Engineers		в	イ
	2.3	Builders, Developers, or Contractors			
		Homebuilders, Developers		A	
		Home Remodeling Contractors		В	
		General Contractors			
		Areinteetural/Engineering Construction Firms		A	

TABLE 2. PRIORITY OF INFORMATION USERS FOR PASSIVE SOLAR SYSTEMS

^aTarget Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups. ^bA is the highest priority, E the lowest.

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PASSIVE SOLAR SYSTEMS (continued)

	Mechanical Engineering Contractors HVAC Contractors Plumbing Contractors Construction Engineers	C B D C
2.4	Passive Systems Installers and Maintainers Installers Carpenters Plumbers Electricians Sheet Metal Workers Solar Maintenance Workers	C C D D C D D C D
2. 5	Passive Equipment Distributors	В
2.6	Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a Passive System Operation Managers Planners	D C
<u>Facilit</u>	ators	
3.1	Legislators and Staff Congressmen Congressional Committee Staff State Legislators National Conference of State Legislators	R A B B
3.2	Local Government Organizations County Government Officials Local Government Officials Municipal Planners Tax Assessors and Officials	B B B C
3.3	Government Solar-Active Organizations DOE-Conservation and Solar Energy (C&SE) DOE-Energy Information Administration (EIA) DOE-Regional Solar Energy Centers (RSECs) DOE/HUD-National Solar Heating and Cooling Information Center (NSHCIC) DOE-Regional Energy Offices	A C A C
	DOE-Energy Extension Service United States Department of Agriculture (USDA) Cooperative Extension Service USDA-Other Department of Housing and Urban Development (HUD)	A B B A

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PASSIVE SOLAR SYSTEMS (continued)

 Government Solar-Concerned Organizations General Services Administration (GSA) Department of Defense (DOD) Small Business Administration (SBA) Internal Revenue Service (IRS) Council on Environmental Quality (CEQ) C Solar Trade Associations Solar Trade Associations Solar Trade Associations Solar Professional Societies Solar Professional Societies Solar Public Interest Groups Solar Lobbyists Solar Lobbyists Solar Lobbyists Solar Lobbyists Solar Concerned Organizations Community/Home Improvement Associations Buvilic Interest Organizations Community/Home Improvement Associations Buvinonmental Organizations Comprovement Professional Societies Nonsolar Trade Associations Farmer Co-ops Farmer Co-ops Farmer Co-ops Farmer's Education and Cooperative Union of America Coecupational Safety and Health Administration (OSHA) American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Camerican National Standards Institute (ANSI) Duliding Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials (ICBO), Southern Building Code Congress (SBCC) American Society of Mechanical Engineers (ASME) Building Inspecto		Department of Labor (DOL)—Comprehensive Employment and Training Act (CETA) Tennessee Valley Authority (TVA) National Center for Appropriate Technology (NCAT) State Governors' Offices State Energy Offices State Solar Energy Offices State Agricultural Offices Municipal Energy Offices	C A B A C B
3.5 Nongovernment Solar-Active Organizations B Solar Trade Association B Building Materials Trade Association B Solar Professional Societies B Solar Public Interest Groups B Solar Lobbyists B 3.6 Nongovernment Solar-Concerned Organizations Community/Home Improvement Associations B Public Interest Organizations B Chambers of Commerce C Nonsolar Professional Societies B Nonsolar Trade Associations B Farmer Co-ops C Farmer's Education and C Cooperative Union of America C 3.7 Regulatory, Codes, and Standards Community Environmental Protection Agency (EPA) E Occupational Safety and Health Administration (OSHA) American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) CAmerican National Standards Institute (ANSI) D Building Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials (ICBO), Southern Building Code C	3.4	Government Solar-Concerned Organizations General Services Administration (GSA) Department of Defense (DOD) Small Business Administration (SBA) Internal Revenue Service (IRS) Council on Environmental Quality (CEQ)	C C D B C
 Nongovernment Solar-Concerned Organizations Community/Home Improvement Associations Bublic Interest Organizations Environmental Organizations Environmental Organizations Chambers of Commerce Nonsolar Professional Societies Nonsolar Trade Associations Farmer Co-ops Farmer's Education and Cooperative Union of America 8.7 Regulatory, Codes, and Standards Community Environmental Protection Agency (EPA) Occupational Safety and Health Administration (OSHA) American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) C American National Standards Institute (ANSI) Building Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials (ICBO), Southern Building Code Congress (SBCC) American Society of Mechanical Engineers (ASME) C Better Business Bureaus Building Inspectors 	3.5	Nongovernment Solar-Active Organizations Solar Trade Associations Building Materials Trade Association Solar Professional Societies Solar Public Interest Groups Solar Lobbyists	B B B B
3.7 Regulatory, Codes, and Standards Community Environmental Protection Agency (EPA) E Occupational Safety and Health Administration E American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) C American National Standards Institute (ANSI) D Building Officials and Code Administrators (BOCA), Council of American Building Officials C (CABO), International Conference of Building Officials (ICBO), Southern Building Code C Congress (SBCC) C American Society of Mechanical Engineers (ASME) C Better Business Bureaus C Building Inspectors B	3.6	Nongovernment Solar-Concerned Organizations Community/Home Improvement Associations Public Interest Organizations Environmental Organizations Chambers of Commerce Nonsolar Professional Societies Nonsolar Trade Associations Farmer Co-ops Farmer's Education and Cooperative Union of America	B B C B B C C C
	3.7	 Regulatory, Codes, and Standards Community Environmental Protection Agency (EPA) Occupational Safety and Health Administration (OSHA) American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) American National Standards Institute (ANSI) Building Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials (ICBO), Southern Building Code Congress (SBCC) American Society of Mechanical Engineers (ASME) Better Business Bureaus Building Inspectors 	E C D C C C B

PASSIVE SOLAR SYSTEMS (continued)

20	Iltility Community	
9.0	Electric Power Companies	Ð
	Gas Utilities	Đ
	National Association of	
	Regulatory Utility Commissioners	D
	State Utility Commissions	D
	Utility Trade Associations	D
	Federal Power Marketing Agencies	
	DOE-Bonneville Power Administration	С
	Tennessee Valley Authority (TVA)	В
3 9	Financial Community	۰.
V •J	Bankers	R
*	Venture Capital Brokers	D
	Government Loan Agencies	B
	Stock Brokers	Ē
3.10	Legal Community	С
3.11	Real Estate Community	
0.11	Agencies	С
	Salesmen	B
	Appraisers	B
• • •		
3.12	Insurance Community	Ξ.
	Management	D
	Agents	
	Actuaries	[]
3.13	Educational Community	
	High School Science Teachers	В
	University Faculty	B
	Vocational Instructors	В
	Career Counselors	D
	Seminar Organizers and Instructors	С
3.14	Information Intermediaries	
0011	Federal Technical Libraries	С
	Industrial Technical Libraries	, D
	Academic or Nonprofit Technical Libraries	B
	Public Libraries	Ā
• _	Federal Information Centers	В
	On-Line Information Services	В
	Bookstores	A
	Film Distributors	D
3,15	Media	
	Newspapers and Magazines	В
	Technical and Trade Journals	B.
		•.

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PASSIVE SOLAR SYSTEMS (concluded)

	Television Radio Book Publishers Newspaper Farm Editors of America	B B B B
3.16	Labor Organizations Carpentry Unions Construction Unions Bricklayers' Unions	D C D
Users	or Prospective Users	•
4. 1	Government, Commercial or Industrial Users Department of Defense (DOD) GSA-Public Building Service Other Federal/State/Local Agencies Owning or Holding Titles to Buildings	B B B
	New Retrofit	B C
	Owners of Small Buildings New Retrofit	A B
4.2	Residential or Farming Users Homeowners Custom Homes Speculative Houses Retrofits Mobile Home Owners Farmers, Ranchers	A B A C B
Genera	al Public	
	Secondary School Students College Students Adults	B B B
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TABLE 3. PRIORITY OF INFORMATION USERS FOR PHOTOVOLTAIC SYSTEMS

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		Target Audiences ⁸	Priority of Needs Over Next Three Years ^b
1.0	Resea	archers	· ·
	1.1	DOE-Funded Researchers and Developers	
		Contractors	Α
		National Laboratories	Α
	1.2	Non-DOE, Federally-Funded Researchers and Develo	opers _
		National Aeronautics and Space Administration (N	ASA) C
		Department of Defense (DOD)	С
		National Science Foundation (NSF)	С
	1.3	Nonfederally-Funded Researchers and Developers	ć
		Universities	B
		PV Manufacturers or Potential Manufacturers Trade Research Associations	Α
		Electric Power Research Institute (EPRI)	В
		Independent Research Organizations	B
2.0	Applic	cations Technologists	<i>,</i>
	2.1.	PV or PV-Related Manufacturers	<i>.</i>
		PV Cell Manufacturers	Á
		Component Manufacturers	А
		Silicon Producers	Α
	2.2	PV Facility or System Designers	
		System Designers/Engineers	В
		Architectural/Engineering Design Firms	С
		Mechanical Engineers	D ·
		Electrical Engineers	D
	2.3	Builders, Developers, or Contractors	
		General Contractors	C
		Architectural/Engineering Construction Firms	C
		Mechanical Engineering Contractors	D E
		nomebunders, Developers	E

TABLE 3. PRIORITY OF INFORMATION USERS FOR PHOTOVOLTAIC SYSTEMS

^aTarget Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups. ^bA is the highest priority, E the lowest.

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PHOTOVOLTAIC SYSTEMS (continued)

2.4	PV Systems Installers and Maintainers Installers Electricians PV Maintenance Workers	D D D
2.5	PV Equipment Distributors	D
2.6	Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a PV System Operations Managers Power Engineers Planners	D C C
Facil	itators	
3.1	Legislators and Staff Congressmen Congressional Committee Staff State Legislators National Conference of State Legislators	B A C C
3.2	Local Government Organizations County Government Officials Local Government Officials Municipal Planners Tax Assessors and Officials	E E C E
3.3	Government Solar-Active Organizations DOEConservation and Solar Energy (C&SE) DOEEnergy Information Administration (EIA) DOEEnergy Research (ER) DOERegional Solar Energy Centers (RSECs) DOERegional Energy Offices DOEEnergy Extension Service DOEFederal Energy Regulation Commission (FERC) National Center for Appropriate Technology (NCAT) Department of Interior (DOI) Bureau of Land Management (BLM) International Energy Agency State Energy Offices State Solar Energy Offices Municipal Energy Offices United States Department of Agriculture (USDA) Cooperative Extension Service (CES)	A C D D B D C B C D D D D D D D
3.4	Government Solar-Concerned Organizations General Services Administration (GSA) Department of Defense (DOD)	D C

PHOTOVOLTAIC SYSTEMS (continued)

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	National Aeronautics and Space Administration (NASA) USDA—Rural Electrification Administration (REA) USDA—Other	C C C
	Department of Housing and Urban Development (HUD) Council on Environmental Quality (CEQ)	D C
÷	Atmospheric Administration (NOAA) State Governor's Offices	C C
	State Agricultural Offices State Forestry Offices	C C
3.5	Nongovernment Solar-Active Organizations	B
	Solar Professional Societies	B
	Solar Public Interest Groups	В
	Solar Lobbyists	В
3.6	Nongovernment Solar-Concerned Organizations	~
	Public Interest Organizations	C
	Environmental Organizations	U F
	Nonsolar Professional Societies	B
	Nonsolar Trade Associations	B
	Community/Home Improvement Associations	Ε
3.7	Regulatory, Codes, and Standards Community	-
	Environmental Protection Agency (EPA)	С
	tration (OSHA)	Л
	American National Standards Institute (ANSI)	č
	Building Officials and Code Administrators (BOCA),	-
	Council of American Building Officials (CABO),	
	International Conference of Building Officials	_
	(ICBO), Southern Building Code Congress (SBCC)	E
	American Society of Mechanical Engineers (ASME)	C.
	Better Business Bureaus	E
3.8	Utility Community	-
	Electric Power Companies	В
	National Association of Regulatory Utility Commissioners	C
	State Utility Commissions	R
	Utility Trade Associations	B
	Federal Power Marketing Agencies	
	DOE-Bonneville Power Administration (BPA)	В
	Tennessee Valley Authority (TVA)	В
3.9	Financial Community	
	Bankers	, D

PHOTOVOLTAIC SYSTEMS (continued)

	Venture Capital Brokers Government Loan Agencies Stock Brokers	E D E
3.10	Legal Community	D
3.11	Real Estate Community	E
3.12	Insurance Community	D
3.13	Educational Community High School Science Teachers University Faculty Vocational Instructors Career Counselors Seminar Organizers and Instructors	B B D E
3.14	Information Intermediaries Federal Technical Libraries Industrial Technical Libraries Academic or Nonprofit Technical Libraries Public Libraries Federal Information Centers On-Line Information Services Bookstores Film Distributors	B B D A C D D
3.15	Media Newspapers and Magazines Technical and Trade Journals Television Radio Book Publishers	C B C D D
3.16	Labor Organizations Electrical Unions	D
Users	or Prospective Users	
4.1	Government, Commercial, or Industrial PV Users Department of Defense (DOD) National Aeronautics and Space Administration (NASA) GSA—Public Building Service DOC—National Weather Service U.S. Coast Guard USDA—Forest Service National Park Service Other Federal/State/Local Agencies Owning or Holding Titles to Buildings	B B C A A A A C

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PHOTOVOLTAIC SYSTEMS (concluded)

	Electric Utilities	· C
	Owners of Microwave or Radio Repeaters	· A
	Owners of Impressed Current Protection (ICP)	
	Wells, Pipelines, or Bridges	Α
	Owners of Outdoor Lighting	В
•	Owners of Large Buildings or Complexes	С
	Owners of Small Buildings	· C
	Owners of Remote Facilities	В
4.2	Residential or Farming PV Users	
	Homeowners	D
	Farmers, Ranchers	D
	Remote Facility Owners	В
4.3	Foreign PV Users	
	Owners of Microwave or Radio Repeaters	В
	Owners of ICP Wells, Pipelines, or Bridges	В
	Developers of Remote Rural Telephone Systems	В
	Developers of Remote Educational TV	В
	Developers of Remote or Village Power	С
	Developers of Remote Pumping	С
Gene	ral Public	
	Secondary School Students	В
	College Students	R
	Adults	B
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TABLE 4. PRIORITY OF INFORMATION USERS FOR SOLAR THERMAL ELECTRIC POWER

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		Target Audiences ^a	Priority of Needs Over Next Three Years ^b
1.0	Resea	archers	
-	1.1	DOE-Funded Researchers and Developers	
		Contractors National Laboratories	A A
	1.2	Non-DOE, Federally-Funded Researchers and Develo	pers C
	1.3	Nonfederally-Funded Researchers and Developers	C
		Universities Solar Thermal Manufacturers or Potential	C
		Manufacturers	А
		Floatria Power Research Institute (FPRI)	۵
		Independent Research Organizations	$\frac{1}{C}$
		Utilities	B
		Solar Thermal Test Facilities Users Association	A
2.0	Appli	cations Technologists	
	2.1	Solar Thermal or Solar Thermal-Related Manufacture	ers
		Component Manufacturers	Α
		Solar Thermal Small System Manufacturers	Α
	2.2	Solar Thermal Facility or System Designers	۵
		Anabitaatural/Engineering Dasign Firms	A
	•	Power Engineers (Industrial)	
		Mechanical Engineers	A
		Electrical Engineers	B
	2.3	Builders, Developers, or Contractors General Contractors	С
		Architectural/Engineering Construction Firms	č
		Mechanical Engineering Contractors	ı C
		Construction Engineers	С.

TABLE 4. PRIORITY OF INFORMATION USERS FOR SOLAR THERMAL ELECTRIC POWER

^aTarget Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups. ^bA is the highest priority, E the lowest.



SOLAR THERMAL ELECTRIC POWER (continued)

2.4	Solar Thermal System Installers and Maintainers Installers Carpenters Plumbers Electricians Sheet Metal Workers Solar Maintenance Workors Construction Workers	ם ם ם ם ם
2.5	Solar Thermal Equipment Distributors	С
2.6	Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a Solar Thermal System Operation Managers Plant Engineers Power Engineers Planners	C C C B
Facil	itators	
3.1	Legislators and Staff Congressmen Congressional Committee Staff State Legislators National Conference of State Legislators	B A C C
3.2	Local Government Organizations County Government Officials Local Government Officials Municipal Planners Tax Assessors and Officials	E E D
3.3	Government Solar-Active Organizations DOE—Conservation and Solar Energy (C&SE) DOEEnergy Information Administration (EIA) DOE—Energy Research (ER) DOE—Regional Solar Energy Centers (RSECs) DOE—Regional Energy Offices DOE—Energy Extension Service DOE—Federal Energy Regulation Commission (FERC) National Center for Appropriate Technology (NCAT) International Energy Agency State Governors' Offices State Energy Offices State Solar Energy Offices State Agricultural Offices Municipal Energy Offices	A C B D B D B E B D C C E D

SOLAR THERMAL ELECTRIC POWER (continued)

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3.4	Government Solar-Concerned Organizations Small Business Administration (SBA) Council on Environmental Quality (CEQ)	E C
3.5	Nongovernment Solar-Active Organizations Solar Trade Associations Solar Professional Societies Solar Public Interest Groups Solar Lobbyists	B B B
3.6	Nongovernment Solar-Concerned Organizations Public Interest Organizations Environmental Organizations Chambers of Commerce Nonsolar Professional Societies Nonsolar Trade Associations	C C B B
3.7	Regulatory, Codes, and Standards Community Environmental Protection Agency (EPA) Occupational Safety and Health Administration (OSHA) American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) American National Standards Institute (ANSI) Business Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials	C E C D
	(ICBO), Southern Building Code Congress (SBCC) American Society of Mechanical Engineers (ASME) National Bureau of Standards (NBS)	E C C
3.8	Utility Community Electric Power Companies National Association of Regulatory Utility Commissioners State Utility Commissions Utility Trade Associations Federal Power Marketing Agencies DOE-Bonneville Power Administration (BPA) Tennessee Valley Authority (TVA)	B B B B B B
3.9	Financial Community Bankers Venture Capital Brokers Government Loan Agencies Stock Brokers	C C E
3.10	Legal Community	E
3.11	Real Estate Community	Ε

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SOLAR THERMAL ELECTRIC POWER (concluded)

3.12	Insurance Community	D
3.13	Educational Community High School Science Teachers University Faculty Vocational Instructors Career Counselors Seminar Organizers and Instructors	B B E C
3.14	Information Intermediaries Federal Technical Libraries Industrial Technical Libraries Academic or Nonprofit Technical Libraries Public Libraries Federal Information Centers On-Line Information Services Bookstores Film Distributors	B B D B C E D
3.15	Media Newspapers and Magazines Technical and Trade Journals Television Radio Book Publishers	C B C E D
3.16	Labor Organizations Electrical Unions Steamfitters' Unions Construction Unions Sheet Metal Workers' International Association (SMWIA)	D D D D
Users o	or Prospective Users	
4.1	Government, Commercial, or Industrial Users Electric Utilities Owners of Large Buildings or Complexes Owners of Remote Facilities Other Commercial Enterprises	B B C C
4.2	Residential or Farming Users Remote Facility Owners	С
Genera	l Public	
	Secondary School Students College Students Adults	B B B

TABLE 5. PRIORITY OF INFORMATION USERS FOR INDUSTRIAL PROCESS HEAT

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1. Researchers 1.1 DOE-Funded Researchers and Developers Contractors B National Laboratories B 1.2 Non-DOE, Federally-Funded Researchers and Developers National Science Foundation (NSF) C 1.3 Nonfederally-Funded Researchers and Developers Universities C Solar Manufacturers B Trade Research Associations B Independent Research Organizations C Fuel Industry A Chemical Industry A Other Industrial Solar Users A 2.0 Applications Technologists 2.1 IPH-Related Manufacturers Collector Manufacturers B Component Manufacturers B 2.1 IPH-Related Manufacturers A System Designers/Engineers A Mechanical Engineers A Mechanical Engineers B 2.2 IPH Facility or System Design Firms A Mechanical Engineers B Mechanical Engineers B Mechanical Heating, Ventilating and Air Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors G			Target Audiences ^a	Priority of Needs Over Next Three Years ^b
1.1 DOE-Funded Researchers and Developers Contractors B National Laboratories B 1.2 Non-DOE, Federally-Funded Researchers and Developers National Science Foundation (NSF) C 1.3 Nonfederally-Funded Researchers and Developers Universities C Solar Manufacturers B Trade Research Associations B Independent Research Organizations C Fuel Industry A Other Industry A Other Industrial Solar Users A 2.0 Applications Technologists 2.1 IPH-Related Manufacturers Collector Manufacturers B Component Manufacturers B Component Manufacturers A System Designers A Industrial Architects A Architectural/Engineering Design Firms A Mechanical Engineers B 2.3 Builders, Developers, or Contractors B 2.3 Builders, Developers, or Contractors C General Contractors C C General Contractors C C Architectural/Engineering Construction Firms<	1.	Resea	archers	
Contractors B National Laboratories B National Laboratories B 1.2 Non-DOE, Federally-Funded Researchers and Developers National Science Foundation (NSF) C 1.3 Nonfederally-Funded Researchers and Developers Universities C Solar Manufacturers B Trade Research Associations B Independent Research Organizations C Fuel Industry A Other Industry A Other Industrial Solar Users A 2.0 Applications Technologists 2.1 IPH-Related Manufacturers Collector Manufacturers B Component Manufacturers B Component Manufacturers A System Designers/ Industrial Architects A Architectural/Engineering Design Firms A Mechanical Engineers B Mechanical Engineers B Mechanical Heating, Ventilating and Air Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors C General Contractors C C General Contractors C C		1.1	DOE-Funded Researchers and Developers	
1.2 Non-DOE, Federally-Funded Researchers and Developers National Science Foundation (NSF) C 1.3 Nonfederally-Funded Researchers and Developers Universities C Solar Manufacturers B Trade Research Associations B Independent Research Organizations C Fuel Industry A Other Industry A Other Industry A Other Industrial Solar Users A 2.0 Applications Technologists 2.1 IPH-Related Manufacturers Collector Manufacturers B Component Manufacturers B 2.2 IPH Facility or System Designers A Industrial Architects A System Designers/Engineers A Mechanical Engineers B Mechanical; Heating, Ventilating and Air Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors C General Contractors C C Architectural/Engineering Construction Firms B			Contractors National Laboratories	B B
1.3 Nonfederally-Funded Researchers and Developers Universities C Solar Manufacturers B Trade Research Associations B Independent Research Organizations C Fuel Industry A Chemical Industry A Other Industry A Other Industry B Collector Manufacturers B Collector Manufacturers B Component Manufacturers B Component Manufacturers A System Designers A Industrial Architects A System Designers/Engineers A Mechanical Engineering Design Firms A Mechanical Heating, Ventilating and Air B Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors C General Contractors C Architectural/Engineering Construction Firms B		1.2	Non-DOE, Federally-Funded Researchers and Deve National Science Foundation (NSF)	elopers C
1.3 Nonrederally-runded Researchers and Developers Universities C Solar Manufacturers B Trade Research Associations B Independent Research Organizations C Fuel Industry A Chemical Industry A Other Industrial Solar Users A 2.0 Applications Technologists 2.1 IPH-Related Manufacturers Collector Manufacturers B Component Manufacturers B 2.1 IPH Facility or System Designers Industrial Architects A Architectural/Engineering Design Firms A Mechanical Engineers B 2.3 Builders, Developers, or Contractors General Contractors C Architectural/Engineering Construction Firms B		1.0	No. 6. deceller Deceled Docement and Docement	
Solar Manufacturers B Solar Manufacturers B Trade Research Associations B Independent Research Organizations C Fuel Industry A Chemical Industry A Other Industrial Solar Users A 2.0 Applications Technologists A 2.1 IPH-Related Manufacturers B Collector Manufacturers B Component Manufacturers B 2.2 IPH Facility or System Designers A Industrial Architects A System Designers/Engineers A Mechanical Engineers B Mechanical Heating, Ventilating and Air B Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors C General Contractors C Architectural/Engineering Construction Firms B		1.3	Noniederally-Funded Researchers and Developers	C
Solar Manufacturers B Trade Research Associations B Independent Research Organizations C Fuel Industry A Chemical Industry A Other Industrial Solar Users A 2.0 Applications Technologists A 2.1 IPH-Related Manufacturers B Collector Manufacturers B Component Manufacturers B 2.2 IPH Facility or System Designers A Industrial Architects A Aystern Designers/Engineers A Mechanical Engineers B 2.3 Builders, Developers, or Contractors C General Contractors C Architectural/Engineering Construction Firms B			Universities	
Independent Research Associations B Independent Research Organizations C Fuel Industry A Chemical Industry A Other Industrial Solar Users A 2.0 Applications Technologists A 2.1 IPH-Related Manufacturers B Collector Manufacturers B Component Manufacturers B 2.2 IPH Facility or System Designers Industrial Architects A Architectural/Engineering Design Firms A Mechanical Engineers B 2.3 Builders, Developers, or Contractors General Contractors C Architectural/Engineering Construction Firms B			Solar Manufacturers	B
Independent Research Organizations C Fuel Industry A Chemical Industry A Other Industrial Solar Users A 2.0 Applications Technologists A 2.1 IPH-Related Manufacturers Collector Manufacturers B Component Manufacturers B Component Manufacturers B 2.2 IPH Facility or System Designers Industrial Architects A Architectural/Engineering Design Firms A Mechanical Engineers B Mechanical; Heating, Ventilating and Air B Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors C General Contractors C Architectural/Engineering Construction Firms B			Trade Research Associations	В
Puller Industry A Chemical Industry A Other Industrial Solar Users A 2.0 Applications Technologists A 2.1 IPH-Related Manufacturers Collector Manufacturers B Component Manufacturers B 2.2 IPH Facility or System Designers A Industrial Architects A System Designers/Engineers A Architectural/Engineering Design Firms A Mechanical: Heating, Ventilating and Air B Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors C General Contractors C Architectural/Engineering Construction Firms B			Independent Research Organizations	C
Chemical Industry A Other Industrial Solar Users A 2.0 Applications Technologists A 2.1 IPH-Related Manufacturers B Collector Manufacturers B Component Manufacturers B 2.2 IPH Facility or System Designers A Industrial Architects A System Designers/Engineering Design Firms A Mechanical Engineers B Mechanical; Heating, Ventilating and Air Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors C General Contractors C Architectural/Engineering Construction Firms B			Fuel industry	A
2.0 Applications Technologists A 2.1 IPH-Related Manufacturers Collector Manufacturers B 2.1 IPH-Related Manufacturers B Component Manufacturers B 2.2 IPH Facility or System Designers Industrial Architects A System Designers/Engineers A Architectural/Engineering Design Firms A Mechanical Engineers B Mechanical; Heating, Ventilating and Air Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors General Contractors C Architectural/Engineering Construction Firms B			Chemical industry	A
2.1 IPH-Related Manufacturers B Collector Manufacturers B Component Manufacturers B 2.2 IPH Facility or System Designers A Industrial Architects A System Designers/Engineers A Architectural/Engineering Design Firms A Mechanical Engineers B Mechanical; Heating, Ventilating and Air B Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors C General Contractors C Architectural/Engineering Construction Firms B	2.0	Appli	cations Technologists	
2.1 If If Heiter Manufacturers B Collector Manufacturers B Component Manufacturers B 2.2 IPH Facility or System Designers Industrial Architects A System Designers/Engineers A Architectural/Engineering Design Firms A Mechanical Engineers B Mechanical; Heating, Ventilating and Air B Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors General Contractors C Architectural/Engineering Construction Firms B		<u> </u>	IDH-Poloted Manufacturers	
Connector ManufacturersDComponent ManufacturersB2.2IPH Facility or System Designers Industrial ArchitectsASystem Designers/EngineersAArchitectural/Engineering Design FirmsAMechanical EngineersBMechanical; Heating, Ventilating and Air Conditioning (HVAC) EngineersB2.3Builders, Developers, or Contractors General Contractors Architectural/Engineering Construction FirmsC		4.1	Collector Manufacturers	В
2.2 IPH Facility or System Designers A Industrial Architects A System Designers/Engineers A Architectural/Engineering Design Firms A Mechanical Engineers B Mechanical; Heating, Ventilating and Air B Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors General Contractors C Architectural/Engineering Construction Firms B			Component Manufacturers	B
Industrial ArchitectsASystem Designers/EngineersAArchitectural/Engineering Design FirmsAMechanical EngineersBMechanical; Heating, Ventilating and AirBConditioning (HVAC) EngineersB2.3Builders, Developers, or ContractorsGeneral ContractorsCArchitectural/Engineering Construction FirmsB		2.2	IPH Facility or System Designers	
System Designers/Engineers A Architectural/Engineering Design Firms A Mechanical Engineers B Mechanical; Heating, Ventilating and Air B Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors C General Contractors C Architectural/Engineering Construction Firms B			Industrial Architects	· A
Architectural/Engineering Design Firms A Mechanical Engineers B Mechanical; Heating, Ventilating and Air B Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors General Contractors C Architectural/Engineering Construction Firms B			System Designers/Engineers	Α
Mechanical Engineers B Mechanical; Heating, Ventilating and Air B Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors General Contractors C Architectural/Engineering Construction Firms B			Architectural/Engineering Design Firms	Α
Mechanical; Heating, Ventilating and Air Conditioning (HVAC) Engineers B 2.3 Builders, Developers, or Contractors General Contractors C Architectural/Engineering Construction Firms B			Mechanical Engineers	В
Conditioning (HVAC) EngineersB2.3Builders, Developers, or Contractors General Contractors Architectural/Engineering Construction FirmsC			Mechanical; Heating, Ventilating and Air	
2.3 Builders, Developers, or Contractors General Contractors C Architectural/Engineering Construction Firms B			Conditioning (HVAC) Engineers	В
General ContractorsCArchitectural/Engineering Construction FirmsB		2.3	Builders, Developers, or Contractors	
Architectural/Engineering Construction Firms B			General Contractors	С
			Architectural/Engineering Construction Firms	В

TABLE 5. PRIORITY OF INFORMATION USERS FOR INDUSTRIAL PROCESS HEAT

^aTarget Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups. ^bA is the highest priority, E the lowest.

INDUSTRIAL PROCESS HEAT (continued)

		Mechanical Engineering Contractors Construction Engineers	B C
	2.4	IPH System Installers and Maintainers Installers Carpenters Plumbers Electricians Sheet Metal Workers Solar Maintenance Workers Construction Workers	B E D D E D E
-	2.5	IPH Equipment Distributors	. В
	2.6	Technical Specialists for Utility, Government, Commerical, or Industrial Organization Using an IPH System Operation Managers Plant Engineers Planners	B A B
3.0	Facilit	ators	
	3.1	Legislators and Staff Congressmen Congressional Committee Staff State Legislators National Conference of State Legislators	B A B B
	3.2	Local Government Organizations County Government Officials Local Government Officials Municipal Planners Tax Assessors and Officials	C C B
	3.3	Government Solar-Active Organizations DOE—Conservation and Solar Energy (C&SE) DOE—Energy Information Administration (EIA) DOE—Energy Research (ER) DOE—Regional Solar Energy Centers (RSECs) DOE—Regional Energy Offices DOE—Energy Extension Service United States Department of Agriculture (USDA)— Cooperative Extension Service USDA—Other National Center for Appropriate Technology (NCAT) Tennessee Valley Authority (TVA) DOE—Federal Energy Regulation Commission	A C B A B B B A D B D

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INDUSTRIAL PROCESS HEAT (continued)

	International Energy Agency State Governors' Offices State Energy Offices State Solar Energy Offices State Agricultural Offices Municipal Energy Offices	D C B B B D
3.4	Government Solar-Concerned Organizations Food and Drug Administration (FDA) Small Business Administration (SBA) Internal Revenue Service (IRS) Council on Environmental Quality (CEQ)	C C C C C
3.5	Non-Government Solar-Active Organizations Solar Trade Associations Solar Professional Societies Solar Public Interest Groups Solar Lobbyists	B B B B
3.6	Nongovernment Solar-Concerned Organizations Public Interest Organizations Environmental Organizations Chambers of Commerce Nonsolar Professional Societies Nonsolar Trade Associations Farmer Co-ops Farmer's Education and Cooperative Union of America	B B C B B C C
3.7	Regulatory, Codes, and Standards Community Environmental Protection Agency (EPA) Occupational Safety and Health Administration (OSHA) American Society for Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) American National Standards Institute (ANSI) Building Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials (ICBO), Southern Building Code Congress (SBCC) American Society of Mechanical Engineers (ASME) Better Business Bureaus	B D C C C C D
3.8	Utility Community Electric Power Companies Gas Utilities National Association of Regulatory Utility Commissioners	D D D
	Regulatory Utility Commissioners	D

INDUSTRIAL PROCESS HEAT (continued)

	State Utility Commissions Utility Trade Associations	D D
3.9	Financial Community Bankers Venture Capital Brokers Government Loan Agencies Stock Brokers	B C B E
3.10	Legal Community	D
3.11	Real Estate Community	E
3.12	Insurance Community	D
3.13	Educational Community High School Science Teachers University Faculty Vocational Instructors Career Counselors Seminar Organizers and Instructors	B D D C
3.14	Information Intermediaries Federal Technical Libraries Industrial Technical Libraries Academic or Nonprofit Technical Libraries Public Libraries Federal Information Centers On-Line Information Services Bookstores Film Distributors	B B D B C D D
3.15	Media Newspapers and Magazines Technical and Trade Journals Television Radio Book Publishers Newspaper Farm Editors of America	B B C C D B
3.16	Labor Organizations Steamfitters' Unions Construction Unions Sheet Metal Workers' International Association (SMWIA)	D D C
Users	or Prospective Users	

4.1 Government, Commercial or Industrial Users Oil Companies

В

B B B

4.2

5.0

INDUSTRIAL PROCESS HEAT (concluded)

Iron Foundaries	В
Alumina Industry	В
Cement Industry	· B
Stone, Clay, and Glass Products Industry	В
Textile Mills	В
Brewers	В
Commercial Laundries	В
Food Processing Industry	В
Large Grain or Crop Drying Operations	В
Commercial Greenhouses	В
Forest Products Industry	В
Other Industrial Process Heat Users	В
Farming Users	В
Farmers, Ranchers	В
al Public	

General Public

Secondary School Students	•
College Students	
Adults	•

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44

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TABLE 6. PRIORITY OF INFORMATION USERS FOR BIOMASS ENERGY SYSTEMS

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		Target Audiences ^a	Priority of Needs Over Next Three Years ^b
1.0	Rese	earchers	
	1.1	DOE-Funded Researchers and Developers	
		Contractors	Α
		National Laboratories	А
	1.2	Non-DOE, Federally-Funded Researchers and Develo	pers
		National Science Foundation (NSF)	A
,		United States Department of Agriculture (USDA)	Α
		Environmental Protection Agency (EPA)	Α
		National Aeronautics and Space Administration (NA	ASA) A
	1.3	Nonfederally-Funded Researchers and Developers	
		Universities	Α
		Biomass Equipment Manufacturers or Rotential	•
		Manufacturers	A
		Floatric Device Research Institute (FDRI)	D
	•	Cas Research Institute	В А
		Independent Research Organizations	, A R
		Industrial Solar Users	B
2.0	Appl	ications Technologists	
	2.1	Biomass-Related Manufacturers	
		Boiler Manufacturers	В
		Woodstove and Pre-Fabricated Fireplace Manufact	urers B
		Incinerator Manufacturers	В
•		Biomass Conversion Equipment Manufacturers	В.
		De-watering Equipment Manufacturers	, В
		Fermentation and Distillation Equipment	•
		Manulacturers	A
		Anaerobic Digestor Manufacturers	ت D
		Agricultural or Forestry Equipment Manulacturers	a D

TABLE 6. PRIORITY OF INFORMATION USERS FOR BIOMASS ENERGY SYSTEMS

^aTarget Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups. ^bA is the highest priority, E the lowest.

2.2	Biomass Facility or System Designers System Designers/Engineers Architectural/Engineering Design Firms Mechanical Engineers Chemical Engineers Biochemical Engineers Sanitary Engineers	B B C B B B
2.3	Builders, Developers, or Contractors Homebuilders General Contractors Architectural/Engineering Construction Firms Mechanical Engineering Contractors Construction Engineers	B C C C C
2.4	Biomass Systems Installers and Maintainers Woodstove Installers Chimneysweeps Stonemasons Pipefitters Carpenters Plumbers Sheet Metal Workers Maintenance Workers Construction Workers	B D C D E E E E E
2.5	Biomass Equipment and Product Distributors	В
2.6	Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a Biomass System Operation Managers Plant Engineers Planners	C B B
2 . 7	Producers or Collectors of Biomass Feedstock Owners of Farms Owners of Private Forests Owners of Livestock Feedlots Wood Products Industry Pulp and Paper Industry Food Processing Industry Agricultural Engineers Foresters Forest Managers Silviculture Experts Aquaculture Experts	A B C B B B C C C D D

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	2.8	Convertors or Vendors of Biomass Fuels or Byproducts Gasoline Stations Municipal Waste and Refuse Departments Petrochemical Industry Alcohol Production Industry Producers of Gaseous Fuels Chemical Industry Ammonia Producing Industry Animal Feed Producers Biochemists Agricultural Engineers	B C B A C C B B B
3.0	Facilit	ators	
	3.1	Legislators and Staff Congressmen Congressional Committee Staff State Legislators National Conference of State Legislators	B A B B
	3.2	Local Government Organizations County Government Officials Local Government Officials Municipal Planners Municipal Waste and Sewage Departments Tax Assessors and Officials	D C D C D
	3.3	Government Solar-Active Organizations DOE—Conservation and Solar Energy (C&SE) DOE—Energy Information Administration (EIA) DOE—Energy Research (ER) DOE—Regional Solar Energy Centers (RSECs) DOE—Regional Energy Offices DOE—Energy Extension Service National Center for Appropriate Technology (NCAT) USDA—Cooperative Extension Service USDA—Forest Products Lab USDA—Other International Energy Agency State Governors' Offices State Energy Offices State Solar Energy Offices State Agricultural Offices State Forestry Offices Municipal Energy Offices	A C A B B B B B A C B B B B B B B B B B
	3.4	Government Solar-Concerned Organizations General Services Administration (GSA) Department of Defense (DOD)	C C

	Small Business Administrative (SBA) USDA-Rural Electrification Administration (REA) Internal Revenue Service (IRS) Council on Environmental Quality (CEQ) Bureau of Alcohol, Tobacco, and Firearms Department of Transportation (DOT) Department of Interior (DOI)-Bureau of Land Management (BLM) General Accounting Office (GAO)	C D C C B C C C C
3.5	Nongovernment Solar-Active Organizations Solar Trade Associations Solar Professional Societies Solar Public Interest Groups The Alternate Energy Institute Wood Energy Institute Bio-Energy Council Complete Tree Institute, U. of Maine National Gasohol Commission Biomass Energy Institute, Inc. New England Solar Energy Congress Solar Lobbyists	B B B B B B B B B B B B B B B B B B B
3.6	Nongovernment Solar-Concerned Organizations Public Interest Organizations Environmental Organizations Future Farmers of America Chambers of Commerce Non-Solar Professional Societies National Solid Waste Management Association American Chemical Society Non-Solar Trade Associations Forest Industrial Council National Cattlemen's Association American Pulpwood Association American Paper Institute Farmer Co-ops American Farm Bureau Federation Farmer's Education and Cooperative Union of America Home Improvement Associations	B B C E B C B B C C C C C R B B B B B B B B B B
3.7	Regulatory, Codes, and Standards Community Environmental Protection Agency (EPÅ) Occupational Safety and Health Administration (OSHA) American National Standards Institute (ANSI) American Society of Mechanical Engineers (ASME) Federal Drug Administration (FDA) Better Business Bureaus	B E D C C

	Building Inspectors		В
3.8	Utility Community Municipally-Owned Gas and Electric Utilities Electric Power Companies Gas Utilities National Association of		B C C
	Regulatory Utility Commissioners State Utility Commissions Utility Trade Associations		D D C
	DOE-Bonneville Power Administration (BPA) Tennessee Valley Authority (TVA)		D B
3.9	Financial Community Bankers Venture Capital Brokers Government Loan Agencies		B C
	USDA—Farmer's Home Administration (FHA) USDA—Commodity Credit Corporation (CCC) Stock Brokers		A A E
3.10	Legal Community		D
3.11	Real Estate Community		D
3.12	Insurance Community Management Agents Actuaries		D C C
3.13	Educational Community High School Science Teachers University Faculty Vocational Instructors Career Counselors Seminar Organizers and Instructors	· :	B B C D C
3.14	Information Intermediaries Federal Technical Libraries Industrial Technical Libraries Academic or Nonprofit Technical Libraries Public Libraries Federal Information Centers On-Line Information Services Bookstores Film Distributors		B B B B B B B B D
3.15	Media Newspapers and Magazines		В

BIOMASS ENERGY SYSTEMS (concluded)

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		Technical and Trade Journals Television Radio Book Publishers Newspaper Farm Editors of America	B C B B
	3.16	Labor Organizations Steamfitters' Unions Construction Unions Farmworkers' Unions	D D D
4.0	Users	or Prospective Users	
·	4.1	Government, Commercial or Industrial Users Department of Defense (DOD) Owners of Large Transportation Fleets Electric Utilities Industries Requiring Ammonia Gas Utilities Glass Manufacturers Industrial Process Heat Users Industries Requiring Gaseous Fuels Industries Using Boilers Food Processing Industry Pulp and Paper Industry Pulp and Paper Industry Logging Industry Forest Products Industry Other Industries Producing Organic Waste or Refuse Owners of Large Buildings or Complexes Owners of Small Buildings Owners of Remote Facilities	B C C C C C C C C C C C C C C C C C C C
	4.2	Residential or Farming Users Homeowners Custom Homes Speculative Houses Retrofits Farmers, Ranchers Car Owners Mobile Home Owners Remote Facility Owners	A B A B C B
5.0	Gener	al Public	
		Secondary School Students College Students Adults	B B B

TABLE 7. PRIORITY OF INFORMATION USERS FOR WIND ENERGY SYSTEMS

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		Target Audiences ^a C	Priority of Needs Over Next Three Years ^b
1.0	Resea	archers	
	1.1	DOE-Funded Researchers and Developers	
		Contractors	Α
	•	National Laboratories	В
	1.2	Non-DOE, Federally-Funded Researchers and Develop	pers
		National Aeronautics and Space Administration (NA	ASA) A
		and Atmospheric Administration (NOAA)	B
		Department of Interior (DOI)-Bureau of	2
		Reclamation (BOR)	В
		United States Department of Agriculture (USDA)	В
	1.3	Nonfederally-Funded Researchers and Developers	
		Universities	C C
		Wind Manufacturers	В
		Trade Research Associations	
		Electric Power Research Institute (EPRI)	A
		Independent Research Organizations	
		Industrial Solar Users	<u>ر</u>
		o thitles	A
2.0	Applie	cations Technologists	
	2.1	Wind or Wind-Related Manufacturers	
		Wind System Manufacturers	A
		wind System Components Manufacturers	A
	2.2	Wind Facility or System Designers	
-		System Designers/Engineers	Α
		Architectural/Engineering Design Firms	В
		Power Engineers (Industrial)	· C
		Electrical Engineers	. C
		Mechanical Engineers	C
	2.3	Builders, Developers, or Contractors	
		General Contractors	C
		Architectural/Engineering Construction Firms	C

TABLE 7. PRIORITY OF INFORMATION USERS FOR WIND ENERGY SYSTEMS

^aTarget Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups. ^bA is the highest priority, E the lowest.

WIND ENERGY SYSTEMS (continued)

	Mechanical Engineering Contractors Construction Engineers	C C
2.4	Wind System Installers and Maintainers Installers Electricians Wind Maintenance Workers	B C Ĉ
2.5	Wind Equipment Distributors	В
2.6	Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a Wind System Operation Managers Power Engineers Planners	C: C B
Facil	itators	
3.1	Legislators and Staff Congressmen Congressional Committee Staff State Legislators National Conference of State Legislators	B A B B
3.2	Local Government Organizations County Government Officials Local Government Officials Municipal Planners Tax Assessors and Officials	C C D
3.3	Government Solar-Active Organizations DOE-Conservation and Solar Energy (C&SE) DOE-Energy Information Administration (EIA) DOE-Energy Research (ER) DOE-Regional Solar Energy Centers (RSECs) DOE-Regional Energy Offices DOE-Energy Extension Service DOE-Federal Energy Regulation Commission (FERC) USDA-Cooperative Extension Service USDA-Other National Center for Appropriate Technology (NCAT) DOI-Bureau of Land Management Department of Commerce (DOC) International Energy Agency State Governors' Office State Energy Offices State Solar Energy Offices State Agricultural Offices	A C B A C B A A B B C D B B A B B A B

D

WIND ENERGY SYSTEMS (continued)

Municipal Energy Offices

3.4	Government Solar-Concerned Organizations Federal Communications Commission (FCC) Small Business Administration (SBA) USDA-Rural Electrification Administration (REA) Council for Environmental Quality (CEQ)	C C B C
3 . 5	Nongovernment Solar-Active Organizations Solar Trade Associations Solar Professional Societies American Wind Energy Association Solar Public Interest Groups The Alternate Energy Institute Solar Lobbyists	B B A B B B
3.6	Nongovernment Solar-Concerned Organizations Home Improvement Associations Public Interest Organizations Environmental Organizations Nonsolar Professional Societies Nonsolar Trade Associations Farmer Co-ops Farmer's Education and Cooperative Union of America	E B B B B B B B
3.7	Regulatory, Codes, and Standards Community Environmental Protection Agency (EPA) Occupational Safety and Health Administration (OSHA) American National Standards Institute (ANSI) American Society of Mechanical Engineers (ASME) Better Business Bureaus American Society for Testing Materials (ASTM)	C D B E B
3.8	Utility Community Electric Power Companies National Association of Regulatory Utility Commissioners State Utility Commissions Utility Trade Associations American Public Power Association National Rural Electrification Association Federal Power Marketing Agencies DOE—Bonneville Power Administration Tennessee Valley Authority (TVA) Municipally-Owned Gas and Electric Utilities	A B A A A B B C
3.9	Financial Community Bankers Venture Capital Brokers	B

57
WIND ENERGY SYSTEMS (continued)

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·	Government Loan Agencies Stock Brokers	B E
3.10	Legal Community	D
3.11	Real Estate Community	E
3.12	Insurance Community Management Agents Actuaries	C B C
3.13	Educational Community High School Science Teachers University Faculty Vocational Instructors Career Counselors Seminar Organizers and Instructors	B D C
3.14	Information Intermediaries Federal Technical Libraries Industrial Technical Libraries Academic or Nonprofit Technical Libraries Public Libraries Federal Information Centers On-Line Information Services Bookstores Film Distributors	B C B B B B D
3.15	Media Newspapers and Magazines Technical and Trade Journals Television Radio Book Publishers Newspaper Farm Editors of America	B C C C B
3.16	Labor Organizations Electrical Unions Carpentry Unions Construction Unions Aerospace Unions	D D D D
Users	or Prospective Users	
4.1	Government, Commercial, or Industrial Users Electric Utilities Owners of Large Buildings or Complexes Owners of Small Buildings	A C C

WIND ENERGY SYSTEMS (concluded)

	Other Commercial, Industrial Users Foreign Users Owners of Remote Facilities	C C B
	4.2 Residential or Farming Users Homeowners Farmers, Ranchers Remote Facility Owners	C B B
5.0	General Public	
	Secondary School Students College Students Adults	B B B

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TABLE 8. PRIORITY OF INFORMATION USERS FOR OCEAN ENERGY SYSTEMS

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		Target Audiences ^a C	Priority over Next	Of Needs Three Years
1.0	Resea	archers _		
	1.1	DOE-Funded Researchers and Developers		
		Contractors		Α
		National Laboratories		A
	1.2	Non-DOE, Federally-Funded Researchers and Develop Department of Commerce (DOC)-Maritime	ers	
		Administration (MARAD)		A
		DOCNational Oceanic and Atmospheric		
		Administration (NOAA)		A
		US Navy		C
		National Aeronautics and Space Administration (NA	SA)	Ċ
	•	National Science Foundation (NSF)		č
	1.3	Nonfederally-Funded Researchers and Developers		
		Universities		С
		Ocean Energy System—Related Manufacturers		
		or Potential Manufacturers		В
		Flectric Power Research Institute (FPRI)		Δ
		Internet ower nesearen mistitute (Erni)		R
		National Energy Laboratory of Hawaii		Δ
		Ammonia Producing Industry		A
2.0	Appli	rations Technologists		
2.0	<u>pp</u>			
	2.1	Ocean Energy System—Related Manufacturers		
		Cold Water Pipe Manufacturers		A
		Wire and Cable Companies		A
		Aerospace Industry	a n tin	C
	•	Shipbuilding Industry		A
		Offshore Drilling Platform Construction Industry		A
		Platform Components Manufacturers		A .
		Heat Exchanger Manufacturers		A
		Pump Manufacturers		A
		Rotary Equipment Manufacturers		A
				•

TABLE 8. PRIORITY OF INFORMATION USERS FOR OCEAN ENERGY SYSTEMS

^aTarget Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups.

^bA is the highest priority, E the lowest.

OCEAN ENERGY SYSTEMS (continued)

	2.2	Ocean Energy Facility or System Designers System Designers/Engineers Architectural/Engineering Design Firms Power Engineers Mechanical Engineers Corrosion Engineers Marine Engineers/Architects Marine Surveyors Electrical Engineers	A A B A C C
	2.3	Builders, Fabricators, or Contractors General Contractors Architectural/Engineering Construction Firms Construction Engineers Mechanical Engineering Contractors Shipbuilders Aerospace Contractors Marine Construction Contractors	C B C B B B B
	2.4	Ocean Energy Facility Service Workers Shipbuilding Workers Marine Construction Workers Maintenance Workers	C C C
3.0	Facilit	ators	
	3.1	Legislators and Staff Congressmen Congressional Committee Staff State Legislators in Florida, Hawaii, and Puerto Rico National Conference of State Legislators	B A A C
	3.2	Local Government Organizations	D
	3.3	Government Solar-Active Organizations DOE—Conservation and Solar Energy (C&SE) DOE—Energy Information Administration (EIA) DOE—Energy Research (ER) DOE—Regional Energy Offices DOE—Federal Energy Regulation Commission (FERC) International Energy Agency DOC—NOAA DOC—MARAD Florida, Hawaii, and Puerto Rico State Governments Other Seacoast State Governments	A C A B C B B A C

OCEAN ENERGY SYSTEMS (continued)

3.4	Government Solar-Concerned Organizations Council on Environmental Quality (CEQ)	С
3.5	Nongovernment Solar-Active Organizations Solar Trade Associations Ocean Energy Council Solar Professional Societies Solar Public Interest Groups Solar Lobbyists	B A A B B
3.6	Nongovernment Solar-Concerned Organizations Public Interest Organizations Environmental Organizations Nonsolar Professional Societies Nonsolar Trade Associations National Ocean Industry Association Atlantic States Fisheries Commission Department of Commerce (DOC)	B B B B B B B
3.7	Regulatory, Codes, and Standards Community Environmental Protection Agency (EPA) Occupational Safety and Health Administration (OSHA) Army Corps of Engineers American Society for Testing Materials (ASTM) National Electrical Manufacturers Association (NEMA) American Bureau of Shipping U.S. Coast Guard	B D C C B B
3.8	Utility Community Southeastern State Utility Commissions Utility Trade Associations OTEC Utilities Users' Council SE USA Electric Utilities Utilities in Hawaii, Puerto Rico and Maine	B A B B
3.9	Financial Community Bankers Venture Capital Brokers Government Loan Agencies Stock Brokers	C D B E
3.10	Legal Community Patent Attorneys Maritime Lawyers Maritime Arbitrators Law of the Sea Institute	D C C B
3.11	(This class is not applicable for Ocean Energy	

Systems)

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OCEAN ENERGY SYSTEMS (concluded)

	3.12	Insurance Community		С
	3.13	Educational Community High School Science Teachers University Faculty Vocational Instructors Career Counselors Seminar Organizers and Instructors	,	B B E D
	3.14	Information Intermediaries Federal Technical Libraries Industrial Technical Libraries Academic or Nonprofit Technical Librarics Public Libraries Federal Information Centers On-Line Information Services Bookstores Film Distributors		A B C D B B E D
	3.15	Media Newspapers and Magazines Technical and Trade Journals Television Radio Book Publishers		C B C D D
	3.16	Labor Organizations Maritime Construction Workers Unions Aerospace Unions Maritime Unions Shipbuilding Workers Unions		ם ח ט
4.0	Users or	Prospective Users		
	4.1	Government, Commercial, or Industrial Users Electric Utilities Ocean Industries U.S. Navy		B C C
	4.2	Residential or Farming Users		D
5.0	Genera	l Public		
		Secondary School Students College Students Adults		B B B

TABLE 9. PRIORITY OF INFORMATION USERS FOR ADVANCED SOLAR STORAGE SYSTEMS

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		Target Audiences ^a O	Priority of Needs over Next Three Years ^b
1.0	Resear	chers	
	1.1	DOE-Funded Researchers and Developers	
		Contractors	A '
		National Laboratories	Α
	1.2	Non-DOE, Federally-Funded Researchers and Develop	bers
		National Aeronautics and Space Administration (NA	ASA) A
		National Science Foundation (NSF)	D
		Department of Defense (DOD)	В
	1.3	Nonfederally-Funded Researchers and Developers	
	1.0	Universities	А
		Solar Manufacturers or Potential Manufacturers	B
		Independent Research Organizations	Ð
		Institute of Ges Technology	Δ
		Trade Research Associations	
		Cas Descarch Institute	٨
		Gas Research Institute Electric Deven Descensh Institute (EDDI)	A A
		Liectric Power Research Institute (EPRI)	A D
		Ammonia Producers	В
		Chemical Industry	В
		Fuel Industry	В
2.0		ations Technologists	
	2.1	Storage-Related Manufacturers	
		Photovoltaics System Manufacturers	В
		Solar Heating and Cooling (SHAC) Manufacturers	В
• • • •	• • • • • •	Heating, Ventilating and Air Conditioning	
		(HVAC) Manufacturers	В
		Wind System Manufacturers	B
		Battery Manufacturers	B
	2.2	Storage System Designers	
		Sustam Designang/Engineang	· C

TABLE 9. PRIORITY OF INFORMATION USERS FOR ADVANCED SOLAR **STORAGE SYSTEMS**

^aTarget Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups. ^bA is the highest priority, E the lowest.

ADVANCED SOLAR STORAGE SYSTEMS (continued)

		Architectural/Engineering Design Firms Mechanical Engineers Electrical Engineers Chemical Engineers	D C E C
	2.3	Builders, Developers, or Contractors General Contractors Architectural/Engineering Construction Firms Mechanical Engineering Contractors Construction Engineers	D D D D
•	2.4	Storage System Installers and Maintainers	Ε
	2.5	Storage Equipment Distributors	E
	2.6	Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a Solar Storage System	. D
3.0	Facilita	ators	
	3.1	Legislators and Staff Congressmen Congressional Committee Staff State Legislators National Conference of State Legislators	B A D D
	3.2	Local Government Organizations County Government Officials Local Government Officials Municipal Planners Tax Assessors and Officials	E E D E
	3.3	Government Solar-Active Organizations DOL—Conservation and Solar Energy (C&SE) DOE—Energy Information Administration (EIA) DOE—Energy Research (ER) DOE—Regional Solar Energy Centers (RSECs) DOE—Regional Energy Offices DOE—Energy Extension Service DOE—Federal Energy Regulation Commission (FERC) National Center for Appropriate Technology (NCAT) International Energy Agency State Energy Offices State Solar Energy Offices Municipal Energy Offices United States Department of Agriculture (USDA)— Cooperative Extension Service Department of Commerce (DOC)	A C C D D D D D D D D D D D D D D D D D

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ADVANCED SOLAR STORAGE SYSTEMS (continued)

3.4	Government Solar-Concerned Organizations General Services Administration (GSA) Department of Defense (DOD) Department of Housing and Urban Development (HUD) USDA-Rural Electrification Administration (REA) USDA-Other Council on Environmental Quality (CEQ) General Accounting Office (GAO) State Governors' Offices State Agricultural Offices State Forestry Offices	D D D D D D D D D D D D
3.5	Nongovernment Solar-Active Organizations Solar Trade Associations Solar Professional Societies Solar Public Interest Groups Solar Lobbyists	B B B
3.6	Nongovernment Solar-Concerned Organizations Public Interest Organizations Environmental Organizations Chambers of Commerce Nonsolar Professional Societies Nonsolar Trade Associations	C C B B
3.7	Regulatory, Codes, and Standards Community Environmental Protection Agency (EPA) Occupational Safety and Health Administration (OSHA) American National Standards Institute (ANSI) Building Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials (ICBO), Southern Building Code Congress (SBCC) American Society of Mechanical Engineers (ASME) Better Business Bureaus American Society for Testing Materials (ASTM)	C D E E E E E
3.8	Utility Community Electric Power Companies	В
·	National Association of Regulatory Utility Commissioners State Utility Commissions Utility Trade Associations Federal Power Marketing Agencies	C B B
	DOE-Bonneville Power Administration Tennessee Valley Authority (TVA)	A B
3.9	Financial Community	Ε

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ADVANCED SOLAR STORAGE SYSTEMS (continued)

3.10	Legal Community	Ε
3.11	Real Estate Community	` E
3.12	Insurance Community	Έ
3.13	Educational Community High School Science Teachers University Faculty Vocational Instructors Career Counselors Seminar Organizers and Instructors	B B E E E
3.14	Information Intermediaries Federal Technical Libraries Industrial Technical Libraries Academic or Nonprofit Technical Libraries Public Libraries Federal Information Centers On-Line Information Services Bookstores Film Distributors	B B D A C E D
3.15	Media Newspapers and Magazines Technical and Trade Journals Television Radio Book Publishers	C B C E D
3.16	Labor Organizations	E
Users	or Prospective Users	
4.1	Government, Commercial, or Industrial Users Federal/State/Local Agencies Owning or Holding Titles to Duildings Electric Utilities Users of Industrial Process Heat Owners of Large Buildings or Complexes Owners of Small Buildings Owners of Photovoltaic Systems Owners of Wind Energy Conversion Machines	D C D D D D
4.2	Residential or Farming Users Homeowners Farmers, Ranchers	D D



ADVANCED SOLAR STORAGE SYSTEMS (concluded)

5.0 General Public

Secondary School Students College Students Adults

B B B

Document Control	1. SERI Report No.	2. NTIS Accession No.	3. Recipient's Accession No.
Page	TR-751-472		
4. Title and Subtitle			5. Publication Date
		May 1980	
Solar Information User Priority Study		6.	
7. Author(s)		······································	8. Performing Organization Rept. No.
William W. Belev	7; Barbara L. Wood		
9. Performing Organization	Name and Address		10. Project/Task/Work Unit No.
Solar Energy Rec	earch Institute		8133.00,8420.14
1617 Cole Boulev	vard		(C)
Golden, Colorado	80401		
			(G)
12 Soonsoring Organizatio	n Name and Address		13 Type of Benort & Period Covered
			Technical Report
			14.
15. Supplementary Notes	······		
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16. Abstract (Limit: 200 wor for the design, c	rds) The Information	Systems Division (1) rdination of the So	SD) at SERI is responsible lar Energy Information Data
Bank (SEIDB). Und	ler this effort ISD	is building data ba	ses, collecting solar infor-
mation, and prepa	ring and distributi	ing information produ	ucts and services. To ensure
that SEIDB is res	ponsive to the high	n-priority information	on needs of the solar com
munity, ISD is pe	rforming the follow	ving tasks:	
 Defining 	the community of so	lar information user	rs,
2. Setting p	riorities as to whi	ich groups of informa	ation users have the most
important	near-term informat	ion needs,	
3. Determini 4. Determini	ng the near-term in	channels that can be	e effectively used to reach
the high-	priority users.	channers that can be	e effectively used to reach
5. Determini	ng what high-priori	ty information needs	s are being met fully by
existing	products and servic	es, and	
6. Recommend	ing additional, tar	geted, cost-effectiv	ve information products and
Services	to meet high-prior	ty needo.	ve. First identifying for
each solar techno will need solar i	logy those members nformation; second,	or potential members , describing the rela	s of the solar community who ative importance of meeting
17. Document Analysis		icton needs of each a	group of information disers.
Dissemination ; S	Energy ; Informatic Surveys	on Needs ; Informatio	on Systems ; Information
b. Identifiers/Open-End	ed Terms Solar Energy	Information Data Ba	nk (SEIDB)
c LIC Categories			
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58c 18. Availability Statement National Techni	cal Information Ser		19. No. of Pages
58c 18. Availability Statement National Techni U:S. Department	cal Information Ser of Commerce	rvice	19. No. of Pages 72
58c ^{18. Availability Statement} National Techni U:S. Department 5285 Port Royal	cal Information Ser of Commerce Road	rvice	19. No. of Pages 72 20. Price
58c 18. Availability Statement National Techni U:S. Department 5285 Port Royal Springfield, Vi	cal Information Ser of Commerce Road rginia 22161	rvice	19. No. of Pages 72 20. Price \$5.25

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