



Global Energy and Environment Network Project

Internet Energy and Environment Sampler

Prepared for:

**Office of Energy, Environment, and Technology
Center for Environment
Bureau for Global Programs, Field Support, and Research
USAID**

GLEEN
Global Energy and Environment Network Project
Internet Energy and Environment Sampler

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Prepared for:

OFFICE OF ENERGY, ENVIRONMENT, AND TECHNOLOGY
Center for Environment
Bureau for Global Programs, Field Support, and Research
United States Agency for International Development

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1. INTRODUCTION

1.1 OVERVIEW

A global partnership to ensure universal access to timely, high-quality information related to energy and the environment -- this is the **GLEEN** vision and this sampler is a contribution to the effort to realize this vision. The Global Energy and Environment Network (**GLEEN**) will strengthen the capacity of developing and post-communist country institutions, businesses, and individuals to access and disseminate energy and environmental information. This information will help all countries solve their common energy and environmental problems.

The rate and quality of economic and social change in developing countries can be accelerated through the transfer of high value technical information. This transfer should be facilitated among experts and practitioners in developing countries as well as between and among energy efficiency specialists in both developing and industrialized nations. This transfer of technical information is possible via the rapidly expanding global, electronic communications infrastructure which provides access to the information available in both technologically advanced nations and developing countries.

U.S. Vice President Al Gore gave expression and direction to the development of this infrastructure in his March 1994 call for the creation of a **Global Information Infrastructure**. He outlined five principles to guide this expanded information exchange:

- ▶ Encourage private investment
- ▶ Promote competition
- ▶ Create a flexible regulatory framework
- ▶ Provide open access to the network for all information providers
- ▶ Ensure universal service.

1.2 THE GLEEN PROJECT

GLEEN is designed to build on Vice President Gore's Global Information Infrastructure initiative. **GLEEN** is at work to increase the access developing countries have to electronically available energy efficiency information. There has been a preliminary assessment of energy efficiency information available on the Internet which reviewed the scope, quality, and usefulness to developing countries. The assessment looked at what was on the Internet, what was not, and what could be added. Key information resources, such as universities, national laboratories, and government agencies, have been contacted by telephone and mail surveys.

Potentially useful information identified during the assessment was screened and is included in this sampler. An information architecture, in use by the international energy community, was adopted to organize the information included in the sampler.

Two demonstrations on improved access to energy efficiency information on the Internet have also been presented to the U.N. Commission on Sustainable Development and to USAID and State Department personnel. The second demonstration included a presentation of the CD ROM-based system under development by CREST (the Council on Renewable Energy for Sustainable Development). CREST is funded, in part, by the USAID Office of Energy, Environment, and Technology.

Underway is a survey of the information needs of developing country energy efficiency specialists. Some work has also begun to identify target developing country sites which will receive assistance in accessing the Internet. Expanding the number of target sites will continue to be a GLEEN effort. GLEEN will seek to achieve widespread connections and access to energy and environmental information by developing country institutions. A more in-depth assessment of information on the Internet will be conducted, and GLEEN will work to expand the amount and quality of information on the Internet. Developing country institutions will be urged to contribute to and to use this valuable resource. GLEEN is also looking to demonstrate the usefulness of an electronic conference to share information and to increase exchange among energy efficiency specialists at less cost and with more frequency than is possible with meetings which require extensive travel.

2. GLEEN INTERNET ENERGY AND ENVIRONMENT SAMPLER

The *GLEEN Internet Energy and Environment Sampler* identifies sources of information related to energy and the environment that can be accessed electronically. In particular, emphasis is placed on sources that can be accessed for no charge through the Internet or via various bulletin board systems (BBS). Because a wealth of information is also available on a subscription basis, fee-based systems that can be accessed electronically are also sampled.

General sources of information are summarized below. First, the free information sources are identified and Internet addresses are listed. A brief description of the type of information available is provided. Next, the major fee-based sources of information available electronically are reviewed. Access instructions and cost information, where available, are given. It should be realized, however, that costs and addresses can change without notice.

This information is organized according to a taxonomical scheme developed by the U.S. Department of Energy and adopted by the International Energy Agency (see Section 2.2). To access the pre-screened material on-line, one does require, at a minimum, a computer, telecommunications access to the Internet, and the appropriate communications software.

In the discussion above, reference is made to free information. This reference to "free" addresses charges that may be imposed by the custodian of the information. While the information may be supplied without charge, there may be charges for telecommunications access to either the Internet and the listed BBSs.

2.1 THE INTERNET & GAINING ACCESS

Many Internet host sites worldwide allow anyone to log on and access files and other services. In many cases this access is at no-cost for the information at that site. In some cases there is a combination of free access with fees for some services such as full text document retrieval. In other cases there are commercial services which charge for initial access and then, using various pricing structures, charge for actual use. But the world of access to free sources is quite large, and one can find much useful information and many useful contacts before one has to pay for access to commercial services.

When accessing information via the Internet certain issues should be considered. They are:

Ease of Access: One should expect to spend time learning the various Internet access procedures. There are many sources of help both on the Internet itself and in published guide material. Both kinds of assistance are discussed below.

Speed & Time: With the "boom" in new users connecting to the Internet, there has been a tremendous amount of unanticipated "traffic" going across the communication lines. This often leads to slow response time and busy signals in connecting to popular hosts. Persist; be patient.

Security: Depending on how a user plans to use the Internet and what information will be sent and received, security may be a concern. There are a number of computer "hackers" on the Internet who are able to access nearly anyone's e-mail, crack passwords, and read whatever is sent across the network. Although there is a voluntary security team responsible for watching situations such as these, it is important to be conscious of the security factor. One should think first about what one sends through the Internet.

Continuity: Not only are there many new users daily, there is a comparable growth in the number of sources and the amount of available information. Sources and providers also change how they do things and may even leave the Internet. One should not be too surprised if something found one day is not available the next. Perhaps the provider is off-line for maintenance. Perhaps the provider has stopped supporting the service. It is important to be aware of similar, alternative sources or access routes.

There are many excellent references available that describe the Internet and methods of accessing it. The reader is encouraged to utilize these resources. These details of Internet access are not covered in this report.

2.2 CONTENT OF THE GLEEN SAMPLER

Information in the *GLEEN Internet Energy and Environment Sampler* is divided into two categories:

- ▶ General Sources in Section 2.3
- ▶ Pre-Screened Information in Section 2.4.

GENERAL SOURCES

We describe below a number of sources that contain energy information and that are good starting points for those interested in conducting searches themselves. The scope of information available at these sites is extensive, varied, and useful. The sponsoring organizations and/or the immediate providers are reliable and likely to maintain and expand the data.

Many of the sources from which we have selected the pre-screened items listed in Section 2.4 derive from one or another "gopher." Gophers are largely university-based computer servers named after the original server developed and maintained by the University of Minnesota. To access a gopher is to encounter a hierarchy of menus which lead to various data files and on to other gophers with other files of data. The world of gophers is a large network of computer servers with access to each other and open to any user who has an initial point of access.

Here is a **TIP** for users accessing the Internet by means of a gopher server:

Pressing the slash (/) key while on most gopher systems allows the user to search that gopher menu structure for text strings. This eliminates the need to look at every sub-menu when one is only searching for a specific menu selection.

We have divided the General Sources further into Free Information Sources in Section 2.3.1 and Fee-Based or Restricted Information Sources in Section 2.3.2. The Free Information Resources are organized by type (e.g., Newsgroups) or institution (e.g., Universities, National Laboratories). The Fee-Based or Restricted Information Resources are arranged alphabetically by sponsoring organization. Many of these information sources offer keyword search functions on their root menu. In addition, menu options that are most likely to contain information on energy efficiency have been identified for both sections.

PRE-SCREENED INFORMATION

These are specific pieces of information or documents that have been selected from various sources on the Internet via one gopher or another. They have been selected to suggest the range and kind of energy efficiency information that is available to practitioners in both developed and developing countries. The items can be accessed in two ways:

- ▶ **Point and Click** - Special software was used to "capture" addresses of noteworthy items located during a search of the Internet for relevant energy efficiency information. The captured addresses, or "bookmarks," can be used to retrieve the items automatically via a "point and click" Windows-based interface at any time in the future thus eliminating the necessity of conducting searches again or of navigating multiple paths and menus to relocate the information. The Gopher software used is freeware that was downloaded from the Internet. To use this software the user must be connected to the Internet via a LAN or via a dial-up account using a PPP or SLIP protocol.
- ▶ **Path Selection** - Given the filename, path, host name, and port information presented in Section 2.4, users can also locate the pre-screened information using standard Internet tools such as gopher client programs and anonymous FTP servers, or the telnet utility. While this process is not as convenient as the point-and-click techniques described above, the end results are the same. Also, the user is not required to have direct access to Internet services, but may use less expensive, dial-in shell account services.

The pre-screened information has been organized according to the categories given in Exhibit 2.1. The information schema and categories are those developed and used by the Office of Scientific & Technical Information of the U.S. Department of Energy. This system has also been adopted by the International Energy Agency for the dissemination and indexing of energy information

among IEA member countries. The system is the basis, for instance, of the organization and indexing used by USDOE for the Energy Science and Technology Data Base.

The major categories are identified by the first two digits from 10 to 99. All of the major categories for energy are listed on Exhibit 2.1. The major categories and their first level subcategories, which coincide with the items of pre-screened information, are indicated on Exhibit 2.1 with an asterisk (*) before the Category Number, and both the number and the Category Title are in bold typeface. The complete system with category numbers, category titles, and extensive scope notes is available in *International Energy - Subject Categories and Scope*, Energy Technology Data Exchange, International Energy Agency, 1992 (ETDE/PUB--1-R2). The report can be ordered from the National Technical Information Service (NTIS) of the U.S. Department of Commerce.

This comprehensive indexing scheme has been chosen as a guide for organizing the energy efficiency information included in the section of Pre-Screened Information because of its widespread use and its relevance. This IEA/USDOE system will easily accommodate expansion and elaboration as the GLEEN Sampler evolves.

Exhibit 2.1 International Energy Subject Categories Used to Organize the Pre-Screened, "Bookmarked" Items on Energy Efficiency

| NUMBERS | CATEGORY TITLES |
|----------------|---------------------------------------|
| 10000 | COAL, LIGNITE, AND PEAT |
| 20000 | PETROLEUM |
| 30000 | NATURAL GAS |
| 40000 | OIL SHALES AND TAR SANDS |
| 50000 | NUCLEAR FUELS |
| 70000 | ISOTOPE & RADIATION SOURCE TECHNOLOGY |
| 80000 | HYDROGEN |
| 90000 | BIOMASS FUELS |
| 100000 | SYNTHETIC FUELS |
| 130000 | HYDRO ENERGY |
| 140000 | SOLAR ENERGY |
| 150000 | GEO THERMAL ENERGY |
| 160000 | TIDAL AND WAVE POWER |

| NUMBERS | CATEGORY TITLES |
|----------------|-------------------------------------------|
| 170000 | WIND ENERGY |
| * 200000 | FOSSIL-FUELED POWER PLANTS |
| * 200100 | POWER PLANTS & POWER GENERATION |
| * 200200 | WASTE MANAGEMENT |
| 210000 | NUCLEAR POWER REACTORS & PLANTS |
| 220000 | NUCLEAR REACTOR TECHNOLOGY |
| 240000 | POWER TRANSMISSION AND DISTRIBUTION |
| 250000 | ENERGY STORAGE |
| * 290000 | ENERGY PLANNING AND POLICY |
| * 290100 | ENERGY ANALYSIS AND MODELING |
| * 290200 | ECONOMICS AND SOCIOLOGY |
| * 290300 | ENVIRONMENT, HEALTH, AND SAFETY |
| * 290400 | ENERGY RESOURCES |
| * 290500 | RDD & COMMERCIALIZATION |
| * 290600 | NUCLEAR ENERGY |
| * 290700 | TRANSPORT AND STORAGE |
| * 290800 | HEAT UTILIZATION |
| * 291000 | CONSERVATION |
| * 292000 | SUPPLY, DEMAND, AND FORECASTING |
| * 293000 | POLICY, LEGISLATION, & REGULATION |
| * 294000 | FOSSIL FUELS |
| * 295000 | HYDROGEN AND SYNTHETIC FUELS |
| * 296000 | ELECTRIC POWER |
| * 298000 | CONSUMPTION AND UTILIZATION |
| * 299000 | UNCONVENTIONAL SOURCES & POWER GENERATION |
| 300000 | DIRECT ENERGY CONVERSION |

| NUMBERS | CATEGORY TITLES |
|----------------|-----------------------------------------------------------|
| * 320000 | ENERGY CONSERVATION, CONSUMPTION & UTILIZATION |
| * 320100 | BUILDINGS |
| * 320200 | TRANSPORTATION |
| * 320300 | INDUSTRIAL AND AGRICULTURAL PROCESSES |
| * 320600 | MUNICIPALITIES AND COMMUNITY SYSTEMS |
| * 320900 | EDUCATION AND PUBLIC RELATIONS |
| * 330000 | ADVANCED PROPULSION SYSTEMS |
| * 330100 | INTERNAL COMBUSTION ENGINES |
| * 330300 | ELECTRIC-POWERED SYSTEMS |
| * 330400 | HYBRID SYSTEMS |
| * 330800 | ALTERNATIVE FUELS |
| 540000 | ENVIRONMENTAL SCIENCES |
| 990000 | GENERAL AND MISCELLANEOUS |

* Categories used to organize the Pre-screened Information in Section 2.4.

Source: IEA, International Energy Categories
 USDOE, OSTI, Energy, Science & Technology Data Base

2.3 GENERAL SOURCES FOR ENERGY EFFICIENCY INFORMATION

This section describes a number of large and stable sources of energy and efficiency information that are available electronically and provide an overview of the type and scope of material available from each resource. Section 2.3.1 describes resources where the access is free and Section 2.3.2 lists resources where fees are imposed.

The value and usefulness of each resource is highlighted. Access, price, and contact information have been provided where applicable. To illustrate what one will encounter, we include portions of the menu structure of selected gophers. On some of the menus we have indicated the most relevant choices with an arrow (→).

Text representing information that will appear on the computer screen is presented in a different, smaller typeface. The USAID gopher menu structure printed below is an example of the differentiation used:

1. WELCOME!/
2. AGENCY WIDE OVERVIEW/
3. WHY FOREIGN AID?..A FOCUS ON RESULTS/
4. SUPPORTING BROAD-BASED ECONOMIC GROWTH/
5. STABILIZING POPULATION GROWTH/PROMOTING HEALTH/
--> 6. PROTECTING THE ENVIRONMENT/
7. PROMOTING DEMOCRACY/
8. HUMANITARIAN ASSISTANCE AND POST-CRISIS TRANSITION/
9. REGIONAL/COUNTRY FOCUS/
10. USAID PROCUREMENT AND BUSINESS OPPORTUNITIES/
11. DOCUMENTS AND PUBLICATIONS (LIBRARY)/
12. GETTING AROUND GOPHER SPACE/
13. SEARCH FOR KEYWORDS ON THIS GOPHER <?>

The address to the USAID gopher system is *gopher.info.usaid.gov*.

For some of the resources, the results of sample searches using energy and efficiency as keywords have been included. The search results should be seen as suggestive and not as comprehensive lists of the available information. Items that are worthy of further attention are included in Section 2.4.

Most of the information included is accessible via the Internet. Some particularly valuable information which is available on diskette, CD ROM, or via direct dial modem connection has also been identified.

2.3.1 FREE INFORMATION RESOURCES

The resources in this section are organized by type and by sponsoring organization.

- ▶ Government Agencies: U.S. Federal & States, Canada
- ▶ U.S. Government National Laboratories
- ▶ International Organizations
- ▶ Universities
- ▶ Non-Profits/Professional Associations
- ▶ Libraries and Bibliographies
- ▶ News Groups
- ▶ Mailing Lists / LISTSERV

Government Agencies: U.S. Federal & States, Canada

United States Agency for International Development (USAID) - Gopher to *gopher.info.usaid.gov*.

The USAID Gopher is a recent development and is growing quickly. Energy efficiency information appears under the gopher pick "Protecting the Environment." See the beginning of this section for the initial menu screen.

Canada, Center for Mineral & Energy Technology, Library - Telnet to *canlib.emr.ca*

Login as opac to access to the library and search its collection.

Canada, International Development Research Center (IDRC) - Telnet to *ddbbs.idrc.ca* and login as guest.

IDRC has prepared and maintains a *Development Activity Index* which is an indexed system of projects and activities from most of the world's donor agencies, including USAID. The Index is available on CD-ROM. It is free to organizations in developing countries but there is a fee for organizations in industrialized countries. Under similar conditions the DAI is being prepared to be accessible on the Internet. Currently some data bases developed by IDRC are available via Internet. Both the Index and the data bases available via Telnet include information on energy programs in developing countries.

Michigan Public Service Commission, Energy & Regulatory Matters Information Service (ERMIS) - Telnet to *ERMIS.commerce.state.mi.us*. E-mail to *tstanton@great-lakes.net*.

ERMIS includes energy forums on conservation, integrated resource planning, weatherization, and waste management. There are also groups of forums on the environment, Michigan State regulatory matters, and issues of concern to the National Association of Regulatory Commissioners (NARUC). NARUC is a major U.S. organization focused on matters related to electric utilities, such as integrated resource planning, demand side management, competition, and rates.

There are a number of "libraries" of data files that can be downloaded from ERMIS. Among the topics are:

- ▶ Electric Issues Library
- ▶ Energy Conservation & Such
- ▶ Integrated Resource Planning
- ▶ Low-Income Home Energy Assistance Program
- ▶ NARUC Energy Conservation Committee
- ▶ NARUC Subcommittee on Computers.

ERMIS has a close relationship with the EICBBS of the Washington State Energy Office (see below) and much information flows between the two services. ERMIS will be accessible on the Internet by the end of 1994.

United States Department of Commerce, National Technical Information Service, FedWorld
- Telnet to *Fedworld.gov*, login as *new* and follow instructions.

FedWorld includes hundreds of BBS maintained by many federal agencies. The USDOE has four BBS on the system:

- ▶ **EPUBS** - publications from the Energy Information Administration (see below)
- ▶ **TeleNews** - news releases from the Office of Fossil Energy
- ▶ **FERC** - regulatory notices posted by the Federal Energy Regulatory Commission
- ▶ **MegaWatt I** - a discussion group on energy technology.

United States Department of Energy, Energy Efficiency & Renewable Energy Network (EREN) - The document URL on the World Wide Web (WWW) is <http://www.eren.doe.gov>.

The EREN is a joint project between the Office of Energy Efficiency and Renewable Energy at DOE headquarters, the Argonne National Laboratory, the Oak Ridge National laboratory, and the National Renewable Energy Laboratory.

Access to EREN allows one access to a large depository of energy efficiency information, data, and resources. Information can be searched and retrieved by subject or organization. EREN can be used as an entry to the national laboratories at Argonne, Brookhaven, Lawrence Berkeley, Los Alamos, NREL, Oak Ridge, Pacific Northwest, and Sandia. EREN also provides links to other federal and private resources on the Internet. One can access EREN either through the graphical interface-based program called Mosaic or through a character-based menu driven interface called Lynx.

United States Department of Energy, Energy Information Administration - Telnet to *FedWorld.gov*, login as *new* and follow instructions.

One of the federal BBS included in FedWorld provides references to publications on energy supply and demand in the U.S. and internationally. Categories include Residential and Commercial Energy Consumption, Passenger Car Efficiency, Industrial Energy Consumption, Energy Consumption Summary 1993, End Use Consumption Surveys, and Manufacturing Energy Consumption.

United States Environmental Protection Agency - Gopher to <gopher.rtpnc.epa.gov> or telnet to <epaibm.rtpnc.epa.gov> and login as *public* using *onl* as a password.

A wealth of information on U.S. environmental policy including industrial and technology policy and information on advanced batteries. Also provides access to the EPA On-line Library. Via telnet one can access both the headquarters and regional library holdings of EPA.

Washington State Energy Office, Energy Ideas Clearinghouse BBS - Telnet to *eicbbs.wseo.wa.gov*.

The Energy Ideas Clearinghouse Bulletin Board Systems (EICBBS) is managed by the Washington State Energy Office with funding from the Bonneville Power Administration, the Western Area Power Administration, U.S. Department of Agriculture's National Rural Development Partnership, and the U.S. Department of Energy. This is an international bulletin board for professionals in the energy field and for students in energy-related college and university programs. The EICBBS provides a mechanism for fast and easy information transfer and serves as a central repository of information on aspects of energy efficiency in the commercial and industrial sectors as well as renewable energy and environmental externalities of energy use.

EICBBS includes over 65 energy related discussion forums on such topics as building envelopes, cogeneration, electric vehicles, industrial technologies, sustainability, integrated resource planning, and power quality to name only a few. There is a directory of training opportunities, an energy experts referral file, a data base of software programs that can be downloaded, and an extensive directory of energy-related programs and organizations. It includes a service which collects energy related Codes and Legislation that can be searched by subject. This file has a particularly extensive set of codes that address various aspects of energy efficiency in, for example, buildings. Some limited library information referral services are also available. EICBBS exchanges e-mail and conference messages with the ERMIS BBS at the Michigan Public Service Commission (see above).

The EICBBS will soon have an FTP site and a World Wide Web site. There will also be increased capacity, icon-driven menus (RIP), and greater overall capacity.

U.S. Government National Laboratories

Argonne National Laboratory (ANL) - Gopher to *gopher.ctd.anl.gov*.

The ANL DIS (Decision and Information Systems Division) gopher pick allows keyword searching in journals and periodicals and returns appropriate bibliographic information for each article cited. EREN is an alternative way to access ANL data; see above USDOE, Energy Efficiency & Renewable Energy Network.

Lawrence Berkeley Laboratory (LBL) - Gopher to *gopher.lbl.gov*.

LBL's root gopher menu picks for the *Sampler of LBL Research Abstracts* and *LBL Science Articles* offer access to energy efficiency information and pointers to other relevant information. The first menu page has these options:

1. WHAT'S NEW ON THE LBL GOPHER SERVER [DATE]
2. WORLD WIDE WEB (WWW) AT LBL <HTML>
3. SAMPLER OF LBL RESEARCH ABSTRACTS/
4. LBL DOCUMENTS (CURRENT JOB OFFERINGS (CJO), ETC.)/
5. LBL SCIENCE ARTICLES/
6. LBL COMPUTING NEWSLETTER/
7. LBL CURRENTS NEWSLETTER (RECENT ISSUES)/
8. IMAGES (LBL WEATHER MACHINE & VARIOUS GRAPHICS IMAGES)/
9. LBL UNIX (INFORMATION ON LBL UNIX SYSTEMS)/
10. INFORMATION SERVERS (OTHER GOPHERS, LIBRARIES, &C.)/
11. COMPREHENSIVE EPIDEMIOLOGIC DATA RESOURCE (CEDR)

For further information about LBL or individual LBL publications, contact Jeffery Kahn of the LBL Public Information Department's at 510-486-4019 or send an e-mail to *jbkahn@lbl.gov*. EREN is an alternative way to access LBL data; see below USDOE, Energy Efficiency & Renewable Energy Network.

Los Alamos National Laboratory - Gopher to *infoserver.lanl.gov*.

Selecting *Information by Division* from the root gopher allows access to *The Energy Technology Program Office* pick. Bibliographic access to the library's collections is also available via the *Library Samplers and Information* pick. EREN is an alternative way to access Los Alamos data; see above USDOE, Energy Efficiency & Renewable Energy Network.

National Renewable Energy Laboratory (NREL) - Telnet to *info.nrel.gov*.

The *Information Sources* pick leads to an *NREL Information* pick that opens the *New Energy Information Locator (NEIL)* database. A wealth of energy information in various media, including disk, CD ROMs, and dial-in services, are described in the data base. Price and access instructions are included in each record and the database is searchable by keyword and by service provider. Here is the main NREL menu screen:

1. SEARCH ALL MENUS ON THIS SERVER <?>
2. PEOPLE AT NREL/
3. DOING BUSINESS WITH NREL/
4. RESEARCH IN PROGRESS/
5. MORE ABOUT NREL/

6. INFORMATION SOURCES/
7. OTHER COOL STUFF/

Although most of the pertinent information is located in NEIL, a search of the entire gopher using the keyword efficiency returned a number of interesting references. A few of them are listed below:

1. NEW MATERIALS IMPROVE ENERGY EFFICIENCY AND REDUCE ELECTRICITY USE
2. OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY. TOMORROW'S ENERGY TODAY
4. NEW ON-LINE SENSOR IMPROVES ENERGY EFFICIENCY FOR A MYRIAD OF INDUSTRIES
5. NEW SYSTEM USES FIBER OPTICS TO IMPROVE ENERGY EFFICIENCY
8. BRENNAN, A., TOMORROW'S ENERGY TODAY: ENERGY EFFICIENCY & RENEWABLE ENERGY
15. TOMORROW'S ENERGY TODAY (ENERGY EFFICIENCY OPTIONS). (VIDEO)
19. ENERGY EFFICIENCY STRENGTHENS LOCAL ECONOMIES
36. DATABASE ON ENERGY EFFICIENCY PROGRAMS
- > 73. INTERNATIONAL DATABASE ON ENERGY EFFICIENCY PROGRAMMES

EREN is an alternative way to access NREL data; see above USDOE, Energy Efficiency & Renewable Energy Network.

Oak Ridge National Laboratory (ORNL) -- Gopher to gopher.ornl.gov.

Most of the energy efficiency information is located on the gopher menu option *Presentations and Recent Publications*. Selecting this option provides access to searchable abstracts of the *Technical Papers* and *Published Papers from 1992 to the Present*. Information on ordering the publications is also provided.

Below is a list of some of the relevant titles a search of *Technical Reports Released in 1993* using the keywords energy and efficiency:

1. ENERGY EFFICIENCY AND RENEWABLE ENERGY PROGRAM BIBLIOGRAPHY 1993
6. FOSSIL ENERGY ADVANCED RESEARCH & TECHNOLOGY PROGRAM
7. TRANSPORTATION ENERGY DATA BOOK: EDITION 13
9. ENERGY DIVISION ANNUAL PROGRESS REPORT
17. THERMAL ENERGY STORAGE TECHNICAL PROGRESS REPORT
25. U.S. DEPARTMENT OF ENERGY INTEGRATED RESOURCE PLANNING PROGRAM

The *Presentations and Recent Publications* gopher pick also offers access to the Technical Events Calendar at ORNL. Events are listed by week a month in advance:

Here is a typical entry:

MONDAY, MAY 2 - "RENEWABLE ENERGY DEVELOPMENT IN A COMPETITIVE UTILITY ENVIRONMENT," BLAIR SWEZEY, NATIONAL RENEWABLE ENERGY LABORATORY, GOLDEN, COLORADO. ENERGY DIVISION SEMINAR

EREN is an alternative way to access NREL data; see above USDOE, Energy Efficiency & Renewable Energy Network.

International Organizations

European Commission Host Organization (ECHO) - Telnet to *echo.v25.sunet.se* and login as echo.

ECHO has a database called Sesame that tracks EC aid projects to non-Community states and includes energy-related topics. There is also a library and Community research and development data base. One may only browse those services.

International Energy Agency, IEA Energy Register - Access is via Sprint International X-25 and the appropriate local Sprint access number.

The IEA Register is an online data base on energy related assistance to the countries of Central and Eastern Europe and the countries of the former Soviet Union. Subject categories within the system which can be searched include Energy-Efficiency and Conservation and Energy-Electricity. Requests for access and additional information should be addressed to Siobhan Cantwell, IEA Register, Paris, telephone 33-1-45-24-94-69, Internet *register@iea.fr*.

United Nations - Gopher to *nywork1.undp.org*.

The United Nations Development Program (UNDP) is taking the lead within the UN System to promote use of the Internet and to use the Internet to disseminate information about its programs and the events it sponsors. The only energy related information which is loaded on the UNDP Gopher is the text of its regular publication *UNDP Update* which is under the menu item United Nations Development Program (UNDP) Documents/ listed below. The publication carries announcements of new UNDP programs and an occasional article or program activities. Actual information from UNDP energy-related programs and reports requires clearance from host governments and permission to include this material on the Internet is not available.

The first screen of the UN Gopher offers these options:

**THE UNITED NATIONS, WHAT IT IS AND WHAT IT DOES/
UNITED NATIONS CURRENT INFORMATION (HIGHLIGHTS, PRESS RELEASES)
UNITED NATIONS DOCUMENTS (GENERAL ASSEMBLY, SEC. COUNCIL)/
UNITED NATIONS CONFERENCES/
UNITED NATIONS ECONOMIC & SOCIAL COUNCIL (ECOSOC)/
UNITED NATIONS SYSTEM DIRECTORIES/
UNITED NATIONS SYSTEM TELECOMMUNICATIONS SAMPLER/
UNITED NATIONS DEVELOPMENT PROGRAM (UNDP) DOCUMENTS/
OTHER UNITED NATIONS & RELATED GOPHERS/
ENVIRONMENT RELATED INFORMATION/
OTHER GOPHER & INFORMATION SERVERS/
ACCESS TO EXTERNAL PUBLIC DATABASE/
UNITED NATIONS 50TH ANNIVERSARY/
ANNOUNCEMENTS - WHAT'S NEW/**

The World Bank - Gopher to *gopher.worldbank.org*.

The World Bank has sector-specific information on energy and environmental data summaries for all projects including those that are energy-related. A list of these with order information and cost is available under the World Bank Publications option on the menu.

1. WELCOME TO THE WORLD BANK
2. PUBLIC INFORMATION CENTER/
- > 3. WORLD BANK PUBLICATIONS/

Universities

Many universities throughout the world have provided computer servers to host files and data bases and to provide access to the information they host and the means for their staff and students to access the Internet. We have selected only a few where we were able to identify sources of energy efficiency information.

Asian Institute of Technology, Thailand - Gopher to *rccvax.ait.ac.th* login as guest.

There are a number of energy-related gopher picks including energy policy, development, and conservation. Through the library, access is provided to RERIC, an energy publications bibliographic database.

University of Tennessee at Knoxville, USA - Gopher.rtd.utk.edu.

A search of the University's **Sponsored Research** database using energy and efficiency as keywords turned up citations to 60 projects that included contact information and project abstracts.

University of Lund, Sweden - Gopher-info.slu.se.

This research database includes a number of abstracts relating to energy efficiency. Most are in Swedish with English subtitles, but some are in English.

Non Profits/Professional Associations

Consortium for International Earth Science Information Network (CIESIN) - Gopher to *gopher.ciesin.org*.

CIESIN offers a basic Gopher service for global climate change information. It samplers, abstracts, and maintains contact information for a broad range of climate change information.

CIESIN also offers a range of services including a calendar of events and access to World Resources Institute Information (fee-based). The initial screen has these options:

- ABOUT CIESIN**
- SEARCH THE CIESIN MENU TREE**
- HDP - HUMAN DIMENSIONS PROGRAM**
- GLOBAL CHANGE RESEARCH INFORMATION OFFICE (GCRIO)**
- CIESIN HUMAN DIMENSIONS KIOSK**
- CIESIN ELECTRONIC BOOKSHELF**
- ENVIRONMENTAL INTERNET SAMPLER**
- OTHER INTERNET RESOURCES**
- CLASSROOM EARTH**

Energy & Climate Information Exchange (ECIX) - FTP to *ftp.igc.apc.org/pub/ECIXfiles*

ECIX is a project of the EcoNet. It is aimed at educating the general public on the potential of energy efficiency and renewable energy to reduce the use of fossil fuels and how fossil fuels contribute to climate change. It is primarily a source for the text of documents and journals on energy related environmental issues. Information and case studies on refrigeration, auto efficiency, utility programs, and other topics is valuable. There is a fee for some EcoNet services.

National Bureau of Economic Research (NBER) Abstracts - Gopher to *nber.harvard.edu*.

NBER provides searchable abstracts of its publications, menu item #3 below. Energy efficiency appears frequently among its reports. There are fees for some of NBER's services. For additional information contact NBER at 1050 Massachusetts Avenue, Cambridge MA 02138, telephone: 617-868-3900 or telefax 617-868-2742.

The initial screen of the NBER Gopher offers these options:

1. NBER INFORMATION
2. ABOUT THIS GOPHER
- > 3. SEARCH FOR NBER PUBLICATION <?>
4. PENN-WORLD TABLES V. 5.5/
5. ECONOMICS WORKING PAPER ARCHIVE/
6. NETEC (UNIVERSAL) ECONOMICS WORKING PAPER INDEX/
7. LINKS TO ECONOMICS-ORIENTED GOPHERS/
8. PHONE BOOKS AT OTHER INSTITUTIONS/
9. NOTES ON SAS PORTABLE FILE FORMATS
10. FILES AVAILABLE FOR ANONYMOUS FTP

Searching NBER's abstracts via Item #3 using the keyword energy produced the following result:

1. [TI] INDUSTRIAL DEMAND FOR ENERGY
2. [TI] ENERGY RESOURCES AND RESEARCH AND DEVELOPMENT
3. [TI] ENERGY, OBSOLESCENCE, AND THE PRODUCTIVITY SLOWDOWN
4. [TI] ENERGY EFFICIENCY, USER COST CHANGES
5. [TI] ENERGY AND GROWTH UNDER FLEXIBLE EXCHANGE RATES
7. [TI] ENERGY TAXES AND AGGREGATE ECONOMIC ACTIVITY
8. [TI] ENERGY TAX CREDITS AND RESIDENTIAL CONSERVATION INVESTMENT

Libraries and Bibliographies

Libraries have been among the most aggressive institutions to move into the electronic identification and distribution of information. Below we list the premier U.S. library, the Library of Congress, and a network service, HYTELNET, that provides access to a large number of academic libraries across the United States. The British Library also has an extensive collection that can be accessed electronically. What is accessible electronically, though, are bibliographic citations to books or citations and abstracts to various publications, but only rarely to full text files. These are extremely valuable resources in identifying material but there is most often a next-step required to gain access to the full contents of what has been identified.

Much of the vast store of periodical literature, academic and technical journals, and current awareness services can be found and retrieved via the Internet. Some of this from the Library of Congress or using HYTELNET. It is important to note, though, the distinction between learning that something exists and finding its location and then gaining access to the full text of the article or publication that has been identified. There are some periodicals that exist only online via computer services and others that have an electronic version parallel to the printed format. Usually, these full text publications are available for a fee. There are also a host of bibliographic sources that can identify articles and periodicals as well as books and reports. Often one can access these services at no cost, search generally by subject or specifically for one title. There usually will be a charge, however, to acquire the full text of the cited item. But to learn that a particular item resides in a periodical or that there are a number of periodicals with articles on a subject one needs to understand is a great step forward.

Listed below are both individual titles which are available electronically and bibliographic services that index and provide access to full text. More and more publications are coming available electronically, and as one grows more familiar with the Internet one will continue to find periodicals and sources of articles relevant to energy efficiency information.

British Library Document Supply Centre (BLDSC) - Telnet to *pac.carl.org*.

This service of the national British Library can be reached via CARL (Colorado Association of Research Libraries) via telnet. The same conditions apply for BLDSC as for CARL: one can access and search the system free but there is a fee for document retrieval. Both breadth and depth of BLDSC holdings exceed those of Uncover. Document retrieval costs are slightly higher.

CICNet - Gopher to *gopher.cic.net* or Telnet to *enews.com* and login in as gopher.

An electronic periodical service that publishes full text of selected periodicals.

DevelopNet News - Send an e-mail message to *vita@gmuvax.bitnet*.

Focuses on articles relating to technology transfer in international development including energy. Contact Dania Granados at VITA (Volunteers in Technical Assistance) for more information and for archives of this periodical.

Energy Ideas - Send an e-mail message to *ei@igc.apc.org*.

The emphasis is on articles, including case studies, on the use of energy-efficient and renewable-energy technologies in public sector facilities. Back issues are posted on EcoNet's conference *climate.news*. Contact Jonathan Kleinman at the e-mail address for subscription information and access to EcoNet for which there is a fee. Also see the discussion of EcoNet in Section 2.3.2.

ENEWS - Send an e-mail message to *listserve@fem.unicamp.br*.

The *International Newsletter on Energy Efficiency Issues in the Developing Countries* includes project information and analysis, funding information, and publication announcements. To subscribe to the newsletter send an e-mail with the message "subscribe enews-l" in the body and leave the subject line of the message blank. Gilberto Jannuzzi can be contacted at *enews@fem.unicap.br* for additional information.

Journal of Energy and Development - Gopher to *csf.Colorado.edu*.

This is an academic journal published by the International Research Center for Energy and Economic Development at the University of Colorado. Access to the journal's current and archived book reviews is available on line.

Library of Congress - Gopher to *marvel.loc.gov*.

Files available on the Library of Congress Gopher, LOCIS (Library of Congress Information System) include the Library's complete collection of sampled material as well as legislative history and current affairs files prepared by the Library's Congressional Research Service at the Library.

HYTELNET - Telnet to *access.usask.ca* and log in as *hytelnet*.

HYTELNET is a large consortium of on-line library files and samplers. Access is via Here is the initial screen on the Internet for HYTELNET:

1. HYTELNET (WORD SEARCH) <?>
2. LIBRARY SAMPLERS/
3. LIBRARY SAMPLERS, BY SYSTEM TYPE/
4. LIBRARY SAMPLERS, HELP FILES/
5. NEW OR REVISED HYTELNET ENTRIES/
6. OTHER RESOURCES/

Uncover - Telnet to *pac.carl.org*.

This is one of the bibliographic services that one can search at no cost but for which there is a fee to retrieve articles. This is a another service of CARL (Colorado Alliance of Research Libraries). There are article search tools (no cost) and delivery tools (cost) available from CARL. Requested articles are telefaxed for a fee that includes copyright charges.

News Groups

News Groups are similar to **bulletin board systems (BBS)** forums. Whatever the name they all share a commitment to communicating and exchanging information. These groups provide a way to identify or "talk" to a large number of individuals with similar interests who are willing to share information and exchange questions and answers. There is also much benefit to just listening in on other's exchanges.

There are almost as many News Groups as there are subjects in the largest of the world's encyclopedias. A number of the publications cited in Appendix A have lists of News Groups. We list below only a handful that appear to be relevant to discussions on energy efficiency:

| | |
|--------------------------------------------|-----------------------------------------------------------------------------|
| alt.architecture.alternative: | Alternative architectural trends for building energy efficiency |
| cogeneration-request@grove.iup.edu: | Contracts, construction, operations, maintenance, and regulations |
| techserv@nist.gov: | Technology transfer covering energy inventions and manufacturing technology |
| sci.energy: | Energy, science and technology |
| sci.egr: | Technical engineering questions |
| sci.egr.control: | Engineering of control systems |
| sci.egr.manufacturing: | Manufacturing technology. |

Depending on how one gains access to the Internet, there are different ways to get into news groups, to read what is posted on them, and to participate with your own responses or questions. If one goes through a provider, there is likely to be a menu that will lead to a list of news groups and prompts on how to proceed. Alternatively, there are a number of software programs called newsreaders that are explained in many of the books listed in Appendix A.

Mailing Lists

A mailing list or a **listserv** is a variation on a news group and is a way to realize some of the benefits of a news group while only working via e-mail. A few of the listservs which relate to energy efficiency and developing country issues are listed here.

bitl.ev - Send an e-mail message to *listserve@sjsuvm1.sjsu.edu*.

Electric vehicle discussion list from Bitnet. To subscribe to the list send a message with "subscribe ev <first name> <last name>" in the body of the message. Contact Clyde R. Visser at *cvisser@ucrmath.ucr.edu* for additional information.

bit.listserv.devel-l: - Send an e-mail message to *listserve@american.edu*.

Consists of individuals interested in technology transfer in international development. The message to subscribe should say "subscribe devel-l <first name> <last name>" in the body of the message. An e-mail message can be sent to Dania Granados at *vita@gmuvax.bitnet* for more information and for archives.

2.3.2 FEE-BASED OR RESTRICTED INFORMATION SOURCES

- ▶ AIA Online
- ▶ BLAISE-LINE
- ▶ CCEET Register
- ▶ ECHO
- ▶ ECONet
- ▶ Dialog
- ▶ EPRINet
- ▶ Internet Company
- ▶ Lexis/Nexis
- ▶ OLADE
- ▶ OECD
- ▶ World Resources Institute

AIA Online

This information and communications service was developed by the American Institute of Architects and provides information on the building industry. Services and available information include:

- ▶ Industry news and business leads
- ▶ Sources of information on building products
- ▶ Directories and areas of interest to architects
- ▶ Information on building costs and specifications
- ▶ Calendar of events, roundtable discussions
- ▶ Access to other information networks.

Costs to use *AIA Online* range from \$12.00 per hour and \$10 per month to \$6.00 per hour and \$75 per month. For an information brochure and application call 1-800-626-7300.

BLAISE-LINE:

BLAISE-LINE is the British Library's online service which provides access to bibliographic records in twenty-one data bases covering all subject areas. The data bases include the British National Bibliography and other collections of the British Library.

The system requires registration. Fees are 95 pounds sterling per year, 12 pounds sterling per hour of use and .45 pounds sterling for each record displayed in full form. The application form may be obtained by sending mail to B.kefford-b.rl.ac.uk or brian.kefford@london.british-library.uk.

See British Library Document Centre in Section 2.3.1 for alternative access to the British Library.

CCEET Register (Centre for Cooperation with European Economies in Transition):

The *CCEET Register* tracks all OECD member-country aid projects in all sectors (including energy) to the countries of Eastern Europe and the NIS. The *CCEET Register* is available only to the governments of OECD member countries and multilateral organizations. Energy projects are accessible by keyword search and contain abstracts.

The *IEA Register* includes the energy information included in the CCEET Register and is available to private sector organizations and individuals. Contact the IEA or the CCEET Register Office at 2, rue Andre-Pascal, 75775 Paris CEDEX 16, telephone number 33-1-45-24-82-00 or telefax 33-1-45-24-91-77.

Dialog Information Services:

This commercial data base service, although expensive, contains a good selection of energy-related material. The sign-up fee is \$295 and per-minute-of-use charges start at over \$1. Contact Dialog Sales at 415-858-3785.

Especially relevant information includes:

- ▶ **NTIS, National Technical Information Service, U.S. Department of Commerce** - This is the source for identifying and ordering copies of U.S. government-sponsored energy and environmental research reports.
- ▶ **Ei Compendex* Plus** - The electronic version of *Engineering Index*. Abstracts from over 4,500 engineering and technology journals worldwide.
- ▶ **Energy Science & Technology** - This is the U.S. Department of Energy's bibliographic index of the world's energy literature that includes research reports, conference proceedings, journals, books, dissertations, and patents. Use is limited to the individuals from countries which exchange energy information with the U.S.

This is generally limited to member countries of the International Energy Agency and includes, Canada, Denmark, Finland, France, Italy, Japan, the Netherlands, Ireland, Norway, Spain, Sweden, Switzerland, and the U.K.

- ▶ **Energyline** - This is the online version of Energy Information Abstracts and includes records from the Energy Index dating to 1971. Contents include books, journals, U.S. Congressional committee reports, conference proceedings, speeches, and statistics.

The attached table shows the number of citations derived from these Dialog files using the phrase **energy efficiency** as a search criterion:

| File # | Name | Time Period | No. of citations |
|--------|-----------------------------------------------|-------------------------|------------------|
| 6 | NTIS (National Technical Information Service) | 1964-1994 / Aug | 5,366 |
| 8 | Engineering Index/ Compendex | 1970-1994 / Aug, week 4 | 4,394 |
| 69 | Energyline | 1970-1993 / Dec | 2,182 |
| 103 | Energy Science & Technology/USDOE | 1974-1994 / Jul | 29,137 |

ECHO (European Commission Host Organization):

Telnet to echo.v25.sunet.se and login as `echo`. There is a library and European Community research and development data bases that require a password and/or account. Use ECHO's internal e-mail to inquire about registration and fees.

EcoNet (Institute for Global Communications):

This service provides environmental information, data bases, and an array of discussion groups. Energy issues are addressed throughout the network. *EcoNet* also attempts to ease international connectivity problems by working with 11 partner networks in Europe, Latin America, and Africa. It will provide advice to those outside of these areas on alternative connections.

The costs for *EcoNet* vary according to the means of access. Each user pays a \$15 sign-up fee and the online charges start at \$3/hour when accessed via Internet.

Contact Institute for Global Communications (IGC), 18 De Boom Street, San Francisco, CA 94107, telephone 415-442-0220, telefax 415-546-1794, Internet support@igc.apc.net.

EcoNet discussion groups are divided into 69 different topic areas including regions of the world, Air & Climate, Energy, and United Nations. Listed below are a few of the many public conferences:

- ▶ **climate.forum:** News, information, and discussion on global climate change, ozone depletion, and other climate-related issues.
- ▶ **climate.news:** Regular newsletters on climate and energy issues, including ECO Newsletters from INC meetings, ECIX Project Newsletter, ECIX Climate Digest, GECR Highlights, and Tiempo bulletin on global warning and the third world. The sponsor is the Energy and Climate Information Exchange Project.
- ▶ **energy.effrefs:** A working library of recent reports, articles, directories, newsletters, brochures and other information resources that deal specifically with energy efficiency technologies and policies. The sponsor is the International Institute for Energy Conservation.
- ▶ **energy.forum:** International discussion on the technical, political and economic aspects of using energy efficient and renewable energy technology, and the development and implementation of policies supporting their use. The sponsor is the International Institute for Energy Conservation.
- ▶ **energy.mdb:** News and discussion of the energy policies and practices of the multilateral development banks (World Bank, regional development banks); the Global Environmental Facility (GEF); and bilateral lending agencies.

Other accessible conferences are sponsored by various organizations:

- ▶ **awea.windnews:** Discussion of wind energy, including back issues of the American Wind Energy Association newsletter.
- ▶ **redi.planning:** Organizational planning related to the development of renewable energy technology and applications sponsored by the Renewable Energy Development Institute.
- ▶ **grns.usa.ref:** Information and documents pertaining to the U.S. Greens Movement: bibliographies, history, values, reorganization, past activities, listings of Green Groups around the country.

Internet BitNet mailing lists and UseNet conferences are also accessible via EcoNet:

- ▶ **bitl.ev:** Electric vehicle discussion list from the Bitnet.
- ▶ **list.eneews:** Electronic newsletter on energy efficiency issues in developing countries.
- ▶ **sci.energy:** UseNet discussions about energy, science and technology.

EPRINET (Electric Power Research Institute -- EPRI):

EPRI sponsors a data network principally for electric utility member companies to access news and information on EPRI research projects and seminars.

EPRI membership is open to U.S. electric utility companies and affiliate membership is available for utilities from foreign countries. Various EPRI information and data services are available on a fee-basis to non-members.

Contact Michael Dumbach, Electric Power Research Institute, 3412 Hillview Avenue, Palo Alto, CA, 94304-1395, telephone 415-855-2896, telefax 415-855-2954, Internet mdumbach@msm.epri.com, Telnet to eprinet.epri.com.

The Internet Company:

The Internet Company provides access to the U.S. Code of Federal Regulations, the Federal Register of the United States, U.S. Department of Energy Orders, and U.S. Nuclear Regulatory Commission Regulatory Guides, and the Commerce Business Daily through Counterpoint Publishing of Cambridge, MA, 617-547-4515. Although portions of each of these services are available at no charge, full access is granted only to those with an account. Gopher to gopher.internet.com.

LEXIS/NEXIS:

These commercial data base services, although expensive, are quite comprehensive and include energy-related information from:

- ▶ U.S. Federal Court decisions
- ▶ U.S. Federal Register
- ▶ U.S. Code of Federal Regulations
- ▶ U.S. Congressional bills
- ▶ Public Utility Commission decisions from selected states
- ▶ Codes for all states in the U.S.

- ▶ All utility-related State court decisions
- ▶ All State Public Utility Commission court cases
- ▶ International treaties, conventions and agreements
- ▶ European Commission laws and decisions.

LEXIS is a legal information service that concentrates on court decisions. NEXIS is a more general service concentrating on business information. The combined services cost

- ▶ \$125.00 per month
- ▶ \$0.065 or \$0.72 per minute of search time
- ▶ \$6.00 to \$11.00 per search file charge
- ▶ Various per line printing costs.

For additional information, contact Lexis/Nexis customer service at 1-800-544-7390.

OLADE - Latin American Energy Organization:

OLADE maintains an Energy-Economic Information System (SIEE) for Latin America and the Caribbean that includes information on prices, reserves, supply, demand, energy chain equipment, economics and finance, overall economic statistics. All of this data is available for purchase on disk from OLADE but is currently not available on line.

Contact Ing. Leopoldo Villasmil, Informatics Coordinator, OLADE, Casillas 17116413, Quito, Ecuador, telephone 593-2-538- 280 or telfax 593-2-539-684 for additional information.

OECD - Organization for Economic Cooperation and Development:

The OECD makes a wide variety of energy statistics available on diskette or magnetic tape. Publications from the International Energy Agency are available from the OECD. Contact your local OECD publications center or OECD Publications, 2, rue Andre-Pascal, 75775 Paris Cedex 16, France, telephone 33-1-49-10-42-65 or telefax 33-1-49-10-42-99.

OECD publication titles include:

- ▶ Annual and Quarterly Energy Price and Tax Statistics
- ▶ Annual Electricity Statistics
- ▶ Electricity Information
- ▶ Energy Balances of OECD and Non-OECD Countries
- ▶ Energy Statistics of OECD and Non-OECD Countries
- ▶ Quarterly Energy Balances
- ▶ World Energy Statistics and Balances

World Resources Institute:

The World Resource Institute maintains statistics that track the natural resources of most of the countries of the world. Some of the data is available for purchase directly through the Internet. Telnet to WRI.Ciesin.org.

Energy data available includes:

- ▶ Fuelwood and Charcoal Production
- ▶ Commercial Energy Consumption
- ▶ Energy Imports as a % of Consumption
- ▶ Energy Requirements- Conventional Fuel Equivalent
- ▶ Traditional Fuels Consumption
- ▶ Traditional Fuels as a % of Total Requirements
- ▶ % of Commercial Energy Used - Industry
- ▶ % Commercial Energy Used - Transport
- ▶ % of Commercial Energy Used -Agriculture
- ▶ % of Commercial Energy Used - Commercial
- ▶ % of Commercial Energy Used - Residential
- ▶ % of Commercial Energy Used - Other
- ▶ Energy Intensity - Industry
- ▶ Energy Intensity - Agriculture

Additional files available include information on hydroelectric projects, industrial CO2 emissions, methane emissions, and CFC emissions.

2.4 PRESCREENED ENERGY EFFICIENCY INFORMATION

Most, although not all, of the material in this section was selected from the resources listed previously in Section 2.3. Internet addresses are given, and a brief description of each item is provided. The references cited here are meant to be a representative sample and not a comprehensive list. Topics include technology descriptions, policy and regulations, economics and financing, project descriptions, discussions groups, and product directories to name a few. The items are in order by the categories used by the International Energy Agency as discussed above in Section 2.2.

The format of each item is the typical gopher format that one finds using Gopher and bookmarking. Each entry has five elements:

- | | | | |
|---|------|---|-------|
| ▶ | Type | ▶ | Host |
| ▶ | Name | ▶ | Port. |
| ▶ | Path | | |

Data types which appear in the items listed below are 0 for text or 1 for a directory. Other data types that one might encounter on a gopher server include a list of Internet users (2), a compressed file (4), or a graphics file (g). To use the entries below to retrieve an item, one has first to access a "host" through a specified "port" (usually 70). After one is connected to a particular gopher, one then enters the "path" to gain access to a directory that contains the "name" or the item to be retrieved.

2000000 FOSSIL-FUELED POWER PLANTS**200100 *Power Plants & Power Generation***

Type=0+

Name=Evaluation of Power Plant Operation for the National Power Plant Corporation of the Philippines

Path=0/prot_env/docs/tech_rep/etip1.txt

Host=gaia.info.usaid.gov

Port=70

Full text of the report of a USAID scoping mission to the Philippines. The purposes of the mission included (1) assessing the capabilities to improve power plant operations and (2) to scope the need for assistance to promote the use of fuel additives for oil-fired units, to study water treatment requirements for fossil and geothermal units, and to improve coal handling system design and operation.

Type=0

Name=Advanced Coal Combustion System for Industrial Boilers

Path=/Research/Sponsored/.allfiles/J/00/01/0/J000100

Host=gopher.rtd.utk.edu

Port=70

Brief description of a U.S. Department of Energy research project.

Type=0

Name=Second look at burners may yield different conclusions.

Path=0/1989/May/19/Second look at burners may yield different conclusions

Host=gopher.mndly.umn.edu

Port=71

Summary of a discussion on "garbage burners," waste-to-energy projects.

290000 ENERGY PLANNING AND POLICY

290200 *Economics and Sociology*

Type=0
Name=**Energy Economics**
Path=R4858-9001-/ait/research/.EnergyRes
Host=emailhost.ait.ac.th
Port=70

Research project description relating to greenhouse gases in Thailand, Asian Institute of Technology, Thailand

Type=0
Name=**Renewable Energy and Energy Efficiency Programs and Human Capital Development**
Path=/Research/Sponsored/.allfiles/E/00/63/0/E006306
Host=gopher.rtd.utk.edu
Port=70

Citation and abstract of a research project.

290500 *Research, Development, Demonstration & Commercialization*

Type=0+
Name=**Technical and Commercial Assessment of Amorphous Silicon and Energy Conversion Devices Including Photovoltaic Technology**
Path=0/prot_env/docs/tech_rep/ei9204.txt
Host=gaia.info.usaid.gov
Port=70

Full text of a USAID report to assess the market potential for the manufacture of amorphous silicon photovoltaic modules in India.

291000 *Conservation*

Type=0+
Name=**California-institute-for-energy-efficiency**
Path=0/.LBL_Science_Articles/.LBL_Currents/california-institute-for-energy - efficiency
Host=gopher.lbl.gov
Port=70

Text of a press release announcing that Lawrence Berkeley Laboratory has received funds from Pacific Gas & Electric to support the lab's research.

Type=0+
Name=**Efficiency and Alternative Energy**
Path=0/NRCan-Info-English/mets/eaetb
Host=gopher.emr.ca
Port=70

"Efficiency and Alternative Energy" is a branch of the Canadian national Ministry for Energy and is responsible the Ministry's research and development program in energy efficiency. This item describes the branch program.

Type=0
Name=**Energy Planning**
Path=R9001-12754-/ait/research/.EnergyRes
Host=emailhost.ait.ac.th
Port=70

Research project description relating to energy and environmental management in Southeast Asia, Asian Institute of Technology, Thailand

Type=0
Name=**Energy Conservation**
Path=R12754-16666-/ait/research/.EnergyRes
Host=emailhost.ait.ac.th
Port=70

Research project description, Asian Institute of Technology, Thailand

Type=0
Name=**ICARUS: A tool for the assessment of energy conservation policy**
Path=R8516-15900-/yliopisto/tdk/mltdk/Laitokset/Kasvitieteen laitos/Lehtia/Change 15
Host=gopher.helsinki.fi
Port=70

Description of a data base focusing on energy savings derived from reducing carbon dioxide emissions.

Type=0
Name=**110. Task Force on Energy Conservation**
Path=0GOPHER_ROOT70:[SPOLPROC.SPOLAB]110.TXT
Host=scenva.ca.sunycentral.edu
Port=70

Short description of a university-wide energy conservation policy at the State University of New York.

292000

Supply, Demand and Forecasting

Type=0
Name=Energy Demand Forecasting
Path=R0-4858-/ait/research/.EnergyRes
Host=email!host.ait.ac.th
Port=70

Research project description for residential energy demand forecast model for 12 Asia countries, Asian Institute of Technology, Thailand

Type=0
Name=Monitoring Energy Use in Commercial Buildings
Path=D tisphere.mit.edu 9000 28400 ilp
Host=noc.drexel.edu
Port=71

Description of a "non-intrusive" approach developed at the Massachusetts Institute of Technology to monitor a building HVAC system.

293000

Policy, Legislation and Regulation

Type=1
Name= 2. Air Conditioning
Path=1/Wellington City Council/Bylaws/ 2. Air Conditioning
Host=golem.wcc.govt.nz
Port=70

Text of legislation from Wellington, New Zealand establishing guidelines for air conditioning use.

296000

Electric Power

Type=0+
Name=Private Power in Developing Countries
Path=0/prot_env/docs/tech_rep/energy1.asc
Host=gaia.info.usaid.gov
Port=70

Full text of a policy and background paper prepared by the Director of the USAID Office of Energy. The paper describes the roles private participation -- ownership, financing and operation of power facilities -- can play in alleviating power shortages in developing countries. It reviews the experience with private power in eleven developing countries and outlines an policy framework for private sector participation in power development.

Type=0
Name=**NEW: COGENERATION Discussion of Cogeneration Facilities**
Path=R341537-343028-/Distribution list log/New lists/log. started.930113
Host=nora.hd.uib.no
Port=70

Description of a discussion group on cogeneration.

Type=0
Name=**Industry Directory**
Path=0/information/outside/neil/data/file_036
Host=nreinfo.nrel.gov
Port=70

Annual industry directory published by *Independent Energy* magazine; all those listed are involved in non-utility power generation activities.

299000 *Unconventional Sources and Power Generation*

Type=0+
Name=**Energy from Citrus Wastes in Belize: Industry Overview**
Path=0/prot_env/docs/tech_rep/ei9116.txt
Host=gaia.info.usaid.gov
Port=70

Full text of a USAID feasibility study exploring various ways to use the large quantity of waste generated by the citrus industry in Belize to produce energy.

Type=0+
Name=**Energy from Sawmill Wastes in Honduras: Industry Overview**
Path=0/prot_env/docs/tech_rep/ei9105.txt
Host=gaia.info.usaid.gov
Port=70

Full text of a USAID technical and financial appraisal of the use of wood wastes to fuel cogeneration projects in Honduras.

320000 ENERGY CONSERVATION, CONSUMPTION, AND UTILIZATION

320100 *Buildings*

Type=0
Name=**Affordable Housing and Energy Efficiency**

Path=0/brown/departs/environm/thesis/shepherd.asc
Host=gopher.brown.edu
Port=70

Discussion of the practices of the Providence, Rhode Island housing authority and how it includes a concern for energy conservation in its program for low-income housing.

Type=0
Name=L-1763 Decorating for Energy Efficiency (Abstract)
Path=0/pubs/housing/l-1763.abs
Host=leviathan.tamu.edu
Port=70

Discussion of how home furnishings can contribute to conserving energy.

Type=0
Name=Energy Efficiency in the Home-Windows
Path=0/ianr/videohdr/homeec/15-23.video
Host=UNLVM.UNL.EDU
Port=70

Description of a video on using energy efficient windows in residential buildings.

Type=0
Name=Furnaces
Path=0/Computers/FAQs/Home Owner/Furnaces
Host=vixen.cso.uiuc.edu
Port=70

A series of questions-and-answers on residential furnaces.

Type=0
Name=The impact of vegetation on air conditioning consumption.
Path=0/urb/dat/10/The impact of vegetation on air conditioning consumption.
Host=minerva.forestry.umn.edu
Port=70

A report abstract on the contribution from vegetation in reducing energy consumption for air conditioning.

Type=0
Name=Air Conditioning Policy (1985) [18Jan93, 6kb]
Path=0/University Policies/Administrative Policies list/Air Conditioning Policy (1985)
Host=gopher.queensu.ca

Port=70

The official policy on use of air conditioning adopted by Queens University, Canada, to promote conservation.

Type=0

Name=BallastMaster

Path=0/information/outside/neil/data/file_005

Host=nreinfo.nrel.gov

Port=70

Description of an electronic data base on ballasts prepared by the Washington State Energy Office.

Type=0

Name=Sonoma Online

Path=0/information/outside/neil/data/file_068

Host=nreinfo.nrel.gov

Port=70

Description of an electronic bulletin board on renewable energy and home energy systems.

Type=0

Name=California Energy Commission Appliance Database

Path=0/information/outside/neil/data/file_012

Host=nreinfo.nrel.gov

Port=70

Description of the California Energy Commission's data base on appliances and their energy efficiency features.

Type=0

Name=Directory of Certified Refrigerators and Freezers

Path=0/information/outside/neil/data/file_015

Host=nreinfo.nrel.gov

Port=70

Description and cost of a published and an online data base on appliances that meet certain energy efficient standards prepared by the Association of Home Appliance Manufacturers that.

Type=0

Name=Directory of Certified Room Air Conditioners

Path=0/information/outside/neil/data/file_016
Host=nreinfo.nrel.gov
Port=70

Description and cost of a published and an online data base on appliances that meet certain energy efficient standards prepared by the Association of Home Appliance Manufacturers.

Type=0
Name=**Directory of Certified Unitary Air-Conditioners and Unitary Air-Source Heat Pumps on Diskette**
Path=0/information/outside/neil/data/file_017
Host=nreinfo.nrel.gov
Port=70

Description and cost of a published and an online data base on appliances that meet certain energy efficient standards prepared by the Air Conditioning & Refrigeration Institute.

Type=0
Name=**Consumers' Directory of Certified Efficiency Ratings for Residential Heating and Water Heating Equipment**
Path=0/information/outside/neil/data/file_013
Host=nreinfo.nrel.gov
Port=70

Description and cost of a published and on online data base on appliances that meet certain energy efficient standards prepared by the Gas Appliance Manufacturers Association.

Type=0
Name=**Energy Conservation Window Treatment: Introduction**
Path=0/iaar/videohdr/homeec/40-203.video
Host=UNLVM.UNL.EDU
Port=70

Description and ordering information on a 25-minute video on the impact of window design on energy consumption.

Type=0
Name=**Energy Conservation Window Treatment: Make Your Own**
Path=0/iaar/videohdr/homeec/40-206.video
Host=UNLVM.UNL.EDU
Port=70

Description and ordering information on a 55-minute video which explains how to make one's own energy efficient windows.

Type=0
Name=Energy Conservation Window Treatment: Shutters
Path=0/ianr/videohdr/homeec/40-207.video
Host=UNLVM.UNL.EDU
Port=70

Description and ordering information on a 26-minute video on the energy saving aspects of window shutters.

Type=0
Name=Energy Conservation in Building Design
Path=0/.gopherdir/ctu/Civil/Building-Constructions/Projects/Energy Conservation in Building Design
Host=isdec.vc.cvut.cz
Port=70

A list of the faculty in the Department of Building Construction, Civil Engineering, at a Czech university, with their addresses and a short list of their publications.

Type=0
Name=Nrgideas0393
Path=0/e-serials/alphabetic/e/energy-ideas/nrgideas0393.gz
Host=gopher.cic.net
Port=70

March 1993 issue of a magazine focusing on energy efficient sports centers.

Type=0
Name=Nrgideas0792
Path=0/e-serials/alphabetic/e/energy-ideas/nrgideas0792.gz
Host=gopher.cic.net
Port=70

July 1992 issue of a magazine focusing on energy efficient lighting technology.

Type=0
Name=Nrgideas0893
Path=0/e-serials/alphabetic/e/energy-ideas/nrgideas0893.gz
Host=gopher.cic.net
Port=70

July-August, 1993 issue of a magazine focusing on energy efficient offices.

Type=0

Name=Nrgideas1092

Path=0/e-serials/alphabetic/e/energy-ideas/nrgideas1092.gz

Host=gopher.cic.net

Port=70

October 1992 issue of a magazine on how the building envelope has an impact on the building's energy consumption.

320200 *Transportation*

Type=0+

Name=Negative feelings over gas tax

Path=0/News and Weather/The Lantern/1993 - Summer Quarter/Vol. 113 No. 017 - aug. 12/Negative feelings over gas tax

Host=gopher.acs.ohio-state.edu

Port=70

An article discussing negative attitudes toward an increase in the gasoline tax published at Ohio State University, August 12, 1993.

Type=0

Name=Fuel efficiency same for 8 yrs

Path=0/The Student/Class Resource

Materials/EST10/Fall93/News/Wk8.News/Fuel. efficiency. same. for. 8. yrs

Host=dale.ucdavis.edu

Port=70

A journal article about automobile fuel economy during the period 1984 to 1992 published October 10, 1993.

Type=0

Name= **Russia-Urban Public Transport Project**

Path=0/PIC/pid/pid/ruspa003.txt

Host=ftp.worldbank.org

Port=70

A detailed introduction from the Public Information Center of a World Bank-sponsored project. The implementing agency is the Government of the Russian Federation, Ministry of Transport.

320300 Industrial and Agricultural Processes

Type=0
Name=MotorMaster
Path=0/information/outside/neil/data/file_040
Host=nreinfo.nrel.gov
Port=70

Description of an electronic data base on motors prepared by the Washington State Energy Office.

Type=0
Name=Industrial Power Systems
Path=R17489-19002-/ait/research/.EnergyRes
Host=emailhost.ait.ac.th
Port=70

Research project description, Asian Institute of Technology, Thailand

Type=0
Name=Gas Treatment/Processing
Path=R23544-24561-/ait/research/.EnergyRes
Host=emailhost.ait.ac.th
Port=70

Research project description, Asian Institute of Technology, Thailand

Type=0
Name=DC Motors (e.g. centrifuges, shakers, rotators)
Path=0/hsc_info/Support Services/anal_chem/repair/services/dcm
Host=oac.hsc.uth.tmc.edu
Port=70

Brief advice on maintaining motors.

Type=0
Name=Motors and Generators
Path=/.textfiles/FC1/FC1669
Host=blackbird.iss.indiana.edu
Port=70

Description of a seven minute, 16mm film on aspects of basic motor theory.

320600 Municipalities and Community Systems

Type=0+
Name=**New Generation of Computers Emphasize Energy Efficiency**
Path=0/testarea/ig/CNNDB/510.9
Host=path.net
Port=8001

Text of a news program that appeared on the Cable News Network and which discussed how computers can be used to achieve energy efficiency.

Type=0
Name=**93-04-26-12: Utility-subsidized energy efficiency**
Path=0/communication/biosph-l-arc /1993/apr93/93-04-26-12: Utility-subsidized energy efficiency
Host=ecosys.drdr.Virginia.EDU
Port=70

An item from the UseNet which is an excerpt from a *Science* magazine article giving examples of energy efficiency programs sponsored by electric utilities.

Type=0
Name=**Power System Analysis and Planning**
Path=R16666-17489-/ait/research/.EnergyRes
Host=emailhost.ait.ac.th
Port=70

Research project description, Asian Institute of Technology, Thailand

Type=0
Name=**Electric Utilities Management**
Path=R19002-23544-/ait/research/.EnergyRes
Host=emailhost.ait.ac.th
Port=70

Research project description, Asian Institute of Technology, Thailand

320900 Education and Public Relations

Type=0+
Name=**Business Assistance Programs In Energy and the Environment**
Path=0/procurement_bus_opp/bus_dev_info/sectoral/energy_env/eoproject.asc
Host=gaia.info.usaid.gov
Port=70

Description of USAID programs available to business in developing countries.

Type=1

Name=**Department de Maquines i Motors Termics (organizational unit)**

Path=**Mou=Department de Maquines i Motors Termics, o=Universitat Politecnica de Catalunya, c=ES**

Host=**nimrod.slu.se**

Port=**5555**

List of department members at this Spanish University interested in motor technology.

Type=0

Name=**WATTSLINE**

Path=**0/information/outside/neil/data/file_078**

Host=**nreinfo.nrel.gov**

Port=**70**

Information on the Association of Demand Side Management Professionals.

Type=0

Name=**Wisconsin Center for Demand-Side Research Library Sampler**

Path=**0/information/outside/neil/data/file_080**

Host=**nreinfo.nrel.gov**

Port=**70**

Information on library services at the Wisconsin Center.

Type=0

Name=**Wisconsin Demand-Side Options Database**

Path=**0/information/outside/neil/data/file_081**

Host=**nreinfo.nrel.gov**

Port=**70**

Information on and the fee structure to access this data base maintained by the Wisconsin Center for Demand-Side Research.

Type=0

Name=**Energy Conservation and Management Consultants**

Path=**0/information/outside/neil/data/file_021**

Host=**nreinfo.nrel.gov**

Port=**70**

Describes a consultants data base and the cost to purchase it.

330000 ADVANCED PROPULSION SYSTEMS**330300 *Electric-Powered Systems***

Type=1

Name=**Chapter 474 -- ELECTRIC AND HYBRID VEHICLE RESEARCH, DEVELOPMENT AND DEMONSTRATION PROGRAM; EQUIVAL**

Path=1/cfr10/byChapters/II/D/474

Host=gopher.counterpoint.com

Port=2001

A notice regarding electric and hybrid vehicle research, development, and demonstration program from the Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy.

Type=0

Name=**Electric Car Competition**

Path=0/.files/CH061093/CH06109314

Host=gopher1.cit.cornell.edu

Port=70

An article from the Cornell *Chronicle* about a student electric car competition, 06/10/93

Type=0

Name=**Electric vehicle (GM Impact)**

Path=0/HPV/archive/Electric_and_others/Electric Vehicle Mailing List [fwd from NEW-LIST]

Host=zippy.sonoma.edu

Port=70

News forum for individuals interested in the development of electric vehicles

330800 *Alternative Fuels*

Type=0

Name=**CNG VEHICLE SAFETY STANDARDS**

Path=0/ByQuarter/93Q4/93Q4/122993.133

Host=gopher.counterpoint.com

Port=2002

A notice of new safety standards from the National Highway Traffic Safety Administration, U.S. Department of Transportation.

Type=0

Name=**NEW: HYDROGEN as an alternative fuel**

Path=R453075-454471-/Distribution list log/New lists/log.started.930113

Host=nora.hd.uib.no

Port=70

Introduction to a list of individuals interested in hydrogen fuel.

Type=1

Name=**sci.energy.hydrogen: All about hydrogen as an alternative fuel.** Path=nnntp lsa
sci.energy.hydrogen

Host=newshost.cca.vu.nl

Port=4320

Access to a news group which discusses hydrogen fuel.

Type=0

Name=**58 FR 51622:Methodology for Analyzing the Feasibility and Economic Impact
of Alternative Fuel Use**

Path=0/ByDate/100493/100493/100493.14

Host=gopher.counterpoint.com

Port=2002

Notice of availability and request for comments from the U.S. Department of Energy

Type=0+

Name=**216C.40 Alternative fuel vehicles. [18Feb94, 3kb]**

Path=0/Revisor of Statutes/Minnesota Statutes 1993/216 - 217 Utilities/216C
DEPARTMENT OF PUBLIC SERVICE; ENERGY DIVISION/216C.40 Alternative fuel
vehicles.

Host=gopher.revisor.leg.state.mn.us

Port=70

A notice from the State of Minnesota Energy Department.

Type=0+

Name=**1993-04-21 Executive Order on Alternative Fuel Vehicles**

Path=0/data/archive/white-house/1993-04/103

Host=zeus.esusda.gov

Port=70

Full text of the executive order on the Federal use of alternative fueled vehicles.

APPENDIX A

"WHERE TO START" FOR NEW INTERNET USERS

Jim Milles

Ver. 4.5, 21 July 1994

1. E-mail systems vary widely:

For help with most e-mail questions (signature files, quoting, and so on), contact your local computer support personnel or your Internet service provider, or consult the books listed below for a discussion of your mail system.

2. Some recommended books for new users of the Internet:

Aboba, Bernard. *The Online User's Encyclopedia: Bulletin Boards and Beyond*. Reading, MA: Addison-Wesley, 1994. 806 pp. ISBN 0-201-62214-9, US\$32.95. (A remarkably useful and comprehensive work, covering everything from the basics of computer communications, to using local bulletin boards, to the intricacies of the Internet.)

Dern, Daniel P. *The Internet Guide for New Users*. New York: McGraw-Hill, 1994. 570 pp. ISBN 0-07-016510-6, US\$40.00 (hardcover); ISBN 0-07-016511-4, US\$27.95 (paper). (Dern is the former editor of *Internet World* magazine and author of numerous articles on the Internet in many other publications.)

Engst, Adam. *Internet Starter Kit for Macintosh*. Indianapolis: Hayden Press, 1993. 641 pp. ISBN 1-56830-064-6, US\$19.95. (Highly recommended by Mac users, many of whom preferred this to the Fraase book listed below. Comes with a disk containing a variety of Internet access software, including a "legal copy of MacTCP 2.0.2.")

Gilster, Paul. *The Internet Navigator*. New York: John Wiley, 1993. 470 pp. ISBN 0-471-59782-1, US\$24.95. (An elegantly written and cleanly designed guidebook, the best of the new books for the individual dial-up user. Contains a wealth of useful background information on the workings of the Internet and the organizations behind it. Recommended for the individual dial-up user who is serious about the Internet.)

Hahn, Harley & Rick Stout. *The Internet Complete Reference*. Berkeley: Osborne McGraw-Hill, 1993. 818 pp. ISBN 0-07-881980-6, US\$29.95. (Considered by many the best of the new crop of Internet books, and at 800+ pages, among the most comprehensive. The humor, however, seems somewhat more lame than some others.)

Krol, Ed. *The Whole Internet: User's Guide & Sampler*. 2nd ed. Sebastapol, CA: O'Reilly & Associates, 1994. 543 pp. ISBN 1-56592-063-5, US\$24.95. (In the fast-moving world of the Internet, for most of 1993 this was the successor to Zen as the essential guide to the Internet, and is still regarded by many as the best of the Internet books. However, the availability of other books like Gilster's makes Krol's Unix bias more evident. Recommended especially for users of Unix systems.)

LaQuey, Tracy. *The Internet Companion Plus: A Beginner's Start-Up Kit for Global Networking*. Reading, MA: Addison-Wesley, 1993. 196 pp. ISBN 0-201-62719-1, US\$19.95. (A good guide for the true beginner, useful even for the pre-beginner who has not yet signed on to the Internet.)

Randall, Neil. *Teach Yourself the Internet: Around the World in 21 Days*. Indianapolis, IN: SAMS Publishing, 1994. 676 pp. ISBN 0-672-30519-4, US\$25.00. (A remarkably comprehensive workbook and resource guide, generously illustrated; its greatest strength is its systematic approach to gaining familiarity with the scope of the Internet.)

Savetz, Kevin M. *Your Internet Consultant: The FAQs of Life Online*. Indianapolis, IN: SAMS Publishing, 1994. 550 pp. ISBN 0-672-30520-8, US\$25.00. (Most commonly asked questions about tools and resources presented in a convenient format; well indexed and with a clearly organized table of contents.)

Smith, Richard and Mark Gibbs. *Navigating the Internet: Deluxe Edition*. Indianapolis, IN: SAMS Publishing, 1994. 640 pp. ISBN 0-672-30485-6, US\$29.95. (A highly readable guide, with an easy-to-use listing of Internet resources arranged by subject. Smith is well known for his popular online "Navigating the Internet" courses.)

3. Other useful books for new users:

Badgett, Tom and Corey Sandler. *Welcome to... Internet: From Mystery to Mastery*. New York: MIS Press, 1993. 324 pp. ISBN 1-55828-308-0, US\$19.95. (A self-instruction handbook.)

Braun, Eric. *The Complete Internet Directory*. New York: Fawcett, 1993. 704 pp. ISBN 0-449-90898-4, US\$25.00. (As the title suggests, this is a directory of newsgroups, discussion lists, ftp sites, and so on, with just a few pages on how to use these resources. A directory like this, Hahn and Stout's *Internet Yellow Pages*, or Rittner's *Whole Earth Online Almanac*, may be useful as a companion to one of the other "how-to" guidebooks).

Eddings, Joshua. *How the Internet Works*. Emeryville, CA: Ziff-Davis Press, 1994. 218 pp. ISBN 1-56276-192-7, US\$24.95. (Excellent integration of graphics to explain some of the technology behind the Internet. However, examples of resources are extremely short and selective; definitely not a resource guide.)

Falk, Bennett. *The Internet Roadmap*. San Francisco: SYBEX, 1994. 263 pp. ISBN 0-7821-1365-6, US \$12.99.

Fisher, Sharon. *Riding the Internet Highway*. Carmel, Indiana: New Riders Pub., 1993. 266 pp. ISBN 1-56205-192-X, US\$16.95.

Fraase, Michael. *The Mac Internet Tour Guide: Cruising the Internet the Easy Way*. Chapel Hill, NC: Ventana Press, 1993. 288 pp. ISBN 1-56604-062-0, US\$27.95. (The first Internet guide written for Macintosh users; includes a 800K disc containing useful software.)

Fraase, Michael. *The PC Internet Tour Guide: Cruising the Internet the Easy Way*. Chapel Hill: Ventana Press, 1994. ISBN1-56604-084-1, US\$24.95.

Fraase, Michael. *The Windows Internet Tour Guide: Cruising the Internet the Easy Way*. Chapel Hill, NC: Ventana Press, 1994. 344 pp. ISBN 1-56604-081-7, US\$24.95. (Good graphics and sample screens, but coverage is selective; some important tools like World-Wide Web are omitted.)

Gardner, James. *A DOS User's Guide to the Internet*. Waterloo, ON, Canada: MKS [Mortice Kern Systems], 1993.

Hahn, Harley, and Rick Stout. *The Internet Yellow Pages*. Berkeley, CA: Osborne McGraw-Hill, 1994. 447 pp. ISBN0-07-882023-5, US\$27.95. (An entertaining, easy-to-use directory of Internet resources, and an excellent companion to Hahn and Stout's *Complete Internet Reference*.)

Heslop, Brent and David Angell. *The Instant Internet Guide*. Reading, MA: Addison-Wesley, 1994. 209 pp. ISBN 0-201-62707-8, US\$14.95.

Hoffman, Paul E. *Internet Instant Reference*. San Francisco: SYBEX, 1994. 317 pp. ISBN 0-7821-1512-8, US\$12.99. (A pocket guide to Internet terms and concepts, for both beginning and advanced Internet users.)

The Internet Unleashed. Indianapolis: SAMS Publishing, 1994. 1,387 pp. ISBN 0-672-30466-X, US\$44.95. (Contains chapters written by over 40 prominent Internet experts. This is the most comprehensive, and most expensive, Internet reference currently available, but not recommended for the beginning user).

Jaffe, Lee David. *Introducing the Internet: A Trainer's Workshop*. (Internet Workshop Series, Number 1.) Berkeley, CA: Library Solutions Press, 1994. 92 pp. ISBN 1-882208-05-6, US\$30.00 (US\$45.00 with diskette). (The first in a series of supplements to *Crossing the Internet Threshold*, by Tennant, Ober, and Lipow. Based on an actual trainer's handouts and script, it may also be used as a self-instruction workbook.)

Kehoe, Brendan. Zen and the Art of the Internet: A Beginner's Guide. 3rd ed. Englewood Cliffs, NJ: Prentice-Hall, 1994. 193 pp. ISBN 0-13-121492-6, US\$23.95. (One of the first and most popular guides to the Internet. The first edition was distributed for free on the Internet, and is still available at many anonymous ftp sites, e.g. nic.merit.edu, directory/introducing.the.internet, filename zen.txt.)

Kochmer, Jonathan and North West Net. The Internet Passport:North West Net's Guide to Our World Online. 4th ed. Bellevue,WA: North West Net, 1993. 515 pp. ISBN 0-9635281-0-6, US\$29.95.

(A comprehensive guide to Internet resources, comparable to Krol's The Whole Internet but even broader in scope. It covers a number of areas that other guides ignore.)

Lambert, Steve & Walt Howe. Internet Basics. New York: Random House, 1993. 495 pp. ISBN 0-679-75023-1, US\$27.00. (Although this is a good, general guide to the Internet for any user, it is especially useful for those who access the Internet through the commercial Delphi information service. Howe is the sysop of the Delphi Internet SIG.)

Levine, John R. and Carol Baroudi. The Internet for Dummies.San Mateo, California: IDG Books, 1993. 355 pp. ISBN 1-56884-024-1, US\$19.95. (A very useful, well organized, and readable book, one of the publisher's popular "... for Dummies" series.)

Marine, April; Kirkpatric, Susan; Neou, Vivian; and Ward, Carol.Internet: Getting Started. Englewood Cliffs, NJ: PTR Prentice Hall, 1992. 360 pp. ISBN 0-13-327933-2, US\$28.00. (Includes useful information on how to obtain Internet access, as well as other technical reference material.)

Pike, Mary Ann and Tod G. Pike. The Internet Quick Start.Indianapolis: Que Corp., 1994. 387 pp. ISBN 1-56529-658-3,US\$21.99. (Contains separate chapters on "Using the Internet via" CompuServe, AOL, DELPHI, and Unix systems.)

Quarterman, John S. The Matrix: Computer Networks and Conferencing Systems Worldwide. Bedford, MA: Digital Press,1990. 719 pp. ISBN 1-55558-033-5, US\$49.95. (A comprehensive guide to the history and present--as of 1990--state of the Internet and its component and related networks. Recommended for those who want to learn the background and history of the Internet.)

Rittner, Don. Whole Earth Online Almanac. New York: Brady Publishing, 1993. 545 pp. ISBN 1-56686-090-3, US\$32.95.(Another directory of online resources, this one attempts to cover not only Internet, but also Fidonet and commercial services like America Online and CompuServe, and even local BBS.)

Robinson, David F.W. *All About Internet FTP: Learning and Teaching to Transfer Files on the Internet.* (Internet Workshop Series, Number 2.) Berkeley, CA: Library Solutions Press, 1994. 90 pp. ISBN 1-882208-06-4, US\$30.00 (US\$45.00 with diskette). (The second supplement to *Crossing the Internet Threshold*; suitable for use either by trainers or as a self-teaching workbook.)

Sachs, David and Henry Stairs. *Hands-On Internet: A Beginning Guide for PC Users.* Englewood Cliffs, NJ: PTR Prentice Hall, 1994. 275 pp. ISBN 0-13-056392-7, US\$27.95. (A detailed workbook for the individual user; like most of the others, assumes the reader will be working on a Unix system.)

Tennant, Roy, John Ober, & Anne G. Lipow. *Crossing the Internet Threshold: An Instructional Handbook.* 134 pp. ISBN 1-882208-01-3, US \$45.00. Berkeley, CA: Library Solutions Press, 1993. (Includes helpful fact sheets on various Internet tools from ftp and telnet to archie, gopher, WAIS, and World-Wide Web.)

Tolhurst, William A., Mary Ann Pike, Keith A. Blanco, and John R. Harris. *Using the Internet: Special Edition.* Indianapolis, IN: Que Corp., 1994. 1188 pp. ISBN 1-56529-353-6, \$39.95. (At well over 1000 pages, this is the current leader in the sweepstakes for biggest Internet book. However, its coverage is surprisingly spotty; it includes a 110-page chapter on legal considerations, but ignores major tools like World-Wide Web.)

4. FTP:

For those who know enough about using the Internet to be able to use "ftp," the following sources are very useful (note that they are regularly updated, so the version numbers and file names may change):

de Presno, Odd. "The Online World." Available by anonymous ftp from oak.oakland.edu, directory /pub/msdos/info, type binary, filename online16.zip. Uncompress with PKZip 2.04g. (An excellent source for coverage of European resources, also excellent for users of commercial services like CompuServe, Genie, and MCI mail.)

December, John. "Information Sources: the Internet and Computer-Mediated Communication." 15 December 1993, release 3.15. Available by anonymous ftp from ftp.rpi.edu, directory/pub/communications, filename internet-cmc.txt. (Gives locations and access instructions for hundreds of Internet training documents, directories, and other materials. Essential for locating the many valuable Internet resources discussed in the other guidebooks.)

Gaffin, Adam and Electronic Frontier Foundation. "Big Dummy's Guide to the Internet." January 1994. Available by anonymous ftp from ftp.eff.org, directory /pub/Netinfo/BigDummy, filename bigdummy.txt.

Martin, Jerry. "There's Gold in them thar Networks! or Searching for Treasure in all the Wrong Places." RFC 1402, January 1993. Available by anonymous ftp from nic.merit.edu, directory/introducing.the.internet, filename network.gold.

Milles, James. "Discussion Lists: Mail Server Commands." Available by anonymous ftp from sluaxa.slu.edu, directory /pub/millesjg, filename mailser.cmd. (Explanation of the most commonly used commands for five of the most popular discussion list management programs.)

Milles, James. "An Introduction to Using the Internet at Saint Louis University School of Law." Available by anonymous ftp from sluaxa.slu.edu, directory /pub/millesjg, filename interlaw.wp(binary, WordPerfect 5.1/5.2 format), interlaw.txt (ASCII), or interlaw.ps (PostScript). (Although the focus is on legal resources, this guide should be useful for any VAX/VMS user. It is also the only source I know of that discusses the differing commands for the BITNET and Unix listserver systems.)

NCSA Education Group. "An Incomplete Guide to the Internet." July 1993. Available by anonymous ftp from ftp.ncsa.uiuc.edu, directory /Education/Education Resources/Incomplete Guide/Incomp.Guide.Old, filename Incomp.Guide.July.txt. (Focuses on K-12 users and resources.)

Noonan, Dana. "A Guide to Internet/Bitnet." June 1993. Available by anonymous ftp from vm1.nodak.edu, directory /nnews, filename guidev2.nnews. (A rare and valuable guide for the VAX/VMS user.)

"NYSERNet New User's Guide to Useful and Unique Resources on the Internet." Version 2.2, April 1992. Available by anonymous ftp from nysernet.org, directory /pub/guides, filename new.user.guide.V2.2.txt

Parker, Elliott S. "Getting to Start: Selected Readings in Computer Communication." Ver. 4.01 (13 Dec 1993). Available by sending an e-mail message to LISTSERV@CMUVM.CSV.CMICH.EDU containing only the line GET NETSTART INFO F=MAIL. (A lengthy bibliography of books, articles, and other materials about the Internet and related topics.)

Polly, Jean Armour. "Surfing the INTERNET: An Introduction." Version 2.0.3, May 15, 1993. Available by anonymous ftp from nysernet.org, directory /pub/guides, file surfing.2.0.3.txt.

"SURAnet Guide to Selected Internet Resources." December 1993. Available by anonymous ftp from ftp.sura.net, directory /pub/nic, file infoguide.12-93.txt.

Yanoff, Scott. "Special Internet Connections" (updated frequently). A list of interesting and useful selection showing the broad range of Internet resources, including a few Online Public Access Samplers, chat lines, weather servers, Campus Wide Information Systems, and other reference resources. Available by anonymous ftp from [csd4.csd.uwm.edu](ftp://csd4.csd.uwm.edu), directory /pub, filename inet.services.txt.

5. For information on how to get connected to the Internet:

Engle, Mary, Marilyn Lutz, William W. Jones, Jr., and Genevieve Engel. *Internet Connections: A Librarian's Guide to Dial-Up Access and Use*. Lita Monographs 3. Chicago: Library and Information Technology Association, 1993. 166 pp. ISBN 0-8389-7677-8, US\$22.00.

Estrada, Susan. *Connecting to the Internet: An O'Reilly Buyer's Guide*. Sebastapol, CA: O'Reilly & Associates, 1993. 170 pp. ISBN 1-56592-061-9, US\$15.95.

Notess, Greg R. *Internet Access Providers: An International Resource Directory*. Westport, CT: Meckler, 1993. ISBN 0-88736-933-2, US\$22.95.

If you have e-mail access to the Internet, you can obtain a copy of the Public Dial up Internet Access List (the most comprehensive list of Internet access providers for individuals and small organizations) by sending an e-mail message containing the command "Send PDIAL" to info-deli-server@netcom.com.

6. "Where to Start" for New Internet Users:

The latest version of this document, "Where to Start" for New Internet Users, is available by anonymous ftp from [sluaxa.slu.edu](ftp://sluaxa.slu.edu), directory /pub/millesjg, filename `newusers.faq`, or from [ubvm.cc.buffalo.edu](ftp://ubvm.cc.buffalo.edu), directory /NETTRAIN, filename `NEWUSERS.FAQ`.

It may also be obtained by e-mail by sending a message to LISTSERV@UBVM.cc.buffalo.edu containing only the line: `GET NEWUSERS FAQ NETTRAIN F=MAIL`.

"Where to Start" for New Internet Users is also available on the World-Wide Web (<http://lawlib.slu.edu/newusers.htm>).

A collection of reviews of Internet books can be obtained by anonymous ftp from [ubvm.cc.buffalo.edu](ftp://ubvm.cc.buffalo.edu), cd /nettrain. The filenames are `nettrain.revs1`, `nettrain.revs2`, and `nettrain.revs3`. They may also be obtained by sending a message to LISTSERV@UBVM.cc.buffalo.edu containing only the lines:

`GET NETTRAIN REVS1 NETTRAIN F=MAIL`
`GET NETTRAIN REVS2 NETTRAIN F=MAIL`
`GET NETTRAIN REVS3 NETTRAIN F=MAIL`

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