DOE Virtual Library of Energy Science and Technology

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All of us in the information business are living through a revolution – the digital revolution.

If we were to resist and make peaceful revolution impossible, we would make violent revolution inevitable.

Supporting the Science Mission

- Department of Energy operates a system of National Labs which do basic and applied R&D.

- Principal deliverable from R&D is scientific and technical information.

- OSTI collects, preserves, and disseminates the output of R&D.

- Using Information Age technology, OSTI is reaching more people—at a lower cost per person served.

Supporting the Science Mission

OSTI maintains the world's most comprehensive collection of energy-related scientific and technical information, including over . . .

- 1.5 million reports

- 5 million electronically accessible bibliographic references

- World's largest historic collection of information on nuclear energy

Expanding the Energy Science Universe

Using Technology to Support the Science Mission

Information Age technology is revolutionizing the way OSTI supports the science mission by bringing science information to the desktop. OSTI:

- Leads scientific and technical information program, policies, and business practices costing $200 million at multiple sites

- Connects multiple sources of electronic information

- Coordinates Departmental access to electronic science journals

- Manages the world's most comprehensive collection of classified and sensitive energy-related information

- Gains access to over 80,000 foreign research summaries per year

Result—Information delivered to the desktop, reaching thousands more people at a lower cost per person served

Internet Access to OSTI Products

Includes access to EnergyFiles, DOE Information Bridge (both Web sites), DOE Reports Bibliographic Database, R&D Project Summaries, Energy Science and Technology Software Center, OSTI Home Page, and OpenNet

How OSTI is Expanding in the Energy Science Universe

OSTI has developed and assembled a suite of Internet resources.

- Collectively, we call these resources EnergyFiles, The Virtual Library of Energy Science and Technology <**www.doe.gov/EnergyFiles**>

- EnergyFiles is organized by subject area and contains an alphabetized Resource List.

- EnergyFiles contains over 400 energy-related collections and databases, electronic journals, preprints, conference information, related resources, and workspace tools.

- EnergyFiles will be searchable by April 1999.

EnergyFiles
The Virtual Library of Energy Science and Technology

Subject Areas: Topics and Disciplines of Concern to DOE

- Biology and Medicine

- Chemistry
- Energy Storage, Conversion and Utilization
- Engineering
- Environmental Sciences, Safety and Health
- Fission and Nuclear Technologies
- Fossil Fuels
- Geosciences
- Materials Science
- Mathematics, Computing and Information Science
- Physics
- Plasma Physics and Fusion
- Power Transmission, Distribution and Plants
- Renewable Energy

EnergyFiles
The Virtual Library of Energy Science and Technology - Contains Several Desktop Resources

DOE Information Bridge
www.doe.gov/bridge

- Provides instant free access to over 32,000 DOE R&D full-text reports and bibliographic records, providing over 2.5 million pages of searchable text.

- Content has increased from 1.3 million to 2.5 million full-text pages in its first year of operation and is projected to grow by another 1 million each year.

- Legacy files contributed by Fermi Lab and Los Alamos.

DOE R&D Project Summaries
www.doe.gov/rnd/rdhome.html

- Internet Web site contains current information on over 14,000 Department of Energy R&D projects currently ongoing within the DOE from 1995 forward.

OpenNet
www.doe.gov/opennet

- Contains recently declassified full-text documents about early nuclear weapon testing, human radiation experiments, and health and environmental safety issues.

DOE R&D Accomplishments Database (Prototype)
www.doe.gov/accomplishments

- Provides a central forum for information about the outcome of past DOE R&D that has had significant economic impact, improved people's lives, or been widely recognized as a remarkable advance in science.

DOE Reports Bibliographic Database
www.doe.gov/dra/dra.html

- Contains citations for DOE-sponsored scientific and technical reports covering the period Jan. 1, 1994, to the present. Developed for the Depository Library Program via an interagency agreement between GPO and DOE.

Energy Science and Technology Software Center (ESTSC)
www.osti.gov/html/osti/estsc/estsc.html

- Serves as a repository for and the source from which to purchase software funded by DOE. The center's inventory is contained in a searchable database to help locate software of interest.

Current Awareness Electronic Publications
www.doe.gov/html/osti/products/publics.html

- Provides electronic access to current energy-related, subject specific collections of bibliographic citations with abstracts compiled from a variety of available resources. Links to full text of bibliographic records will soon be available via the DOE Information Bridge Web site.

Under Development

PubScience – Electronic Science Journals

- Searchable bibliographic database of journals that cover DOE R&D with hyperlinks to full text

- Provided on a prototype basis to DOE Headquarters on-line, potentially saving $8 million annually in duplicative paper subscriptions after full implementation

- Goal is to create an energy-related database comparable to PubMed to access literature citations with links to full-text journals at Web sites of participating publishers

- Use of collaborations and partnerships for obtaining the best price for multiple-site access

New technology opens up the possibility that, together, we can conquer text.

But it is not enough for a thing to be possible for it to be achieved.

The Future

User Expectations:

Whatever the survey question, the answers are:

- full-text

- searchable

- online

Designing the Future: Collaboration

- Interagency agreements between GPO/DOE OSTI have provided free public access to DOE information for 20 years.

- GPO/OSTI brings solutions that incorporate Information Age technology to provide better access to DOE science.

- DOE Information Bridge public Web site through GPO access

- DOE's expanding science universe includes new collaborative possibilities
    o Model of virtual reference service
    o Expansion of DOE's Legacy collection of DOE Information Bridge
    o PubScience – DOE's electronic journal Web site

Designing the Future: Mutual Interests/Goals

- Guarantee of efficient, effective public access to Federal Government information

- Inform the public about the policies and programs of the Federal Government

- Support of initiatives and programs that increase availability, use and control of government documents

- Provide access to a comprehensive collection of current and retrospective Federal Government information

- Assist in locating particular fields in government collections

- Provide bibliographic/full-text access to Federal collections

- Increase public awareness of the depository library program and the availability of government information

Making Our Case

- Our costs are real and easily quantified.

- The benefits we produce are equally real but are not easily quantified.

- - Cost benefit is tough to do.
- There is no such thing as a self-sustaining library.
  - Those who want a self-sustaining library want something that has never been and never will be.
  - Not even the most ardent enthusiast for cutting government can cite an exception.
  - Andrew Carnegie is famous for building buildings; he did not operate libraries.

How We Can Help Each Other

- Build on mutual interest and goals
  - support future collaborations
  - share ideas and provide user input and needs
  - spread the word that DOE works for America
  - actively support OSTI's role in making DOE information publicly available
- Use DOE electronic capabilities to help FDLP more effectively access and manage DOE information

- We can conquer text

- The prospect of conquering text is animating and ought to excite the exertions of all of us