National Renewable Energy Laboratory

information resources

Catalog 2001

NREL

Internet Resources ◆ General Interest Publications ◆ Technical Reports
Conference Papers ◆ Journal Articles ◆ Book Chapters ◆ Patents

About the Catalog

The National Renewable Energy Laboratory's (NREL) eighth annual *Information Resources Catalog* can help keep you up-to-date on the research, development, opportunities, and available technologies in energy efficiency and renewable energy. The catalog includes five main sections with entries grouped according to subject area.

Most of the publications in this catalog—and many others on energy efficiency and renewable energy—can be found on Web sites developed and/or maintained by NREL. The first section provides a listing of these "Internet Resources," which is especially helpful if you'd like to access information quickly. You can also access the latest information using these resources. A good place to start a search for information is on NREL's Publications Database at www.nrel.gov/publications/.

The second section provides brief descriptions of the "General Interest Publications" produced by NREL during its 2000 fiscal year. These publications highlight the advances in energy efficiency and renewable energy technologies, as well as the NREL and U.S. Department of Energy (DOE) programs that encourage their advancement and use.

The last three sections in the catalogue—"Technical Reports," "Conference Papers, Journal Articles, Book Chapters," and "Patents"—can help the research community and industry stay updated on the latest innovations from NREL's labs.

We hope you find this catalog useful and informative.

About the National Renewable Energy Laboratory

NREL is DOE's premier laboratory for renewable energy and energy efficiency research, development, and deployment. The Laboratory is a national resource committed to leadership, excellence, and innovation in renewable energy and related technologies.

NREL conducts research in photovoltaics, wind energy, building energy efficiency, biofuels, hybrid vehicles, fuels utilization, biomass power, hydrogen, concentrating solar power, geothermal power, and superconductivity. Advances made in these research areas enable the private sector to make informed choices from a number of energy options.

Key to NREL's mission is facilitating the transfer of these technologies to private industry for commercialization. We do this by cooperating with industry through cost-shared agreements, collaborating with universities and other researchers, and making facilities available for experiments, analyses, and proprietary studies.

NREL is managed for DOE by Midwest Research Institute, Battelle, and Bechtel.

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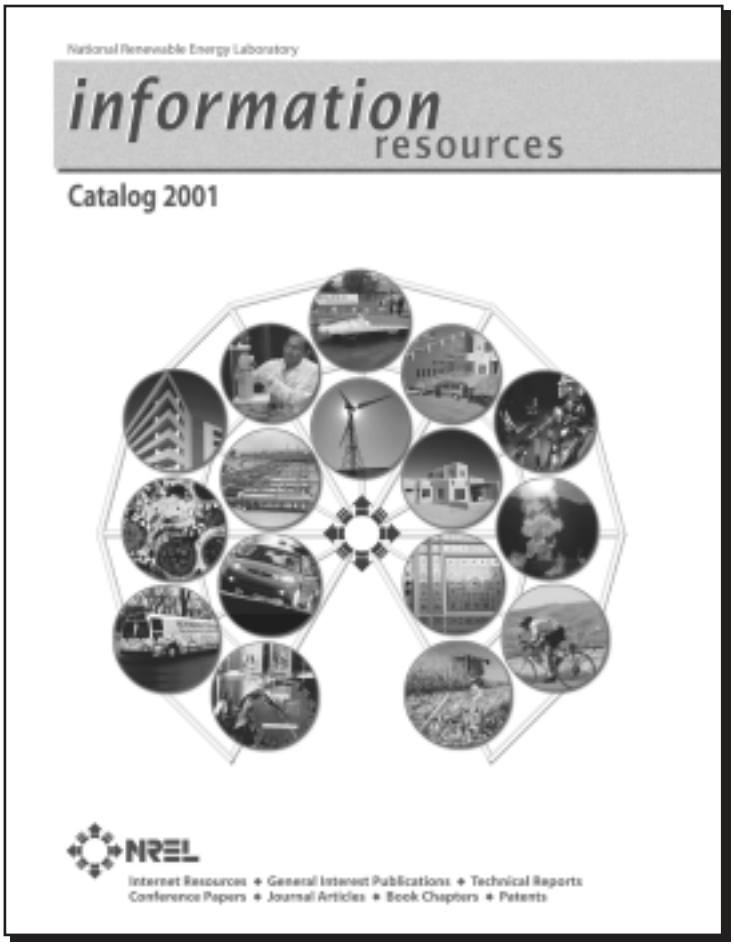


PHOTO CREDITS: (Clockwise, outside) Nebraska Soybean Board, PIX04231; Paul Roessler, PIX01726; Warren Gretz, PIX00132; Warren Gretz, PIX00075; Mike Linenberger, PIX02589; Warren Gretz, PIX00171; Coherent Inc. Laser Group, PIX06354; David Parsons, PIX01047; David Parsons, PIX04075.
(Inside): Schatz Energy Research Center, PIX03973; Ford Motor Company, PIX05471; Warren Gretz, PIX00453; David Parsons, PIX00904; Warren Gretz, PIX03083; Pamm McFadden, PIX02920; Warren Gretz, PIX02268.

Internet Resources

The sites listed below provide information on many energy efficiency and renewable energy technologies. New Internet sites are created regularly, so be sure to visit these Web pages often for new and updated information.

National Renewable Energy Laboratory (NREL)—http://www.nrel.gov

Since its inception in 1977, NREL's mission has been to develop energy efficiency and renewable energy technologies and transfer these technologies to the private sector. The Web site provides information about NREL's technologies, online resources, and programs.

Research and Technology—NREL's research activities and expertise help reduce the cost and increase the use of renewable energy and energy efficiency technologies.

Basic Sciences and Materials—http://www.nrel.gov/st-bsm.html

Bioenergy—http://www.nrel.gov/bioenergy.html

Buildings and Thermal Systems—http://www.nrel.gov/buildings_thermal/

Electricity Technologies—http://www.nrel.gov/st-et.html

Energy Analysis—http://www.nrel.gov/analysis/

Measurements and Testing—http://www.nrel.gov/st-mt.html

Photovoltaics—http://www.nrel.gov/photovoltaics.html

Renewable Energy Resources—http://rredc.nrel.gov/

Transportation—http://www.ctts.nrel.gov/

Wind Energy—http://www.nrel.gov/wind/

NEW—National and International Applications—NREL's Deployment Programs help promote the use of renewable energy and energy efficiency applications. http://www.nrel.gov/applications.html

NEW—Technology Transfer—Contact the NREL Technology Transfer team to license an NREL technology, cooperate in or sponsor research with NREL, start or expand a business using renewable energy technologies, or use NREL facilities for R&D. http://www.nrel.gov/technologytransfer/

Clean Energy Basics—This Web site provides an online primer on energy efficiency and renewable energy. http://www.nrel.gov/clean_energy/

Education Programs—NREL's Science and Technology Education Programs partner with students, teachers, faculty, and schools so that students can develop science and math excellence to advance sustainable energy technologies. http://www.nrel.gov/education/

Online Resources—NREL's databases provide documents and digital photographs of renewable energy and energy efficiency technologies.

NREL Publications—http://www.nrel.gov/publications/

PIX—Online Photographic Library—http://www.nrel.gov/data/pix/pix.html

Energy Efficiency and Renewable Energy Network (EREN) http://www.eren.doe.gov/

EREN is the official Web site for the U.S. Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy. EREN contains documents from DOE programs and maintains links to other government, education, industry association, and international organization Web sites. EREN offers a robust search capability and resources for energy professionals and consumers.

Technologies

Bioenergy—http://www.eren.doe.gov/RE/bioenergy.html
Buildings—http://www.eren.doe.gov/EE/buildings.html
Geothermal—http://www.eren.doe.gov/RE/geothermal.html
Hydrogen—http://www.eren.doe.gov/RE/hydrogen.html
Hydropower—http://www.eren.doe.gov/RE/hydropower.html
Industry—http://www.eren.doe.gov/EE/industriy.html
Ocean—http://www.eren.doe.gov/RE/ocean.html
Power—http://www.eren.doe.gov/EE/power.html
Solar—http://www.eren.doe.gov/RE/solar.html
Transportation—http://www.eren.doe.gov/EE/transportation.html
Wind—http://www.eren.doe.gov/RE/wind.html

Specialized Resources

Ask an Energy Expert—http://www.eren.doe.gov/menus/energyex.html
Consumers—http://www.eren.doe.gov/consumerinfo/
Education—http://www.eren.doe.gov/education/
Financing—http://www.eren.doe.gov/financing/
Kids—http://www.eren.doe.gov/kids/
News—http://www.eren.doe.gov/news/
Solicitations—http://www.eren.doe.gov/solicitations.html
States—http://www.eren.doe.gov/states/

Related Information

DOE Headquarters—http://www.energy.gov/
DOE Office of Energy Efficiency and Renewable Energy—http://www.eren.doe.gov/ee.html
DOE Regional Support Offices—http://www.eren.doe.gov/rso.html
DOE Golden Field Office—http://www.golden.doe.gov/
DOE Office of Scientific and Technical Information (OSTI)—Energy Science and Technology Database—http://www.osti.gov/

The following publications are grouped according to subject matter for your convenience. These documents contain information that is generally nontechnical in nature and is intended for a wide audience. Unless otherwise noted, general interest publications are available in limited quantities from NREL's Document Distribution Service at (303) 275-4363 (phone), (303) 275-4053 (fax), or Sally_Evans@nrel.gov (e-mail). These documents can be accessed in PDF format through the Publications database at www.nrel.gov/publications.

Alternative Fuels

Biodiesel—Clean, Green Diesel Fuel: Great Fleet Fuel Gaining Popularity Rapidly (Fact sheet). September 2001; 2 pp. Biodiesel is like diesel fuel except that it's made from farm products. It's safe for the environment, biodegradable, and produces significantly less air pollution. This fact sheet answers common questions about Biodiesel, including use, safety, and environmental questions.
Order no. DOE/GO-102001-1449.

Bioethanol—Moving into the Marketplace: Advanced Biotechnology Becoming Reality (Fact sheet). August 2001; 4 pp. Technology for producing transportation fuel from biomass is moving out of the laboratory and into the marketplace. Advances in biotechnology have allowed us to reduce the projected cost of producing bioethanol from biomass materials by nearly 25%. This fact sheet discusses the technology used and the Department of Energy's efforts to commercialize that technology.
Order no. DOE/GO-102001-1436.

Biofuels for Your State: Helping the Economy and the Environment (Fact sheet). September 2001; 4 pp. Bioethanol and biodiesel can substitute for gasoline and diesel or be blended with them to reduce toxic air emissions. Using biofuels reduces greenhouse gas buildup, dependence on imported oil, and trade deficits, while supporting local agriculture and rural economies. This fact sheet describes the advantages of using biofuels to solve local problems such as smog and carbon monoxide.
Order no. DOE/GO-102001-1434.

Order no. DOE/GO-102001-1273

Biofuels News (Newsletter). This is a quarterly publication of the Department of Energy's Biofuels Program featuring articles, interviews and upcoming conference information relative to the biofuels and bioenergy industry.

Biofuels News—Spring/Summer 2001, Vol. 4, No. 2 (Newsletter). July 2001; 4 pp.
Order no. DOE/GO-102001-1371.

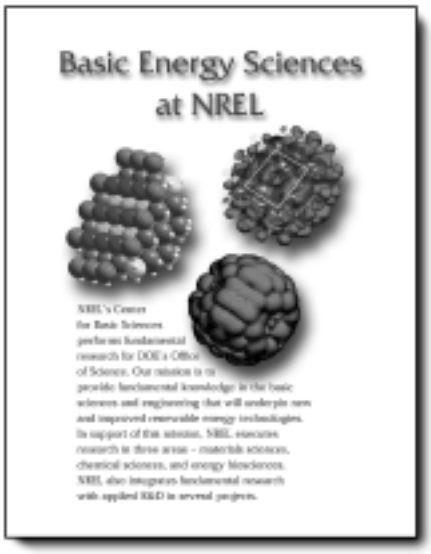
Biofuels News—Winter 2001, Vol. 4, No. 1 (Newsletter). March 2001; 4 pp.
Order no. DOE/GO-102001-1285.

Biofuels News—Fall 2000, Vol. 3, No. 2 (Newsletter). December 2000; 4 pp.
Order no. DOE/GO-102000-1149.

Corn Stover for Bioethanol—Your New Cash Crop? (Fact Sheet) May 2001; 2 pp. Biomass ethanol technology is still developing and important questions need to be answered about corn stover removal, but prospects are excellent for you to someday be able to harvest and sell a substantial portion of your stover for fuel production—without hurting your soil or main corn grain operation.
Order no. DOE/GO-102001-1273.

Basic Sciences

Basic Energy Sciences at NREL (Brochure). December 2000. 8 pp. NREL's Center for Basic Sciences performs fundamental research for DOE's Office of Science. Our mission is to provide fundamental knowledge in the basic sciences and engineering that will underpin new and improved renewable energy technologies. Available electronically only.
Order no. BR-590-29337.



Order no. BR-590-29337

Buildings

Air-Source Heat Pumps. Energy Efficiency and Renewable Energy Clearinghouse (EREC) (Brochure). June 2001; 8 pp. This brochure discusses how an air-source heat pump can heat and cool a home, as well as how to select, install, operate, and maintain one. To obtain printed copies please contact EREC at 1-800-DOE-EREC (1-800-363-3732).
Order no. DOE/GO-102001-1113.

Assessing Climate to Improve Solar Design. Energy Efficiency and Renewable Energy Clearinghouse (EREC) (Brochure). August 2001; 8 pp. This brochure complements the fact sheet on passive solar design, and provides information on how sunlight, weather patterns, and microclimates affect the performance of solar energy systems and designs. To obtain printed copies please contact EREC at 1-800-DOE-EREC (1-800-363-3732).
Order no. DOE/GO-102001-1171.

BigHorn Home Improvement Center: Silverthorne, Colorado Office of Building Technology, State and Community Programs (BTS) (Brochure). December 2000; 4 pp. The BigHorn Home Improvement Center in Silverthorne, Colorado, was designed using a whole-building approach, looking at the way that the building's site, windows, walls, floors, electrical, and mechanical systems could work together most efficiently. It is one of the nation's first commercial buildings to integrate daylighting and natural ventilation cooling systems into a retail space. It is expected to reduce energy costs by 62% compared to conventionally designed retail buidings.
Order no. DOE/GO-102000-1143.

Building America Developments, Information Bulletin Number 3 (Brochure). February 2001; 4pp. This is one in a series of information bulletins about the Building America program, member teams, and current projects. This bulletin highlights the construction completed in Atlanta, Georgia, and the projects related to the International Builders' Show.
Order no. BR-550-29122.

Building America Developments, Information Bulletin Number 2 (Brochure). October 2000; 3 pp. This special issue of Building America Developments highlights the new Artistic Homes' models at the Albuquerque Parade of Homes. These new model homes are designed to reduce energy use by 30% to 50% over that of standard or typically constructed new production homes in Albuquerque, New Mexico.
Order no. BR-550-28952.

Buildings for the 21st Century, Fall 2000. Office of Building Technology, State and Community Programs (BTS) (Newsletter). October 2000; 4 pp. This issue highlights the new high-performance visitor center at Zion National Park, Maryland's new Clean Energy Incentive Act, the Ohio State Weatherization Program, the Rebuild America Program and Native American communities joining forces, and EnergyStar® clothes washers.
Order no. DOE/GO-102000-1110.

Order no. DOE/GO-102000-1143

Buildings for the 21st Century, Summer 2001. Office of Building Technology, State and Community Programs (BTS) (Newsletter). July 2000; 4 pp. This issue includes information on technology roadmap initiatives, new energy computer simulation software, an educational CD for teachers, a CD with energy-saving tips, a study on the efficiency of clothes washers, and a calendar of meetings and conferences.
Order no. DOE/GO-102001-1370.

Cambridge Homes Increases Energy Efficiency in a Mix of Housing Types. Building America Project Summary (Fact Sheet). June 2001; 2 pp. New houses designed by Cambridge Homes in Crest Hill, Illinois, with technical support from the U.S. Department of Energy's Building America Program, save their homeowners money by applying the principles of whole-building design to the entire home product line. Regardless of the model chosen, homebuyers can enjoy consistently high levels of comfort and performance with the added benefit of reduced operating costs.
Order no. FS-550-30459.

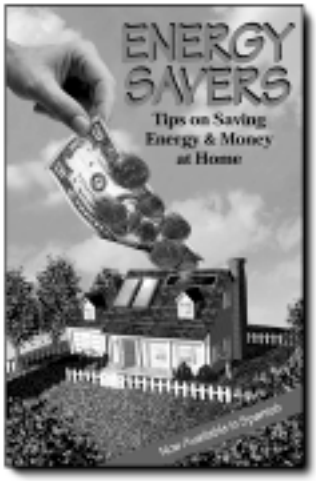
Careers in Renewable Energy. Energy Efficiency and Renewable Energy Clearinghouse (EREC) (Fact Sheet). January 2001; 8 pp. This publication describes the job opportunities, technologies, and market for each of the major renewable energy fields—wind power, solar power, bioenergy, geothermal energy, and hydropower. To obtain printed copies please contact EREC at 1-800-DOE-EREC (1-800-363-3732).
Order no. DOE/GO-102001-1130.

Closed-Combustion Gas Furnace in Conditioned, Sealed, Unvented Attic Increases Energy Efficiency and Eliminates Duct Leakage: Pulte Homes—Sun Lakes at Banning, California. Building America Project Summary (Fact Sheet). September 2001; 2 pp. New houses in this subdivision are designed with technical support from the Building Science Consortium as part of DOE's Building America Program. These homes save their owners money by applying the principles of whole-building design, which considers the house as a complete system instead of separate components.
Order no. FS-550-30909.

Cooling Your Home with Fans and Ventilation. Energy Efficiency and Renewable Energy Clearinghouse (EREC) (Brochure). June 2001; 8 pp. This brochure discusses how to keep a home cool using natural ventilation, attic and mechanical ventilation, fans, whole-house fans, and evaporative or swamp coolers. To obtain printed copies please contact EREC at 1-800-DOE-EREC (1-800-363-3732).
Order no. DOE/GO-102001-1278.

Distributed Energy Resources at Federal Facilities. Federal Energy Management Program (FEMP) Technical Assistance (Fact Sheet). July 2001; 2 pp. Distributed energy resources include both existing and emerging energy technologies: advanced industrial turbines and microturbines; combined heat and power (CHP) systems; fuel cells; geothermal systems; natural gas reciprocating engines; photovoltaics and other solar systems; wind turbines; small, modular biopower; energy storage systems; and hybrid systems. DOE FEMP is investigating ways to use these alternative energy systems in government facilities to meet greater demand, to increase the reliability of the power-generation system, and to reduce the greenhouse gases associated with burning fossil fuels.
Order no. DOE/GO-102001-1211.

Energy Efficiency Upgrades for Little Rock AFB. Federal Energy Management Program (FEMP) Utility Services Case Study (Fact Sheet). November 2000; 2 pp. Little Rock Air Force Base (LRAFB) in partnership with the local utility, Entergy Services, Inc., has reduced energy costs and used savings from investments in high-efficiency equipment to maintain and improve the condition of base housing and other facilities. Three projects were completed, with over $10 million invested. This fact sheet highlights the major accomplishments.
Order no. DOE/GO-102000-1123.



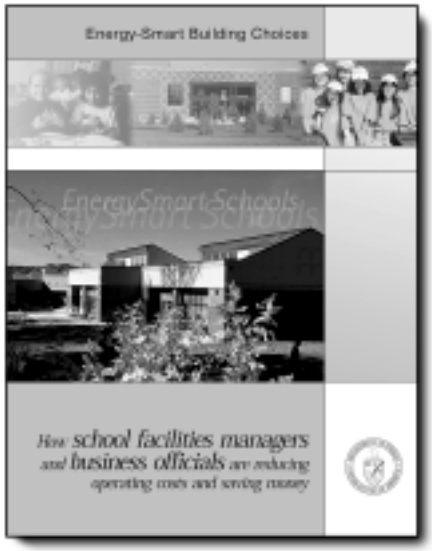
Order no. DOE/GO-102000-1121

Energy Savers: Cool Summer Tips. Office of Building Technology, State and Community Programs (BTS) (Flyer). June 2001; 2 pp. This brochure discusses energy-saving tips for homeowners ranging from low- or no-cost suggestions to higher cost suggestions for longer-term savings. Cooling, windows, weatherizing, and landscaping are addressed.
Order no. DOE/GO-102001-1360.

Energy Savers Tips on Saving Energy and Money at Home (Fifth Printing) (Brochure). August 2001; 36 pp. This popular brochure provides consumers with home energy and money savings tips such as insulation, weatherization, heating, cooling, water heating, energy efficient windows, landscaping, lighting, and energy efficient appliances.
Order no. DOE/GO-102000-1121.

Energy-Smart Building Choices: How Parents and Teachers Are Helping to Create Better Environments for Learning. Office of Building Technology, State and Community Programs (BTS) (Brochure). August 2001; 8 pp. Most K-12 schools could save 25% of their energy costs by being smart about energy. Nationwide, the savings potential is $6 billion. While improving energy use in buildings and buses, schools are likely to create better places for teaching and learning, with better lighting, temperature control, acoustics, and air quality. This brochure, targeted to parents and teachers, describes how schools can become more energy efficient.
Order no. DOE/GO-102001-1429.

Energy-Smart Building Choices: How School Administrators and Board Members Are Improving Learning and Saving Money. Office of Building Technology, State and Community Programs (BTS) (Brochure). August 2001; 8 pp. Most K-12 schools could save 25% of their energy costs by being smart about energy. Nationwide, the savings potential is $6 billion. While improving energy use in buildings and buses, schools are likely to create better places for teaching and learning, with better lighting, temperature control, acoustics, and air quality. This brochure, targeted to school administrators and board members, describes how schools can become more energy efficient.
Order no. DOE/GO-102001-1430.



Order no. DOE/GO-102001-1431

Energy-Smart Building Choices: How School Facilities Managers and Business Officials Are Reducing Operating Costs and Saving Money. Office of Building Technology, State and Community Programs (BTS) (Brochure). August 2001; 8 pp. Most K-12 schools could save 25% of their energy costs by being smart about energy. Nationwide, the savings potential is $6 billion. While improving energy use in buildings and buses, schools are likely to create better places for teaching and learning, with better lighting, temperature control, acoustics, and air quality. This brochure, targeted to school facilities managers and business officials, describes how schools can become more energy efficient.
Order no. DOE/GO-102001-1431.

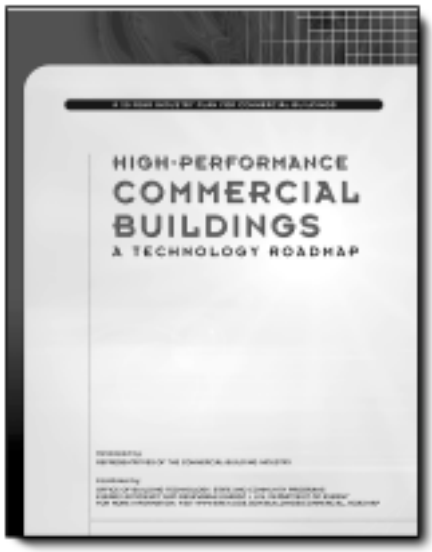
Executive Summary: Window Industry Technology Roadmap. Office of Building Technology, State and Community Programs (BTS) (Brochure). January 2001; 6 pp. An industry-led initiative to identify key goals and strategies for the windows industry with an emphasis on energy conservation, enhanced quality, fast delivery, and low installed cost.
Order no. DOE/GO-102000-1151.

Federal Energy Efficiency through Utility Partnerships. Federal Energy Management Program (FEMP) Program Overview
(Fact Sheet). July 2001; 2 pp. This Utility Program Overview describes how the Federal Energy Management Program (FEMP) utility program assists Federal energy managers. The document identifies both a utility financing mechanism and FEMP technical assistance available to support agencies' implementation of energy and water efficiency methods and renewable energy projects.
Order no. DOE/GO-102001-1337.

First Regional Super ESPC: Success on Kodiak Island, Alaska. Federal Energy Management Program (FEMP) ESPC Case Study
(Fact Sheet). May 2001; 2 pp. This case study about energy saving performance contacts (ESPCs) presents an overview of how the Coast Guard at Kodiak Island, Alaska, established an ESPC contract and the benefits derived from it. The Federal Energy Management Program instituted these special contracts to help federal agencies finance energy-saving projects at their facilities.
Order no. DOE/GO-102001-1309.

Greening Federal Facilities: An Energy, Environmental, and Economic Resource Guide for Federal Facility Managers and Designers; Second Edition (Book). May 2001; 210 pp. This is a nuts-and-bolts resource guide compiled to increase energy and resource efficiency, cut waste, and improve the performance of Federal buildings and facilities. The guide highlights practical actions that facility managers, design and construction staff, procurement officials, and facility planners can take to save energy and money, improve the comfort and productivity of employees, and benefit the environment.
Order no. DOE/GO-102001-1165.

High Performance Commercial Buildings: A Technology Roadmap, Executive Summary. Office of Building Technology, State and Community Programs (BTS)
(Brochure). June 2001; 6 pp.
This brochure provides a summary of plans for integrating research, development, and deployment for future commercial buildings in the U.S.
Order no. DOE/GO-102001-1342.



Order no. DOE/GO-102001-1342

High-Performance Commercial Buildings: A Technology Roadmap. Office of Building Technology, State and Community Programs (BTS) (Brochure). June 2001; 24 pp.
This brochure provides the plan for integrating research, development, and deployment of new technologies to improve future commercial buildings in the United States.
Order no. DOE/GO-102001-1343.

Highlighting High Performance: National Renewable Energy Laboratory's Thermal Test Facility, Golden, Colorado. Office of Building Technology State and Community Programs (BTS)
(Brochure). June 2001; 4 pp.
NREL's Thermal Test Facility in Golden, Colorado, was designed using a whole-building approach—looking at the way the building's systems work together most efficiently. Researchers monitor the performance of the 11,000 square-foot building, which boasts an energy cost savings of 63% for heating, cooling, and lighting. The basic plan of the building can be adapted to many needs, including retail and warehouse space. The Thermal Test Facility contains office and laboratory space where research focuses on the development of energy efficiency and renewable energy technologies that are cost-effective and environmentally friendly.
Order no. DOE/GO-102000-1166.

Highlighting High Performance: National Renewable Energy Laboratory's Visitors Center, Golden, Colorado. Office of Building Technology, State and Community Programs (BTS)
(Brochure). June 2001; 4 pp.
NREL's Visitors Center, also known as the Dan Schaefer Federal Building, is a high-performance building located in Golden, Colorado. The building incorporates passive solar heating, energy-efficient lighting, and other technologies to minimize energy costs and environmental impact. The Visitors Center displays a variety of interactive exhibits on energy efficiency and renewable energy.
Order no. DOE/GO-102001-1281.

Order no. DOE/GO-102001-1281

Highlighting High Performance: The Solar Energy Research Facility, Golden, Colorado. Office of Building Technology, State and Community Programs (BTS)
(Brochure). June 2001; 4 pp.
NREL's Solar Energy Research Facility in Golden, Colorado, uses a stair-step configuration to allow daylight and heat into the office areas, while the laboratories in the back of the building are in a more controlled environment where tight levels of ventilation, humidity, temperature, and light are critical. A unique mechanical system makes the most of the natural environment and the building's design to efficiently heat and cool the building at an annual utility bill savings of almost $200,000 per year.
Order no. DOE/GO-102001-1279.

Insulated Concrete Homes Increase Durability and Energy Efficiency: Mercedes Homes—Melbourne, Florida. Building America Project Summary (Fact Sheet). May 2001; 2 pp. These new houses designed with technical support from the U.S. Department of Energy's Building America Program, save their homeowners money by using energy efficient features such as a high performance heat pump and solar control glazing to reduce cooling costs. Order no. FS-550-30386.

Joshua Tree and Mojave Go Solar. Federal Energy Management Program (FEMP) Technical Assistance Success Story (Fact Sheet). December 2000; 2 pp. This case study describes two of the projects in which the Department of the Interior's National Park Service works with other agencies to replace fossil fuel-powered diesel generators with renewable energy systems. This is done to reduce the greenhouse-gas emissions from using fossil fuels to generate power in remote areas of the parks. Order no. DOE/GO-102000-0755.

Low-Energy Building Design Guidelines: Energy-Efficient Design for New Federal Facilities. Federal Energy Management Program (FEMP) (Booklet). July 2001; 44 pp. This guidebook has been prepared primarily for Federal energy managers to provide practical information for applying the principles of low-energy, whole-building design in new Federal buildings. An important objective of this guidebook is to teach energy managers how to be advocates for renewable energy and energy-efficient technologies, and how to apply specific strategies during each phase of a given project's time line. Order no. DOE/GO-102001-0950.

M&V Guidelines: Measurement and Verification for Federal Energy Projects, Version 2.2 (Book). September 2000; 340 pp. This document contains procedures and guidelines for quantifying the savings resulting from energy efficiency equipment, water conservation, improved operation and maintenance, renewable energy, and cogeneration projects implemented under federal agency energy savings performance contracts. Order no. DOE/GO-102000-0960.

New American Home®: Atlanta, Georgia 2000. Office of Building Technology, State and Community Programs (BTS) (Brochure). July 2001; 4 pp. This annual showcase project designed by committee is co-sponsored by the National Association of Home Builders', National Council of the Housing Industry, BUILDERS Magazine, and Ladies Home Journal. Hedgewood Properties teamed with Building America's IBACOS Consortium and Southface Energy Institute to build a house with a Home Energy Rating Systems level of 90. Order no. FS-550-30722.

Office of Building Technology, State and Community Programs (BTS) Technology Fact Sheets. Buildings that are more energy efficient, comfortable, and affordable...that's the goal of DOE's BTS. The following fact sheets detail the benefits, techniques and design considerations of each technology.

Advanced Wall Framing. Office of Building Technology, State and Community Programs (BTS) Technology (Fact Sheet). October 2000; 6 pp. Order no. DOE/GO-102000-0770.

Combustion Equipment Safety. Office of Building Technology, State and Community Programs (BTS) Technology (Fact Sheet). October 2000; 4 pp. Order no. DOE/GO-102000-0784.

Crawlspace Insulation. Office of Building Technology, State and Community Programs (BTS) Technology (Fact Sheet). December 2000; 4 pp. Order no. DOE/GO-102000-0774.

Passive Solar Design. Office of Building Technology, State and Community Programs (BTS) Technology (Fact Sheet). December 2000; 4 pp. Order no. DOE/GO-102000-0790.

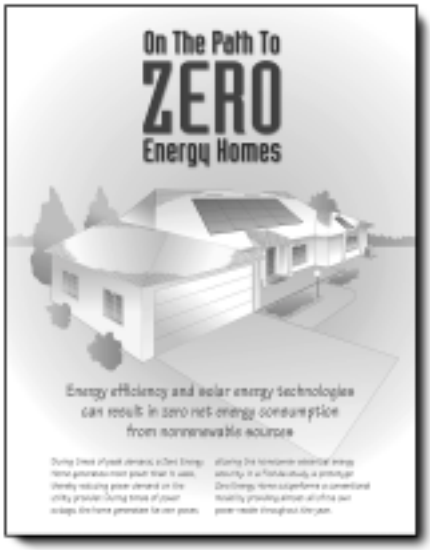
Slab Insulation. Office of Building Technology, State and Community Programs (BTS) Technology (Fact Sheet). December 2000; 4 pp. Order no. DOE/GO-102000-0775.

Wall Insulation. Office of Building Technology, State and Community Programs (BTS) Technology (Fact Sheet). October 2000; 4 pp. Order no. DOE/GO-102000-0772.

Water Heating. Office of Building Technology, State and Community Programs (BTS) Technology (Fact Sheet). August 2001; 4 pp. Order no. DOE/GO-102001-0785.

Weather-Resistive Barriers. Office of Building Technology, State and Community Programs (BTS) (Fact Sheet). October 2000; 4 pp. Order no. DOE/GO-102000-0769.

On the Path to Zero Energy Homes (Brochure). April 2001; 6 pp.
This brochure describes the Zero Energy Homes concept using a case study. Energy efficiency and solar energy technologies can result in zero net energy consumption from nonrenewable sources. During times of peak demand, a Zero Energy Home generates more power than it uses, thereby reducing power demand on the utility provider. During times of power outage, the home generates its own power, allowing the homeowner essential energy security. In a Florida study, a prototype Zero Energy Home outperforms a conventional model by providing almost all of its own power needs throughout the year.
Order no. DOE/GO-102001-1287.



Order no. DOE/GO-102001-1287

Passive Solar Design for the Home. Energy Efficiency and Renewable Energy Clearinghouse (EREC) (Brochure). February 2001; 8 pp.
This fact sheet provides homeowners with an introduction to passive solar design, or climatic design. It explains how they can use windows, walls, and floors to collect, store, and distribute solar energy to heat their homes in the winter, as well as reject solar heat in the summer. It includes information on heat-movement physics; basic solar design techniques—direct gain, indirect gain (Trombe walls), isolated gain (sunspaces), and design for summer comfort; window options for passive solar; and design cost. To obtain printed copies please contact EREC at 1-800-DOE-EREC (1-800-363-3732).
Order no. DOE/GO-102001-1105.

Passive Solar Design: The Foundation for Low-Energy Federal Buildings. Federal Energy Management Program (FEMP) (Fact Sheet). November 2000; 4 pp.
This fact sheet updates a similar one published in 1996 for the DOE's Federal Energy Management Program. This fact sheet describes strategies for implementing passive solar features—such as south-facing windows, daylighting, and thermal mass—into new building designs and retrofits. It also discusses how to design and build low-energy, sustainable buildings by using a whole-building approach to the design process.
Order no. DOE/GO-102000-0728.

Regional Super ESPC Saves Energy and Dollars at NASA Johnson Space Center. Federal Energy Management Program (FEMP) ESPC Case Study (Fact Sheet).
May 2001; 2 pp. This case study about energy saving performance contacts (ESPCs) presents an overview of how the NASA Johnson Space Flight Center established an ESPC contract and the benefits derived from it. FEMP instituted these special contracts to help federal agencies finance energy-saving projects at their facilities.
Order no. DOE/GO-102001-1308.

Solar Electricity for Commercial Applications (Brochure).
May 2001; 4 pp. This brochure describes the benefits of using solar electricity in commercial buildings.
Order no. DOE/GO-102001-1314.

Solar Heated Pools for Your Commercial Property (Brochure).
May 2001; 4 pp. This brochure describes the energy-saving and cost-saving benefits of using solar water heating in commercial swimming pools.
Order no. DOE/GO-102001-1313.

Solar Heated Pools for Your Home (Brochure). May 2001; 4 pp.
This brochure describes the benefits of using solar to heat your home swimming pool.
Order no. DOE/GO-102001-1318.

Solar Hot Water for Your Home (Brochure). May 2001; 4 pp.
This brochure describes the cost-saving and energy-saving benefits of using solar heated water in your home.
Order no. DOE/GO-102001-1317.

Solar Independence (Brochure).
June 2001; 2 pp. The Solar Independence exhibit, on display from June 30–July 15, 2001 at Chicago's Museum of Science and Industry, features a demonstration house, two solar-powered fountains, a bubble machine, and an American flag which consists of solar panels that power all the displays. A kid's quiz is available for children to help them learn more about solar power.
Order no. DOE/GO-102001-1104.

Solar Water Heaters: The Next Generation (Fact sheet).
March 2001; 2 pp. The U.S. Department of Energy is pursuing an aggressive goal to cut the cost of solar water-heating systems in half. Replacing metal and glass components with less expensive plastic ones is a key strategy for that goal. This fact sheet describes new technologies for solar water heaters.
Order no. DOE/GO-102001-1289.

Solar Water Heating for Commercial Applications (Brochure). May 2001; 4 pp.
This brochure describes the energy-saving and cost-saving benefits of using solar water heating in commercial buildings.
Order no. DOE/GO-102001-1312.

Super Energy Savings Performance Contracts (Revision). Federal Energy Management Program (FEMP) Program Overview (Fact Sheet). June 2001; 4 pp. This fact sheet describes the U.S. Department of Energy's (DOE's) streamlined energy savings performance contracting, or "Super ESPC," process, which is managed by DOE's Federal Energy Management Program (FEMP).
Order no. DOE/GO-102001-1160.

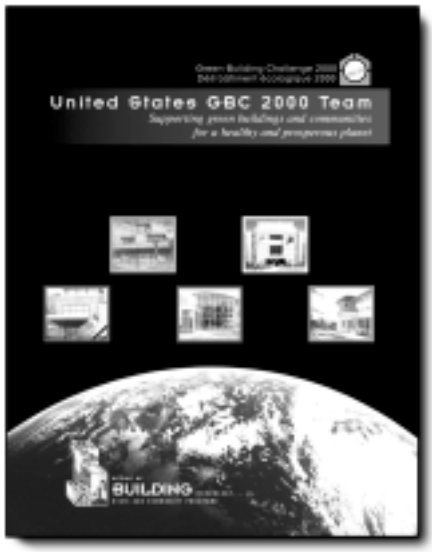
Systems Engineering Saves Energy in Southwest: Pulte Homes—Tucson, Arizona. Building America Project Summary (Fact Sheet).
October 2000; 2 pp. Houses built by Pulte Homes as part of the U.S. Department of Energy's Building America program in Tucson, Arizona, save money for the home owners by reducing electric air-conditioning costs and gas-heating costs with little or no additional investment.
Order no. FS-550-28476.

Technologies for Distributed Energy Resources. Federal Energy Management Program (FEMP) Technical Assistance (Fact Sheet). July 2001; 4 pp. Increases in electric power demand and the need for greater system reliability are driving the development and use of distributed power generation systems. This fact sheet describes distributed energy resources for Federal facilities, and how FEMP is investigating ways to use these alternative energy systems in government facilities to meet greater demand, to increase the reliability of the power-generation system, and to reduce the greenhouse gases associated with burning fossil fuels.
Order no. DOE/GO-102001-1212.

Transpired Air Collectors: Ventilation Preheating (Fact sheet). March 2001; 2 pp. Many commercial and industrial buildings have high ventilation rates. Although all that fresh air is great for indoor air quality, heating it can be very expensive. This fact sheet describes a technology available to use solar energy to preheat ventilation air and dramatically reduce utility bills.
Order no. DOE/GO-102001-1288.

Transpired Solar Walls for Your Commercial Buildings (Brochure). May 2001; 4 pp. This brochure describes the benefits of using transpired solar walls to help heat commercial buildings.
Order no. DOE/GO-102001-1315.

United States GBC 2000 Team: Supporting Green Buildings and Communities for a Healthy and Prosperous Planet. Green Building Challenge 2000 (Brochure). October 2000; 8 pp. This brochure describes five buildings in the United States analyzed by the U.S. Green Building Challenge 2000 team as part of an international effort to measure the performance of green buildings.
Order no. DOE/GO-102000-1129.



Order no. DOE/GO-102000-1129

Utility Energy Services Contracts: Lessons Learned. Federal Energy Management Program (FEMP) (Brochure). August 2001; 12 pp. This brochure describes best practices in the use of Utility Energy Services Contracts. The recommendations were generated by a group of innovative energy managers in many successful projects. The topics include project financing, competition between utility franchises, and water conservation.
Order no. DOE/GO-102001-1336.

Weatherize Your Home—Caulk and Weather Strip. Energy Efficiency and Renewable Energy Clearinghouse (EREC) (Brochure). April 2001; 8 pp. This brochure explains the basics of caulking and weather stripping, and provides a comparison of the types of products available. To obtain printed copies please contact EREC at 1-800-DOE-EREC (1-800-363-3732).
Order no. DOE/GO-102001-1172.

Whole-Building Design Increases Energy Efficiency in a Mixed-Humid Climate: Ideal Homes—Norman, Oklahoma. Building America Project Summary (Fact Sheet). June 2001; 2 pp. New houses designed by Ideal Homes in Norman, Oklahoma with technical support from the U.S. Department of Energy's Building America Program, save their homeowners money by applying the principles of whole-building design.
Order no. FS-550-30504.

Whole-House Approach Benefits Builders, Buyers, and the Environment. Building America Program Overview: Office of Building Technology, State and Community Programs (BTS) (Brochure). January 2001; 8 pp. This document provides an overview of DOE's Building America program. Building America works with the residential building industry to develop and implement innovative building processes and technologies that save builders and homeowners millions of dollars in construction and energy costs.
Order no. BR-550-27745.

Energy Efficiency and Renewable Energy

Advanced Technology and Alternative Fuel Vehicles. Energy Efficiency and Renewable Energy Clearinghouse (EREC) (Brochure). August 2001; 8 pp. This brochure provides an overview of today's alternative fuel choices (including biofuels, biodiesel, electricity, and hydrogen), alternative fuel vehicles and advanced vehicle technologies. To obtain printed copies please contact EREC at 1-800-DOE-EREC (1-800-363-3732).
Order no. DOE/GO-102001-1142.

Concentrating Solar Power: Energy from Mirrors. Energy Efficiency and Renewable Energy Clearinghouse (EREC) (Brochure). March 2001; 8 pp. This brochure explains how concentrating solar power technology works and the three types of systems in development today: trough, dish, and central receiver. To obtain printed copies please contact EREC at 1-800-DOE-EREC (1-800-363-3732).
Order no. DOE/GO-102001-1147.

Making Your Home Energy Smart: Web Resources (Flyer). April 2001; 1 p. This flyer provides a variety of documents and web resources for organizations with information to make your home energy smart.
Order no. MK-500-30048.

Renewable Energy: An Overview. Energy Efficiency and Renewable Energy Clearinghouse (EREC) (Brochure). March 2001; 8 pp.
This fact sheet provides an introduction to renewable energy technologies. To obtain printed copies please contact EREC at 1-800-DOE-EREC (1-800-363-3732).
Order no. DOE/GO-102001-1102.

Small Hydropower Systems. Energy Efficiency and Renewable Energy Clearinghouse (EREC) (Fact Sheet). July 2001; 8 pp. This fact sheet introduces consumers to small hydropower systems, how the systems work and how to assess a site for hydropower suitability. To obtain printed copies please contact EREC at 1-800-DOE-EREC (1-800-363-3732).
Order no. DOE/GO-102000-1173.

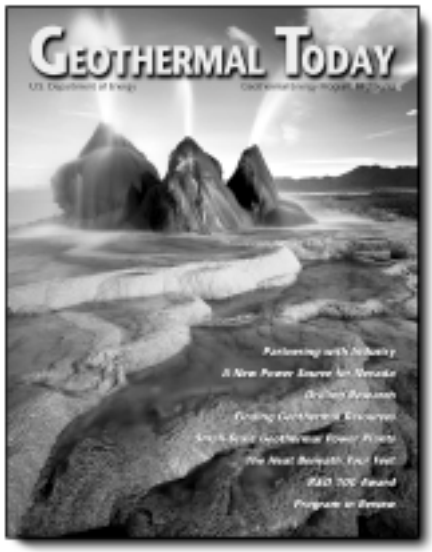
Energy Policy and Analysis

International Performance Measurement & Verification Protocol: Concepts and Options for Determining Energy and Water Savings, Volume I (Book).
January 2001; 101 pp.
This international protocol describes a methodology for measuring energy and water savings.
Order no. DOE/GO-102001-1187.

Order no. DOE/GO-102001-1187 and -1188

International Performance Measurement & Verification Protocol: Concepts and Practices for Improved Indoor Environmental Quality, Volume II (Book).January 2001; 58 pp.
This international protocol describes a methodology for measuring indoor environmental quality.
Order no. DOE/GO-102001-1188.

Geothermal Energy



Order no. DOE/GO-102001-1350

Geothermal Energy—Heat from the Earth: Idaho. GeoPowering the West Series (Fact Sheet).
May 2001; 2 pp. This general use fact sheet outlines geothermal energy in Idaho. Idaho holds enormous resources—among the largest in the United States—of this clean, reliable form of energy that to date have barely been tapped.
Order no. DOE/GO-102001-1350.

Geothermal Energy—Heat from the Earth: Nevada. GeoPowering the West Series (Fact Sheet).
July 2001; 2 pp. This general use fact sheet outlines geothermal energy in Nevada. Nevada holds the largest amount of untapped geothermal resources in the U.S., with a potential of 2,500 to 3,700 megawatts of electricity.
Order no. DOE/GO-102001-1432.

Geothermal Today: 2000 Geothermal Energy Program Highlights (Book).
August 2001; 40 pp. This book highlights research and industry developments of geothermal energy for 2000 and 2001.
Order no. DOE/GO-102001-1441.

Industry

1,3-Propanediol Made From Fermentation-Derived Malonic Acid. Office of Industrial Technologies (OIT) Agriculture Project Fact Sheet.
September 2001; 2 pp. 1,3-Propanediol is one of two ingredients used in producing polytrimethylene terephthalate (PTT), a polymer which can be used in polyester and nylon applications. Researchers are developing a process to ferment biomass feedstock to malonic acid using filamentous fungi and then catalytically convert malonic acid to 1,3-propanediol.
Order no. DOE/GO-102001-1458.

Allied Partners: Your Connection to Efficiency, Productivity, and Profits. Office of Industrial Technologies (OIT) Industries of the Future BestPractices (Brochure).
February 2001; 2 pp. This brochure describes the Office of Industrial Technologies' Allied Partner initiative. Information on how to become an Allied Partner, benefits of joining, and some examples of recent Allied Partner activity is included.
Order no. DOE/GO-102001-1215.

Clean Fractionation for the Production of Cellulose Plastics. Office of Industrial Technologies (OIT) Agriculture Project Fact Sheet. September 2001; 2 pp. Clean Fractionation is a new technology that enables energy-efficient and environmentally clean separation of cellulose, chemicellulose, and lignin from lignocellulosic biomass.
Order no. DOE/GO-102001-1457.

Combustion—Research and Development. Office of Industrial Technologies (OIT) (Brochure). February 2001; 8 pp. This brochure describes the Office of Industrial Technologies' Combustion initiative, a research and development program that works with manufacturers to increase the energy efficiency of heat-delivery systems.
Order no. DOE/GO-102001-1213.

Education Initiative. Office of Industrial Technologies (OIT) Agriculture Project Fact Sheet. September 2001; 2 pp. The Department of Energy launched the Education Initiative in 1999 to promote the establishment of multi-disciplinary, graduate-level education and research programs.
Order no. DOE/GO-102001-1460.

Order no. DOE/GO-102001-1290

Energy Matters (Newsletter). This bimonthly newsletter from DOE's Office of Industrial Technologies promotes the use of energy-efficient industrial systems.

Energy Matters—May/June 2001 May 2001; 8 pp.
Order no. DOE/GO-102001-1357.

Energy Matters—March/April 2001 March 2001; 8 pp.
Order no. DOE/GO-102001-1290.

Energy Matters—January/February 2001
January 2001; 6 pp.
Order no. DOE/GO-102000-1183.

Energy Matters—November/December 2000
November 2000; 8 pp.
Order no. DOE/GO-102000-1135.

Functionalized Vegetable Oils for Utilization as Polymer Building Blocks. Office of Industrial Technologies (OIT) Agriculture Project Fact Sheet.
September 2001; 2 pp. Vegetable oils such as soybean oil will be converted to novel polymers using hydroformylation and other catalytic processes. These polymers can be used in the construction, automotive, packaging, and electronic sectors.
Order no. DOE/GO-102001-1459.

Hosting a Showcase Demonstration Event. Industries of the Future BestPractices Fact Sheet. October 2000; 2 pp. This fact sheet describes how industrial manufacturers can showcase energy efficiency technologies implemented in their plants. Companies can gain access to a wide variety of technical assistance and resources when they agree to host a showcase demonstration and this fact sheet explains how to participate.
Order no. DOE/GO-102000-1136.

Industrial Assessment Centers. Office of Industrial Technologies (OIT) (Brochure). January 2001; 6 pp. The Office of Industrial Technologies' Industrial Assessment Centers (IACs), based at universities across the country, provide small and mid-sized manufacturers with no-cost energy assessments.
Order no. DOE/GO-102001-1167.

Industrial Membrane Filtration and Fractal Separation Systems. Office of Industrial Technologies (OIT) Agriculture Project Fact Sheet. September 2001; 2 pp. Improved membrane filtration and separation technologies reduce energy use, capital and maintenance costs of separation and purification systems for biomass sugars. Other areas of application include waste treatment, and chemical and food processing.
Order no. DOE/GO-102001-1456.

Inventions and Innovation Project Fact Sheets and Success Stories. The U.S. Department of Energy's Inventions and Innovation Program can help an individual inventor or a small business develop and market energy-saving ideas. The following fact sheets take a look at some of the technologies developed through the program.

Advanced Method of Inspecting Tubular Goods and Refinery Process Piping. Inventions and Innovation Petroleum Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1195.

Deep-Discharge Zinc-Bromine Battery Module Offers Megawatts Capacity. Inventions and Innovation Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1169.

Distillation Column Flooding Predictor. Inventions and Innovations Petroleum Project Fact Sheet. January 2001; 2 pp.
Order no. DOE/GO-102001-1036.

Dual Fuel Conversion System for Diesel Engines. Inventions and Innovation Project Fact Sheet. January 2001; 2 pp.
Order no. DOE/GO-102001-0862.

Early-Warning Device for Prevention of Destructive Arc Faults. Inventions and Innovation Project Fact Sheet.
October 2000; 2 pp.
Order no. DOE/GO-102000-0848.

Energy Saving Method of Manufacturing Ceramic Products from Waste Glass. Inventions and Innovation Glass Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1035.

Fabrication and Testing of a Prototype Ceramic Furnace Coil for Chemical and Petrochemical Processing. Inventions and Innovation Industrial Materials for the Future Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1039.

Fresh Way to Cut Combustion, Crop and Air Heating Costs Avoids Million BTU Purchases. Inventions and Innovation Combustion Success Story (Fact Sheet). January 2001; 2 pp.
Order no. DOE/GO-102001-0874.

High-Speed Permanent Magnet Motor Development for Advanced Cooling Technology. Inventions and Innovation Project Fact Sheet.
October 2000; 2 pp.
Order no. DOE/GO-102000-0844.

Highly Efficient Rapid Tooling Using Optimized Cooling Passages. Inventions and Innovation Metal Casting Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-0847.

Industrial Vacuum Bagging Apparatus for Composite Lamina Manufacturers Reduces Energy Use and Waste. Inventions and Innovation Success Story (Fact Sheet).
January 2001; 2 pp.
Order no. DOE/GO-102001-0852.

Low-Cost Synthesis and Consolidation of Titanium Carbide. Inventions and Innovation Industrial Materials for the Future Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1021.

Low-Energy Alternative to Commercial Silica-Based Glass Fibers. Inventions and Innovation Glass Project Fact Sheet. January 2001; 2 pp.
Order no. DOE/GO-102001-1140.

Low-Frequency Sonic Mixing Technology. Inventions and Innovation Chemicals Project Fact Sheet. January 2001; 2 pp.
Order no. DOE/GO-102001-0843.

Miniature, Inexpensive, Amperometric Oxygen Sensor. Inventions and Innovation Sensors and Controls Project Fact Sheet. January 2001; 2 pp.
Order no. DOE/GO-102001-0849.

PowerGuard®. Inventions and Innovation Success Story
(Fact sheet). October 2000; 2 pp.
Order no. DOE/GO-102000-0876.

Pulsed Laser Imager for Detecting Emissions of Hydrocarbons and Volatile Organic Compounds. Inventions and Innovation Petroleum Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1029.

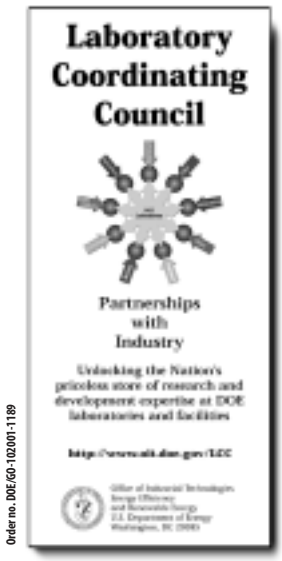
Replacement of Thermally Produced Calcined Clay. Inventions and Innovation Forest Products Project Fact Sheet. October 2000; 2 pp.
Order no. DOE/GO-102000-0875.

Self-Agitating Soap Stick. Inventions and Innovation Petroleum Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1170.

Simple Design and Manufacturing Process for High-Intensity Silicon Vertical Multi-Junction Solar Cells. Inventions and Innovation Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1038.

Titanium Matrix Composite Tooling Material for Enhanced Manufacture of Aluminum Die Castings. Inventions and Innovation Metalcasting Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1030.

Laboratory Coordinating Council: Partnerships with Industry
(Revised Brochure). January 2001; 2 pp.
The Laboratory Coordinating Council, working through the Department of Energy's Office of Industrial Technologies, coordinates partnerships between industry, academia, and the 16 U.S. national laboratories and facilities.
Order no. DOE/GO-102001-1189.



New Continuous Isosorbide Production from Sorbitol. Office of Industrial Technologies (OIT) Agriculture Project Fact Sheet. September 2001; 2 pp. Isosorbide is a new polymer additive derived from corn (via sorbitol) that when copolymerized with polyethylene terephthalate (PET), increases the strength and rigidity of the plastic. This project will develop an economically-viable, continuous catalytic process to convert sorbitol to isosorbide.
Order no. DOE/GO-102001-1461.

NICE³ Project Fact Sheets.
NICE³ (National Industrial Competitiveness through Energy, Environment and Economics) is a U.S. Department of Energy cost-sharing grant program that works to advance U.S. industrial competitiveness by providing financial assistance to state and industry partnerships demonstrating energy-efficient, clean production technologies. The following fact sheets take a look at some of the technologies developed through the program.

Closed-Cycle Bleach Kraft Pulp Production: NICE³ Forest Products Project Fact Sheet.
October 2000; 2 pp.
Order no. DOE/GO-102000-0901.

Demonstration of a High-Temperature, Corrosion-Resistant Coating for Recuperators. NICE³ Aluminum Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-0942.

Hot Strip Mill Transfer Bar Rapidfire™ Edge Heat Project: NICE³ Steel Project Fact Sheet (Revision). October 2000; 2 pp.
Order no. DOE/GO-102000-0947.

Increasing Productivity and Reducing Emissions through Enhanced Control of Die Casting Lubricants: NICE³ Metalcasting Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-0946.

Magnetic Elutriation Technology for Clean and Efficient Processing of Iron Ore: NICE³ Mining Project Fact Sheet. January 2001; 2 pp.
Order no. DOE/GO-102001-1045.

Supercritical Purification of Compounds Used for Combinatorial Chemical Analyses. NICE³ Chemicals Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1044.

Three-Phase Rotary Separator Turbine. NICE³ Petroleum Project Fact Sheet.
January 2001; 2 pp.
Order no. DOE/GO-102001-1046.

Office of Industrial Technologies (OIT) BestPractices Case Studies. BestPractices is part of the Office of Industrial Technologies' (OIT's) Industries of the Future strategy, which helps the country's most energy-intensive industries improve their competitiveness. BestPractices brings together the best-available and emerging technologies and practices to help companies begin improving energy efficiency, environmental performance, and productivity right now. These case studies profile industrial firms who are implementing energy efficient technologies and system improvements into their manufacturing processes, and document the activities, savings, and lessons learned on these projects.

Alcoa North American Extrusions Implements Energy Use Assessments at Multiple Facilities. Office of Industrial Technologies (OIT) BestPractices Aluminum Assessment Case Study (Brochure). August 2001; 8 pp.
Order no. DOE/GO-102001-1437.

Compressed Air System Enhancement Increases Efficiency and Provides Energy Savings at a Circuit Board Manufacturer (Sanmina Plant, Oswego, New York). Office of Industrial Technologies (OIT) BestPractices Technical Case Study (Brochure). June 2001; 4 pp.
Order no. DOE/GO-102001-1328.

Compressed Air System Modifications Improve Efficiency at a Plastics Blow Molding Plant (Southeastern Container Plant). Office of Industrial Technologies (OIT) BestPractices Technical Case Study (Brochure). June 2001; 4 pp.
Order no. DOE/GO-102001-1326.

Compressed Air System Optimization Saves Energy and Improves Production at a Synthetic Textile Plant. Office of Industrial Technologies (OIT) BestPractices Technical Case Study (Brochure).
May 2001; 6 pp.
Order no. DOE/GO-102001-1329.

Compressed Air System Optimization Saves Energy and Improves Production at a Textile Manufacturing Mill (Peerless Division, Thomaston Mills, Inc.). Office of Industrial Technologies (OIT) BestPractices Technical Case Study (Brochure). June 2001; 6 pp.
Order no. DOE/GO-102001-1327.

Compressed Air System Redesign Results in Savings and Increased Production at a Fuel System Plant (Caterpillar's Pontiac Plant). Office of Industrial Technologies (OIT) BestPractices Technical Case Study (Brochure). June 2001; 4 pp.
Order no. DOE/GO-102001-1322.

Compressed Air System Renovation Project Improves Production at a Food Processing Facility. Office of Industrial Technologies (OIT) BestPractices Technical Case Study (Brochure). June 2001; 4 pp.
Order no. DOE/GO-102001-1330.

Compressed Air System Upgrade Improves Production at a Steel Mill (The U.S. Steel Mon Valley Works). Office of Industrial Technologies (OIT) BestPractices Steel Project Case Study (Brochure).
June 2001; 4 pp.
Order no. DOE/GO-102001-1323.

Corporate Energy Conservation Program for Alcoa North American Extrusions. Office of Industrial Technologies (OIT) Aluminum BestPractices Management Case Study (Brochure). August 2001; 4 pp.
Order no. DOE/GO-102001-1433.

IAC Energy Assessment of Spanish Fork Plant. Office of Industrial Technologies (OIT) Aluminum BestPractices Assessment Case Study (Brochure). August 2001; 4 pp.
Order no. DOE/GO-102001-1375.

Installation of Reverse Osmosis Unit Reduces Refinery Energy Consumption. Office of Industrial Technologies (OIT) BestPractices Petroleum Technical Case Study (Brochure).
August 2001; 4 pp.
Order no. DOE/GO-102001-1355.

Kennecott Utah Copper Retrofits Smelting Applications from Air-Fuel to Oxy-Fuel Burners. Office of Industrial Technologies (OIT) BestPractices Mining Technical Case Study (Brochure).
August 2001; 4 pp.
Order no. DOE/GO-102001-1373.

Modernization of Electrolysis System at MagCorp Reduces Costs and Waste. Office of Industrial Technologies (OIT) BestPractices Mining Technical Case Study (Brochure).
August 2001; 4 pp.
Order no. DOE/GO-102001-1374.

Motor Assembly Plant Saves $85,000 with Compressed Air System Improvements (Bodine Electric's Chicago Facility). Office of Industrial Technologies (OIT) BestPractices Technical Case Study (Brochure). June 2001; 4 pp.
Order no. DOE/GO-102001-1324.

Power Factor Study Reduces Energy Costs at Aluminum Extrusion Plant. Office of Industrial Technologies (OIT) BestPractices Aluminum Technical Case Study (Brochure).
August 2001; 4 pp.
Order no. DOE/GO-102001-1358.

Office of Industrial Technologies (OIT) Energy Tips Fact Sheets. This series of Energy Tips fact sheets focuses on plant systems, where significant efficiency improvements and savings can be achieved. Industry gains easy access to near-term and long-term solutions for improving the performance of motor, steam, compressed air, and process heating systems.

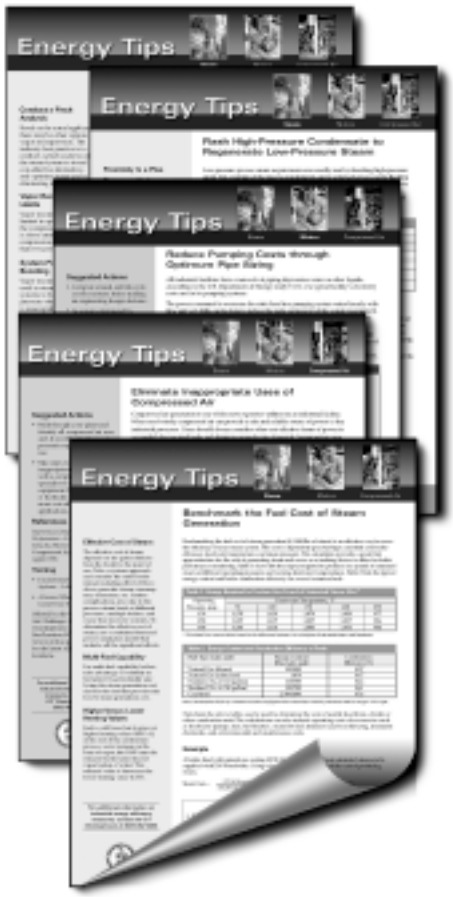
Benchmark the Fuel Cost of Steam Generation. Office of Industrial Technologies (OIT) Steam Energy Tips Fact Sheet #15. December 2001; 2 pp.
Order no. DOE/GO-102000-1115.

Deaerators in Industrial Steam Systems. Office of Industrial Technologies (OIT) Steam Energy Tips Fact Sheet #18.
December 2000; 2 pp.
Order no. DOE/GO-102000-1118.

Determine the Cost of Compressed Air for Your Plant. Office of Industrial Technologies (OIT) Compressed Air Energy Tips Fact Sheet #1.
December 2000; 2 pp.
Order no. DOE/GO-102000-0986.

Eliminate Inappropriate Uses of Compressed Air. Office of Industrial Technologies (OIT) Compressed Air Energy Tips Fact Sheet #2.
December 2000; 2 pp.
Order no. DOE/GO-102000-0987.

Flash High-Pressure Condensate to Regenerate Low-Pressure Steam. Office of Industrial Technologies (OIT) Steam Energy Tips Fact Sheet.
May 2001; 2 pp.
Order no. DOE/GO-102001-1275.



Install Removable Insulation on Uninsulated Valves and Fittings. Office of Industrial Technologies (OIT) Steam Energy Tips Fact Sheet #17.
December 2000; 2 pp.
Order no. DOE/GO-102000-1117.

Minimize Boiler Short Cycling Losses. Office of Industrial Technologies (OIT) Steam Energy Tips Fact Sheet #16.
December 2000; 2 pp.
Order no. DOE/GO-102000-1116.

Minimize Compressed Air Leaks. Office of Industrial Technologies (OIT) Compressed Air Energy Tips Fact Sheet #3.
December 2000; 2 pp.
Order no. DOE/GO-102000-0988.

Use a Vent Condenser to Recover Flash Steam Energy. Office of Industrial Technologies (OIT) Steam Energy Tips Fact Sheet.
May 2001; 2 pp.
Order no. DOE/GO-102001-1276.

Use Low-Grade Waste Steam to Power Absorption Chillers. Office of Industrial Technologies (OIT) Steam Energy Tips Fact Sheet.
May 2001; 2 pp.
Order no. DOE/GO-102001-1277.

Use Vapor Recompression to Recover Low-Pressure Waste Steam. Office of Industrial Technologies (OIT) Steam Energy Tips Fact Sheet.
May 2001; 2 pp.
Order no. DOE/GO-102001-1274.

Office of Industrial Technologies (OIT) Industry of the Future Brochures. OIT encourages industry-wide efforts to boost resource productivity through a strategy called Industries of the Future (IOF), partnerships between the Department of Energy and industry established to increase industrial energy and cost efficiency. The following brochures describe the partnering activities, information on what works, examples of successful partnerships, financial assistance available and the benefits of partnering with OIT for each industry.

Agriculture—Industry of the Future. Office of Industrial Technologies (OIT) (Brochure).
February 2001; 8 pp.
Order no. DOE/GO-102001-1152.

Aluminum—Industry of the Future: Office of Industrial Technologies (OIT) (Brochure).
February 2001; 8 pp.
Order no. DOE/GO-102001-1153.

BestPractices—Industries of the Future. Office of Industrial Technologies (OIT) (Brochure).
February 2001; 8pp.
Order no. DOE/GO-102001-1209.

Chemicals—Industry of the Future. Office of Industrial Technologies (OIT) (Brochure).
February 2001; 8 pp.
Order no. DOE/GO-102001-1154.

Financial Assistance—Industries of the Future. Office of Industrial Technologies (OIT) (Brochure)
February 2001; 8 pp.
Order no. DOE/GO-102001-1210.

Forest Products—Industry of the Future: Office of Industrial Technologies (OIT) (Brochure).
January 2001; 8pp.
Order no. DOE/GO-102000-1146.

Glass—Industry of the Future. Office of Industrial Technologies (OIT) (Brochure).
February 2001; 8 pp.
Order no. DOE/GO-102001-1155.

Metal Casting—Industry of the Future. Office of Industrial Technologies (OIT) (Brochure).
February 2001; 8 pp.
Order no. DOE/GO-102001-1156.

Mining—Industry of the Future. Office of Industrial Technologies (OIT) (Brochure).
February 2001; 8 pp.
Order no. DOE/GO-102001-1157.

Petroleum—Industry of the Future. Office of Industrial Technologies (OIT) (Brochure). February 2001; 8 pp.
Order no. DOE/GO-102001-1158.

Steel—Industry of the Future. Office of Industrial Technologies (OIT) (Brochure). February 2001; 8 pp.
Order no. DOE/GO-102001-1159.

OIT Times—Fall 2001, Vol. 4, No. 4 (Newsletter). September 2001; 12 pp. The Fall 2001 edition of the OIT Times newsletter, a quarterly publication produced by the Office of Industrial Technologies covers the States Industries of the Future program and related activities in Maine, New Hampshire, Ohio, West Virginia, Utah, Washington, Tennessee, Kentucky, Massachusetts, Texas, and Wisconsin.
Order no. DOE/GO-102001-1466.

OIT Times—Summer 2001, Vol. 4, No. 3 (Newsletter). June 2001; 8 pp. The Summer 2001 edition of the OIT Times newsletter, a quarterly publication produced by the Office of Industrial Technologies, covers the return on federal investment in OIT-sponsored R&D technologies and contains lists of emerging technologies in each Industry of the Future.
Order no. DOE/GO-102001-1368.

OIT Times—Spring 2001, Vol. 4, No. 2 (Newsletter). April 2001; 16 pp. The Spring 2001 edition of the OIT Times newsletter, a quarterly publication produced by the Office of Industrial Technologies, covers the technical sessions, related activities, and new OIT publications that debuted at Expo IV (held February 19-22, 2001).
Order no. DOE/GO-102001-1292.

OIT Times—Winter 2001, Vol. 4, No. 1 (Newsletter). December 2000; 12 pp. The Winter 2001 edition of the OIT Times newsletter, a quarterly publication produced by the Office of Industrial Technologies, focuses on OIT's upcoming Expo, the 4th Biennial Industrial Energy Efficiency Symposium and Expo, held February 19–22, 2001, in Washington, D.C.
Order no. BR-810-29241

OIT Tools Can Help You Improve Productivity. Office of Industrial Technologies (OIT) Industries of the Future BestPractices Tools and Information Fact Sheet. August 2001; 2 pp. OIT provides a wide range of resources to help U.S. industry save energy and money, reduce emissions and waste, and increase productivity and competitiveness. This fact sheet outlines where to find the available information.
Order no. DOE/GO-102001-1349.

Plant Profiles: Industrial Energy Management in Action. Office of Industrial Technologies (OIT) (Brochure). February 2001; 24 pp. This brochure profiles industrial manufacturing firms who are achieving significant energy savings in their plants. The DOE Office of Industrial Technologies six plant-of-the-year nominees are featured, and an additional 10 projects from other companies are also highlighted. Information on OIT's awards and recognition process, and information on OIT and BestPractices is also included.
Order no. DOE/GO-102001-1208.

Plant-Wide Assessments Help Industry Identify Energy and Cost Savings Opportunities. Office of Industrial Technologies (OIT) Industries of the Future BestPractices Plant-Wide Assessments Fact Sheet. August 2001; 2 pp. This fact sheet details how plant-wide energy assessments help identify overall energy use in manufacturing processes and highlights opportunities for best energy management practices for industry.
Order no. DOE/GO-102001-1356.

Profiles and Partnerships. Office of Industrial Technologies (OIT) (Booklet). January 2001; 128 pp. This brochure describes the Office of Industrial Technologies (OIT) Industries of the Future (IOF) Strategy. Through the IOF initiatives, OIT partners with the nation's nine most energy intensive industries to improve their energy and cost efficiencies.
Order no. DOE/GO-102001-1193.

Pump Life Cycle Costs: A Guide to LCC Analysis for Pumping Systems—Executive Summary (Brochure). January 2001; 18 pp. This brochure is a management tool that can help companies minimize waste and maximize energy efficiency for many types of systems including pumping systems.
Order no. DOE/GO-102001-1190.

Reduce Your Industrial Natural Gas Bill: Ten Timely Tips (Brochure). January 2001; 4 pp. This brochure outlines ways to reduce industrial natural gas costs. It is also included in the January/February 2001 issue of Energy Matters (DOE/GO-102000-1183).
Order no. DOE/GO-102001-1192.

Training Sessions Provide Ways to Improve Industrial System Efficiency. Industries of the Future BestPractices Training Fact Sheet. January 2001; 2 pp. This fact sheet describes training available for U.S. industry on ways to achieve energy efficiency through systems improvements.
Order no. DOE/GO-102001-1191.

Vision: Results for Today. Leadership for Tomorrow. Office of Industrial Technology (OIT) Corporate Brochure. February 2001; 16 pp. This brochure provides an overview of the Office of Industrial Technologies and its research, development, and deployment efforts to increase industrial energy efficiency.
Order no. DOE/GO-102001-1164.

National Renewable Energy Laboratory

National Renewable Energy Laboratory Institutional Plan 2001-2005 (Book). April 2001; 122 pp. The NREL Institutional Plan details the mission and vision of the Laboratory, its capabilities, the R&D it performs, and the programs it manages for the Department of Energy—in particular, for the Office of Energy Efficiency and Renewable Energy and for the Office of Science. It also describes recent accomplishments in each program, and the direction planned for each program for the next five years. The document also details special RD&D initiatives being pursued by the Laboratory, and it describes the Laboratory's physical plant and how NREL manages its operations to provide America with a world-class institute for R&D in the renewable energy and energy efficiency sciences and technologies.
Order no. MP-600-29306.

Order no. BK-310-29183 or EL-310-29825 (CD)

National Renewable Energy Laboratory 2000 Information Resources Catalog (Book). January 2001; 92 pp. This is the seventh annual catalog listing documents produced by NREL during the last fiscal year. Each year the catalog is mailed to state energy offices, DOE support offices, and to anyone looking to find out more information about NREL's activities and publications. This year the catalog is also available in a CD-ROM Version containing PDFs of many of the general interest publications and technical reports.
Order no. BK-310-29183.
Order no. EL-310-29825 (CD-ROM).

Order no. BR-340-30998

NREL Research Participant Program (Brochure). September 2001; 6 pp. This Human Resources brochure highlights NREL's Research Participant Program that reaches out to student interns, postdoctoral researchers, and research associates.
Order no. BR-340-30998.

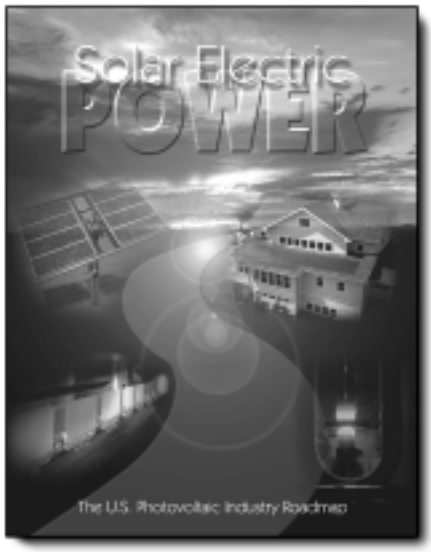
State and Local Initiatives: Your Bridge to Renewable Energy and Energy Efficiency Resources (Brochure). August 2001; 4 pp. This brochure for local and state policymakers, informs them about the State and Local Initiatives team at the National Renewable Energy Laboratory. The brochure outlines the benefits of using renewables and energy efficiency, the benefits of using the State and Local Initiatives team as a liaison to the wealth of information at NREL, and some of the services and resources available.
Order no. BR-710-28871.

Solar Energy–Photovoltaics

NREL PV Working With Industry, Fourth Quarter 2000 (Newsletter). January 2001; 12 pp. NREL PV Working With Industry is a quarterly newsletter devoted to the research, development, and deployment performed by NREL staff in concert with their industry and university partners. This issue features an article on the IEEE PVSC conference held in Alaska in September 2000, an article about two new R&D initiatives, and an article on cooperative research efforts between the NCPV and the Solar Buildings and Concentrating Solar Power programs.
Order no. BR-520-29133.

Order no. DOE/GO-102001-1168

Photovoltaic Energy Program Overview, Fiscal Year 2000 (Booklet). February 2001; 28 pp. This report details the FY 2000 achievements of DOE's PV Program in the categories of R&D, Technology Development, and Systems Engineering and Applications. Highlights include development of a record-breaking concentrator solar cell that is 32.4% efficient; fabrication of a record CIGS cell at 18.8% efficiency; sharing an R&D 100 award with Siemens Solar Industries and the California Energy Commission for development and deployment of commercial CIS thin-film modules; and support for the efforts of the PV Industry Roadmap Workshop.
Order no. DOE/GO-102001-1168.



Order no. BR-520-30150

Solar Electric Power—The U.S. Photovoltaic Industry Roadmap (Booklet). May 2001; 36 pp.
This document provides the U.S. photovoltaic industry's plan for the next 20 years. It describes the roles of industry and government in the areas of research and development, market opportunities, and policy and institutional initiatives, covering the near term (1-3 years), mid term (4-10 years), and long term (11-20). Prepared by Energetics, Incorporated, Columbia, Maryland, under contract to Sandia National Laboratories. Facilitated by the National Center for Photovoltaics. Produced and printed by the United States photovoltaics industry.
Order no. BR-520-30150.

Solar Electricity: The Power of Choice, First Quarter 2001 (Newsletter). April 2001; 12 pp.
This quarterly newsletter (formerly NREL PV Working With Industry) is devoted to the research and development activities performed by NREL staff in concert with their industry and university partners. This issue is devoted to NREL's renewables workshop for farmers and ranchers, presented at the National Western Stock Show in Denver; the PV Industry Roadmap; the Siemens Solar Industries celebration of 200 MW of cumulative PV module production; and a profile of "PV Beyond the Horizon" initiative. The editorialist for this issue is Tim Anderson of the University of Florida.
Order no. BR-520-29629.

Solar Electricity: The Power of Choice, Second Quarter 2001 (Newsletter). August 2001; 12 pp.
This quarterly newsletter (formerly NREL PV Working With Industry) is devoted to the Research and Development (R&D) activities performed by NREL staff in concert with their industry and university partners. This issue is devoted to demonstrating that PV R&D is a valuable investment for the U.S.
Order no. BR-520-30280.

Order no. BR-520-30280

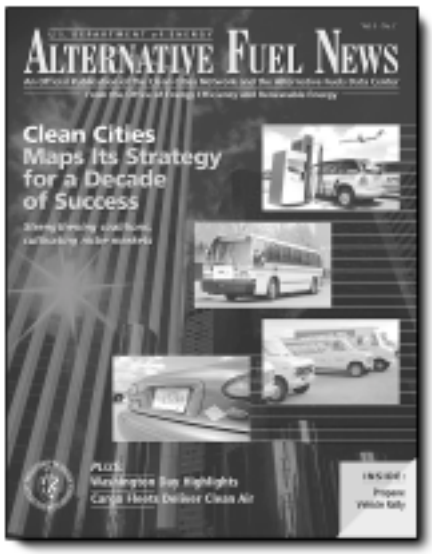
U.S. Department of Energy Photovoltaic Energy Program Contract Summary: Fiscal Year 2000 (Book). February 2001; 330 pp.
This report summarizes the in-house and subcontracted R&D activities under the National Center for Photovoltaics (NCPV) and DOE National Photovoltaics Program for FY 2000. The mission of the DOE National Photovoltaics Program is to make PV a significant part of the domestic economy-as an industry and an energy resource. This Contract Summary documents the 179 research projects supported by the PV Program, performed by 107 organizations in 32 states, including 69 projects performed by universities and 60 projects performed by industry partners. The efforts described in this summary represent steps toward improving PV manufacturing, performance, cost, and applications, and toward accomplishing the DOE PV Program's overall mission.
Order no. DOE/GO-102001-1198.

Transportation

2001 Joint ADVISOR/PSAT Vehicle Systems Modeling User Conference Proceedings, 28–29 August 2001, Southfield, Michigan (CD-ROM). August 2001. The Conference provided an opportunity for engineers in the automotive industry and the research environment to share their experiences in vehicle systems modeling using ADVISOR and PSAT, vehicle systems modeling tools.
Order no. DOE/GO-102001-1435.

Airport-Based Alternative Fuel Vehicle Fleets. Clean Cities Alternative Fuel Information Series (Brochure). February 2001; 6 pp.
This brochure features an account of alternative fuel vehicle usage and success highlighting three major airports.
Order no. FS-540-28353.

Alternative Fuel News: Official Publication of the Clean Cities Network and the Alternative Fuels Data Center, Vol. 5, No. 2 (Newsletter). July 2001; 16 pp.
This issue features articles on the proposed National Energy Policy; the 2001 National Clean Cities Conference; Clean Cities Coalition Award and National Partner Award recipients; station cars; and new emissions-reducing incentives in Texas.
Order no. BR-540-30297.



Order no. BR-540-29699

Alternative Fuel News: Official Publication of the Clean Cities Network and the Alternative Fuels Data Center, Vol. 5, No. 1 (Newsletter). May 2001; 16 pp. This issue features articles on recent changes to the Clean Cities Program; the SuperTruck student engineering challenge; and a propane vehicle rally and conference in Kansas City, MO.
Order no. BR-540-29699.

Alternative Fuel News: Official Publication of the Clean Cities Network and the Alternative Fuels Data Center; Vol. 4, No. 4 (Newsletter). February 2001; 16 pp. This issue includes articles on the emerging opportunity for the growing market of AFV resales, the increased use of E85 ethanol in Minnesota, and an interview with the Fleet/AFV Brand Team Manager at Ford Motor Company.
Order no. BR-540-29013.

Alternative Fuel News: Official Publication of the Clean Cities Network and the Alternative Fuels Data Center; Vol. 4, No. 3 (Newsletter). December 2000; 16 pp. This issue focuses on transit buses and refuse haulers. Many transit agencies and waste management companies are investigating alternatives to traditional diesel buses and refuse haulers.
Order no. BR-540-28718.

Alternative Fuel Transit Buses: DART's (Dallas Area Rapid Transit) LNG Bus Fleet Final Results (Brochure). October 2000; 46 pp. In 1998, Dallas Area Rapid Transit began operating a large fleet of heavy-duty buses powered by liquefied natural gas. As part of a $16 million commitment to alternative fuels, DART operates 139 LNG buses serviced by two new LNG fueling stations.
Order no. BR-540-28739.

Atlanta's Kent Igleheart Brings Home 2001 Outstanding Coordinator Award. Clean Cities Alternative Fuel Information Series Fact Sheet. July 2001; 2 pp. This fact sheet includes an overview of the accomplishments of Atlanta's Clean Cities coordinator Kent Igleheart, who received the 2001 Outstanding Coordinator Award.
Order no. FS-540-30708.

Biodiesel Offers Fleets a Better Alternative to Petroleum Diesel. Clean Cities Technical Assistance Fact Sheet. May 2001; 4 pp. From cost to availability, this fact sheet presents the various the advantages of using biodiesel fuel in fleet vehicles. It also offers a number of real-life success stories.
Order no. FS-540-30136.

Clean Cities Coalition Awards. Clean Cities Alternative Fuel Information Series Fact Sheet. May 2001; 2 pp. This fact sheet introduces the winners of the 2001 Clean Cities coalition awards, including the Empire, Movers & Shakers, Gold Star, Few Good Fleets and Madison Avenue awards.
Order no. FS-540-30085.

Clean Cities National Partner Awards (Fact Sheet). May 2001; 4 pp. This fact sheet briefly describes each of the 10 winners of the Clean Cities National Partner Awards.
Order no. FS-540-30086.

Clean Cities Technical Assistance (Tiger Teams). Clean Cities Alternative Fuel Information Series Technical Assistance Fact Sheet. January 2001; 2 pp. This fact sheet presents a description of Tiger Teams, sponsored by DOE and NREL, to help implement the use of alternative fuels by constituents of DOE's Clean Cities coalitions.
Order no. FS-540-29662.

Commercially Available Hybrid Electric, Low-Speed Vehicles not Eligible for EPAct Credit. EPAct Fleet Information and Regulations, State and Alternative Fuel Provider Program Compliance Advisory Fact Sheet. September 2001; 1 pp. State and alternative fuel provider fleets are updated on DOE's position on HEVs and LSVs.
Order no. DOE/GO-102001-1438.

Driving the Nation Toward a Clean Energy Future. Fuels Utilization Program Fact Sheet. December 2000; 2 pp. NREL's Center for Transportation Technologies and Systems' Fuel Utilization Program is developing and demonstrating engine and fuel technologies that allow alternative and advanced petroleum fuels to compete with their conventional counterparts. As the number of vehicles and miles traveled on American roadways continues to grow, the nation is looking toward advanced vehicles and fuels to meet the increasing demand for more energy-efficient, environmentally friendly modes of transport.
Order no. FS-540-29285.

Order no. FS-540-29285

E. O. (Executive Order) 13149: Federal Agencies to Reduce Petroleum Use by 20%. EPAct Fleet Information and Regulations Federal Fleet Program Fact Sheet. April 2001; 2 pp. This fact sheet presents a detailed description of the history of EPAct's Federal Fleets Program and what fleets need to do to comply to its regulations.
Order no. DOE/GO-102001-1300.

EPAct: Alternative Fuels for Energy Security, Cleaner Air. EPAct Fleet Information and Regulations, State and Alternative Fuel Provider Program Fact Sheet. April 2001; 2 pp. This fact sheet presents a summary of the EPAct program as a whole, including fleet information and regulations.
Order no. DOE/GO-102001-1306.

EPAct Fleet Information and Regulations: State and Alternatie Fuel Provider Program, Annual Report (Brochure). April 2001; 4 pp. This document presents a detailed account of the activity and accomplishments made by fleets covered by the EPAct State and Alternative Fuel Provider Program.
Order no. DOE/GO-102001-1295.

FY 2000 Progress Report for Fuels for Advanced CIDI Engines and Fuel Cells (Book).
November 2000; 120 pp. DOE's Office of Transportation Technologies FY 2000 Annual Progress Report for the Fuels for Advanced CIDI Engines and Fuel Cells Program highlights progress achieved and comprises 22 summaries of industry and National Laboratory projects that were conducted.
Order no. DOE/GO-102000-1150.

Guidebook to the U.S. Department of Energy's Alternative Fuel Transportation Program for State and Alternative Fuel Provider Fleets (Booklet). February 2001; 46 pp. This booklet has been produced by the U.S. Department of Energy (DOE) as a reader-friendly guide to the primary requirements of the Alternative Fuel Transportation Program for States and fuel providers. DOE has addressed the topics that fleet managers ask about most frequently.
Order no. DOE/GO-102001-1134.

New York City Transit Diesel Hybrid Electric Buses (Fact Sheet). September 2001; 2 pp.
This fact sheet provides information on the diesel hybrid electric buses used at NYC Transit (the largest public transportation system in the United States). Clean fuel buses represent about 5% of NYC Transit's fleet.
Order no. FS-540-30736.

Order no. DOE/GO-102000-1137

Next Generation Natural Gas Vehicle Program (Brochure).
October 2000; 6 pp. The Department of Energy's Office of Transportation Technologies is initiating the Next Generation Natural Gas Vehicle (NGNGV) Program to develop commercially viable medium and heavy-duty natural gas vehicles. These new vehicles will incorporate advanced alternative fuel vehicle technologies that were developed by DOE and others.
Order no. DOE/GO-102000-1137.

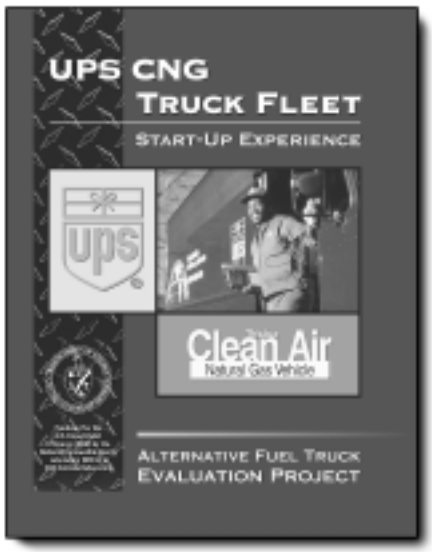
S&FP Program: Frequently Asked Questions. EPAct Fleet Information and Regulations, State and Alternative Fuel Provider Program Fact Sheet. April 2001; 6 pp. This fact sheet is question and answer session regarding all aspects of EPAct's State and Alternative Fuel Provider program, including compliance guidelines.
Order no. DOE/GO-102001-1297.

S&FP Program Promotes Alternative Fuels to Cut Need for Foreign Oil. EPAct Fleet Information and Regulations, State and Alternative Fuel Provider Program Fact Sheet. April 2001; 2 pp. This fact sheet provides a detailed description of the history of EPAct's State & Alternative Fuel Provider Program and what fleets need to do to comply to its regulations.
Order no. DOE/GO-102001-1296.

SuperShuttle CNG Fleet Study Summary. Clean Cities Alternative Fuel Information Series, Alternative Fuel Case Study (Brochure). March 2001; 6 pp.
This fact sheet provides an account of the successful use of alternative fuels in a fleet of SuperShuttle passenger vans, which offer shared-rides between Boulder and Denver International Airport.
Order no. BR-540-29441.

Taking an Alternative Route (Booklet). April 2001; 32 pp. This is a guide for fleet managers and individual owners on using alternative fuels in cars and trucks. Discussed in detail are all fuels authorized for federal credits under the Energy Policy Act of 1992 (EPAct). Information for federal and state fleet managers about how to comply with EPAct, and about the Clean Air Act Amendments is also provided.
Order no. DOE/GO-102001-0753.

UPS CNG Truck Fleet Start Up Experience: Alternative Fuel Truck Evaluation Project (Brochure). August 2001; 12 pp.
UPS operates 140 Freightliner Custom Chassis compressed natural gas (CNG)-powered vehicles with Cummins B5.9G engines. Fifteen are participating in the Alternative Fuel Truck Evaluation Project being funded by DOE's Office of Transportation Technologies and the Office of Heavy Vehicle Technologies.
Order no. BR-540-30493.



Order no. BR-540-30493

Waste Management's LNG Truck Fleet: Final Results (Book). January 2001; 50 pp.
Waste Management, Inc., operates a fleet of heavy-duty LNG refuse trucks at its Washington, Pennsylvania, facility. This document presents the results of the project designed to provide transportation professionals with quanitative, unbiased information on the cost, maintenance, operational, and emissions characteristics of LNG as one alternative to conventional diesel for heavy-duty trucking applications.
Order no. BR-540-29073.

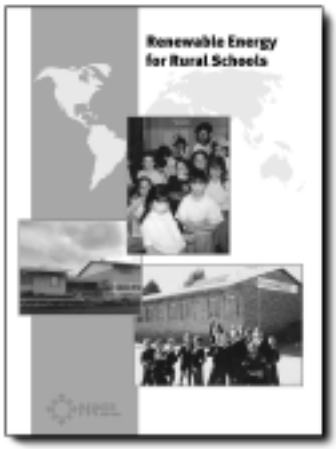
What's New on the Web? Clean Cities Alternative Fuel Information Series Fact Sheet. April 2001; 2 pp.
This fact sheet describes what was newly added to the AFDC and Clean Cities (and other DOE) Web sites.
Order no. FS-540-30128.

What's New: Spring 2001 Update. EPAct Fleet Information and Regulations, State and Alternative Fuel Provider Program (Newsletter). June 2001; 2 pp. This newsletter provides a general update of things fleet managers need to know about the State and Alternative Fuel Provider Program.
Order no. DOE/GO-102001-1299.

Village Power

Renewable Energy for Microenterprise (Booklet). November 2000; 80 pp. This guide outlines the potential benefits that current renewable energy technologies can offer rural microenterprises. It also introduces the institutional approaches developed to make RE technologies accessible to microentrepreneurs and the challenges encountered.
Order no. BK-500-26188.

Renewable Energy for Rural Schools (Booklet). November 2000; 64 pp. This publication addresses the need for energy primarily in those schools that are not connected to the electric grid. This guide applies mostly to schools located in non-electrified areas, and in areas where grid power is expensive and unreliable, it can be used to examine other energy options to conventional power.
Order no. BK-500-26222.



Order no. BK-500-26222

Wind Energy

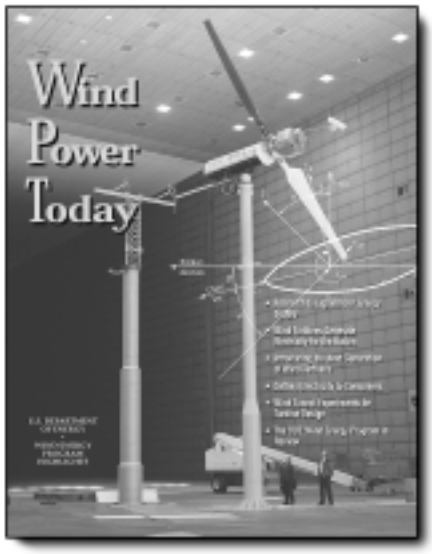
2001 Wind Energy Across America Calendar January 2001; 28 pp.
This calendar for 2001 contains photographs of wind farms across America, wind facts, and wind industry meeting dates. It also provides a list of contacts for more information about wind energy.
Order no. DOE/GO-102001-1184.

IEA Wind Energy Annual Report 2000 (Book). May 2001; 212 pp.
The twenty-third IEA Wind Energy Annual Report reviews the progress of the activities in the Implementing Agreement for Co-operation in the Research and Development on Wind Turbine Systems under the auspices of the International Energy Agency (IEA). The agreement and its program, called IEA R&D Wind, is a collaborative venture among 19 contracting parties from 17 IEA member countries and the European Commission.
Order no. BK-500-29436.

Small Wind Electric Systems: A U.S. Consumer's Guide (Booklet). May 2001; 28 pp. This guide provides consumers with enough information to help them determine if a small wind electric system can provide all or a portion of the energy they need for their home or business based on their wind resource, energy needs, and their economics.
Order no. DOE/GO-102001-1293.

Supplemental Environmental Projects Using Renewable Energy: A New Approach to Addressing Air Quality Violation Penalties (Fact Sheet). April 2001; 2 pp.
Supplemental environmental projects, or SEPs, are environmentally beneficial projects that offer pollution prevention, energy efficiency, green energy, and community-based programs that may include investment in cost-effective alternative energy technologies, such as wind energy. This fact sheet explains how SEPs can help companies mitigate all or part of the penalties imposed as a result of air pollution violations.
Order no. DOE/GO-102001-1283.

Wind Power Today: 2000 Wind Energy Program Highlights (Book). May 2001; 40 pp. This annual publication provides an overview of the U.S. Department of Energy's Wind Energy Program. The purpose is to show how DOE's Wind Energy Program supports wind turbine research and deployment in hopes of furthering the advancement of wind technologies that produce clean, low-cost, reliable energy.
Order no. DOE/GO-102001-1325.



Order no. DOE/GO-102001-1325

The National Renewable Energy Laboratory's (NREL) technical reports provide information on research and analysis projects performed by NREL staff and subcontractors. They are intended for technical professionals. Unless otherwise noted, NREL technical reports are available in limited quantities from NREL's Document Distribution Service at (303) 275-4363 (phone), (303) 275-4053 (fax), or Sally_Evans @nrel.gov (e-mail). These documents can be accessed in PDF format through the Publications database at http://www.nrel.gov/publications/.

Alternative Fuels

Dayton, D.C. **Fuel Cell Integration—A Study of the Impacts of Gas Quality and Impurities: Milestone Completion Report.** June 2001; 28 pp. Contributors: M. Ratcliff and R. Bain. Order no. MP-510-30298.

Hettenhaus, J.R.; Wooley, R.; Wiselogel, A. **Biomass Commercialization Prospects in the Next 2–5 Years: BIOMASS COLLOQUIES 2000.** October 2000; 67 pp. Order no. SR-580-28886.

Johnson, V.H.; Pesaran, A.A.; Sack, T. **Temperature-Dependent Battery Models for High-Power Lithium-Ion Batteries.** January 2001; 17 pp. Presented at the 17th Annual Electric Vehicle Symposium, 15–18 October 2000, Montreal, Canada. Order no. CP-540-28716.

Kadam, K.L. **Environmental Life Cycle Implications of Using Bagasse-Derived Ethanol as a Gasoline Oxygenate in Mumbai (Bombay).** November 2000; 89 pp. Order no. TP-580-28705.

Kadam, K.L. **Microalgae Production from Power Plant Flue Gas: Environmental Implications on a Life Cycle Basis.** June 2001; 63 pp. Order no. TP-510-29417.

McAloon, A.; Taylor, F.; Yee, W.; Ibsen, K.; Wooley, R. **Determining the Cost of Producing Ethanol from Corn Starch and Lignocellulosic Feedstocks.** October 2000; 44 pp. A Joint Study Sponsored by U.S. Department of Agriculture and U.S. Department of Energy. Order no. TP-580-28893.

Biopower

Fostering the Bioeconomic Revolution in Biobased Products and Bioenergy: An Environmental Approach. January 2001; 32 pp. Order no. MP-28950.

Buildings

Balcomb, J.D.; Hayter, S.J.; Weaver, N.L. **Energy-10 PV: Photovoltaics, A New Capability (Preprint).** February 2001; 9 pp. Prepared for the American Solar Energy Society National Solar Conferences Forum 2001, 21–25 April 2001, Washington, DC. Order no. CP-550-29637.

Balcomb, J.D.; Hayter, S.J.; Weaver, N.L. **Hourly Simulation of Grid-Connected PV Systems Using Realistic Building Loads: Preprint.** February 2001; 9 pp. Prepared for the American Solar Energy Society National Solar Conferences Forum 2001, 21–25 April 2001, Washington, DC. Order no. CP-550-29638.

Barley, D. **Overview of Residential Ventilation Activities in the Building America Program (Phase I).** May 2001; 32 pp. Order no. TP-550-30107.

Deru, M.P.; Kirkpatrick, A.T. **Ground-Coupled Heat and Moisture Transfer from Buildings; Part 1: Analysis and Modeling (Preprint).** February 2001; 12 pp. Prepared for the American Solar Energy Society National Solar Conferences Forum 2001, 21–25 April 2001, Washington, DC. Order no. CP-550-29693.

Deru, M.P.; Kirkpatrick, A.T. **Ground-Coupled Heat and Moisture Transfer from Buildings; Part 2: Application (Preprint).** February 2001; 10 pp. Prepared for the American Solar Energy Society National Solar Conferences Forum 2001, 21–25 April 2001, Washington, DC. Order no. CP-550-29694.

Judkoff, R.; Balcomb, J.D.; Subbarao, K.; Barker, G.; Hancock, E. **Buildings in a Test Tube: Validation of the Short-Term Energy Monitoring (STEM) Method: Preprint.** February 2001; 11 pp. Prepared for the American Solar Energy Society National Solar Conferences Forum 2001, 21–25 April 2001, Washington, DC. Order no. CP-550-29805.

Judkoff, R.; Balcomb, J.D.; Hancock, C.E.; Barker, G.; Subbarao, K. **Side-By-Side Thermal Tests of Modular Offices: A Validation Study of the STEM Method.** December 2000; 39 pp. Order no. TP-550-23940.

Neymark, J.; Judkoff, R.; Knabe, G.; Le, H.T.; Durig, M.; Glass, A.; Zweifel, G. **HVAC BESTEST: A Procedure for Testing the Ability of Whole-Building Energy Simulation Programs to Model Space Conditioning Equipment: Preprint.** June 2001; 11 pp. Prepared for Building Simulation 2001, 13–15 August 2001, Rio de Janeiro, Brazil. Order no. CP-550-29828.

Plympton, P.; Kappaz, P.; Kroposki, B.; Stafford, B.; Thornton, J. **Four Federal Grid-Connected Photovoltaic Systems: Powering Our Nation's Capital with Solar: Preprint.** April 2001; 9 pp. Prepared for the American Solar Energy Society National Solar Conferences Forum 2001, 21–25 April 2001, Washington, DC. Order no. CP-710-29050.

Slayzak, S.J.; Ryan, J.P. **Desiccant Dehumidification Wheel Test Guide.** December 2000; 51 pp.
Order no. TP-550-26131

Smith, J.A. **Solar-Based Rural Electrification and Microenterprise Development in Latin America: A Gender Analysis.** November 2000; 30 pp.
Order no. SR-550-28995.

Smith, M.W. **Analysis of the Thermal Performance of Tierra I—A Low-Energy High-Mass Residence.** May 2001; 89 pp.
Order no. TP-550-25873.

Smith, M.W.; Torcellini, P.A.; Hayter, S.J.; Judkoff, R. **Thermal Performance Analysis of a High-Mass Residential Building (Preprint).** January 2001; 8 pp. Prepared for the American Solar Energy Society National Solar Conferences Forum 2001, 21–25 April 2001, Washington, DC.
Order no. CP-550-29537.

Walker, A. **Financing Distributed Generation: Preprint.** August 2001; 15 pp. Prepared for the Association of Energy Engineers Annual Conference, 24–26 October 2001, Atlanta, Georgia.
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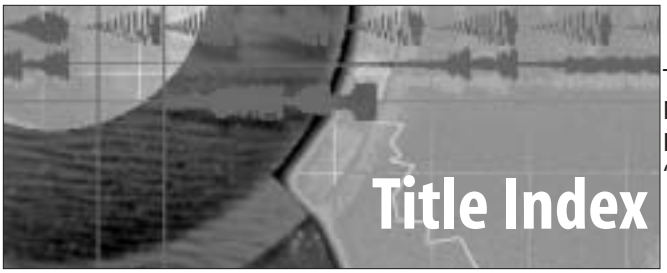

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