

ENERGY CENTER OF WISCONSIN

ANNUAL REPORT 2005

“We abuse land because we regard it as a commodity
belonging to us. When we see land as a community to which
we belong, we may begin to use it with love and respect.”

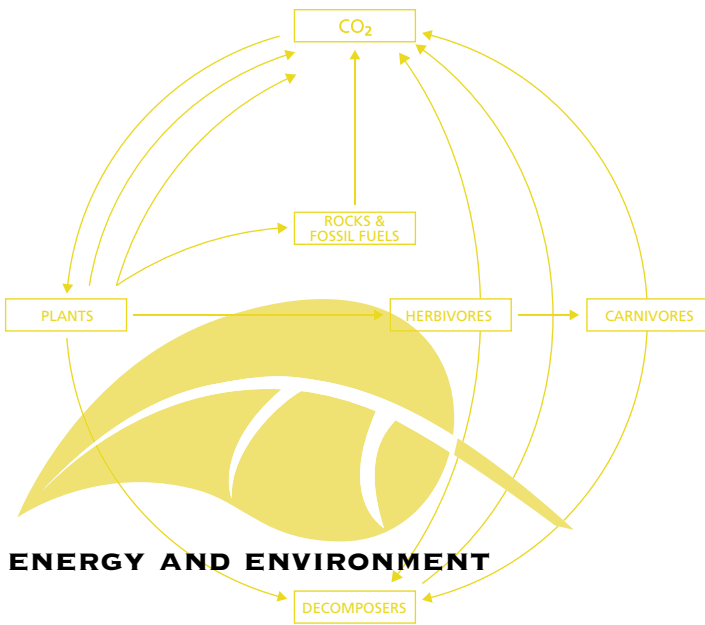
—Aldo Leopold

MAKING A DIFFERENCE

We have gathered a growing community of architects, engineers, builders, developers, business people, policymakers, teachers, students, and concerned citizens committed to understanding and respecting the place we call home. Together we're finding solutions to our energy and environmental challenges that build a healthy environment and strong economy.

In 2005, we focused on four fronts we think are essential to a healthy planet: energy and environmental policies that move us toward a low-carbon economy, buildings that use less energy and fewer resources, best practices that reduce industrial energy use, and information that helps us make smart energy decisions. Our efforts have resulted in:

- Showing policymakers that the State of Wisconsin has the potential to save, over five years, enough electricity to power between 170,000 and 240,000 homes and defer the need for one average-size power plant.
- Eight new commercial buildings in Wisconsin that will use 1,969,450 fewer kilowatt hours of electricity thanks to assistance from the Energy Center's *Advanced Buildings™* project team.
- Over 600 home builders, remodelers and contractors attending the Better Buildings: Better Business conference to learn how to build, remodel and manage high performance homes and apartments.
- Seventy-four training activities covering topics in building performance, energy and the environment and industrial best practices drawing more than 2,300 participants.
- More than 200,000 students in 200 school districts in Wisconsin becoming energy literate thanks to our members who sponsored KEEP scholarships for 2,000 teachers.
- Characterizing Wisconsin's multifamily housing stock and benchmarking energy use in these buildings to assess the energy efficiency opportunities in this market.



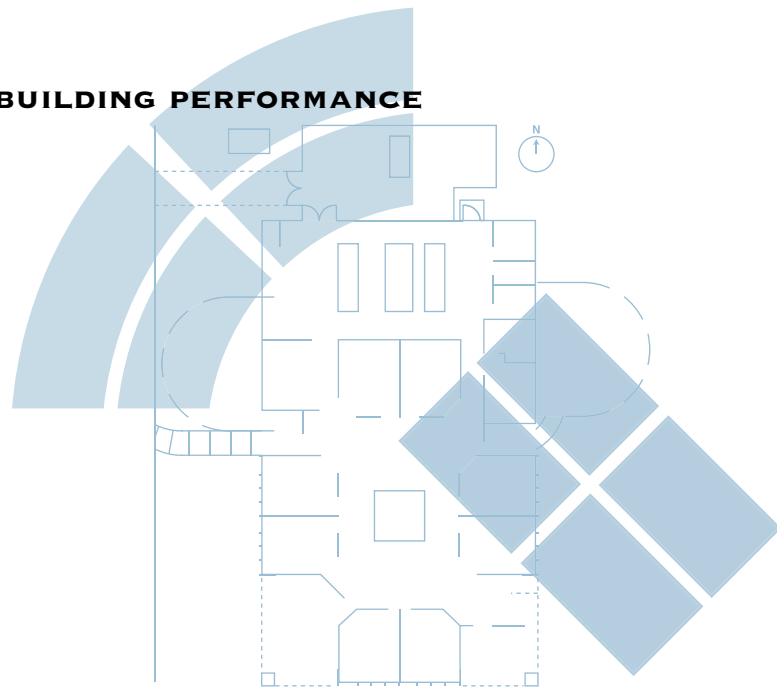
Our energy use, whether it's electricity to light our buildings and drive industrial machinery, natural gas to power our industry and heat our homes, or gasoline to drive our cars, depends primarily on finite fossil fuels. In Wisconsin, more than 55 percent of the electricity we generate is produced by coal-fired power plants. And those coal-fired power plants are a major contributor to one of the most daunting environmental problems we face today—global climate change.

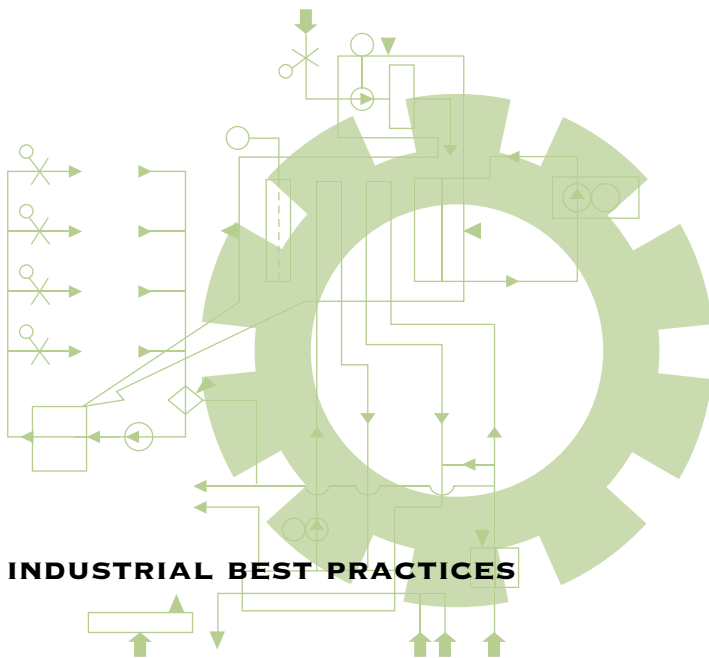
While several states in the Northeast and Northwest have begun crafting their own initiatives to address global climate change, we have been slow in the Midwest to take up the challenge. Given our manufacturing base and heavy reliance on coal, efforts to address greenhouse gas emissions and global climate change are threatening despite research showing that climate change could disrupt important regional industries. The Energy Center hopes to show, through its energy and environment initiatives, that not only can we harness our manufacturing base and technical expertise to develop clean energy technologies, including coal gasification technologies, but we also can tap the Midwest's vast agricultural and biomass resources to replace petroleum as a raw material for everything from fuel to furniture polish. We are committed to drawing on the strengths of our Midwestern roots to forge a low-carbon economy critical to the health of our planet.

Most of us spend 90 percent of our time indoors—at home, work, worship or play. And the buildings we're spending all that time in have a significant impact on our environment. Buildings use 72 percent of the electricity produced in the United States. That electricity accounts for 39 percent of our total carbon dioxide emissions contributing to global climate change. And despite the progress we've made in making houses more energy efficient, many of our new homes use just as much energy or more than older ones simply because they are larger—the average home size has increased by 600 square feet in the last 25 years.

Within the next 30 years, more than a third of the buildings in the United States will be new. What an opportunity that affords us to reduce the environmental impact of our built environment! We can choose to make these buildings more energy and resource efficient, healthier for the occupants and more comfortable. High performance buildings not only use fewer resources, but also are practical and economical to build. Through our research, partnerships, outreach and education initiatives, the Energy Center is helping architects, developers, engineers, and home builders find solutions to our building challenges. Together, we can create a more sustainable, beautiful and prosperous built environment.

BUILDING PERFORMANCE



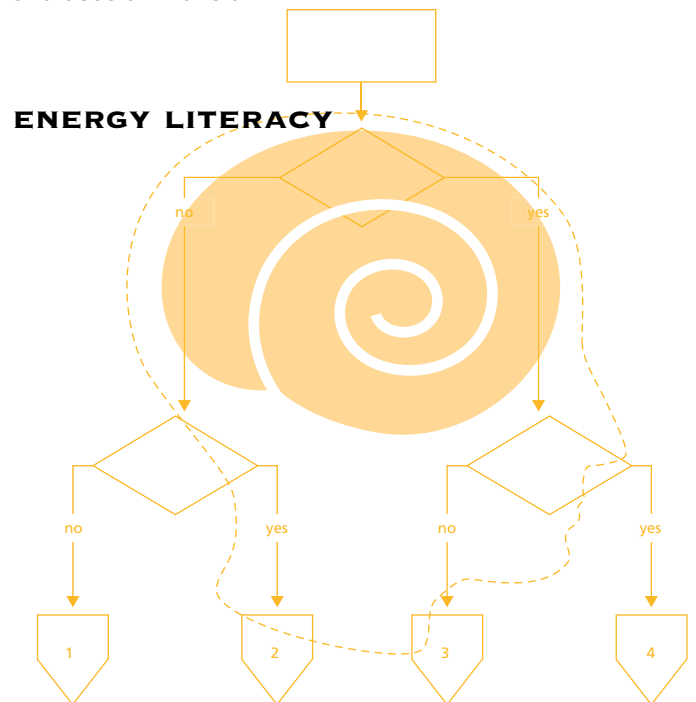


Wisconsin and the Midwest traditionally has been a strong manufacturing region. Nearly one in five jobs in Wisconsin are in manufacturing. Manufacturing contributes significantly to our economy and most of our manufacturing businesses are small employers—over 25 percent have fewer than four employees. And after many years of decline (85,000 jobs lost since 2000), manufacturing businesses with fewer than 20 employees are adding jobs, while their larger counterparts continue to lose jobs. Keeping our small manufacturers healthy and competitive is important to our economy. Reducing their energy use and making their processes more efficient helps them thrive and benefits our environment as well.

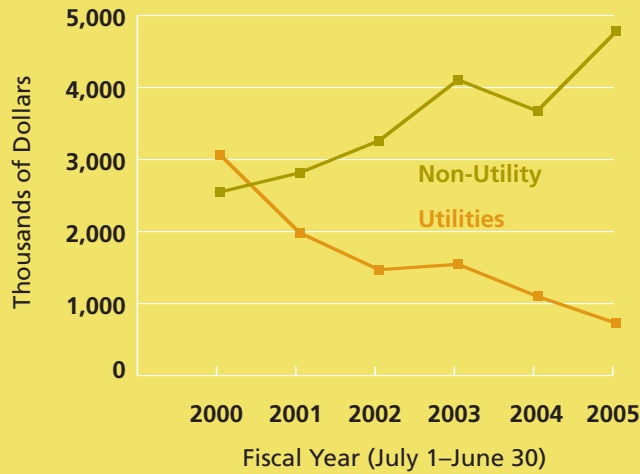
Industry—factories, farms, mining and construction operations use over one third of the energy we consume in the United States. These industries spend over \$80 billion a year for heat and power. They also account for nearly 30 percent of the greenhouse gas emissions in the U.S. contributing to global climate change. Industrial best practices—low-cost or no-cost off-the-shelf technologies and energy management practices—can reduce their operating and maintenance costs, eliminate waste, improve product quality, increase capacity and reduce their environmental impact. Through our industrial best practices initiatives, the Energy Center is helping our small manufacturers remain competitive in our global economy.

We face rising energy costs, growing environmental and health problems and increasingly complex choices that require an understanding of the inter-connection of energy, environment and the economy. We need credible, accessible information resources and educational opportunities to help us understand those connections and to make informed decisions regarding our energy use. The Energy Center provides information in a variety of formats not only to inform, but also to inspire actions that help solve our critical environmental problems. Take a virtual tour through a high performance building, attend a professional education program, browse our library catalog or ask our librarian for research help. Or ask your children—perhaps they're learning about energy and the environment because their teachers have attended Wisconsin's K-12 Energy Education Program (KEEP). These are just a few of the ways we hope to raise our energy literacy.

Credible, objective information is essential for making decisions on the efficient use of our energy resources, and creating a healthy environment and strong economy. Through our professional education programs and innovative web-based information, and our traditional library resources and publications, the Energy Center is committed to providing the resources we need to be smart energy consumers, educators and decision makers.



PRIMARY REVENUE SOURCES



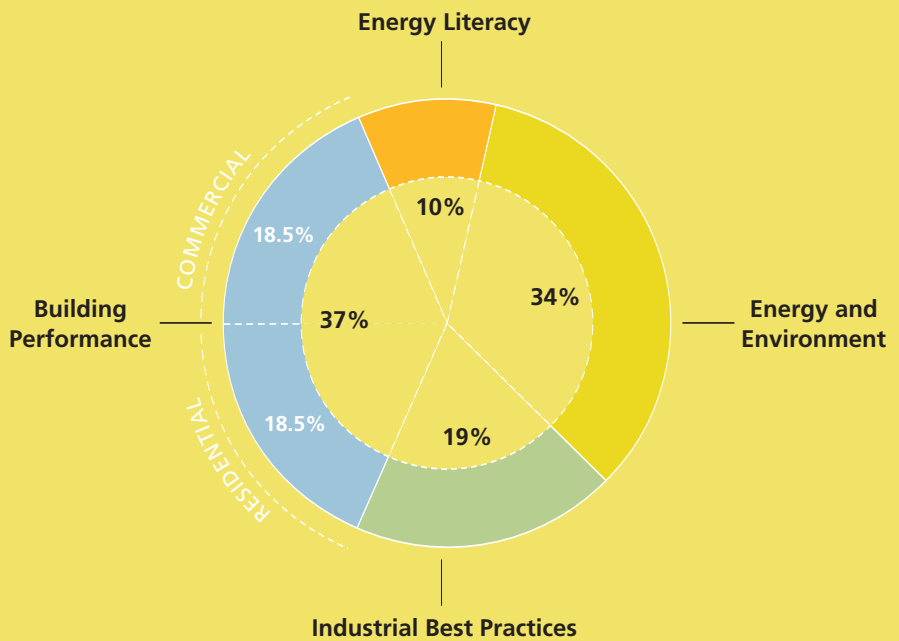
TOTAL REVENUE

2000:	\$5,704,000
2001:	\$4,819,000
2002:	\$4,744,000
2003:	\$5,750,000
2004:	\$4,793,000
2005:	\$5,593,000

FINANCIAL PERFORMANCE

Throughout 2005, the Energy Center realized continued growth in funding from foundations, contracts, and state and federal grants. We begin 2006 with strong partners supporting our mission to develop solutions to energy challenges that promote economic and environmental sustainability. 2005 concluded with net assets of over \$800,000 and the Energy Center remains debt free.

ENERGY CENTER PRACTICE AREAS



BOARD OF DIRECTORS

DAVID BENFORADO

Municipal Electric Utilities of Wisconsin

RALPH CAVANAGH

Natural Resources Defense Council

SENATOR ROBERT L. COWLES

Wisconsin Senate 2nd Senate District

PHYLLIS DUBÉ—VICE PRESIDENT

We Energies

JOHN FARROW

Milwaukee School of Engineering

RICK JOHNSON

BadgerMeter, Inc.

GERALD KULCINSKI

University of Wisconsin—Madison

ERIC LAWSON

Potter Lawson, Inc.

TOM MEINZ

Wisconsin Public Service Corporation

TERRY NICOLAI

Alliant Energy

BILL OEMICHEN

Wisconsin Federation of Coops

DAN SCHOOFF

Public Service Commission of Wisconsin

BILL WARD

Proctor & Gamble Paper Products Company

LAURA WILLIAMS—SECRETARY

Madison Gas & Electric Company

JOHN WILSON—PRESIDENT

Michael, Best & Friedrich

BRIAN ZELENAK

Xcel Energy

FAREWELL We bid goodbye to outgoing board members—Kirby Anderson, Kate Bloomberg, Shannon Clark, Dan Ebert and Paul Liegeois. Thank you for your hard work and service on our behalf.

MISSION AND VISION

The Energy Center develops solutions to energy challenges that promote economic and environmental sustainability through innovative research and education.

We envision the efficient use of energy resources, a healthy environment, and a strong economy.

CORPORATE MEMBERS

- PLATINUM Alliant Energy We Energies
- GOLD Madison Gas and Electric
 Wisconsin Public Service Corporation
 Xcel Energy
- BRONZE Wisconsin Public Power Incorporated

(pictured below from left) David Benforado, Chris Berg-Thacker, Terry Nicolai, Kate Bloomberg, Ralph Cavanagh, Steve Brick, Marge Anderson, John Farrow, John Wilson, Paul Liegeois, Susan Stratton, Gerald Kulcinski, Rick Johnson, Laura Williams, Phyllis Dubé and Brian Zelenak. (not pictured) Senator Robert Cowles, Eric Lawson, Tom Meinz, Bill Oemichen, Dan Schooff and Bill Ward.



455 Science Drive, Suite 200
Madison, WI 53711
608.238.4601
www.ecw.org

