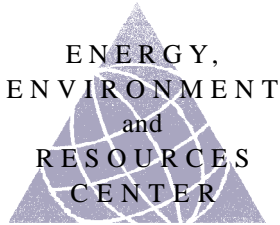


H I G H L I G H T S and I N I T I A T I V E S



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Sheila Webster, Director

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Donald Alvic, Director

Pro-Dialogue
Mary English and
David L. Feldman, Directors

Water Resources Research Center
Tim Gangaware, Assoc. Director

For more information, contact
Gail Farris at 865-974-4251
University of Tennessee
EERC
311 Conference Center Bldg.
Knoxville, TN 37996-4134.
Visit our website at:
<http://eerc.ra.utk.edu/>.

AWARDS Senior Research Scientist **David Feldman**, who serves as an adjunct professor of **political science** and graduate program instructor in **environmental policy**, received the Policy Studies Organization 2001 Interdisciplinary Award at the *American Political Science Association Annual Meeting* in San Francisco. **Feldman** received the award for his outstanding work in policy studies.

APPOINTMENTS Governor Don Sundquist recently appointed Research Leader **Mary English** to the 14-member Tennessee Air Pollution Control Board. Charged with maintaining the purity of the state's air resources, the board comprises representatives from state environmental agencies, academia, private industry, and nongovernmental organizations. **English**, a representative of the Tennessee Environmental Council, has been active in smart-growth planning, which plays a role in improving air quality.

PROJECTS Research staff from EERC's Systems Development Institute (SDI) in collaboration with researchers from Oak Ridge National Laboratory designed and maintain www.fueleconomy.gov, a Web site sponsored by the U.S. Department of Energy. SDI researchers involved in the project include Research Associates **Janet Hopson** and **Robert Gibson**, Senior Research Technician **Lisa Li**, and **Anurag Agarwal**, SDI's assistant director. The site, produced in partnership with the U.S. Environmental Protection Agency, features fuel-saving and vehicle-maintenance tips along with safety, fuel-economy, and pollution-emissions ratings. The site discloses statistics for 1985 through 2002 model vehicles and displays current, nationwide gas prices.

PUBLICATIONS *Sightline*, an EERC newsletter that focuses on resource and environmental issues facing Great Smoky Mountains National Park, has secured funding for its second year of publication. Created by EERC's Office of Communications, *Sightline* is sponsored jointly by EERC, Friends of Great Smoky Mountains National Park, and Great Smoky Mountains Natural History Association. The semiannual, 20-page newsletter boasts a circulation of 10,000 and targets park users, elected officials, local business leaders, scientists, and others who are concerned about conditions in the park. The Summer 2001 edition includes articles on wild hogs, acid deposition, archeology, black bears, aquatic insects, and landscape management. The Winter 2002 edition will be devoted entirely to Cades Cove.

In November, **Sujit Das** of Oak Ridge National Laboratory, Senior Research Scientist **Jean Peretz**, and Associate Professor **Bruce Tonn (Department of Urban and Regional Planning)** published *Evaluation of the Benefits Attributable to Automotive Lightweight Materials Program Research and Development Projects*. The report was prepared for the Automotive Lightweight Materials Program, a division of the Department of Energy's Office of Advanced Automotive Technologies.

Green Seal of Approval



Each *Highlights and Initiatives* page presents an in-depth look at one of EERC's projects or activities. This edition focuses on EERC's research in support of the GreenSeal environmental labeling program.

The EERC conducts unbiased, analytical, and multidisciplinary research designed to promote real-world solutions to problems in the fields of energy, environment, technology, and economic development.

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Green Seal of Approval

EERC researchers help purchasing agents “choose green” by recommending products and manufacturing processes that are easy on the environment. • BY LISA BYERLEY GARY

“The new container is superior,” Dhingra says. “Based on the materials it’s made from, you could almost eat the box along with your lunch.”

LOTS OF PRODUCTS on the market say they are environmentally benign, but when consumers read the fine print, they may find that their purchase isn’t nearly so green as they thought.

That’s precisely the misrepresentation GreenSeal was established to address. Products and services that meet GreenSeal’s stringent criteria are awarded the “Green Seal of Approval,” which helps steer consumers toward environmentally superior products.

But defining what is truly green is no simple matter. That’s where researchers at the University of Tennessee’s Energy, Environment and Resources Center (EERC) come in. Staff from EERC’s Center for Clean Products and Clean Technologies (CCPCT) have been hired to perform the technical evaluations behind the GreenSeal label. To that end, CCPCT brings a life-cycle approach to evaluation that examines all aspects of a product, from extraction of raw materials to disposal.

“The life-cycle approach helps us understand critical environmental data like total energy use, recycled content, and the recyclability of the item,” says CCPCT researcher Rajive Dhingra.

As one of CCPCT’s GreenSeal evaluators, Dhingra often finds himself studying products with a critical eye that sets him apart from most consumers. His gaze has recently fallen on “clam-shell” containers distributed by the millions to consumers who order burgers at fast-food restaurants—among them, McDonald’s.

As a result of the work of Dhingra and other CCPCT researchers,

GreenSeal approved a product called EarthShell, a rigid, single-use food container made from limestone and starch along with a few binders thrown in for strengthening. Fast-food sandwich containers are traditionally made from cardboard-type material or from polystyrene, a material that doesn’t readily degrade in a landfill.

“The new container is superior,” Dhingra says. “Based on the materials it’s made from, you could almost eat the box along with your lunch.”

In the case of the sandwich container, CCPCT helped GreenSeal develop an industry standard. In other cases, the CCPCT staff conducts product research and produces *Choose Green* reports, which steer corporate purchasing agents toward environmentally superior products.

To date, CCPCT has produced *Choose Green* reports on office furniture and particle and fiber board. The Center is working on two additional reports on carpeting and nonpaper office supplies.

GreenSeal funds its projects from its own budget and also from the U.S. Environmental Protection Agency and manufacturers interested in evaluations of specific products or processes.

Early in 2002, the CCPCT staff, in partnership with GreenSeal, will begin developing procurement criteria for the state of California; California will apply the guidelines in purchasing certain products. Meanwhile, Dhingra and colleague Jonathan Overly are working on another study to develop an environmental standard for EarthShell bowls and plates for the Winter Olympics. •

For more information, contact Rajive Dhingra, CCPCT, The University of Tennessee, 311 Conference Center Building, Knoxville, TN 37996-4134, call 865-974-8752, or visit the GreenSeal Web site at <<http://www.greenseal.org>>.

