

REUSABLE NEWS



Resource Conservation Challenge: Are You Up To It?



“Today, we are challenging all Americans to take personal responsibility for their day-to-day decisions, and to take one small action every day to conserve our natural resources. EPA is asking Americans to adopt smart environmental practices, make smart environmental purchases, reuse more products, and recycle at least one pound of their household waste a day.”

With these words, Marianne Horinko, Assistant Administrator for EPA’s Office of Solid Waste and Emergency Response (OSWER), launched EPA’s Resource Conservation Challenge to the nation in her keynote address at the National Recycling Coalition’s Annual Congress and Exposition in Austin, Texas, last September. The Resource Conservation Challenge is just that—a “challenge”—to large and small

businesses, manufacturers, consumers, communities, youth—all Americans—to do more to reduce waste, cut greenhouse gas (GHG) emissions, recover energy, and protect valuable natural resources.

The initiative has three goals: (1) pollution prevention and recycling of materials, (2) recovering energy through process modifications and conversion of wastes to energy, and (3) pollution prevention (or recycling as a second chance) of 39 “priority” chemicals. The materials and energy challenges will not only support existing goals to increase the national recycling rate and reduce the per capita rate of waste generation but will also expand EPA’s effort beyond municipal waste. The priority chemical challenges initially will focus on 30 priority chemicals identified by the waste program and then be supplemented by

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New Studies Measure Extent and Benefits of Recycling

Recycling is growing, playing a role in reducing GHG emissions, and helping build the U.S. economy. Recycling rates and many of the benefits of recycling—both environmental and economical—are documented in several new reports.

According to EPA’s *Municipal Solid Waste in the United States: 2000 Facts and Figures* (EPA530-R-02-001), 30.1 percent of the municipal solid waste (MSW) generated in the United States was recycled in 2000—a monumental increase from 1990, when the national recycling rate was 16.2 percent. The report also reviews generation, recycling, and disposal rates for all the materi-

als in MSW and includes special chapters on source reduction and electronics recycling. The report is available in hard copy from the RCRA Hotline at 800 424-9346 and on the Internet at www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm.

Although the U.S. recycling rate for MSW has significantly increased over the past decade, global atmospheric concentrations of GHGs also have increased dramatically over the past century. The *Climate Action Report 2002* (United States’ 2002 submission under the United Nations Framework Convention on Climate Change) reviews the issues associ-

ated with climate change, including current and future trends in GHG emissions. The publication makes the point that renewable energy sources, such as wind, geothermal, and solar, can help reduce GHG concentrations, and their applications hold great promise for the future. But, the report notes, recycling is an activity everyone can participate in today to help reduce GHG emissions. In 2000, U.S. energy savings attributed to recycling totaled 661 trillion British thermal units—enough energy to power 215 million refrigerators for an entire year. GHG reductions associated with these energy savings totaled 32.9 million

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an additional nine persistent, bioaccumulative, and toxic chemicals that have been the focus of other EPA offices. OSWER hopes to accomplish the program objectives in part through forming challenge partnerships with other programs in the Agency (e.g., OPPTS, OEI, OECA), the states, tribes, industry, the environmental community, and academia.

The Challenge shifts EPA's current orientation away from projects that focus only on "end-of-life" issues (such as cleaning up wastes and only recycling) toward a "beginning-of-life" perspective, using strategies to help shape a new marketplace, one that encourages product design stewardship and more sustainable business and consumer behavior. In addition to challenging Americans to make smarter purchasing and disposal decisions, it also tests creative approaches to waste minimization, energy recovery, recycling.

Public commitment is crucial to meeting the Challenge, and EPA will engage the public through messages and partnerships. EPA is conducting a campaign on several fronts to educate and inform Americans about the impact of waste on resource and energy use, GHG emissions, and pollution. Three of the components of the public campaign are:

- **Partnerships and alliances** with industry, states, and environmental groups designed to provide smarter, faster, voluntary solutions that will safeguard natural resources.
- **Training, tools, and technology assistance** for businesses, governments, and others to make it easier for businesses and consumers to reduce waste, acquire and create a demand for recycled materials, and purchase products that contain recycled materials.
- **Information, outreach and assistance** to the general public and specifically to youth, His-

panic and Black communities, Indian Tribes and Nations, major retailers, electronic manufacturers, and the entertainment industry to reinforce and renew waste prevention efforts across the country.

The campaign promises to revitalize, reform, and re-energize Americans to prevent waste. A snapshot of some of EPA's initiatives in the Resource Conservation Challenge that apply these concepts are:

WasteWise Partners

Through our WasteWise Partnership Program, more than 1,200 partners from business, government, and institutions reduce MSW through innovative waste prevention and recycling techniques. They have voluntarily reduced more than 35 million tons of MSW. WasteWise Partners continue to take on new challenges, such as encouraging the reuse and recycling of construction and demolition debris and the use of recycled products to create new "green buildings."

Waste Minimization Partnership

The National Waste Minimization Partnership Program builds on the success of our WasteWise Program. Through waste reduction and energy recovery, it facilitates government and private sector actions: (1) to encourage shifts in waste generation and management practices, (2) to encourage efficient production, (3) to turn waste into new sources of raw materials and energy, and (4) to buy recycled products. The program also is supporting efforts by communities to move toward a greater degree of energy independence through gasification systems that convert solid and industrial waste into a synthetic natural gas.

Product Stewardship Partnerships

EPA's Office of Solid Waste has helped to facilitate the National

Electronics Product Stewardship Initiative (NEPSI), which brings stakeholders together to develop solutions to better manage end-of-life electronic products in an environmentally sound way. NEPSI aims to recommend a system with a viable national financing mechanism to maximize the collection, reuse, and recycling of used electronics.

A major product stewardship breakthrough came on January 8, 2002, with a Memorandum of Understanding (MOU) among EPA, the carpet industry's trade association, major manufacturers, and participating state and regional governments. The MOU creates a new industry-funded organization to back the development of recycling infrastructure and provides for government procurement and market development initiatives to support this undertaking. By 2012, the partnership hopes to increase the reuse of used carpets from the current level of 5 percent to 40 percent.

For more information about these partnerships, visit www.epa.gov/epr.

We Can Do More

Through these and other efforts, the Resource Conservation Challenge calls on all Americans to do more to conserve natural resources and save and recover energy. Yes—recycling 30 percent of MSW generated in the United States in 2000 saved the equivalent of more than 5 billion gallons of gasoline, reducing dependence on foreign oil by 114 million barrels. But—even though consumers, businesses, industries, and institutions have made impressive waste prevention and reduction efforts, the United States still generates nearly 232 million tons of waste annually. We can and must do more.

For more information about the Resource Conservation Challenge, visit www.epa.gov/epaoswer/osw/conserv/index.htm or contact David Hockey at 703 308-8846.

Take the Green Building Challenge

Through the Green Building Challenge, EPA's WasteWise program hopes to motivate its partners to reduce, reuse, and recycle construction and demolition (C&D) debris and buy more recycled building products. Companies engaging in building activities, from renovating office space to building a new production plant, can save money and protect the environment with resource-efficient construction. As part of the challenge, EPA is encouraging companies to:

- Incorporate environmental specifications into building contracts

and guidelines.

- Rehabilitate an existing structure instead of demolishing it.
- Use deconstruction techniques rather than demolition if a building must be torn down.
- Frame structures efficiently to reduce the amount of lumber used without sacrificing structural integrity.
- Invest in durable products to make sure materials last as long as possible.
- Return unused construction material to vendors.

- Consider the end-of-life management, or recycling potential, of building products at the start of a project.
- Salvage C&D debris for sale and reuse.
- Purchase recycled-content building materials, including insulation, carpet, cement, paint, floor tiles, shower and restroom dividers, laminated paperboard, and structural fiberboard.

For more information, go to WasteWise's Green Building Challenge Resources Web Page at www.epa.gov/wastewise/wrr/cbres.htm.

Recycling Benefits

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metric tons of carbon equivalent—comparable to annual emissions from 24.7 million cars. The report is available on the Internet at www.epa.gov/globalwarming/publications/car/index.html.

In addition to environmental benefits, many economic benefits arise from a commitment to recycling and reuse.

The Final Report of the Recycling Economic Information Project, commissioned by EPA and numerous states through a cooperative agreement with the National Recycling Coalition (NRC), highlights the growth of the recycling and reuse industries. NRC determined that 56,061 recycling and reuse companies, employing approximately 1.1 million people, operate in the United States. These companies generate a

payroll of \$37 billion and gross \$236 billion in revenue annually. The recycling and reuse industry is comparable in size to the automobile and trucking manufacturing industries and is nearly five times the size of the waste management industry. The report also illustrates how overall economic activity is stimulated by businesses that offer goods and services to the recycling and reuse industry, such as office supply companies, legal firms, and building and landscape maintenance firms. The study's economic models estimate that nearly 1.4 million jobs are maintained in these support businesses, and an additional 1.5 million jobs are supported through recycling and reuse industry employee spending. In addition, state and federal governments can experience significant revenue benefits from local government spending on recycling programs. The report is available in hard copy from the RCRA Hotline at 800 424-9346 and on the Internet at www.epa.gov/jtr/econ.

How You—Yes You—Can Estimate Greenhouse Gas Savings

EPA has developed the Waste Reduction Model (WARM) to help solid waste planners and organizations estimate GHG emissions from baseline and alternative waste management scenarios, including recycling, composting, and combustion. WARM is available in a Web-based calculator format and a Microsoft Excel® spreadsheet at www.epa.gov/globalwarming/actions/waste/warm.htm.

A handy companion piece for the WARM is EPA's update of its GHG report, *Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks*, 2nd Edition (EPA530-R-02-006). The report includes the methodology for developing GHG emission factors for MSW management. This second edition includes updated GHG emission factors for all the commodities included in the original report plus five new commodities, expands on earlier analysis of composting, and discusses emerging issues in climate change and waste. The report is available in hard copy from the RCRA Hotline at 800 424-9346 and on the Internet at www.epa.gov/globalwarming/actions/waste/reports.html.

Satellite Forum Features Waste Prevention Trend Setters

During the 2-hour satellite forum, *Communities: Setting Trends in Waste Prevention and Recycling*, held May 1, 2002, solid waste managers learned new strategies to address program challenges. The forum was one in a series sponsored by EPA's Municipal and Industrial Solid Waste Division, and its WasteWise Program, along with the National Recycling Coalition and the Solid Waste Association of North America.

Audience members from more than 40 states and Canada tuned in to EPA's free satellite forum to learn from recycling managers from across the United States. Participants heard about ways their towns can reduce waste through electronics reuse and recycling, construction and demolition (C&D) debris management, and composting, as well as how to run a recycling program on a tight budget. They also heard about how recycling can help stop global climate change by reducing the greenhouse gases associated with the manufac-

ture, distribution, use, and disposal of products.

The four forum panelists were Tom Padia of Alameda County, California, Waste Management Authority and Source Reduction and Recycling Board; Charlie Reighart of Baltimore County, Maryland, Department of Public Works; John Reindel of Dane County, Wisconsin, Department of Public Works; and Laura Weber of the St. Regis Mohawk Tribe in New York state. By sharing their experiences, providing examples of real-life recycling programs, and answering questions, the panelists provided insight into waste management options for various types of communities. Some of their areas of expertise they reviewed are:

- Planning and setting up a collection infrastructure.
- Recycling electronics waste from business.
- Recovering C&D debris.



- Reducing the amount of C&D debris communities generate by incorporating "green building" guidelines into county construction requirements.
- Composting organic materials.
- Promoting public education.

The forum was broadcast to more than 200 downlink sites and carried live over the Internet by the Pennsylvania Department of Environmental Protection. To learn some of the specific suggestions from the panelists, order a video of the forum via the WasteWise Web site at <www.epa.gov/wastewise/forum/materials.htm>. To learn more about the forum panelists, visit <www.epa.gov/wastewise/forum/bios.htm>.



This issue of *Reusable News* is also available on the Internet. Access this and other EPA publications through the World Wide Web at <www.epa.gov/epaoswer/non-hw/recycle/reuse.htm>.

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