



The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman

As we approach a change in the seasons (hopefully), many consumers are contemplating changes as well. Perhaps you're going to build a home, start a home improvement project, redecorate the old place or open a new office. One thing to think about is energy efficiency and pollution reduction.

Why not check out the "ENERGY STAR" program. ENERGY STAR is a voluntary partnership "starring" you, the consumer, and the U.S. Department of

Energy (DOE), the U.S. Environmental Protection Agency (EPA) and industry. Its objectives are expressed in a five-part philosophy. These five tenets are:

- expanding markets for energy-efficient products through voluntary partnerships with industry
- reducing air pollution through energy-efficient technologies
- recognizing the most energy-efficient products on the market with the ENERGY STAR label
- maintaining customer satisfaction by increasing energy efficiency without sacrificing performance
- encouraging innovation and competition by developing energy-efficiency guidelines that are non-proprietary and technology neutral.

Ultimately, the goal is to provide you, the consumer, with an expanded market of energy-efficient products, bearing the distinctive ENERGY STAR label, thereby preventing air pollution while saving energy and often, energy costs for you.

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Craig D. Brooks, Director

How difficult is it being green?...Easier for some than others. Researchers at Carnegie Mellon University (CMU) weren't convinced that e-commerce was as environmentally friendly as Internet retailers were saying. Rather than judging e-commerce by its cover, CMU's Green Design Initiative team decided to take a look at electronic book sales to determine if it really lessens the environmental impact in comparison to traditional retail sales. With e-commerce sales projections expected to reach \$200 billion by 2004, it may be important to look at the environmental impact.

The group's findings....the jury is still out, but some interesting facts have emerged.

Will e-commerce save the world as some have predicted?

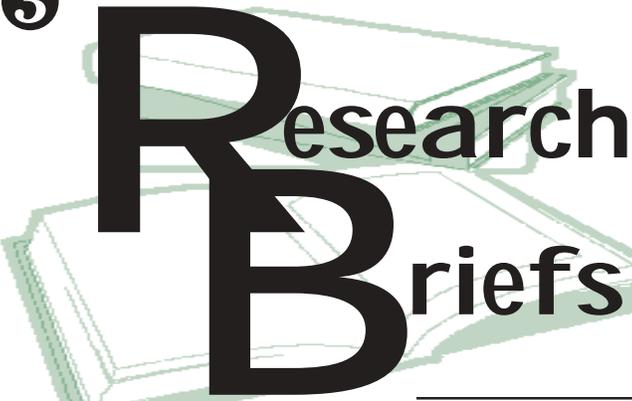
On the surface, e-commerce appears to offer big environmental bonuses by eliminating hundreds of thousands of trips to the mall, cuts down on the retail space needed and eliminates merchant returns of unsold stock. But a closer inspection reveals that the environmental impact is mixed. On-line shopping does reduce commuting and the need to build more shopping centers, however, every book ordered on the Web is heavily packaged and usually follows a complex network of transportation routes. Instead of shipping 10 books in one box to a retailer, 10 boxes with one book are shipped to e-commerce customers. It also takes substantial amounts of electricity to keep the Internet running and air delivery is three times more expensive per ton/mile than the Internet and five times more costly than trucking.

What will e-commerce mean in the long-term? It's unlikely that e-commerce will save the planet as some have claimed. It has the potential to bring reductions in energy and greenhouse emissions, but

there's an increase in packaging and shipping. Business-to-business e-commerce promises to offer the greater energy savings by reducing inventories, overproduction, and unnecessary capital purchases and paper transactions (office paper use has actually doubled since the widespread use of computers - so much for the paperless office!). Amazon.com, for example, uses 16 times less energy per square foot to sell a book than a traditional retail store.

Some fear that while shopping online may ultimately be more energy efficient, it makes shopping so easy and effortless that we all purchase more stuff than we actually want and need. Therefore, CMU has offered several suggestions for making e-commerce more environmentally friendly. First, companies need to look at more efficient ways to get packages to where they need to go and bundle orders together so multiple trips aren't needed. Second, don't print out order confirmations and reduce overnight delivery services...It's unlikely that someone needs a book the next day. And third....the consumer needs to buy less and recycle, recycle, recycle!





Research Briefs

Each month, the committee's staff researches and prepares a number of "briefs" on several topics relevant to the Joint Conservation Committee's mission. Very often, these briefs include references to reports and further research on the topics so that readers may pursue issues on their own.

Supporting Wildlife And Conservation Through Tax Checkoffs

— Tony M. Guerrieri, Research Analyst

They are called state income tax checkoff programs. According to a survey by the Federation of Tax Administrators (FTA), residents of 41 states and the District of Columbia have the opportunity to donate tax refunds to causes such as wildlife preservation, political campaigns, and child abuse prevention programs by filling in a box or two on their state income tax forms. Every state with a broad-based income tax has at least one checkoff program.

Pennsylvania has five different organizations listed on the 2002 Pennsylvania tax return form, including the Wild Resource Conservation Fund, breast and cervical cancer research, the Korean/Vietnam War Memorial, an organ donor awareness trust fund and the Pennsylvania Division of the United States Olympic Committee. The Wild Resource Conservation Fund is the oldest of the checkoff options in Pennsylvania, having appeared on state tax forms since 1982. Taxpayers have given more than \$6.2 million to help fund state conservation efforts over the past 20 years.

Virginia taxpayers can donate to any of 21 different causes, from the Chesapeake Bay Restoration Fund to the Jamestown-Yorktown foundation, and California and Alabama taxpayers can contribute to 11 different programs each.

According to the FTA survey, in 2000, taxpayers contributed \$27.3 million to various checkoff programs. This is a \$1.6 million jump from the 1998 survey, but less than the \$2.3 million increase from 1996 to 1998. In 2000, the PA Revenue Department reports that nearly 59,000 Pennsylvanians, roughly

three percent of all those who received refunds, donated income tax refunds totaling \$426,936.

The most common checkoff, found in 36 states in 2000, is for wildlife and conservation. Programs range from the preservation of non-game wildlife or endangered species to the preservation or acquisition of habitat. Only six jurisdictions with checkoff programs – Arkansas, Hawaii, Maryland, Missouri, West Virginia, and the District of Columbia – do not have non-game wildlife checkoffs. Maryland has a similar program to benefit the Chesapeake Bay and endangered wildlife. In addition to a non-game program, Ohio has a program that benefits natural areas.

Do Something Wild! Pennsylvania's checkoff for the Wild Resource Conservation Fund is the state's oldest

Also popular are political checkoffs, seen in 21 states. Another popular checkoff available in 21 states provides money for children's trust funds that support services for abused and neglected children. Eight states have checkoff programs to fund state Olympic committees. Other checkoffs range from funding for elderly and homeless care to research and prevention for diseases.

According to the FTA survey, in 2000, California, with 14 checkoff programs, pulled in the most of any state, \$3.3 million, followed by \$2.6 million in Michigan, with three boxes, and just under \$2 million in Minnesota with two. Louisiana, with three boxes, attracted only \$18,752.

Among the individual state programs, Michigan generated over \$1 million and Minnesota \$1.05 million for their respective political checkoffs. Maryland was next, contributing \$1.02 million to its

Chesapeake Bay Fund (up from \$875,363 in 1998). At the opposite end, New Mexico generated only \$1,660 for its political fund.

The FTA survey also includes information on average contributions and percentage participation for the three major types of checkoff programs (political contributions, nongame wildlife, and child abuse prevention). Political campaign contributions have the highest participation rate with a nationwide average of 4.4 percent, but the lowest overall average contribution rate of \$4.71 (up from \$2.20 in the 1998 survey).

With contributions averaging \$10.37 per taxpayer, non-game wildlife checkoffs were the most productive programs in 2000. Wildlife checkoffs collected \$7.2 million from 736,000 returns. Nineteen states reported averaging more than \$10 per contributor and three states had participation rates above two percent of the taxpayers. In Pennsylvania, the average contribution was \$6.53 with a participation rate of 0.4 percent. The child abuse checkoff was almost as productive, with donations averaging \$10.32 per contributor and a participation rate averaging 0.9 percent.

Public Opinion on US Wilderness Areas

— Jason H. Gross, Research Analyst

The Campaign for America's Wilderness has released a report entitled "*A Mandate to Protect America's Wilderness*". The report analyzes public opinion surveys taken over the last four years in order to determine what level of importance U.S. citizens place on maintaining publicly held wilderness areas. According to the report, since the 1970s, Americans have increasingly raised the issue of the health of the environment and public lands to a position of national stature. From the level of importance given to the environment in the national debate, we can discern that most people favor a high degree of environmental health and protection. However, without actual numbers there is no precise way to measure the degree of importance which Americans place on the environment. The report is a tool for policy makers to flesh out the issue with real numbers from across the country.

Concerns about oil prices and energy reserves have given rise to the possibility that U.S. public lands could be used to develop domestic energy

supplies. According to the report, 52 percent of voters agreed that protection of the environment should be given priority even at the risk of limiting the amount of energy resources that the U.S. produces domestically. Only about 36 percent of voters felt that development of energy supplies domestically should be given priority even if the environment suffers to some extent. In a NY Times poll, 57 percent of respondents agreed that protecting the environment is important enough that requirements and standards cannot be over emphasized and continuing environmental improvements must be made regardless of the cost.

The value people place on wilderness areas goes far beyond recreation

The report points out a misconception about the value the public places on the use of wilderness areas. According to the report, it is noteworthy that personal, on-the-ground use of wilderness areas that involves a person physically entering a wilderness area ranks only ninth among the benefits most valued by the public. Less than a third of people surveyed valued recreational use as extremely important. An overwhelming majority of people (well over 90% for each category), however, feels that protecting air quality, water quality, and wildlife habitat were the most important of all reasons to protect the environment.

The value the public places on water, air and habitat protection indicates that Americans use their wilderness areas for much more than mere recreation. The report believes this should serve as a wake up call for policy makers who wish to gauge the public appreciation of a wilderness area based only on the number of people who physically enter that area. According to the report, Americans share

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The *Environmental Synopsis* is issued monthly.

The newsletter examines timely issues concerning environmental protection and natural resources.

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5 a deep commitment to the value of preserving the wilderness as their legacy to the future. This goal has nothing to do with personal recreation, but has everything to do with preserving the wilderness apart from any recreational benefit that the environment may convey.

Allocating land among competing and incompatible uses is at the center of land management planning on federal lands. Land management agencies commonly hold public meetings and solicit written comment as a means of forming land management policy. However, public comment meetings are often less than optimally accessible by the large majority of interested citizens. According to the report, it is rare for federal agencies to give any weight to scientifically collected public opinion. The report is persuasive in its position that scientifically performed public opinion surveys should be used as one of the methods of determining land management policy in the same way that public comment is currently used.

For further information contact the Campaign for America's Wilderness at 202-544-3691 or get a copy of the report at: http://www.leaveitwild.org/reports/polling_report.pdf

Acid Rain Program Reducing Sulfur Dioxides and Nitrogen Oxides

— Tony M. Guerrieri, Research Analyst

The combustion of coal and other fossil fuels at electric power plants produces, as by-products, a wide variety of chemicals, including such gases as sulfur dioxide and nitrogen oxides. According to an annual report by the U.S. Environmental Protection Agency (EPA), the agency's acid rain program reduced emissions of both sulfur dioxide and nitrogen oxides through market trading and pollution credits.

The program, which was mandated by Congress as part of the 1990 Clean Air Act Amendments, is designed to reduce the emissions of the two pollutants, which are key contributors to acid rain. Over time, acid precipitation contributes to forest damage and can increase the acidity of lakes, streams, and soils to the point that they change local ecosystems.

The act required that sulfur dioxide emissions be cut 10 million tons from 1980 levels by 2010. The

reductions are to be realized by requiring a two-phase tightening of the restrictions placed on fossil fuel-fired power plants. In 2001, sulfur dioxide emissions from power plants were 10.6 million tons, a five percent drop from 2000 levels, and a 33 percent drop from 1990 levels, according to the EPA report. The approximate emissions in 1980 were about 17.3 million tons. Nitrogen oxide emissions from power plants also continued a downward trend of 4.1 million tons in 2001, an eight percent drop from 2000 levels, and a 25 percent drop from 1990 levels.

These emissions reductions have contributed to measurable improvements in air quality, reductions in deposition, and recovery of acid-sensitive waters, according to the report. The trading component of the acid rain program has significantly lowered the costs of compliance and has not resulted in any significant geographic shifts in emissions.

The “cap and trade” system is a dramatic departure

The acid rain program represents a dramatic departure from traditional command and control regulatory methods that established specific, static emission limitations. Instead, the acid rain program established a “cap-and-trade” system to help reduce levels of sulfur dioxide emissions, according to the report. The trading system allows the utilities more flexibility in planning how to achieve the required reductions in emissions and also enables them to minimize the costs of complying with these reductions. The annual allowances for emissions were allocated to the affected utility based on their historical fuel use, the emission rates specified in the law, and other factors. The utilities are required to own enough allowances at the end of each year to cover the emissions from the affected units. Allowances that are not used each year can be saved (or “banked”) and used to cover emissions in future years. The program provides an incentive for companies to invest in less-polluting technologies.

The program also established a more traditional regulatory approach for nitrogen oxide emissions, with an emission rate limit for certain types of coal-fired boilers. To permit some flexibility, the program allows companies to average the emissions of multiple boilers, so that extra-clean burning boilers may counteract dirtier-burning boilers.



The document, “*EPA Acid Rain Program 2001 Progress Report*”, may be found at www.epa.gov/airmarkets/cmprpt/arp01/index.html along with extensive information on emissions data, allowance transfers, air quality data, and atmospheric deposition data.

Ecotourism As an Economic and Environmental Benefit

— Jason H. Gross, Research Analyst

Ecotourism has been a rapidly growing industry over the past few years, but governments are just starting to realize the potential economic value of ecotourism. As a result of the growing importance of ecotourism, many governments are searching for the tools needed to effectively protect and market their ecotourism resources. A report by the United Nations Environmental Programme (UNEP) entitled “*Ecotourism: Principles, Practices, and Policies For Sustainability*” seeks to highlight ecotourism’s importance and provide insight on what can and should be done to protect it.

The report defines ecotourism as a form of nature-based tourism that relies on sustainable development and the preservation of natural areas. It utilizes responsible travel to these natural areas to conserve the environment and sustain the well being of local people. In order to preserve ecotourism sites, the ecosystems that provide a venue for the tourism must be maintained and allowed to prosper. If the natural diversity of an ecotourism site is lost, the value of that site as a travel destination will diminish proportionately along with its economic value. Because the natural value and economic value of that site are concurrent, ecotourism promotes natural preservation and economic prosperity at the same time.

According to the report, travel and tourism are the world’s fastest growing industries. However, the growth spurt in tourism has a potential negative threat to cultural and biological diversity. The demands of tourism on the infrastructure and ecology of a delicate environmental system can easily damage pristine natural areas. Ecotourism, as a growing niche market within the travel industry, has the potential of becoming the remedy. By providing an economic rationale for protecting delicate environmental areas, ecotourism can be a tool by which

policy makers and planners can work to save biodiverse areas.

One way that ecotourism’s effect is defined is by its sustainable development results. As a location better preserves natural areas, educates visitors about sustainability, and benefits local people, it generates a higher level of ecotourism. By preserving an area, the ecotourism level of interest grows as well as the value of the ecotourism site. But it must be understood that diverse areas that are appropriate for ecotourism do not create themselves. Proper planning and development must be made of these areas so the areas remain suitable for ecotourism and so do not diminish in value as natural areas. If local destinations do not properly fund ecotourism management they will damage their natural and cultural resources and damage their ability to service the ecotourism market.

The potential economic gain from ecotourism is high...but ecotourism areas also require close management

The report states that local communities have the most at stake and the most to lose. Eco-tourism tends to reverse the trend of globalization that makes local economic control difficult. But at the same time the local control of the valuable ecological resources becomes more important because once an area has attracted tourism and raised expectations, it must continue to meet those expectations. Local people must be informed about the value and demands of ecotourism development. If they are not, they will fail to protect the areas.

The potential economic gain for an ecotourism site is quite high, according to the report, which notes that hundreds of independent nature tourism companies in the U.S. handle well over one billion dollars in annual revenue. Research into protecting these areas and developing new areas, including potential ecotourism destinations on public lands, would increase these revenues significantly. If more research on the ecotourism market is performed, a growing nature tourism market will respond to the increasing number and quality of destinations.

For more information on ordering this publication from UNEP, please go to <http://www.unep.org/pc/tourism/library/ecotourism.htm>.

On The Horizon...

a look at upcoming events



- **Tuesday, April 8, 8:30 a.m., Hearing Room 1, North Office Bldg., Capitol Complex – JCC Environmental Issues Forum.** Department of Conservation and Natural Resources (DCNR) Secretary-designate Michael DiBerardinis will be the guest speaker. Secretary-designate DiBerardinis will talk about his plans and priorities for the department.
- **Thursday, April 10, 12 noon, Room 205, Ryan Office Bldg., Capitol Complex – Scrap Tire Report Meeting.** The Joint Conservation Committee is hosting this meeting to examine scrap tire clean up, market development and scrap tire pile reduction efforts. Michael Blumenthal, executive director of the Scrap Tire Management Council and senior technical director of the Rubber Manufacturers Association will discuss the association's latest report *"U.S. Scrap Tire Markets, 2001"*.
- **May 19-20, Penn State Conference Center, State College – Water Reuse and Recycle Symposium.** The Pennsylvania Department of Environmental Protection (DEP) is sponsoring this series of technical sessions on water reuse/recycling planning, innovative reuse/recycle and conservation technologies, and reuse/recycling/conservation success stories. Twenty-five or more exhibitors and 250 attendees are expected. For more information, visit DEP's website at www.dep.state.pa.us and type in Water Reuse 03 in the directLINK box on the home page.

Environmental Issues Forums are open to the public. Please call the committee office at (717) 787-7570 if you would like to attend.

Committee Chronicles...

a review of some memorable committee events



On February 28, the Joint Conservation Committee held a public hearing in Blairsville, Indiana County on the issue of coalbed methane wells, drilling and rights.

The hearing was intended to collect information on the ownership of coalbed methane as related to surface rights, water rights, coal rights and oil and gas rights. The photos show scenes from the hearing.

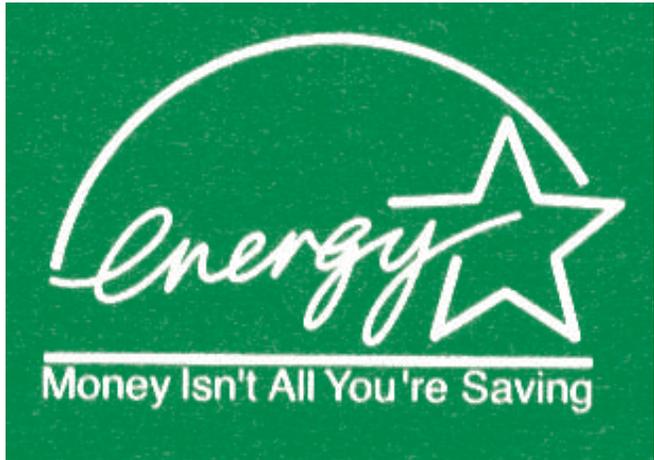


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The **ENERGY STAR** label can be found on a wide variety of household products. Heating and cooling systems, home appliances, home entertainment components, light fixtures and bulbs, and home office equipment are a few examples. The estimate is that using **ENERGY STAR** labeled products in that home office will use about half as much electricity as standard equipment.

ENERGY STAR products are also available for functions you may not have thought of. For example, roofing products, water coolers, windows, doors and skylights, answering machines and ceiling fans. If you're building a new home, why not try to earn the **ENERGY STAR** label by using more energy efficient building products. If one new home out of ten earns an **ENERGY STAR**, it is estimated to be equivalent to removing the pollution of 600,000 cars for one year.

The benefits are reflected both monetarily and in quality of life. It is estimated, for example, that the average household spends about \$1,300 a year on energy bills. Using **ENERGY STAR** products could save you up to 30 percent of that bill – or about \$400 annually. **ENERGY STAR** estimates that if just one room in every household in America would be brightened by **ENERGY STAR** lighting, greenhouse gas emissions would be reduced by one trillion pounds.



Many times consumers are faced with new laws and increasingly stringent regulations in an effort to reduce pollution or energy consumption. Often that

means inconvenience or involuntary lifestyle changes. Why not consider taking a proactive role and use your freedom of choice as a consumer to bring about the desired changes without more laws on the books?

Consider **ENERGY STAR**. Check it out on the Internet at www.energystar.gov or call the **ENERGY STAR** hotline at 1-888-STAR-YES.

How to Contact The Joint Conservation Committee

Phone: 717-787-7570

Fax: 717-772-3836

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Internet Website: <http://jcc.legis.state.pa.us>

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