



The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman

Giants still roam Pennsylvania. Imagine a rural hillside “inhabited” by three-armed, yet somehow majestic 20 story high giants...

Giant windmills, that is. That’s what the committee found when we visited the Somerset Wind Farm, a strikingly imposing sight visible from the Pennsylvania Turnpike at the Somerset exit. These quiet – but not silent as the 115-foot long arms slice with a whooshing sound through the air - giants seemed unbelievably as much a part of the countryside as the stubbled corn and wheat fields where they “lived.”

The committee found that Pennsylvania’s giants do not “take root” by chance. Engineers seek out sites where they can count on an average wind speed of 17-18 miles-per-hour over the course of a year. And, the giants are sensitive to their environment, producing more electricity at night and in the winter, “glitches” that engineers hope to harness and utilize as they strive to make wind power more efficient.

The committee spoke with Paul Copleman of Community Energy, Inc., the retail marketers of the energy being created by the Somerset Wind Farm windmills, and partners with Exelon Power and others, one of a burgeoning group teaming up to create alternative sources of energy in Pennsylvania. Each windmill at

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Craig D. Brooks, Director

This past month the committee continued its long-standing tradition of visiting heritage areas in Pennsylvania with a tour of the National Road State Heritage Park (renamed the National Road Heritage Corridor shortly after our visit) and the Lincoln Highway Heritage Corridor...two GREAT historic highways! Although these highway corridors were constructed nearly 100 years apart, each one in itself is a unique piece of Pennsylvania history that helped shape a nation. They both linked people and cities along the eastern seaboard to those west of the Allegheny Mountains.

The term “park” however, is often misleading. The former National Road State Heritage Park is not a “park” in the traditional sense, but spans 90 miles in southwestern Pennsylvania and was the first federally funded road in the United States. Thus, its new name – National Road Heritage Corridor - is more descriptive. First created as a heritage area in 1994 by the Pennsylvania Department of Community Affairs, the National Road Heritage Corridor passes through three counties: Fayette, Somerset, and Washington. The “Road”, as it’s called, reaches across four distinct historic eras: Early Trails and Military Roads (i.e.: pre-1800 and Mingo’s Path and Nemacolin’s Trail); Construction of the National Road (1806-1835); the Toll Road Era (1836-1900); and the Automobile Era (1900’s).

A visit to the National Road can take you to Fort Necessity Battlefield, site of the French and Indian War battle where a young George Washington led his troops. Down the road in Brownsville, you’ll find the nation’s first cast iron bridge, the Flatiron Building and the home of the Heritage Center and Melega Art Museum. A must-see stop along the Road is Nemacolin Castle which served as a trading post, refuge, and stopping off point for westward bound settlers in the late 1700’s. The trip would not be complete without a visit to the historic Summit Inn, one of the last porch hotels in the country. This mountaintop resort offers a spectacular 10 county view and has served such notables as Henry Ford and Thomas Edison.

Not too far away is the Lincoln Highway Heritage Corridor. This particular highway is perhaps the most famous of all the U.S. highways in Pennsylvania. Completed in the 1920’s, the Lincoln Highway was the first coast-to-coast highway to run from New York to San Francisco. It’s nationally famous for certain landmarks, in particular the giant “Coffee Cup” and the “Ship Motel”, but the Corridor is so much more. On our tour

we paid a visit to historic Bushy Run Battlefield, site of Pontiac’s War in 1763, and the Westmoreland Museum of American Art. This museum has served the community for more than 40 years and features American works of art with special consideration given to artists from Southwestern Pennsylvania...Both are impressive.

Listed on the National Register of Historic Places is the restored Greensburg Train Station that now houses a microbrewery and restaurant as well as the train station and office spaces. Not to be missed are the Compass Inn Museum, a restored stagecoach stop (ask the Innkeeper where the words “toaster”, “spinster” and “pen knife” originated) and the Gristmill at Saint Vincent College. This gristmill, operated by the St. Vincent Benedictines, has been in operation since the 1850’s and sells its FAMOUS St. Vincent Bread onsite. You’ve got to try some! The gristmill is also part of a very successful passive mine drainage improvement project and environmental education center.

Traveling by car in the United States may very well be the favorite way of vacationing this year and “...getting there is half the fun...” By using our highways and automobiles we’re not only having fun, but also keeping our economy and national spirit alive. There is so much to see, so many routes to take, so many places to choose from. If you have a road trip in mind, why not follow the trail of historic highways in Pennsylvania as your next travel destination.

(More photos of sites along the National Road and Lincoln Highway can be found in “Committee Chronicles” on page 7.)



Father Paul Taylor relates the history of the St. Vincent Gristmill in Latrobe, a popular stop along the Lincoln Highway Heritage Corridor, to committee executive director Craig Brooks (left) and committee chairman Rep. Scott Hutchinson (right).



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.

Renewable Energy Choices for a Clean and Prosperous Canada

— Tony M. Guerrieri, Research Analyst

According to a report prepared by members of the Canadian Parliament, there is a tremendous renewable energy potential in Canada, but much of it remains unexploited. The report, *"Unlimited Potential: Capitalizing on Canada's Untapped Renewable Energy Resources"*, was prepared by the Caucus Working Group on Environmental Technologies. The group was established in the fall of 2001 with a mandate to examine various renewable energy technologies, their successes and failures, and the barriers to bringing these technologies into mainstream use.

The report suggests that the degree to which this potential is realized will depend on how competitive renewable energy becomes in the energy market. It concludes that changes in public policy could be critical in removing many of the obstacles to this development, which the report concludes holds the promise of a long-term solution to many of Canada's energy problems.

The economics of fossil fuel have steadily deteriorated over the last several decades as costs of exploration and production, as well as environmental requirements affecting energy production and use, have increased. According to the report, a transition to renewable-based energy systems is looking increasingly likely as their costs decline. Over the past decade, solar and wind power systems have experienced rapid sales growth, declining capital costs and costs of electricity generated, and have continued to improve performance.

Renewable energy is defined as energy derived from a wide range of non-fossil and non-nuclear sources. This includes many naturally occurring, replenishable energy sources such as solar, wind, biomass, and small hydro sources of power. According to the report, tapping these renewable resources could invigorate Canada's economy. However, Canada's efforts to support renewable energy technologies lag significantly behind those of the United

States and other countries. The report stresses the need to capitalize on current technological advances and to overcome political, economic, and institutional barriers.

Like any new technology, renewable energy faces significant barriers to widespread acceptance and use. For example, the sheer size of the existing energy industry, with its dependence on oil and coal, presents an especially difficult challenge. Renewable energy providers have had a difficult time breaking into markets that have long been dominated by fossil fuel providers.

The report outlines ten policies necessary to begin a transition to a renewable energy future, and is intended to give policymakers a realistic framework for a renewable energy future. The policies are divided into four groups: economic incentives; better accounting of hidden costs; policy instruments; and government leadership. The report stresses that each of the ten policies is instrumental to the proliferation of renewable energy technology in Canada. Recommendations include:

- expansion of the 1.2-cents-per-kilowatt-hour incentive for wind energy production to cover all forms of renewable energy;
- elimination of the federal excise tax on biodiesel, as has been done for other environmentally friendly fuels such as ethanol and natural gas;
- expanded use of flow-through shares and the re-introduction of limited partnerships to promote increased investment in renewable energy technology;
- use of domestic emissions trading systems to better account for hidden health and environmental costs associated with fossil fuel energy production;
- extension of federal renewable electricity procurement to other levels of government and major industries;
- establishment of a Renewable Fuels Standard requiring a percentage of fuel sold in Canada to be from renewable sources;
- consideration of the use of a Renewable Portfolio Standard that would require energy producers to supply a certain percentage of energy from renewable sources;
- increased funding for pilot and large-scale demonstration projects;



- creation of a federal coordinating agency to eliminate obstacles to renewable energy development; and
- increased access to investment capital for renewable energy start-ups.

A copy of the report can be found on the World Wide Web at http://www.julianreed.parl.gc.ca/rtf/other/final_report_formatted.pdf.

Air Quality in Southeast A Lesson for Nation

—Jason H. Gross, Research Analyst

It is important to study environmental regions outside our own because we can use them as examples of environmental policy to follow or avoid based on their successes or failures. According to the report *“Blueprint for Breathing Easier,”* the air quality in the Southeast United States is among the worst in the nation. The report is a joint effort by the Southern Alliance for Clean Energy, the Southern Environmental Law Center, and the Environmental Defense.

According to the report, conditions in the Southeast threaten human health, the environment, and long-term economic viability in the region. And the report traces most of the air pollution problems in the region directly to electric generation. There are many older coal-fired power plants that are not under the Clean Air Act protocols because they are old enough to be grandfathered outside the law’s provisions. According to the report, electric generation creates 76% of the sulfur dioxide emissions in the Southeast. Due to the extremely poor air quality, the pressure is on the Southeast to create a cleaner and more environmentally appropriate way of generating electricity.

The lessons learned in the Southeast could be used as a guide to improving our own air quality here in the Northeast. The report states that the poor air quality has wide and varied affects on public health, visibility, ecosystems, global climate change, and the economy. The public health issues caused by a higher degree of particulate matter that settles in the lungs include sickness and death among 11,000 people in the region annually. Air pollution haze reduces visibility by as much as 78% from natural levels, reducing sight distance from 113 miles to an average of 25 miles. Ecosystems are challenged by air pollution that causes acid rain and nitrogen deposits, which in turn make vegetation more susceptible to disease, pests, and poor growth. By improving the environmental health of the Southeast, global climate

change could be reduced, since it is affected by an aggregate of environmental change around the world.

The effects of poor air quality listed above have an impact on the economic health of the region. By making the area less clean to live in, less attractive to look at, and less enjoyable for recreation, the prospects of attracting people to the area to work and live are greatly reduced. The report estimates that improvements to air quality would bring nearly 5,000 new jobs to the region.

The report contains 11 recommendations that states should follow to reduce energy consumption and to promote clean energy usage. Among the recommendations is encouraging national power plant cleanup legislation. By encouraging legislation of this nature the governors of the Southeastern states could start an initiative with a funding source to improve energy infrastructure on a local as well as a national level.

Another recommendation is to create a public benefits fund. Such a fund would create opportunities to finance energy efficiency projects, renewable energy sources, green power programs, and the use of products from the Energy Star program. The report also recommends green power pricing that would promote renewable energy sources as an alternative to conventional dirty energy sources.

It is important to realize that what has happened in the Southeast can occur in other regions as well. We must constantly be alert to a slowly increasing erosion of our air quality that might in turn have effects on our region that are similar to the economic, ecological, and health issues challenging the Southeast. For more information and a copy of the full report contact http://www.environmentaldefense.org/documents/1997_breathingeasier.pdf on the World Wide Web.

How Are the Great Lakes States Doing?

— Tony M. Guerrieri, Research Analyst

Which of the Great Lakes states have cleaner air, or cleaner water? Which do a better job of recycling, or conserving energy? To answer these and other questions, a report by the Michigan Environmental Council provides information on the status and trends of major environmental indicators in the eight Great Lakes states (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin). It also confirms that these states together make up an incredibly complex, dynamic, and interconnected ecosystem.

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The report, “*Greening the Governments: Assessing the Environmental Conditions and Performance of the Great Lakes States,*”

includes the following environmental indicators: air quality; water quality; land use; solid waste; and energy conservation. Specific measures within each indicator were selected on the basis of data availability and consistency in reporting for all eight states.

Air quality presents both the best data and clearest trend of improvement. The Great Lakes states that had the most days with unhealthy air pollution levels as of 1999 were Pennsylvania (21) and Michigan (18). Minnesota had the fewest days with zero. Because New York City is in a non-attainment area for air quality, New York has more people living with unhealthy air – 14 million in the case of ozone pollution – than any other of the Great Lakes states. Pennsylvania was second with over ten million.

Because the states vary in the level of industrial activity, air toxic emissions were also measured against industrial output. The state with the highest ratio of toxic air emissions to the Gross State Product (GSP) of the industries producing them is Indiana (0.8 tons per \$1 million in GSP). A high ratio means more air toxics are released per unit of economic productivity than in other states. The state with the lowest ratio is New York (0.2 tons per \$1 million in GSP). Pennsylvania’s ratio is 0.62 tons per \$1 million of GSP. Only Indiana and Ohio have a higher ratio than Pennsylvania.

New York and Ohio had the lowest percentage of community water systems with reported health-based violations in 2000, but, because of the large numbers that those systems served, New York had the second highest percentage of population (12 percent) affected by these troubled systems. Wisconsin ranked first with 15 percent of its population affected by systems in violation. Pennsylvania’s affected population was only four percent.

Pennsylvania led the Great Lakes states in tons of toxic water releases. The amount of direct toxic releases reported as entering Pennsylvania’s waters rose from 1,000 tons in 1990 to almost 25,000 tons in 1999. New York was second with almost five thousand tons released in 1999. Pennsylvania’s numbers were still extremely high when measured against industrial output.

The leading state in the region in addressing rivers and lakes where polluted runoff or other non-point sources violate water quality standards is Pennsylvania, which has developed limits for 15 percent of its streams. States that have made the least progress are Illinois and Minnesota (0 percent), Wisconsin (0.1 percent), and Ohio (0.2 percent).

The state with the lowest ratio of toxic water discharges to the GSP of the industries producing these pollutants is Michigan, at 0.007 tons per \$1 million in GSP. The state with the highest ratio is Pennsylvania, at

0.28 tons per million in GSP.

The state that generates the most trash per person is Michigan, at 9.656 pounds per person per day. Wisconsin generates the least, 4.174 pounds per person per day, while Pennsylvanians also generate just over four pounds per person per day.

States with the greatest number of programs and policies favoring clean energy sources are Wisconsin (seven of eight) and Pennsylvania and New York (six each). Michigan has the fewest (one).

The state with the greatest number of programs and policies protecting against exotic invasive species and conserving wetlands and water flows is Michigan (five of nine). Pennsylvania is not far behind with four, while New York and Illinois have the fewest (two each).

States with the greatest developed land per person, according to the report, were Wisconsin, Michigan, and Minnesota. Wisconsin had 0.34 acres of developed land per person, Michigan 0.33 and Minnesota 0.31. Developed land per person, according to the report, is a measure of inefficient land use and sprawl. New York (0.15 acres) and Illinois (0.21 acres) consumed the least developed land per person. According to the report, Pennsylvania had 0.28 acres of developed land per person.

Although the eight Great Lakes states have made significant progress addressing long-standing air and water pollution problems, the report concludes that most of the states are not responding quickly enough to meet emerging challenges of land use, energy policy, and water pollution from farms, construction sites, and city streets and parking lots. The report further notes that it is not always easy or feasible to compare environmental conditions among eight such disparate states, and recommends the Great Lakes states enter into a “Right to Know Compact” to standardize collection and reporting of key environmental data.

News to Use in the *Environmental Synopsis*... share it with a friend

The *Environmental Synopsis* is issued monthly.

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

If you or someone you know would like to receive a copy of the *Synopsis* each month, please contact the committee office at 717-787-7570.



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In producing the 72-page report, the Michigan Environmental Council consulted with a panel of advisors from all Great Lakes states. Walt Pomeroy, executive director of the Pennsylvania Organization for Watersheds and Rivers (POWR) participated as the Pennsylvania advisor. For further information and a copy of the report, you can go to the following web address: <http://www.mecprotects.org/greening.pdf>.

Greenways: Local Places for Conservation and Recreation

—Jason H. Gross, Research Analyst

State government and local organizations, individuals and governments are joining together to create and preserve greenways — linear corridors of open space that can be used for conservation, recreation and general open space preservation. Many greenways already thread their way across Pennsylvania, and pass through varied areas - urban, suburban, and rural – while encompassing a variety of functions, such as areas for walking and bicycling, roadways, and avenues to explore downtown areas.

In 1998, Governor Ridge, through executive order 1998-3, called on the Commonwealth to examine greenways and to increase their importance and profile, and formed the Pennsylvania Greenways Partnership Commission to carry out the order. The commission issued a report entitled “*Pennsylvania Greenways: An Action Plan for Creating Connections.*” A subsequent executive order made the Pennsylvania Department of Conservation and Natural Resources (DCNR) the lead agency in implementing the greenways action plan.

DCNR and plan consultants, The RBA Group, provided an update on the plan and how it integrates with the overall environmental strategy for the Commonwealth at the committee’s June Environmental Issues Forum. The greenways action plan is an effort to coordinate and draw together the many disparate greenways into a system, and determine what is most needed for a greenways network.

According to the report, greenways have always represented a grassroots effort. The conservation movement helped begin a system by establishing trails for hiking, bicycling, and off-road vehicle use. These uses were expanded to include protection of open space, rivers, and stream corridors. Many local citizen groups and non-profits have since partnered with local govern-

ment to purchase land to maintain it as conservation areas. Since then, the Commonwealth has helped provide funding to continue and widen the grassroots and local nature of the program, which creates local pride and association with the environment and conservation.

The action plan addresses a number of the benefits from greenways, including enhancing a sense of community, preserving scenic beauty, protecting important environmental resources, and providing recreational opportunities. Greenways not only foster stewardship of the Commonwealth’s rural and farmland legacy by developing local connections with conservation areas, but also create verdant and visitor-friendly oases in acres of urban concrete and steel.

The Greenways Program preserves historic and cultural resources, such as canals, roads and trails (rail and otherwise), by working with other programs, such as the PA Heritage Park Program. Greenways are among Pennsylvania’s tourist destinations, helping to contribute to the economic prosperity of local communities. And, greenways provide a venue for educational opportunities by creating public access areas centered around historic sites.

Greenways — linear corridors of open space that can be used for conservation, recreation and open space preservation

The next challenge for the greenways program is to target critical areas of growth and develop them in order to open greenways to more people. A key part of the greenways plan is to develop an information clearing-house to help coordinate development efforts and widen the sphere of knowledge about greenways and their benefits. Public marketing is a priority, since many greenways are little known by local Pennsylvania residents, not to mention those who live outside a particular area or the state.

Another major goal for the program in the future is to develop more miles for natural resource protection. The program has a goal of adding up to 600 square miles of riparian buffers, and working to incorporate more local conservation areas. More bicycle and pedestrian paths are atop the list of items taking precedence, too.

For more information, please contact DCNR’s Bureau of Recreation and Conservation by calling 717-783-2658 and requesting “*Pennsylvania Greenways: An Action Plan for Creating Connections.*”

On The Horizon...

a look at upcoming committee events



► **Tuesday, September 24, 8:30 a.m., Hearing Room 1, North Office Bldg., Capitol Complex – Environmental Issues Forum.** Dr. Richard R. Parizek, professor of Geology and Geo-Environmental Engineering at Penn State University, and an expert on groundwater supplies, will discuss Pennsylvania's drought and its long-term effects on groundwater supply, use and recharge and also examine "man-made" drought. Dr. Parizek will also touch on groundwater formations, development of new sources of water and their potential use in planning and development.

► **Tuesday, October 8, 8:30 a.m., Hearing Room 1, North Office Bldg., Capitol Complex – Environmental Issues Forum.** Ken Manno, Program Manager for the Sustainable Forestry Initiative (SFI) in Pennsylvania, and an executive from International Paper's Forest Resources Division will provide an overview of the initiative, describe what the SFI is doing in Pennsylvania, and discuss the practical application of SFI.

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



More scenes from the committee's recent visit to the National Road Heritage Corridor and the Lincoln Highway Heritage Corridor.

Committee chairman Rep. Scott Hutchinson (left) and member Rep. Jeff Coleman (R-60) discuss some of what they saw at the Westmoreland Museum of American Art in Greensburg, part of the Lincoln Highway Heritage Corridor.

Rep. Hutchinson gets a hands-on history lesson from a guide at the Nemaocolin Castle in the National Road Heritage Corridor.

The historic Summit Inn, in Farmington, Fayette County, one of the nation's last remaining porch hotels, where visitors to the National



Road Heritage Corridor can enjoy a view of 10 different counties, much as Henry Ford and Thomas Edison did.



Committee chairman Hutchinson (center), Rep. Bob Bastian (R-69, 2nd from left) and committee staff join National Road Heritage Corridor executive director Donna Holdorf (4th from right) and their guide in period attire (4th from left) during the group's tour of Nemaocolin Castle.

Somerset produces 1.5 megawatts of power, making this six-windmill farm a 9-megawatt facility.

And the giants are expected to get bigger - in terms of production that is.

At Mill Run in Fayette County, 10 turbines are producing 15 megawatts of power. There is another Somerset County facility with eight turbines generating 10.4 megawatts built by the Green Mountain Energy Company. Earlier this year, Department of Environmental Protection (DEP)



Somerset's "land of the giants"

Secretary David Hess announced issuance of a water quality permit allowing construction of the Waymart Wind Farm in Wayne County. In late July, Drexel University joined 25 other Pennsylvania colleges and universities in purchasing wind-generated electricity from Pennsylvania wind farms. And, the legislative Task Force for a 21st Century Energy Policy for Pennsylvania as well as the Governor's Energy Task Force is recommending greater promotion of renewable energy sources, including wind power.

A 2000 Department of Energy study calculated that roughly three percent of the nation's electricity supply is produced from renewable sources now, with expectations that that will increase to 20 percent over the next decade. In the past two years alone, worldwide wind power capacity grew by one-third. In Europe, where Germany and Den-

mark are world leaders in use of wind power, several leading initial public offerings in the financial markets earlier this year were wind energy related. Incidentally, industry experts say Pennsylvania has better wind resources than Germany.

Right now, energy from wind power in Pennsylvania is slightly more expensive than conventionally produced power, but brings with it clean power production and economic and environmental benefits. For example, it reduces emissions of nitrogen oxides, sulfur dioxide - an acid rain producer, carbon dioxide and mercury, and helps to create jobs and revenue for local communities through royalties to landowners and tax revenues. And, over the next 10-15 years as the growth of wind power continues, it is expected to become less expensive and price neutral.

For more information, check out some "windy" websites like www.newwindenergy.com, www.dep.state.pa.us/dep/deputate/pollprev/energy/wind/default.htm, www.paenergy.state.pa.us or www.greenmountain.com. And, if you're traveling the PA Turnpike at Somerset, take a few moments to pull off and visit the land of the giants.

Committee chairman Rep. Scott Hutchinson (center) and committee staff discuss wind energy with Paul Copleman (2nd from left) of Community Energy, Inc.



How to Contact The Joint Conservation Committee

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