

Power PartnersSM

EEl Industry Initiatives



**POWER
PARTNERSSM**

Voluntary Climate Actions to Sustain Economic GrowthSM

The electric power industry has partnered with the Department of Energy (DOE) to create Power PartnersSM—a joint government-industry initiative to reduce greenhouse gas emissions. Through Power PartnersSM, the power sector and DOE are working together to develop and implement voluntary climate actions to sustain economic growth.

Power PartnersSM climate actions are guided by the principles of improved energy efficiency, increased investments in research and development, technological innovation, market-based initiatives, and cost-effective carbon dioxide (CO₂) emissions reductions.

In addition to individual company actions, which are the cornerstone of Power PartnersSM voluntary programs, EEI member companies are participating in several, industry-wide initiatives to reduce, avoid, and sequester greenhouse gas emissions.

Learn more about EEI's Power PartnersSM Initiatives:

ForesTree Carbon Company

ForesTree Carbon Company is an initiative to plant trees in critical habitats in the Lower Mississippi River Valley.

Through the natural process of photosynthesis, trees remove CO₂ from the air and convert it into carbon in plant matter, a process called carbon sequestration. For more than 10 years, the electric power industry has greatly increased forest management and tree-planting programs to reduce greenhouse gas emissions, including the actual or planned planting of over 100 million trees.

Through *ForesTree Carbon Company*, electric companies are partnering with government agencies and environmental groups to plant trees and restore natural ecosystems in Arkansas, Louisiana, and Mississippi.

In addition to sequestering CO₂ emissions, the *ForesTree Carbon Company* projects will:

- Create significant habitat for waterfowl, migratory birds, black bears, and other native wildlife species.
- Improve water quality by reducing fertilizer inputs to waters.
- Reduce erosion and stabilize soils to help maintain stream flows and reduce flooding.

For more information on the *ForesTree Carbon Company*, contact John Kinsman at (202) 508-5711 or jkinsman@eei.org.

Coal Combustion Products Partnership (C²P²)

Coal Combustion Products Partnership (C²P²) is aimed at diverting coal combustion products from land disposal and reducing greenhouse gas emissions by increasing the beneficial use of CCPs.

Coal-based electric power plants produce coal combustion products (CCPs), which can be recycled to produce environmental benefits and energy savings. CCPs—including fly ash, bottom ash, boiler slag, and flue gas desulfurization materials—are beneficial as replacements for manufacturing materials. Using CCPs reduces the energy consumption associated with the mining and processing of manufacturing materials. For example, fly ash—the most widely known type of coal ash—can serve as a partial replacement for cement and other concrete products.

Electric companies are partnering with the U.S. Environmental Protection Agency and other key stakeholders to inform potential users of the attributes and beneficial uses of CCPs and the obstacles preventing their use. This partnership targets generators and manufacturers and encourages them to increase the application of CCPs in their endeavors.

In addition to avoiding greenhouse gas emissions, the *Coal Combustion Products Partnership*:

- Reduces energy consumption from the decreased production of cement and other manufacturing materials.
- Reduces the volume of solid waste going to landfills.
- Reduces the use of natural resources.

For more information on the *Coal Combustion Products Partnership*, contact Jim Roewer at (202) 508-5645 or jim.roewer@uswag.org, or visit www.uswag.org/c2p2.htm.

Harvesting the Wind

Harvesting the Wind is aimed at stimulating the production of electricity from wind resources by advancing wind turbine technology and better integrating wind into the existing transmission grid.

Wind flow when “harvested” by modern wind turbines can be used to generate electricity. In fact, wind power is the fastest growing source of electricity production (on a percentage basis) worldwide. By replacing electricity generated from fossil fuels, wind turbines are extremely effective at reducing CO₂ emissions.

In partnership with DOE, electric companies are supporting more advanced wind turbine technology in an effort to encourage widespread utilization of wind as a source of large-scale electricity production. This program is designed to make wind more attractive to electric power companies by taking steps to analyze where wind can be located on the existing transmission grid, purchasing existing wind turbines, and exploring prospective projects in the mountains of the eastern U.S.

In addition to reducing greenhouse gas emissions by replacing electricity generated from fossil fuels, *Harvesting the Wind*:

- Reduces air and water emissions.
- Reduces the production of hazardous waste.
- Avoids the depletion of natural resources such as coal, oil, or gas.
- Prevents environmental damage through resource extraction and transportation.

For more information on *Harvesting the Wind*, contact Chuck Linderman at (202) 508-5652 or clinderman@eei.org.

Biomass for Electricity Generation

Biomass for Electricity Generation is a comprehensive effort to widely expand the use of biomass through the support of technology and to develop more efficient ways to combine biomass with coal for electricity generation.

Biomass is a renewable energy resource derived from the organic waste of natural and human activities. Electricity generated from biomass is fueled by many sources, including timber industry byproducts, raw forest materials, agricultural crops, household and animal waste, and demolition wood. Biomass offers one of the most attractive options for reducing greenhouse gas emissions because trees and other plants sequester atmospheric CO₂. The growth of plants—and their conversion to energy as biomass fuels—recycles atmospheric carbon. The result is no net addition of CO₂ into the atmosphere.

Electric companies are working in partnership with the U.S. Department of Agriculture and the National Renewable Energy Laboratory to promote biomass technologies and to convert waste streams into a useful product. The program also aims to make biomass more useful as a boiler feedstock, either on its own or in conjunction with coal as a means of reducing emissions.

In addition to reducing greenhouse gas emissions, using *Biomass for Electricity Generation* produces many environmental benefits:

- Using biomass to generate electricity reduces sulfur dioxide and nitrogen oxides from coal-based power plants which co-fire biomass with coal.
- Growing biomass feedstock provides habitat for wildlife.
- Electricity from biomass makes productive use of crop residues and wood manufacturing wastes currently stored in landfills.

For more information on *Biomass for Electricity Generation*, contact Chuck Linderman at (202) 508-5652 or clinderman@eei.org.

International Power Partnerships

The International Power Partnerships (IPP) initiative promotes international energy projects to reduce greenhouse gas emissions in partnership with U.S. and International investors.

Fostering international partnerships are a key part of reducing greenhouse gases. Over the years, the electric power industry has partnered with developing countries and nations with economies in transition to reduce greenhouse gas emissions worldwide.

Through IPP, electric companies are partnering with U.S. government agencies and both public and private international organizations to strengthen collaboration and clean energy investment between the U.S. and the developing world as well as developed countries. IPP is currently exploring possible projects in Australia, Brazil, Canada, China, the European Union, India, Italy, Japan, and Korea. These projects use measures that include broad-based market programs as well as technologically advanced energy production and pollution control technologies.

International Power Partnerships focus on:

- Conventional power generation system actions, such as boiler improvements, waste heat recovery systems, and energy management systems.
- Data, research, and monitoring actions.
- End-use energy efficiency.
- Expansion of rural electrification activities.
- Fuel system actions, including fuel switching to natural gas and renewable energy development.
- Transmission and distribution system actions.

For more information on *International Power Partnerships*, contact Ron Shiflett at (202) 508-5507 or rshiflett@eei.org, or visit www.ji.org.

Web Resources

In addition to the specific *Power Partners*SM initiatives outlined on the previous pages, the following tools provide important real-time information on electric companies' climate actions.

Power PartnersSM Resource Guide

The Power PartnersSM Resource Guide is a Web-based tool designed to provide companies with a range of supply- and demand-side options to help guide their individual climate actions.

Electric companies have developed successful programs to reduce greenhouse gas emissions, through both individual actions and collaboration of best practices. The purpose of the *Power Partners*SM Resource Guide is to help users find the latest information on a variety of topic areas through the use of links to credible Web sites and proven company climate actions. Featured sections include end-use efficiency, renewables, generation, transmission and distribution, and transportation, as well as a number of other emission reduction opportunities. *The Power Partners*SM Resource Guide is expected to be online by Summer 2003.

For more information on the *Power Partners*SM Resource Guide, contact Eric Holdsworth at (202) 508-5103 or eholdsworth@eei.org, or Eric Myers at (202) 508-5508 or emyers@eei.org.

Wise Use Web Site

EEI's Wise Use Web Site features a wide range of electric company programs and incentives to help consumers save energy in their homes and businesses and to protect the environment.

Electric companies have a long history of helping their residential, commercial, and industrial customers use electricity wisely and protect the environment. To help customers use electricity wisely, electric companies have developed and implemented programs to improve end-use efficiency through demand-side management and energy conservation programs.

EEI's Wise Use Web Site provides energy saving tips and advice and descriptions of energy-management programs and incentives. The site, which can be accessed through EEI's environment page at www.eei.org/issues/enviro, also provides information on electric solutions, such as compact fluorescent light bulbs and energy-efficient appliances.

For more information on *EEI's Wise Use Web Site*, contact Steve Rosenstock at (202) 508-5465 or srosenstock@eei.org, or Tom Farkas at (202) 508-5557 or tfarkas@eei.org.



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