



Sustainable Redevelopment of Brownfields—Fostering Economic Development and Protecting the Environment

Sustainable Redevelopment

Sustainable development is one of the primary goals of EPA's Brownfields Program. In the context of restoring brownfields, sustainable development does not refer solely to removing potentially hazardous contamination and getting a new business located on the property. Ultimately, sustainable development means finding an approach to brownfields reuse that offers the most significant long-term benefits to the local community—using resources efficiently and reducing waste while encouraging local economic growth. Among the many reuse plans that emphasize sustainable development, “green” buildings and eco-industrial parks are recurring themes.

Eco-industrial parks are based, in part, on the design of natural systems and include features such as energy exchange and conversion of waste output from one industry into input for production in another industry. In August 1994, the President's Council on Sustainable Development selected Cape Charles as one of four sites for a national eco-industrial park demonstration project, to showcase advanced facilities in resource efficiency and pollution prevention. A \$200,000 EPA Brownfields Assessment Pilot award in 1995 and a \$460,000 Showcase Community grant awarded in August 2001 added to a growing commitment of private, state, and federal funding, which also included a \$200,000 Showcase Finalist award and a \$100,000 Brownfields Supplemental Assistance grant. The Cape Charles Sustainable Technology Park is in the Virginia Enterprise Zone, which has provided additional incentives to companies locating in the park. The Brownfields Assessment grant funded environmental assessments on an abandoned 25-acre town dump located in the middle of the 200-acre eco-park. The Sustainable Technology Park Authority will use this site, along with some adjacent land, as a conference and training facility for the park. Approximately one-half of the land in the park is natural habitat, including the 30-acre Coastal Dune Natural Area Preserve and approximately 60 acres of other natural areas. The entire park is open to the public and features walkways and trails—including a Chesapeake Bay overlook. Building One, a 31,000-square-foot solar-powered “green” facility, was completed in 1999. Companies that have leased space in the building thus far include Hauge Technology, a manufacturer of pressure exchangers, and Delisheries, a gourmet baking mixes company. The most recent company to commit to the Park is the German-based ProVento America, Inc., which develops and markets wind farms that produce electricity. ProVento will invest \$7.5 million in its U.S. headquarters at the Cape Charles Park and in six wind turbines that will create enough energy to power more than 3,000 homes.

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A boardwalk winds through natural habitat on Cape Charles' eco-industrial park.

JUST THE FACTS:

- A \$7.5 million wind farm project planned for Cape Charles, Virginia's eco-industrial park includes six wind turbines that will create enough energy to power more than 3,000 homes.
- In Baltimore, Maryland, a former brownfield is now a model “green” building that offers low-energy heating, cooling, and lighting systems among its other energy-efficient designs.
- In Knoxville, Tennessee, a company that produces mulch for city projects and for retail sale signed a lease to conduct operations on a brownfield that had sat unoccupied for nearly 15 years.

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In Baltimore, Maryland, the city's Brownfields Assessment Pilot helped facilitate redevelopment of the historic Montgomery Ward catalog distribution center into a model "green" building for office and technology uses—the Montgomery Park Business Center. The Montgomery Ward warehouse was built from 1925 to 1927, and at that time was the largest mercantile building in Baltimore. The building is listed in the National Register of Historic Places, making its redevelopment into a "green" facility an historic event as well. The business closed its doors in 1985, and in 1995 the Baltimore Brownfields Pilot targeted the site for assessment, cleanup, and redevelopment. The developer put the site through Maryland's Voluntary Cleanup Program and proceeded with a \$3 million cleanup, which included removal of lead paint, asbestos, petroleum, and PCBs. Now the 1.3 million-square-foot Montgomery Park Business Center offers low-energy heating, cooling, and lighting systems; innovative uses of storm water in toilet water; use of recycled materials; windows with insulated "Low-E" glazing; a "green" roof that incorporates soil planting for added insulation; abundant natural light; and bike lockers and showers for employees who ride their bikes to work. So far, 260,000 square feet of office space has been leased to the Maryland Department of the Environment; 60,000 square feet is leased to the Maryland Lottery; and another 80,000 square feet has been leased to NCO, a check-



A former brownfield in Baltimore, prior to redevelopment.

processing/payment center. Currently, total occupancy is at 33 percent and 1,500 people are employed at the Montgomery Park Business Center. When fully occupied, the Business Center, which is located in an Empowerment Zone, will employ 3,500 to 5,000 people. Total private and public investment will reach \$100 million, including \$9 million in grants and loans from the U.S. Department of Housing and Urban Development and \$2 million from Maryland's Brownfields Revitalization Incentive Program for lead abatement.

The Knoxville, Tennessee, Brownfields Pilot has worked with citizens, local businesses, community groups, academic institutions, state and local economic development organizations, and the Tennessee Valley Authority to develop the Center City Business Neighborhood on brownfield sites in the city center. The city has developed a portion of the Business

Neighborhood with a "green" theme, which includes attracting businesses in the recycling and reuse industries. The strategy involves working with lenders to provide low-interest loans to environmentally friendly companies. One such company is Knoxville Recycled Fibers, which performs one stage of its newsprint recycling process at the Business Neighborhood. The company has spent \$1.8 million toward redevelopment activities while creating three new jobs. Another "green" business locating in the Neighborhood, Shamrock Organics, produces mulch for the city and for retail sale. Shamrock Organics has signed a lease on an 8.5-acre property that has not been in use for approximately 15 years.

As the Brownfields Program builds sustainable redevelopment models, future projects have examples to follow. The Program promotes a model of environmental protection that creates economically viable, environmentally sound, self-sustaining communities. By ensuring that reuses are environmentally sound while providing local residents with the greatest possible benefit, the Brownfields Program will continue to improve the quality of life in neighborhoods across the country and prevent the creation of future brownfields.

CONTACTS:

For more information contact
 US EPA Region 3 (215) 814-3132
 US EPA Region 4 (404) 562-8923

Or visit EPA's Brownfields Web site at:
<http://www.epa.gov/brownfields/>