

CLEANUP AND
REDEVELOPMENT

Many coal-fired power plants are expected to close in the coming years. Coal plant communities are faced with potentially long-term job and tax revenue loss, legacy environmental contamination and the need for new economic opportunities.

Understanding the anticipated costs for all phases of redevelopment is an important aspect of a community revitalization plan. Several financial mechanisms may be available to support different phases of the assessment, cleanup and redevelopment process.

EPA's Brownfields Program empowers states, communities and other stakeholders to work together to assess, safely clean up and sustainably reuse brownfields. The revitalization of brownfields properties, including former power plants, can create benefits for communities.

Understanding the costs associated with the decommissioning, remediation and redevelopment planning for a former power plant is an important aspect of a community revitalization plan. Depending on the community's vision for the property's end use, the costs of decommissioning, demolition, remediation and redevelopment can be substantial. With well-estimated project costs, a project team and the community can better identify the best potential funding sources for meeting environmental cleanup challenges. In addition, a good sense of potential project costs will inform decision-making at each phase of the project. Although costs may appear to be prohibitive at first, several financial mechanisms may be available to support different phases of the assessment, cleanup and redevelopment process.

EPA prepared this fact sheet to help communities that may be affected by the closure of coal-fired power plants. Fact sheets covering stakeholder identification and facilitation and plant decommissioning, as well as remediation and redevelopment, are also available.

#### Decommissioning Planning grants for stakeholder teams. Job training grants Brownfields Job training grants for remediation. Cleanup grants. for workers at redevelopment site. Economic and Brownfields **Underground Storage** Tank Cleanup funds Energy efficiency and renewable energy grants. Tax increment funding. Infrastructure grants.

# **Financing Redevelopment Projects**

During the planning phase, project owners and stakeholders estimate project costs to determine funding needs for the project. Different funding mechanisms may be needed for planning, decommissioning and demolition, remediation, site construction, and operations during reuse. The reuse plan, developed early in the planning process, should include cost estimates for each phase of a project. Once cost estimates are available, the plan should incorporate potential funding sources and alternatives.

Decommissioning, remediation and redevelopment can be costly given the size, age and type of operations conducted at each plant. The table below shows major cost items and significant tasks that are likely to be encountered during the phases of redevelopment of a coal-fired power plant.

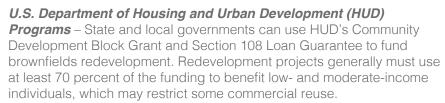
Decommissioning	Remediation	Redevelopment
<ul> <li>Closure planning, including safety engineering survey and asset inventory; legal notices</li> <li>Equipment shutdown, cleaning and removal or sale</li> <li>Electrical switchyard and plant power reconfiguration</li> <li>Security enhancements (fences, gates, lighting)</li> <li>Removal of surplus coal, oil and process chemicals</li> </ul>	<ul> <li>Environmental assessment</li> <li>Removal of hazardous chemicals and wastes</li> <li>Permit applications and closures, remedial plan development and regulatory review</li> <li>Public outreach and public involvement</li> <li>Closure and cleanup of waste management units (ash pits or ponds)</li> </ul>	<ul> <li>Demolition or renovation of existing structures</li> <li>Infrastructure improvements or alterations</li> <li>Architectural planning</li> <li>Construction of new buildings and spaces</li> </ul>

For some redevelopment activities, financial support may be available as grants, loans and tax incentives. Support also may be available through other innovative funding mechanisms. Site owners should determine what incentives and options are available. Under limited circumstances, EPA brownfields assessment grants may be available for state, municipal and tribal organizations if these organizations have access to abandoned power plants. EPA brownfields cleanup grants are not available to owners of closed power plants if the owner is a private party or if the owner is determined to be the party responsible for any contamination at the property. In most cases, and particularly in cases where decommissioned power plants (or waste management units located at these plants) are permitted under the Resource Conservation and Recovery Act, the private party owner is responsible for implementing and paying for corrective actions to address environmental contamination and taking actions to close or decommission all operating units at the plant.

# **Potential Federal Funding Sources**

The 2015 Brownfields Federal Programs Guide provides a comprehensive review of funding and technical assistance programs offered by federal agencies that support brownfields redevelopment. Some of these programs may be applicable to the redevelopment of coal-fired power plants. Here is a summary of a few of the most widely applicable programs.

**EPA Brownfields Program Grants** – EPA's Brownfields Program provides direct funding and revolving loans for the assessment and cleanup of brownfields on an annual competitive basis. Area-wide planning grants are available to communities to research, plan and develop implementation strategies for an area affected by one or more brownfields. Environmental job training grants and technical assistance are also available through the Brownfields Program. EPA brownfields grants have eligibility limitations that may restrict their applicability to privately owned power plants. In addition, brownfields cleanup grants and loans from Brownfields Revolving Loan Fund grants have cost-share requirements. For example, Revolving Loan Fund grant recipients must provide a 20 percent match of the total funds awarded.



**U.S. Department of Commerce, Economic Development Administration (EDA)** – EDA's role is to foster job creation, attract private investment and support long-term job development in economically distressed areas of the country. Grants are available to support the implementation of economic development strategies that advance new ideas and creative approaches. EDA grants for redeveloping power plants require a 100 percent match of the total funds at the time of application. EDA planning grant funds also require a 100 percent match. However, in both cases, communities that meet EDA's "distressed" parameters may qualify for a lesser match amount.

**U.S. Department of Agriculture (USDA)** – USDA seeks to improve the quality of life in rural America. Grants and technical support are available under several programs for a wide range of rural development purposes. Eligibility requirements vary by program, but generally grants are available for communities with populations less than 25,000. The U.S. Forest Service provides technical assistance and grants to states to foster urban reforestation and other projects that will help "green" brownfields. The agency also offers funding sources for energy efficiency and renewable energy projects in rural areas.





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Programs Guide provides a
comprehensive review of funding
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**U.S. Department of the Interior, National Park Service (NPS)** – The Federal Historic Preservation Tax Incentives program encourages private sector investment in the rehabilitation and reuse of historic buildings. Buildings and rehabilitation must meet historic eligibility criteria, which may limit some redevelopment options. The unique architecture in some electric generation buildings at coal-fired power plants has been the basis for securing these tax credits.

Internal Revenue Service (IRS) – The IRS' New Markets Tax Credit provides federal tax credits to attract investment in businesses or economic development projects in low-income communities. Projects could include the redevelopment and reuse of coal-fired plants.

### Massachusetts Creates Plant Revitalization Task Force

Recognizing the need to address community concerns about several planned coal plant closures, the Massachusetts legislature launched the Plant Revitalization Task Force in 2012. The group developed a plan for redeveloping the Salem Harbor Power Station, as well as a plan for decommissioning other coalfired power plants that faced imminent closure throughout the Commonwealth. The state provided \$100,000 for each of three reuse studies. The final report on the Salem Harbor Power Station site is available at http://www.salem.com/sites/ salemma/files/uploads/power plant study final.pdf.

#### State and Local Incentives

Many federal funding programs are administered by states. Additional funds and incentives may be available from state economic development, housing, environmental and energy agencies. Regional development agencies, brownfield redevelopment authorities, land banks, and local community planning groups are also common sources of funding, especially during the initial planning stages. Some states have passed special legislation to focus on the needs of communities facing economic and environmental challenges from the closure of coal-fired power plants.

Municipal financing options will vary from state to state, but generally include property or income tax incentives or state and local cost-sharing mechanisms. Various combinations of public/private ownership also can help finance the project, such as when municipal owners attract private investors to redevelop a site.

Tax increment financing (TIF), which is authorized by states, can help municipalities cover upfront cleanup and infrastructure costs. However, TIFs have a wide range of eligibility requirements, some prohibiting financing of assessment and cleanup costs.

# **Private Sources of Funding**

Commercial and investment funding mechanisms are often used to finance redevelopment projects. For example, to construct its new headquarters, the Accident Fund Insurance Company of America partnered with a local developer, the Christman Company, to redevelop the Ottawa Street Power Station in Lansing, Michigan. Corporate sponsorships, grants and contributions also funded the redevelopment of industrial parcels into open space and museums, and for other public use. Tapping into new opportunities available through social media, some communities have used crowdfunding to raise funds for power plant redevelopment projects.

Program-related investments (PRIs) may also fund the redevelopment of power plants. PRIs are loans, loan guarantees or equity investments made by a foundation to support charitable activities. Educational and research institutions may also contribute to redevelopment by conducting initial feasibility analyses and reviewing remediation options.

#### **References and Links**

EPA's Brownfields Federal Programs Guide is available at http://www.epa.gov/brownfields/2015-brownfields-federal-programsguide.

The Council of Development Finance Agencies' online database of financing options is available at <a href="http://www.cdfa.net/cdfa/cdfaweb.nsf/ordsearch.html">http://www.cdfa.net/cdfa/cdfaweb.nsf/ordsearch.html</a>.

The Environmental Grantmakers Association, a coalition of more than 225 foundations supporting environmental activities, funds redevelopment projects. Find information at **https://ega.org**.

The Funders' Network has a database of foundations that support various elements of smart growth. Find information at **https://www.fundersnetwork.org**.