

The U.S. Environmental Protection Agency (EPA) recognizes the overall environmental benefit of siting renewable energy projects on contaminated lands. This fact sheet answers questions from site owners, renewable energy developers and communities concerning financing tools and structures, as well as federal financial incentives that may be available for redeveloping potentially contaminated sites, landfills, or mine sites for renewable energy.

Have any renewable energy projects been financed and built on potentially contaminated lands, landfills or mine sites?

Yes. To date, EPA's RE-Powering America's Land Initiative has identified over 70 renewable energy projects installed on contaminated properties or landfills, with a cumulative capacity just over 215 megawatts (MW) – the equivalent of a mid-size, coal-fired power plant. Over half are large-scale systems with a project capacity of 1 MW or greater, with many exporting energy onto the utility grid or offsetting onsite energy demands.

How are renewable energy projects financed?

Various approaches have been employed successfully. Project financing varies by project size, as well as local market conditions and available incentives. For many large-scale projects, options range from owner-operator financing, where the system is purchased directly, to third-party power purchase agreements, where the system is owned by an energy developer and the site owner purchases electricity for a given term. Other financing structures include sale/lease back models, which enable the energy user, such as a city government, to use the energy through leasing agreements, while the system owner benefits from the tax advantages.

In several states, community solar gardens or virtual net metering policies enable energy developers to partner with consumers who subscribe to purchase power for a given period of time. For large, utility-scale projects, financing is typically provided through project banks. Development of these utility-scale projects typically employs complex financing deal structures. The potential project scale, site owner, market conditions, and renewable energy developer typically dictate the financing option.

Can federal financing tools for redeveloping contaminated lands also be used for renewables?

More than two dozen federal programs have been used to support brownfields redevelopment. Examples of what may be used to supplement investment in site planning, preparation, construction, or capital equipment purchases follow.

EPA Brownfields Program

Renewable energy projects could benefit during the early stages of project planning and development from EPA assessment grants (up to \$200,000) and cleanup grants (up to \$200,000, typically with a 20% cost share requirement); renewable energy project developers may also be able to partner with recipients of EPA Revolving Loan Funds (capitalized up to \$1 million). These funds can be used to make the site "shovel ready" for a renewable energy project, potentially incorporating elements of the final site requirements.

Department of Housing and Urban Development (HUD)

HUD's Community Development Block Grant (CDBG) program funds projects to either help low- and moderate-income people, address slums and blight conditions, or address urgent community needs. Within these broad guidelines, municipalities can use CDBG funds to provide critical gap financing for site prioritization, planning and assessment activities, as well site preparation, demolition and cleanup. CDBG can improve site readiness for renewable energy projects.

Re-Powering America's Land Initiative

Through the RE-Powering America's Land Initiative, the EPA promotes the reuse of potentially contaminated lands, landfills and mine sites for renewable energy through a combination of tailored redevelopment tools for communities and developers, as well as site-specific technical support.

The Initiative aims to revitalize degraded land by promoting renewable energy as a productive end use, when aligned with the community vision for the site.

Advantages of Reuse

Potentially contaminated lands, landfills and mining sites offer developers a unique value proposition for renewable energy deployment by:

- Leveraging existing infrastructure
- Reducing project cycle times through streamlined permitting and zoning
- Improving project economics with reduced land costs and tax incentives
- Building a sustainable land development strategy by using contaminated lands
- Gaining community support
- Protecting open space

For more information go to:
www.epa.gov/renewableenergyland/

Economic Development Administration (EDA)

EDA's Public Works and Economic Adjustment Assistance program helps finance infrastructure construction, expansion or upgrades, and site preparation activities needed for economic development. EDA targets investments to attract private capital by supporting the "back-end" or real estate reuse elements for projects, including transactions involving contaminated property. Renewable energy aligns with EDA goals.

U.S. Department of Agriculture (USDA)

USDA offers various financing options to spur economic development and job creation opportunities, ranging from community facility loans and grants to business and industry loans and guarantees, in addition to energy-specific grants through the Rural Energy for America Program (REAP). These loans and grant programs may be used to develop a renewable energy system, such as anaerobic digesters for biomass or a solar array that powers agriculture activities for the surrounding community.

Small Business Administration (SBA)

SBA primarily offers loan guarantees for either general business development needs (Section 7a) or long-term community economic development activities (Section 504). These guarantee programs support private lending for a range of activities, including land purchase, equipment, new construction, or conversion of existing facilities. These activities are integral to brownfields efforts and may facilitate renewable energy development.

Are there federal tax incentives that can improve project economics?

Several federal tax incentives can support siting of renewable energy facilities. In general, the goal of tax incentives is to channel private capital to certain areas, such as distressed communities, or to achieve a desired investment outcome, such as renewable energy development.

Business energy investment tax credits: The federal government offers tax credit incentives to promote the development and deployment of renewable technologies (26 USC §48).

Renewable energy bonus depreciation: Many renewable energy projects are classified as "five-year property" under the IRS Modified Accelerated Cost Recovery System (MACRS), making total project costs depreciable over five years, with a 50% "bonus" depreciation for eligible systems in the first year (26 USC §168).

New Markets Tax Credits (NMTC): NMTCs were designed to stimulate investments and create jobs in distressed communities, often the location of brownfield properties (26 USC §45D).

Extension of Renewable Electricity Production and Energy Investment Tax Credits: The American Taxpayer Relief Act of 2012 extends the production and investment tax credits through 2013, specifically for wind energy. Facilities that begin construction (as defined in the IRS ruling released in April 2013) before the end of 2013 may claim the 10-year credit. (Pub. Law 112-240, 126 Stat. 2313)

How can states and local governments help?

Most states and many communities have adapted their own financing programs and approaches to support economic development projects, including brownfields financing needs and renewable energy development. Tools that may be available include grants and rebates, property and sales tax incentives, loans, revolving loan funds, and loan guarantees. Virtually every state issues a variety of tax-exempt and taxable industrial development, revenue, economic development, and general obligation bonds; many also authorize some type of tax-increment finance, which uses future revenue to be generated from a project to help with present-day financing. These tools are well suited for redevelopment strategies involving renewable energy. A Department of Energy-supported website, www.dsireusa.org, outlines state and federal incentives for renewable energy.

How can liability considerations linked to financing be addressed?

The Comprehensive Environmental Response Compensation and Liability Act (CERCLA) contains a secured creditor exemption that eliminates federal owner/operator liability for lenders who hold ownership in a CERCLA facility primarily to protect their security interest in that facility, provided they do not "participate in the management of the facility." [CERCLA §101(20)] EPA's fact sheet on lender liability is available at www.epa.gov/swerosps/bf/aai/lenders_factsheet.pdf. Other laws may apply. These informational materials do not constitute or substitute for advice of legal counsel.

For more information, visit www.epa.gov/renewableenergyland or contact cleanenergy@epa.gov

