

RE-Powering America's Land: Evaluating the Feasibility of Siting Renewable Energy Production on Potentially Contaminated Land

Buffalo, New York

Feasibility Studies to RE-Power Communities

The U.S. Environmental Protection Agency's RE-Powering America's Land initiative encourages renewable energy development on current and formerly contaminated land and mine sites when it is aligned with the community's vision for the site. EPA and the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) are collaborating on a project to evaluate the feasibility of siting renewable energy production on potentially contaminated sites. This effort pairs EPA's expertise on contaminated sites with NREL's expertise in renewable energy. The feasibility studies will provide site owners and communities with a realistic and achievable plan for putting renewable energy on a given site.

Site Description

This 3,500-acre area contains numerous brownfield sites within two state-designated Brownfield Opportunity areas, known as South Buffalo and Buffalo River. Historic uses of these sites range from steel operations, pig iron production, grain production, and production of dye and organic chemicals. What remains of these industries is a legacy of both site contamination and extensive infrastructure.

Community Goals

The focus of this project is to develop a strategy to treat these sites as a resource by using the land along with its abundance of existing infrastructure for wind or solar. The vacant land is an opportunity for numerous renewable energy facilities to be constructed in the project area. There has been significant public and private investment and stakeholder interest in renewable energy production in this part of the city, and the local utility has expressed support for the project. Given the size of the South Buffalo/Buffalo River area as a whole, there is an opportunity for large-scale brownfield renewable energy development.

Feasibility Study: Solar or Wind

EPA and NREL are collaborating to conduct a study on the potential for solar or wind power generation on the South Buffalo/ Buffalo River Area. The feasibility study will evaluate the technical and economic opportunities and challenges at the site. It may:

- Provide a preliminary analysis of the viability of the site;
- Assess solar or wind resource availability;
- Identify possible system size, design and location; and
- Review the economics of the proposed system.

South Buffalo/Buffalo River Area

Buffalo, New York

Site Facts:

Site type: Brownfield, RCRA

Renewable technology: Solar or Wind

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The information presented in this fact sheet comes from the proposal; EPA cannot attest to the accuracy of this information. Therefore, activities described in this fact sheet are subject to change.

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

