

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

Lincoln, Nebraska

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

Beginning in the late 1800s, the Union Pacific Railroad fueled trains and conducted other rail yard maintenance activities at the targeted 32-acre property in the center of Lincoln, Nebraska. The currently vacant site also contained railroad depots, a railroad turntable, a locomotive house, and coal and lumber storage areas. In May 2010, voters approved a bond measure to revitalize the underutilized property for a combination of public and commercial use with a sustainability focus.

Community Goals

The West Haymarket Renewable Energy Project seeks to transform a dilapidated brownfield site into an aesthetically pleasing renewable energy generator for downtown Lincoln's 400-acre West Haymarket Brownfields Redevelopment Project. Given Nebraska's abundant wind resources, wind energy could be used to power the large-scale redevelopment's planned 16,000-seat arena, outdoor festival area, and other civic, commercial, and retail projects. This renewable energy project will help make the proposed \$340 million redevelopment project more sustainable, reduce ongoing power costs, and reduce the project's carbon footprint.

Feasibility Study: Wind

EPA and NREL are collaborating to conduct a study on the potential for wind power generation on the West Haymarket Renewable Energy Project site. The feasibility study will evaluate the technical and economic opportunities and challenges at the site. It will:

- Provide a preliminary analysis of the viability of the site;
- Based on the results of the preliminary assessment, a follow-on study may:
- Assess wind resource availability;
- Identify possible system size, design and location; and
- Review the economics of the proposed system.

West Haymarket Renewable Energy Project Lincoln, Nebraska

Site Facts:

Site type: Brownfield
Renewable technology: 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

