

RE-Powering News

A Quarterly News Digest from EPA's RE-Powering America's Land Initiative



SPOTLIGHT

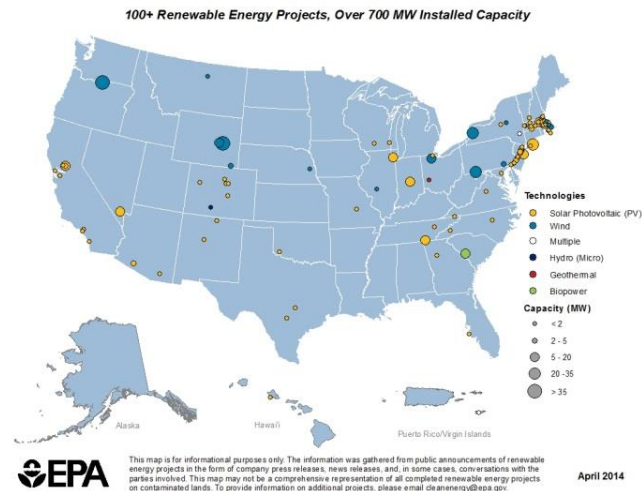
EPA identifies 110 completed renewable energy projects on contaminated lands, landfills, and mine sites in its updated Project Tracking Matrix. See below for more detail.

Our Mission

EPA launched *RE-Powering America's Land: Siting Renewable Energy on Potentially Contaminated Lands, Landfills and Mine Sites* to encourage the siting of renewable energy on thousands of currently and formerly contaminated properties across the nation.

Project Tracking Matrix Update

In April 2014, the U.S. Environmental Protection Agency's (EPA's) RE-Powering America's Land Initiative updated its [Project Tracking Matrix](#). Using publically available information, RE-Powering maintains a list of completed renewable energy projects on contaminated lands, landfills and mine sites. To date, the RE-Powering Initiative has identified 110 renewable energy projects in 31 states and territories with a cumulative installed capacity just over 709 megawatts (MW).



Projects on this list include ground-mounted utility-scale systems, rooftop systems, and systems used for onsite power. Examples range from small solar arrays that power cleanup activities onsite, such as the 500-kilowatt solar training installation on a landfill at Milwaukee

Area Technical College, to huge utility-scale projects like the 100 MW wind project on buffer land at the Columbia Ridge Landfill in Oregon. More than half of the installations are large-scale systems with a project capacity of 1 MW or greater, either exporting energy onto the utility grid or offsetting onsite energy demands. The Project Tracking Matrix also includes summary statistics of the known installations and provides insight on the use of renewable energy on contaminated properties.



Google Earth Screen Capture of Scituate Landfill in 2005



Google Earth Screen Capture of Scituate Landfill in 2013

In conjunction with the updated Project Tracking Matrix, a new addition was made to the [RE-Powering Mapper](#) series of Google Earth KMZ files. RE-Powering has now developed a [Completed Installations](#) KMZ file that shows the locations of all completed renewable energy installations on contaminated lands identified in the Project Tracking Matrix, overlaid on aerial photography. The file allows users to see installations, as well as use features built into Google Earth to view historical imagery of the site over time and sunlight across the landscape according to time of day.

2014 Update to The Land Revitalization Handbook

[The Revitalization Handbook - Revitalizing Contaminated Lands: Addressing Liability Concerns](#) (2014 Edition of The Revitalization Handbook) summarizes the federal statutory provisions and EPA policy and guidance documents that address the potential liability concerns of parties involved in the cleanup and revitalization of contaminated sites. It is designed for use by parties involved in the assessment, cleanup, and revitalization of sites, and provides a basic description of the tools that may be available to address liability concerns associated with several environmental statutes.

The solar farm at the Scituate Landfill was the focus of a recent RE-Powering case study entitled, [An Old New England Town Lights the Way with Solar](#).

Update on Action Plan 2.0

The comment period for providing feedback on the [RE-Powering Action Plan 2.0](#) closed on May 30. The Agency received nearly 60 comments from private citizens, companies, consultants, states, city governments, environmental organizations, among others. EPA is in the process of reviewing the comments received and plans to consider and revise, as appropriate.

RE on CL in the News—Brownfields Yield Opportunities

The Solar Industry article, [Superfund Site Latest Conquest In Solar's Brownfields Campaign](#), discusses renewable energy opportunities on brownfields, landfills, and Superfund sites. According to the article, factors that make brownfields attractive are proximity to grid interconnection systems and land that is already cleared. The article also notes as important the commitment of involved parties, including EPA, in developing solar on contaminated sites, as well as state policies supporting solar development. [Maywood Solar Farm](#) in Indianapolis, IN, is highlighted in the story as well.

Case Study—Maywood Solar Farm, Indianapolis, IN

On April 8, 2014, a ribbon-cutting ceremony was held to celebrate the recent completion of the [Maywood Solar Farm](#), a 10.8 MW solar PV installation in Indianapolis, Indiana. What makes this project unique, however, is the fact that it is the largest such system ever installed at a Superfund site.

Since the 1950s, the [Reilly Tar & Chemical Corporation](#) has produced specialty chemicals and related products at its Indianapolis Plant. For many years, the site also served as a wood treatment facility as well. In 1984, EPA placed the site on the [National Priorities List](#) due to extensive groundwater and soil contamination at the property. Although groundwater monitoring operations are ongoing, a significant amount of the cleanup has been completed at the site.



Maywood Solar Farm. Photo credit: Hanwha Q CELLS

In 2010, Vertellus, the current owner of the property, was first approached by solar developers interested in the site. By the spring of 2012, the solar project had taken shape and Vertellus reached out to EPA to discuss the potential project and how it could be developed without [negatively impacting the remedies in place](#). For example, maintaining soil covers was of critical importance. As a result, Hanwha Q CELLS, the solar developer, created an innovative soil disturbance minimization plan. In close coordination, all parties developed a plan that minimized soil excavation, trenching, and grading and that resulted in a 93% reduction in soil movement when compared to conventional construction methods.

Due to a spirit of cooperation between all parties and a willingness on the part of the developer to be flexible and adapt to environmental requirements, the Maywood Solar Farm was completed in less than one year. "This innovative solar project demonstrates that Superfund sites can be redeveloped," said EPA Region 5 Administrator Susan Hedman at the ribbon-cutting event. "The Maywood Solar Farm project has transformed a site with a long history of contamination into a source of renewable energy."

Upcoming Events

[Renewable Energy Development on Federal Lands 2014](#). July 16 – 17, 2014. Denver, CO. This conference by Electric Utility Consultants, Inc., known as EUCI, will provide an overview of renewable energy development on federal land and detailed sessions on development aspects. The event will convene government officials, company and consulting firm representatives, and project managers who have successfully completed renewable projects, as well as non-governmental organizations and legislative representatives whose current and pending lawmaking efforts will shape future projects.

[Renewable Energy Markets 2014 Conference](#). December 2-4, 2014. Sacramento, CA. Organized by the nonprofit Center for Resource Solutions and the U.S. EPA's Green Power Partnership, Renewable Energy Markets (REM) is an annual event focused on the states, businesses, organizations and households that choose clean renewable electricity every day.

New Resources

[DOE Announces Wind Energy Regional Centers](#). March 2014. The U.S. Department of Energy announced the development of six Wind Energy Regional Resource Centers, selected through a competitive process administered by the National Renewable Energy Lab (NREL).

[*The Outlook for Renewable Energy in America: 2014*](#). April 2014. The American Council on Renewable Energy report assesses the marketplace and forecasts the future of each renewable energy technology sector from the perspectives of U.S. renewable energy trade associations.

[*Solar Market Insight Report 2014 Q1*](#). April 2014. The quarterly Solar Energy Industries Association/GTM Research U.S. Solar Market Insight™ report shows the major trends in the U.S. solar industry. The U.S. solar market continued to expand in the first quarter of 2014.

[*U.S. National Climate Assessment \(NCA\)*](#). May 2014. President Obama recently unveiled the third U.S. NCA, detailing climate changes happening now in the United States, as well as further changes that can be expected throughout this century.

[*Annual Energy Outlook 2014*](#). May 2014. This report includes the U.S. Energy Information Administration's (EIA) projections regarding energy production, consumption, technology and market trends and the direction they may take in the future, including in regards to renewable energy.

[*An Analysis of the Costs, Benefits, and Implications of Different Approaches to Capturing the Value of Renewable Energy Tax Incentives*](#). May 2014. This report compares the relative costs, benefits, and implications of capturing the value of renewable energy tax benefits in three ways to see which method is most competitive under various scenarios.

[*Solar Progress Report*](#). May 2014. On May 9, President Obama announced more than 300 private and public sector commitments to create jobs and cut carbon pollution by advancing solar energy and energy efficiency. The RE-Powering Initiative is identified as one such opportunity. The commitments represent more than 850 MW of solar deployed—enough to power nearly 130,000 homes.

Recent and Upcoming Webinars

[*RE-Powering America's Land: An Update on EPA's Initiative*](#). On July 25, the REDevelopment Institute, an online education and technical assistance hub with a focus on educating those engaged in the revitalization of communities, will be hosting a webinar focused on RE-Powering as part of its ongoing Sustainability Series.

[*Successful Renewable Energy on Government and Institutional Property*](#). June 2 – September 18, 2014, 1:15-2:45 p.m. ET An eight-part renewable energy series that centers on successful case studies and guidance for designing and implementing renewable energy technology and energy efficiency programs on military bases, national parks, government buildings, college

campuses, medical complexes, prisons and other institutional property to meet government and institutional energy utilization program goals.

- [Renewable Energy Policy Discussion](#) - The State of Renewable Energy. June 2, 2014. Examines the state of renewable in the United States and across the Globe.
- [The U.S. Federal Agency Market: Meeting Energy Reduction and Renewable Energy Mandates](#). June 26, 2014. Government leaders from the Department of Defense and other federal agencies addressed regulatory and procurement challenges industry and agency stakeholders need to consider when developing facility energy plans.
- [Renewable Energy Technology Applicability](#). July 10, 2014. This session will provide an overview of technology applications, cost competitiveness of alternatives, and feasibility for government and campus environments.
- [The Effective Marriage of Renewable Energy and Energy Efficiency in an Energy Services Company \(ESCO\) Contract for Municipalities, and Educational and Hospital Campuses](#). July 24, 2014. A panel comprising industry, finance, and government leaders will break down an actual case study and provide insight on the advantages and pitfalls of ESCOs.
- [The Intersection of the Microgrid, Renewable Energy, and Storage](#). August 7, 2014. A case study walk-through is led by industry and academic leaders who have successfully deployed area-wide microgrids.
- [Public Private Partnerships \(PPP\)](#). August 21, 2014. A panel of finance and procurement experts breaks down both a recent successful PPP and a project that did not achieve financing.
- [The Leading Edge of New Energy Efficiency and Renewable Energy Technologies Coming to the Market](#). September 4, 2014. Leadership from DOE and other research centers will provide the latest information on where renewable energy technology is headed and the implications for profitable deployment.
- [Developing the Request for Proposal \(RFP\)](#). September 18, 2014. A panel of contract and finance experts from federal and state agencies, finance organizations, and higher education discuss RFP processes to provide insight into what has worked well and provisions to avoid.

[Solar Permitting & Inspection Webinar Series](#). May 20, 2014 – August 27, 2014. ICLEI - Local Governments for Sustainability U.S.A. and the Interstate Renewable Energy Council, Inc. are

hosting a series of three webinars on Solar Permitting & Inspection. Part of DOE's SunShot Solar Outreach Partnership, the series will review the components of rooftop solar permitting processes, and share best practices and tools for improving them.

- The [first webinar](#) (May 20, 2014) focused on pre-application materials, such as an application checklist and an effective web presence, as well as the permit application submittal and review process.
- The [second webinar](#) (June 26, 2014) addressed the inspection component of the process, including inspection scheduling and timing, inspection checklists, and inspector training.
- The [final webinar](#) (August 27, 2014) will take a step back and examine how communities can change permitting processes, with a particular focus on voluntary regional and statewide collaborations.

[WINDPOWER Presentations Overview](#). June 18, 2014. Three presentations that cover topics from transportation and logistics barriers that limit the size of utility-scale, land-based wind turbines that can be deployed; the impacts of high wind and solar penetrations on the Eastern Interconnection; and explores the new Wind Plant Integrated Systems Design and Engineering Model to examine integrated turbine and plant design.

Contact Us

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