## **RE-Powering America's Land Initiative:**

Renewable Energy on Potentially Contaminated Land, Landfills and Mine Sites

#### **Initiative Overview**

EPA's RE-Powering America's Land Initiative encourages renewable energy development on current and formerly contaminated lands, landfills, and mine sites when such development is aligned with the community's vision for the site.

The RE-Powering Initiative creates new markets for blighted land. Through the reuse of these sites, communities can transform liabilities into assets, providing land resources for clean energy development and diminishing development pressures on open space.

Since the RE-Powering Initiative's inception, 179 renewable energy installations on 171 contaminated lands, landfills and mine sites have been established. These sites are in 38 states and territories, representing a combined 1,124 megawatts (MW) of capacity and providing numerous benefits to their communities. Publicly available, stakeholder-reported information indicates that communities have saved millions of dollars in energy costs, created construction jobs, and received new property tax revenue as a result of reusing these sites for renewable energy. For example, French's Landfill, a Superfund site located in Brick Township, New Jersey, is now home to a 6.5 MW solar installation that is expected to save the township approximately \$13 million in energy costs over 15 years, and the Greenfield Solar Farm, a 2.0 MW solar array built on a landfill in Greenfield, Massachusetts, created approximately 50 local construction jobs and saved the town \$250,000 in its first year of operation.

RE-Powering America's
Land Initiative Action Plan 2.0:
Overview of Goals and Objectives

# Goal 1: Provide Technical and Programmatic Assistance

**Objective 1:** Enhance and Disseminate Tools

**Objective 2:** Expedite Projects

#### Goal 2: Promote Policies and Best Practices that Encourage Renewable Energy on Contaminated Lands

**Objective 3:** Highlight and Analyze Programs and Policies at the Federal, State, Local and Tribal Level

**Objective 4:** Identify Successful Strategies, Articulate Impacts and Disseminate Lessons Learned

## Goal 3: Partner with Stakeholders and Leverage Agency Efforts

**Objective 5:** Strengthen Networks and Facilitate Collaboration among Stakeholders

**Objective 6:** Leverage Funding and Build Capacity



The Molycorp facility, a 21-acre concentrated photovoltaic solar system situated on a former mine site in Questa, New Mexico, has been fully operational since February 2011.



## **RE-Powering America's Land Initiative:**

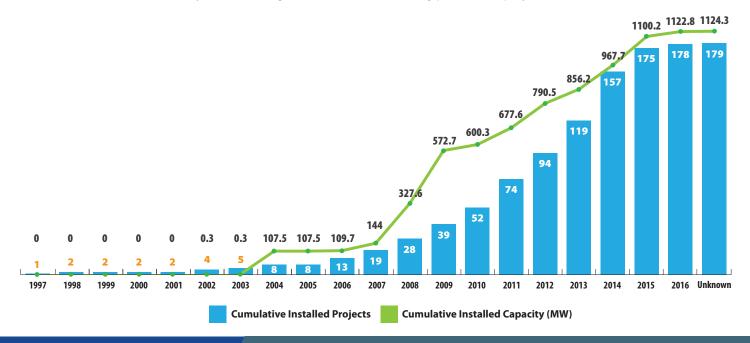
Renewable Energy on Potentially Contaminated Land, Landfills and Mine Sites

### What benefits and other impacts are associated with RE-Powering projects?

- Achieving environmental benefits: facilitating the cleanup of sites, the protection of open space, and reduction in greenhouse gas emissions;
- **Saving money on cleanup:** sites still undergoing remediation can save money on the electricity needed to power the cleanup (green remediation);
- **Saving money to provide electricity:** projects can be structured to require little, if any, upfront investment and then provide electricity to local residents, businesses, and industries at a reduced cost;
- **Providing jobs:** renewable energy projects can spur direct and indirect local employment opportunities in both construction and operation;
- **Providing annual tax revenue:** installations bring unproductive land back into productive use, thus increasing the tax base for the site:
- Promoting revitalization: by finding uses for lands that may have limited reuse options; and
- Offering development advantages: a reduction in project development cost (leveraging existing infrastructure, reduced land costs and tax incentives), including a reduction in project development time (through streamlined permitting and zoning); and opportunities to create partnerships with communities in their efforts to revitalize contaminated properties.

# What is EPA doing to facilitate renewable energy development on contaminated lands, landfills and mine sites?

RE-Powering supports cleanup of contaminated properties, but does not site renewable energy. Remediating contaminated sites and determining their reuse result from the efforts of a diverse set of stakeholders including site owners and operators, consultants, communities, developers, states, tribes, local government, and the financial community. The goals and objectives of EPA's RE-Powering Initiative are a result of feedback received from numerous meetings and listening sessions in which stakeholders asked for tools, enhanced outreach, guidance, and technical assistance. Working in collaboration with the National Renewable Energy Laboratory (NREL), the RE-Powering Initiative has propelled renewable energy development on contaminated lands from merely an interesting idea to an ever-increasing portfolio of projects.





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### **Accomplishment Highlights**

- Created a mapping tool with over 80,000 potentially contaminated land sites on more than 43 million acres to make it easier for stakeholders to identify sites with renewable energy potential
- Developed new environmental liability guidance tailored to the kind of tenant relationships often used in renewable energy development
- Released RE-Powering Liability Reference Guide
- Developed a handbook to integrate the cleanup process with renewable energy development
- Organized stakeholder meetings and workshops, including a finance workshop, convening bankers, developers, communities, and insurance companies to discuss structuring deals to address environmental issues



Fort Carson solar array in Colorado.

- Released a Best Practices document for the installation of solar photovoltaics on landfills in partnership with NREL
- Shared success stories (19) highlighting examples of how sites are being reused in RE-Powering newsletters
- Analyzed trends and reported semi-annually on completed projects
- Developed decision trees for solar and wind technologies to assist stakeholders to screen their sites
- Completed Evaluation Scoping Assessment for the RE-Powering Initiative to identify methods and data that would be needed to assess the Initiative's effectiveness

The RE-Powering Initiative's activities are visible within the efforts of an increasingly diverse group of stakeholders. Examples include:

- The inclusion of related provisions in the President's 2013 Memorandum on Federal Leadership on Energy Management;
- The inclusion by several utilities of contaminated lands as a criterion in their requests for renewable energy sites;
- State interest in representation of their sites in EPA's mapping tool; and
- The expressed preferences within the Bureau of Land Management's review of right-of-way applications to direct development away from lands with high conflict or sensitive resource values and towards low conflict areas such as previously disturbed sites.

#### How can RE-Powering America's Land help your project?

- By developing, enhancing and disseminating tools
- By sharing best practices, resources and highlighting success
- Through partnerships and technical assistance
- · Through communications and outreach

For copies of these resources and for more information, see RE-Powering America's Land website at <a href="http://www.epa.gov/renewableenergyland/">http://www.epa.gov/renewableenergyland/</a> and contact the Initiative by email at cleanenergy@epa.gov.

