RE-POWERING AMERICA'S LAND INITIATIVE:

PROGRAM OVERVIEW



MAY 2023

Office of Communications, Partnerships and Analysis
Office of Land and Emergency Management

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 encourages new markets for underutilized 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.

The Office of Land and Emergency Management, Office of Communications, Partnerships and Analysis leads this initiative. The Initiative has multiple partnerships, including with Department of Energy's National Renewable Energy Lab (NREL). Since the RE-Powering Initiative's inception, hundreds of renewable energy installations on contaminated lands, landfills and mine sites have been established.

The Initiative tracks 502 installations in 47 states and territories, and 2.4 gigawatts (GW) of capacity. These projects provide 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.

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





¹ This information is current as of October 2022; see <u>RE-Powering Tracking Matrix</u> for more information.

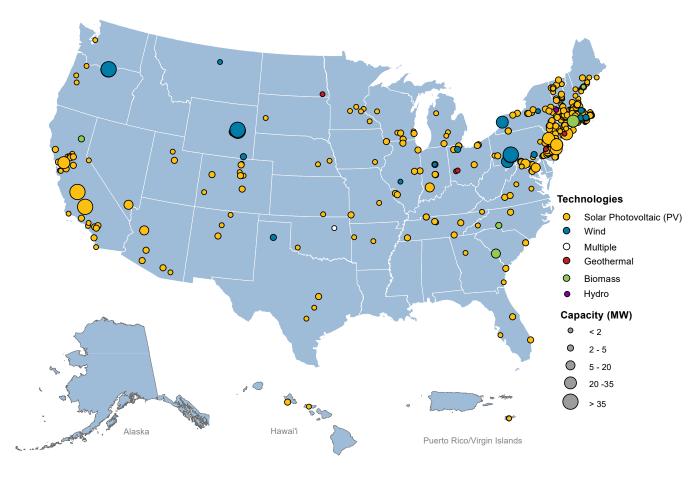
What is EPA doing to facilitate renewable energy development on contaminated lands, landfills and mine sites?

RE-Powering supports cleanup redevelopment of contaminated properties for renewable energy projects. 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 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.

Accomplishment Highlights

- Created a mapping tool
 with over 190,000 potentially
 contaminated land sites
 across the U.S., including state
 environmental programs, these
 sites account for more than 39
 million acres. This tools helps
 stakeholders to identify sites with
 renewable energy potential;
- Released a best practices document for the installation of solar photovoltaics on landfills in partnership with NREL;
- Shared success stories
 highlighting examples of how sites are being reused in RE-Powering presentations;
- Analyzed trends and reported annually on completed projects and their benefits; and
- Developed on-demand training modules to educate the public and interested stakeholders.

502 Renewable Energy Projects with Over 2.4 Gigawatt Installed Capacity





What benefits are associated with RE-Powering projects?



Casselman Wind Power Project in Pennsylvania.

- 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);
- Reducing electricity costs: 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;



Indian Valley Wood Products in Crescent Mills, California.

- **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.



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

Examples include:

- An emerging state mapping tool for Brightfields in Colorado
- State interest in representation of their sites in EPA's mapping tool



- Minnesota State Environmental Quality Board Study: Feasibility of Solar Development on State-Managed Closed Landfills – 2020
- Hosted multiple webinars recently that attracted for example: renewable energy developers and local government representatives
- Performed feasibility studies in multiple states



Moving forward: what is RE-Powering America's Land doing to help communities?

- RE-Powering is well positioned to work with communities impacted by environmental justice and climate change. For example, a 200-kilowatt solar project on a former landfill in Norwood, Colorado is part of the local utility's effort to make renewable energy available to more of its members at a reasonable cost.
- By developing, enhancing and disseminating tools.
- By sharing best practices, resources and highlighting success, such as state policies.
- Fostering partnerships and technical assistance.



Installation of the San Miguel communiy solar array in Norwood, Colorado.

