



Alaska Tribal Response Programs RE-Powering America's Land Lora Strine December 3, 2020



Today's Presentation



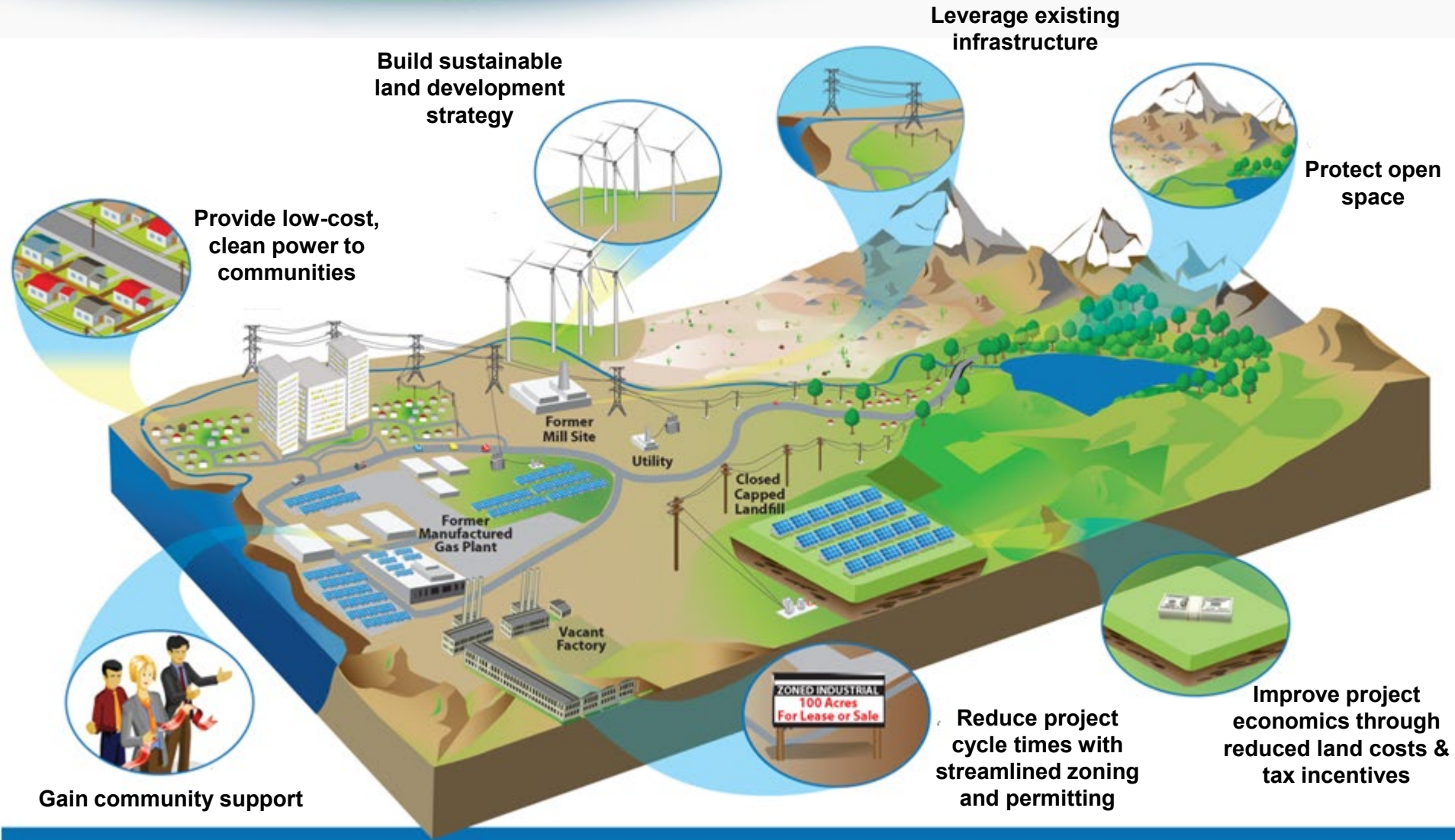
- EPA's RE-Powering America's Land Initiative
 - Program Overview
 - Interactive Tools & Training
 - Recent Reports
 - Liability Updates
 - Project Examples
 - Partnerships
 - Technical Assistance



RE-Powering America's Land

- *Encourages the reuse of formerly contaminated lands, landfills and mine sites for renewable energy development, when such development is aligned with the community's vision for the site.*
 - Raises awareness, creates connections and outreach
 - Disseminates success stories and best practices
 - Develops mapping and screening tools to identify contaminated properties and renewable energy potential
 - Provides technical and programmatic assistance
 - Brownfields grants
 - Liability questions
 - Renewable energy feasibility studies with NREL – National Renewable Energy Lab
 - Articulates benefits – environmental, economic and community

Why Renewables on Potentially Contaminated Lands?



Training Module – great overview of site development!


Land Development Factors

AGENDA TOPICS

1. SITE CONTROL AND OWNERSHIP
2. LIABILITY CONCERNS
3. CLEANUP STATUS AND TIMELINE
4. WHERE TO LOCATE THE RENEWABLE ENERGY (RE) PROJECT WITHIN THE SITE
5. ENVIRONMENTAL AND OTHER PERMITTING REQUIREMENTS
6. ENGAGING COMMUNITIES ON DESIRED AND COMPATIBLE END-USES
7. LAND USE CONSIDERATION DURING CONSTRUCTION, OPERATION, AND DECOMMISSIONING

HERE'S OUR AGENDA-THE SPECIFIC LAND DEVELOPMENT FACTORS WE NEED TO DISCUSS TO DETERMINE WHETHER THESE SITES ARE APPROPRIATE FOR RENEWABLE ENERGY PROJECTS.

LET'S JUMP RIGHT INTO DISCUSSING THE FIRST FACTOR: SITE CONTROL AND OWNERSHIP.





RE-Powering America's Land Initiative

INTERCONNECTION

Plugging RE-Powering Sites Into the Electric Grid



October 2019



<https://www.epa.gov/re-powering>

- **Tracking Matrix**
- **Benefits Matrix**
- **Interconnection**
- **Critical Infrastructure**

Brownfields Utilization, Investment, and Local Development Act (BUILD Act)

Bill Summary

Overview

In March 2018, Congress passed the BUILD Act, which amends the Brownfields provisions of CERCLA, as part of the FY 2018 Omnibus Bill. In this factsheet, we explain the major changes to the Brownfields Amendments. The BUILD Act reauthorized the Brownfields Provisions through 2022.



More Redevelopment Certainty for Governmental Entities

Local or state governments that take control of a contaminated site no longer has to be an "involuntary" acquisition.



Alaska Native Village and Native Corporation Liability Relief

Provides liability relief for Alaska Native Villages and Native Corporations for a facility received under the Alaska Native Claims Act, as long as the entity did not cause or contribute to the release of a hazardous substance from the facility.



Petroleum Brownfield Enhancement

Removed the language and requirement that petroleum brownfield sites be "of relative low risk" in order to be eligible for funding.



Prospective Purchasers and Lessees

Bona Fide Prospective Purchaser definition was amended to include language related to those who have tenancy or leasehold interests in the facility.



Expanded Eligibility for Non-Profit Organizations

Non-profits (including LLCs and community development entities that are non-profit) can now apply for assessment and RLF grants.



Certain Publicly Owned Brownfield Sites

Publicly owned sites acquired prior to January 11, 2002 can apply for assessment and remediation (RLF and cleanup) grants as long as the entity is not responsible for the contamination.



Increased Funding for Remediation Grants

Increased the cleanup grant funding amount to \$500,000 per site; eligible entities can also request a waiver to \$650,000 per site, based on the anticipated level on contamination, size, or ownership status of the site.



Multipurpose Brownfields Grants

Grant authority for multi-purpose grants (assessment and cleanup combination) was increased up to \$1,000,000. No more than 15% of the total appropriation can be awarded to multi-purpose grants.



Allowing Administrative Costs for Grant Recipients

Entities are now able to use up to 5% of grant awards on administrative costs.



Grant Applications

New ranking criteria focusing on renewable energy or energy efficiency projects and waterfront developments.



Small Community Technical Assistance Grants

Authorized a new grant program for states and tribes to provide training, technical assistance, or research for small communities (populations of 15,000 or less), Indian tribes, rural areas, and disadvantaged areas. Maximum of \$20,000 per community.

2018 BUILD Act Provisions for Brownfields Grant Applications

- Energy efficiency
- Renewable energy
- <https://www.epa.gov/brownfields/sunmary-2018-build-act-provisions>

Addressing Liability Concerns



2018 BUILD Act Provisions Address New Category of Local Government Acquisition

- CERCLA § 101(20)(D) now exempts from potential owner or operator liability, a “unit of state or local government which acquired ownership or control through seizure or otherwise in connection with law enforcement activity, or through bankruptcy, tax delinquency, abandonment or other circumstances in which the government acquires title by virtue of its function as sovereign.”

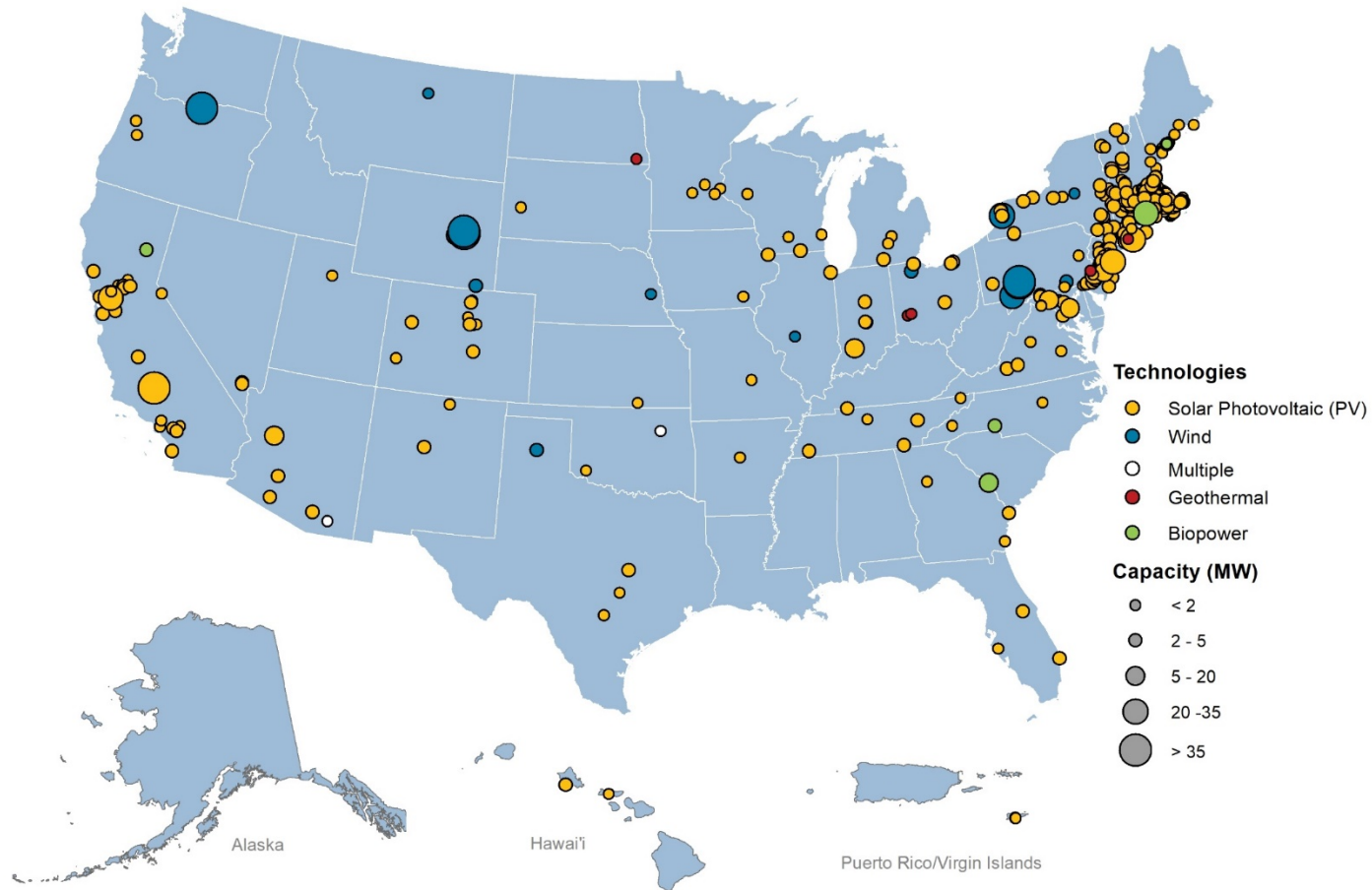
Learn more in the ***2020 Revitalization Handbook -- Revitalizing Contaminated Lands: Addressing Liability Concerns***

<https://www.epa.gov/sites/production/files/2020-06/documents/revitalization-handbook-final-2020.pdf>

Projects Identified as of October 2020



417 Renewable Energy Projects, Over 1.8 Gigawatt Installed Capacity



This map is for informational purposes only. The information was gathered from public announcements of renewable energy projects in the form of company press releases, news releases, and, in some cases, conversations with the parties involved. This map may not be a comprehensive representation of all completed renewable energy projects on contaminated lands. To provide information on additional projects, please email cleanenergy@epa.gov.

October 2020

Stafford Hill Solar Farm (*Rutland, VT*)

Former 15-acre municipal solid waste landfill, Rutland Landfill, which closed in the 1980s

2.3 MW solar PV installation on 9 acres

Includes 4 MW of additional energy storage in the form of lead acid and lithium ion batteries

System acts as a microgrid, providing power to the city's emergency center at the high school

Provides economic benefits, including near-term annual benefits from the storage component of \$350,000–\$700,000 and annual land lease revenue of \$30,600 to the city



Stafford Hill Solar Farm and battery system. Photo courtesy Green Mountain Power.

Known Completed Sites in Region 10



Site/Project Name	City, State	Type of Site	Site Owner	Site Ownership Type	Property Acreage	Former Use Description	RE Type	Project Capacity (kW)	Completion Date	Project Type
Columbia Ridge Landfill	Arlington, OR	Landfill Buffer	Waste Management	Private	12,000	MSW and Industrial Landfill (active)	Wind	100.00	2004	Wholesale Electricity
Corvallis Municipal Airport	Corvallis, OR	Superfund	City of Corvallis	Municipal	-	Chrome-plating Facility	Solar PV	0.10	2017	Wholesale Electricity
SeQuential Biodiesel Solar	Eugene, OR	Brownfields	SeQuential	Private	1	Gas Station	Solar PV	0.03	2006	Rooftop

RE-Powering Mapper



RE-Powering Mapper 2.0 RE-Powering America's Land Initiative

ArcGIS World Geocoding Se

Layer List

Operational Layers

- Solar
- Wind
- Geothermal
- Biomass
- State Policies

Solar State Policies Wind Geothermal Biomass

Options Filter by Map Extent Zoom to Clear Selection Refresh

Site Name	Program	Address	City	County	Zip	State	Acres
CITY OF KEENE LANDFILL	LANDFILL METHANE OUTREACH PROGRAM	55 OLD SUMMIT ROAD	KEENE	CHESHIRE	03431	NH	20
TURNKEY RECYCLING & ENVIRONMENTAL ENTERPRISES	LANDFILL METHANE OUTREACH PROGRAM	90 ROCHESTER NECK ROAD	ROCHESTER	STRAFFORD	03839	NH	204.8

318 features 0 selected

Mapped inventory of 130,000+ EPA and select state tracked sites (over 44 million acres of land)

Incorporates data from:

- EPA Cleanup and Landfill Programs
- National Renewable Energy Lab
 - Wind, Solar, and Biomass Resources
- Southern Methodist University
 - Geothermal
- Department of Homeland Security
 - U.S. Highways
 - Railroads
 - Transmission Lines
 - Substations
- 17 State Agencies:
CA, CO, CT, FL, HI, IL, MA, MD, MN, MO, NJ, NY, OR, PA, TX, VA, and WV

<https://www.epa.gov/re-powering/re-powering-mapper>



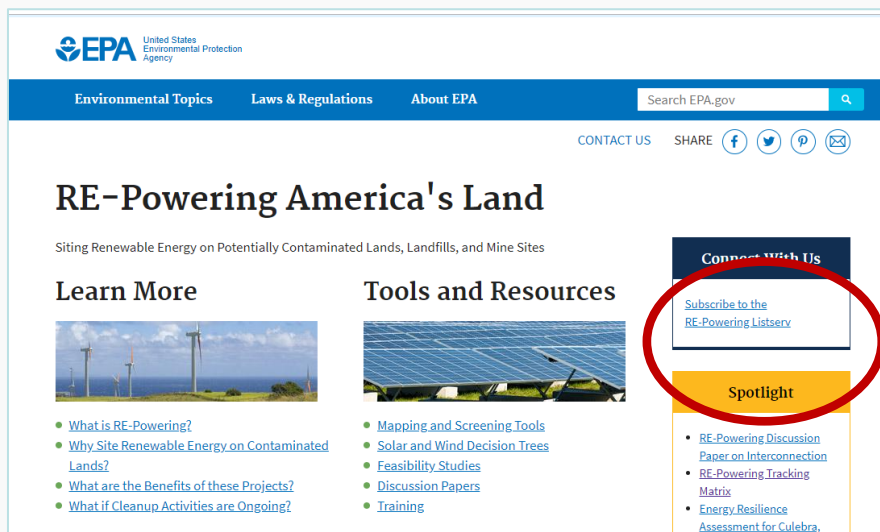
Home page:

<https://www.epa.gov/re-powering>

EPA Contact:

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(202) 564-1521

Get the latest updates. Subscribe to the RE-Powering listserve.



RE-Powering America's Land
Siting Renewable Energy on Potentially Contaminated Lands, Landfills, and Mine Sites

Learn More

- [What is RE-Powering?](#)
- [Why Site Renewable Energy on Contaminated Lands?](#)
- [What are the Benefits of these Projects?](#)
- [What if Cleanup Activities are Ongoing?](#)

Tools and Resources

- [Mapping and Screening Tools](#)
- [Solar and Wind Decision Trees](#)
- [Feasibility Studies](#)
- [Discussion Papers](#)
- [Training](#)

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Spotlight

- [RE-Powering Discussion Paper on Interconnection](#)
- [RE-Powering Tracking Matrix](#)
- [Energy Resilience Assessment for Culebra](#)



APPENDIX

ADDITIONAL RESOURCES

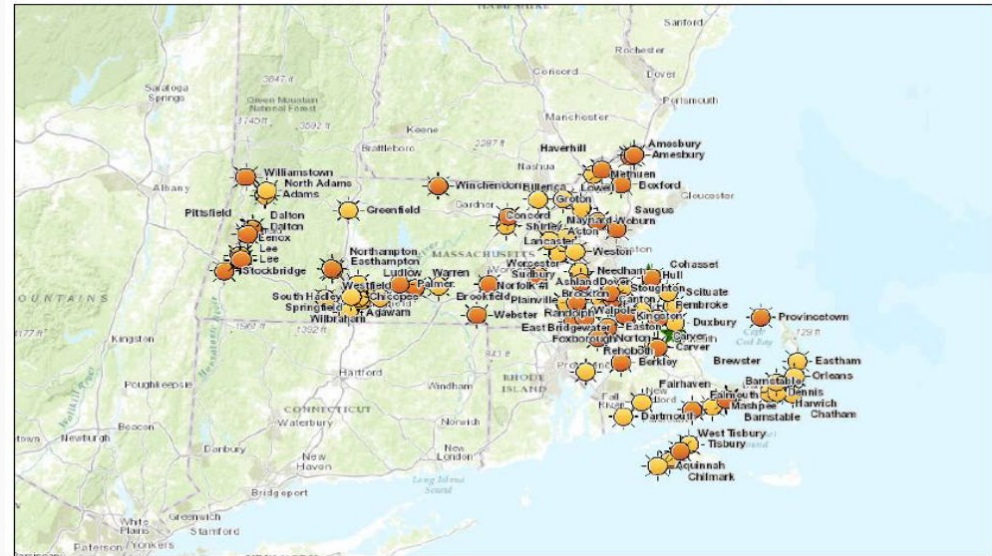
Solar Program Example: Massachusetts



Clean Energy Results Program (CERP)

- Launched 2011
- Specific initiative to “*advance environmental protection through renewable energy and energy efficiency projects*” including development of solar PV on Landfills and Contaminated Land
- Close collaboration by environmental protection and energy resources departments
- Permitting process and regulations revised to facilitate solar PV on landfills and brownfields

Solar and Wind Projects at Massachusetts Landfills



March 17, 2017

Source: MassDEP

Installed & Proposed Capacity To Date:

240 MW on landfills

140 MW on brownfields

Total: 380 MW

Brownfields Cleanup and RLF



Grants provide funding to carry out cleanup activities at one or more brownfield site(s).

- **Cleanup Grants** - cleanup planning and contaminant abatement at one or more sites owned by the recipient.
- **Revolving Loan Fund (RLF) Grants** – capitalize a RLF program to provide loans and subgrants for cleanups.



RE-Powering's Electronic Decision Tree



Redevelopment Plans

Redevelopment plans can take the form of a site-specific redevelopment plan or a comprehensive land use planning and zoning document that applies to, or is under development for, a defined geographic district in which many individual sites are located (commonly referred to as a "Redevelopment Area Plan" or "Specific Area Plan"). Where a Specific Area Plan applies, proposed redevelopment projects at sites within the geographic scope of the plan will be evaluated by the municipality for consistency with the plan's land use objectives for the district. Implementing the plan involves a number of steps including identifying financing, securing development approvals, finalizing the real estate transaction, cleanup, and construction.

Objectives for a redevelopment plan include identifying and identifying the municipality's strategy for eliminating environmental liabilities. When municipalities approve a redevelopment plan for a property, they are more likely to approve a solar installation.

Community Vision

Site reuse should be determined based on the community's long-term vision and needs. Many end uses should be considered for a site. If evaluating sites across the community, a Redevelopment Plan map can be used to identify potential sites. If a RCRA or Superfund site is identified, existing redevelopment plans should be reviewed.

Decision Tree Tool

Home | Site Characteristics and Redevelopment | Redevelopment Considerations | Contamination and Landfill Issues | Load Assessment and Financial | Summary and Results

Site: Landfill ABC | Type: Landfill | Technology: Solar | Installation: Ground

Question	Explanation
Is the usable acreage for a ground mounted system greater than 2 acres? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Skip Enter usable acreage (optional): Enter comment (optional): <input checked="" type="checkbox"/> Include Comments on Summary Report	Usable acreage <ul style="list-style-type: none">is typically characterized as "flat to gently sloping"has southern exposure free from obstructionsgets full sun for 6+ hours a day (at least 4 hours in winter months) Usable Acreage = [Total Acreage - (Area with Obstacles) - (Shaded Area) - (Area with > 10% grade)] <p>Please use the comment area to discuss any obstacle, shading or grade issues. If powering remediation, skip and continue.</p> <p>More Info about estimating usable acreage</p> <p>Strategies to consider "site bundling"</p>

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