RE-Powering America's Land Initiative:
Benefits Matrix

December 2019

"Communities across the nation are creating jobs and stimulating economic growth by redeveloping contaminated land. Renewable energy projects present opportunities for environmental benefits and energy savings in local communities. EPA is committed to helping communities return properties to beneficial, productive reuse that meets their needs."

– Peter C. Wright, Assistant Administrator, Office of Land and Emergency Management

ACROSS THE COUNTRY

All renewable energy projects on contaminated sites realize benefits—from saving money, creating new sources of revenue, to producing clean energy. EPA has reviewed developer and community source data to identify documented benefits for 295 sites. Stakeholders involved with re-developing sites note specific benefits in terms of **job creation, energy cost savings, tax revenue, lease revenue, environmental benefits and others.**

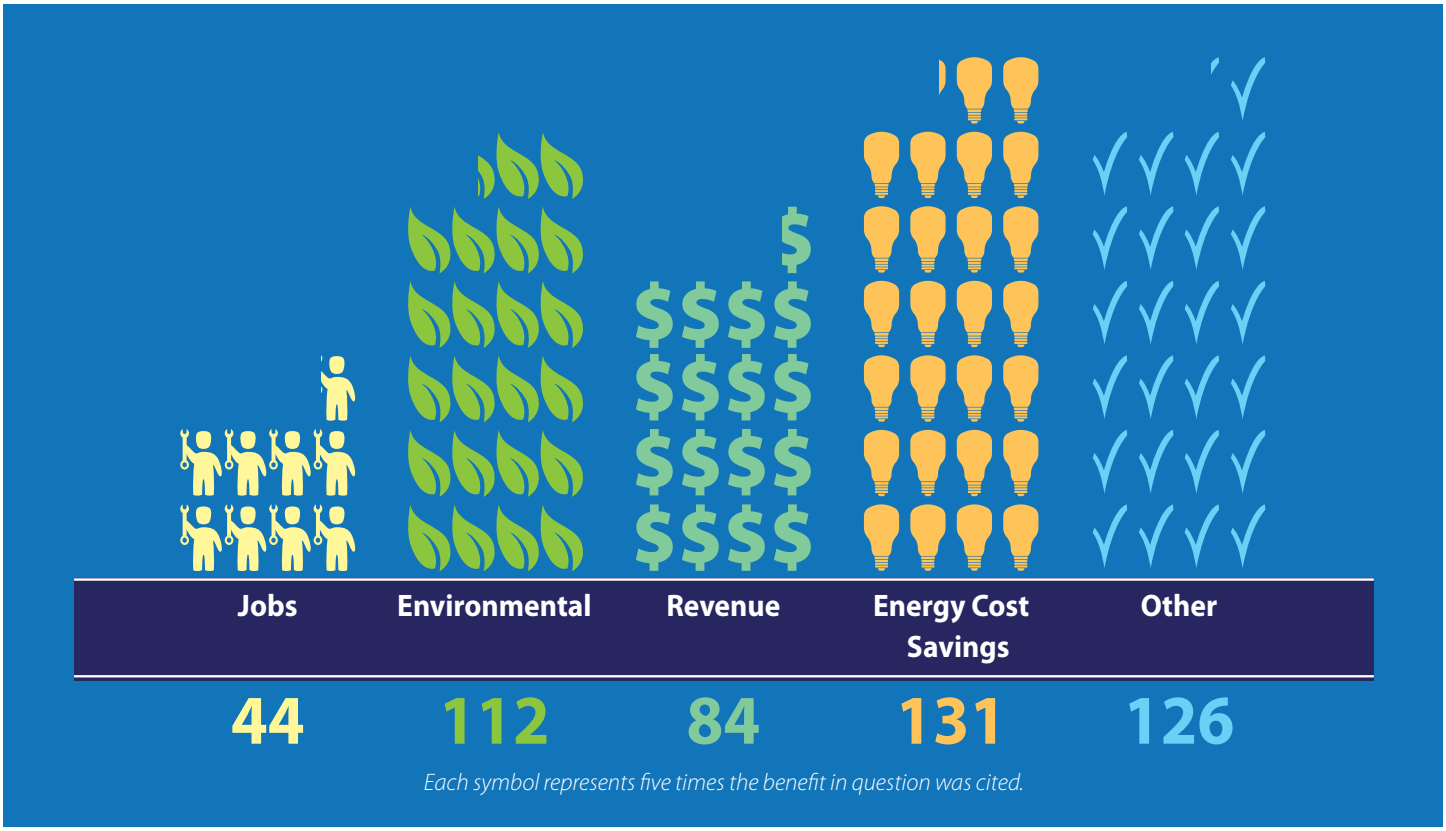
When formerly contaminated sites are redeveloped with renewable energy projects, EPA findings show multiple benefits for the communities.[1] Although all renewable energy installations on contaminated sites have value to the developer or community, the benefits realized for any one project are not always touted publicly. As part of its inventory, RE-Powering tracks benefits such as energy cost savings, increased revenue, and job creation. EPA has identified trends in benefits, including the following:

- Energy cost savings are the most frequently reported benefits, with a quarter of the sites reporting energy cost savings.
- Environmental benefits are reported at many of the sites with solar installations.

Examination of the information included in this document may encourage and assist in planning for future development of renewable energy installations.

1 To date, the RE-Powering Initiative has identified 352 renewable energy installations on 327 contaminated lands, landfills, and mine sites with a cumulative installed capacity of 1,710.2 megawatts (MW) in a total of 41 U.S. states and territories. In this document, installation and project refer to a single renewable energy technology installation, while site and location refer to a single contaminated property. A site or location may have more than one installation or project. For example, the former Dave Johnston Mine (one site) has three separate wind installations, two of which reported benefits that are highlighted here. The RE-Powering Initiative list tracks completed projects where renewable energy systems have been installed on contaminated sites. This resource is available at https://www.epa.gov/re-powering/re-powering-tracking-matrix.

Benefits from Installations across the Country



The commonly reported benefits from renewable energy on contaminated lands include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, and reduced greenhouse gas emissions.[2]

Minnesota Brightfields Initiative – Solar Development on Closed Landfills

The Metropolitan Council, the SolSmart Program, and their organizational partners have aggregated a state-wide, regional, and national team of public, industry association, and non-profit solar and energy professionals to support the "MN Brightfields Initiative." The Brightfields Initiative is actively pursuing opportunities to encourage solar generation on closed landfill properties.

MN Brightfields requested assistance from EPA to screen closed landfills for solar opportunities. EPA's RE-Powering America's Land Initiative is providing ongoing assistance to planners in Minnesota by screening and evaluating closed landfills for solar using similar methods that were developed for RE-Powering America's Lands Mapper Tool.

"We're trying to develop a new market in Minnesota. Our state and local governments see a non-partisan partner plugging us into existing staff people, experts, case studies, and resources, which keep us from replicating the 'wheel,' and instead focus on applying the wealth of RE-Powering's resources to moving our state's and communities' initiative forward."

*—**Cameran J. Bailey,** Metropolitan Council & SolSmart Solar Advisor on the benefits of working with the RE-Powering Team*

2 Sources used to populate this document include other EPA resources (fact sheets, case studies, etc.) or statements by parties directly involved with their respective projects—e.g. the city, town, or county; site owners; developers; utilities; federal agencies; and/or financiers. Note that the benefits reported may have been calculated using different methods and/or expressed in different units; therefore, a cumulative expression of the total benefits achieved by renewable energy projects on contaminated lands is not possible from publicly available sources. In addition, the specific benefits of each project can vary due to a number of factors, including electricity prices, site clean-up status, incentives and policies such as renewable portfolio standards, development costs, availability of transmission and infrastructure, and renewable energy technology type and capacity.

Casting New Beginnings for Former Foundry

The Coldwater Board of Public Utilities (CBPU) Solar Field Park is located in Coldwater, Michigan. The site was a former foundry, which was a barren piece of land for nearly 30 years. Branch County received approximately $13,000 of EPA Brownfield grant funding for property environmental assessments. The blighted foundry site was adjacent to a residential neighborhood, a city park, and an electric substation. In May of 2018, NextEra Energy Resources LLC developed a 1.3 MW solar array on the site. The installation of the solar field gave Coldwater an opportunity to clean-up the site and show their environmental stewardship to the community.

The City of Coldwater has a 99-year lease with the site's owner Marmon Group for $1. A Power Purchase Agreement is in place with an average cost of less than 5 cents per kWh. The solar installation also helps the utility meet renewable requirements for Municipal Electric Utilities in Michigan. The community support was positive throughout the entire process and the solar installation is a source of on-going pride for the community. Not only did the development of the solar field clean-up a blighted site, but the city became one of a very few small communities in Michigan to have a solar field, not to mention one on a brownfield.

"A site that sat blighted for almost 30 years, offering little to no value, was once again an asset to our community." - Bob Granger, Energy Waste Reduction Manager, CBPU

Opening of Solar Field (Photo Courtesy CBPU): Left to right, Jeff Budd- Asst. Utility Director; Cisco Ortiz, Council Member; Keith Baker, City Manager; State Senator Mike Shirkey; Paul Beckhusen –Utility Director; Marc Gerken, President & CEO of American Municipal Power; Tom Kramer, Mayor; Mike Beckwith, Council Member; Scott Ohm & Travis Machan; Board Members; State Representative Eric Leutheuser; Bob Granger; Energy Optimization Manager; Dave Watson, Board Member.

A Range of Benefits from Renewable Energy on Contaminated Lands

Renewable energy installations on contaminated land can provide a range of benefits to municipalities, developers, businesses, and the environment. Some examples include:

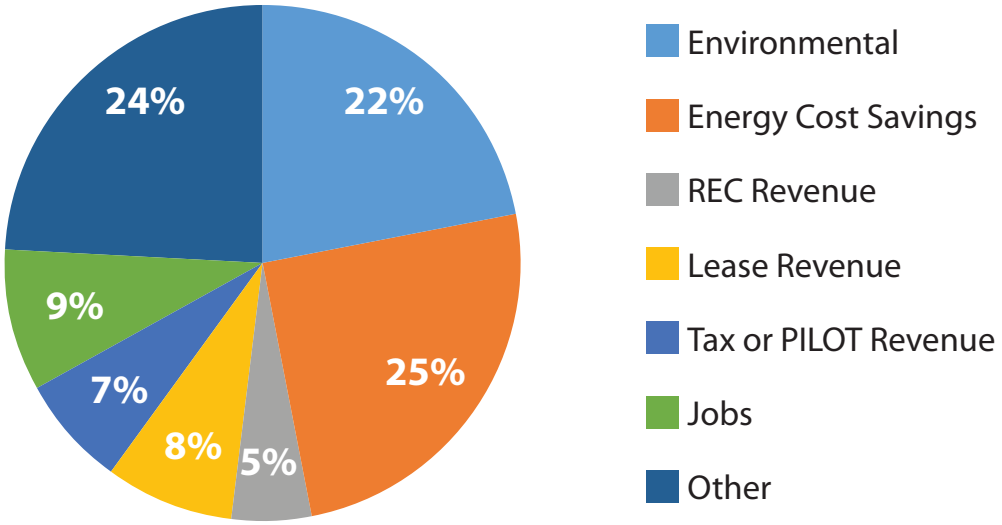
Annapolis Renewable Energy Park (Annapolis, MD): A 16.8-MW solar project located on approximately 80 acres of the closed and capped Annapolis landfill offers benefits to the city and county. The City of Annapolis owns the landfill where the Annapolis Renewable Energy Park is located. The city earns revenue by leasing the landfill to Annapolis Solar Park. The city also saves money by purchasing some of the electricity at a rate less than what the city was paying. Local businesses were involved in the construction of the project. More than 100 green jobs were created or will be created in the city over the next 20 years as a result of this installation. Additionally, the City of Annapolis, Anne Arundel County, and Anne Arundel County Board of Education signed power purchase agreements for the solar energy, which will be used to power city, county and school buildings and operations.

Long View Forest Solar (Hartland, VT): A 0.745-MW solar project is located on a remediated brownfield site that was formerly a sawmill. The project produces approximately 900,000 kWh per year or enough to power approximately 125 homes annually. The project is generating savings for Mascoma Bank as well as the Montshire Museum of Science located in Norwich, VT; combined these two entities will realize approximately $700,000 of savings on their electricity bills over the 25-year term of the agreement. The solar array has increased the size of the local tax base in addition to generating renewable power.

Inside the Numbers

RE-Powering has documented benefits for 295 renewable energy on contaminated land installations currently tracked in the RE-Powering Tracking Matrix. Many installations publicly reported multiple benefits; as such, the RE-Powering Benefits Matrix includes citations of 497 total reported benefits. In addition to these, many expected benefits have not been publicly reported. Benefits are anticipated for every renewable energy project on contaminated land, including energy cost savings, revenue, greenhouse gas (GHG) reductions, or a combination of these. Although not comprehensive of all realized benefits, the following charts represent a snapshot of the types of benefits stakeholders are touting publicly as measures of success.

Reported Benefits for Renewable Energy Projects on Contaminated Lands[3]



3 Pie chart represents percentage of benefits across 497 total benefits identified within the 295 renewable energy on contaminated sites with reported benefits. The "Other" category in all charts includes cost savings associated with powering site clean-up (green remediation); induced economic benefits to the community resulting from jobs created (e.g., more customers for the local diner); secondary use of renewable energy installations as tools for learning and data gathering; and the ability to use renewable energy installations for distributed generation.

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
AZ - ARIZONA														
Ajo Solar Project	AZ	Ajo	Mine Lands	Private	Solar	5	Wholesale Electricity	2011	Half of the approximately 50 construction jobs went to local residents. The electricity generated onsite will be sold to Arizona Public Service (APS) under a 25-year power-purchasing agreement.				✓	✓
Bagdad Mine Solar	AZ	Bagdad (census-designated)	Mine Lands	Private	Solar	15	Wholesale Electricity	2011	Power generated by the solar is sold to Freeport-McMoRan at a set rate under the terms of a 25-year power purchase agreement. The project generates 15 megawatts of electricity, enough to power about 3,000 homes.	✓		✓		
Apache Powder	AZ	Benson	Superfund	Private	Solar	0.0014	Onsite Use - Green Remediation	1997	The use of solar and wind energy to power cleanup reduces the 30-year groundwater cleanup cost from $25 million to approximately $2.5 million. The cost of solar PV system and windmill pump is three times less expensive than the cost to run power lines and pay for electricity at remote areas of the site.					✓
Desert Star Solar Plant	AZ	Buckeye	Landfill	Municipal	Solar	10	Wholesale Electricity	2015	Estimated $15,000,000 -$20,000,000 of direct and indirect investments were made to the local economy from this project. More than 100 construction jobs.				✓	✓
CA - CALIFORNIA														
Regulus Solar Power Plant	CA	Bakersfield	Brownfield	N/A	Solar	82	Wholesale Electricity	2015	The project will contribute to the creation of 1,300 full time equivalent employee years, $6.1M in property taxes and $25.4M in sales generated for the county over 20-year life of project. It is anticipated to provide almost $184 million in revenue to local businesses, governments and households during the first 20 years of operation.		✓		✓	✓
Camp Pendleton	CA	Camp Pendleton	Superfund	Federal	Solar	1.5	Wholesale Electricity	2011	The Naval Facilities Engineering Command anticipates the system will save the Marine Corps $336,000 yearly in electricity costs while more than tripling its previous solar energy capacity.	✓				
Cloverdale Landfill	CA	Cloverdale	Landfill	N/A	Solar	1.8	Wholesale Electricity	2014	The Cloverdale project is designed to generate over 2.7 million kilowatt hours of energy annually, the equivalent of more than 6,000,000 pounds of CO2.			✓		

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
MCE Solar One (Chevron Richmond Refinery)	CA	Contra Costa	Oil Refinery Landfill	Private	Solar	10.5	Wholesale Electricity	2018	Supported 341 jobs; partnered with job–training program RichmondBUILD to train and hire local residents. Maximized local economic benefits by requiring 50% local resident workforce and engaging Richmond–based contractors and supplier.				✓	✓
Frontier Fertilizer	CA	Davis	Superfund	Private	Solar	0.06888	Onsite Use - Green Remediation	2011	The system offsets up to 5% of the site's annual electricity use for pump and treat system operations, saving energy costs of approximately $1,500 per year.	✓				✓
Western Regional Sanitary Landfill	CA	Lincoln	MSW Landfill	Private	Solar	0.009	Onsite Use - General	2017	WPWMA will be saving $.04 per kWh over what it would otherwise be paying PG&E—savings that are ultimately passed along to landfill ratepayers. More than 25 local students from Sierra College gained hands-on training for solar jobs by designing and installation the system. Solar powers the landfill's LFG power plant.	✓			✓	
Lawrence Livermore National Laboratory	CA	Livermore	Superfund	Federal	Solar	0.004	Onsite Use - Green Remediation	2009	The self-powered solar treatment units allow ground water treatment at remote areas of the 7,000-acre site without the installation of costly power lines or generators.					✓
Pemaco Superfund Site	CA	Maywood	Superfund	Municipal	Solar	0.006	Onsite Use - Green Remediation	2007	Annual electricity cost savings of $2,839.	✓				
Travis Air Force Base	CA	Near Fairfield	Superfund	Federal	Solar		Onsite Use - Green Remediation	2008	Brings Travis Air Force Base one step closer to shutting down its four groundwater treatment plants that currently cost about $7,000 a month in utilities to operate.					✓
Milliken Landfill	CA	Ontario	Landfill	Municipal	Solar	3.1	Wholesale Electricity	2017	Produces enough electricity to power 500 homes.			✓		
NASA Jet Propulsion Laboratory (JPL)	CA	Pasadena	Superfund	Federal	Solar	0.564	Rooftop	2011	Under a 20-year power purchase agreement, the PV system is expected to annually generate 869,158 kWh of energy (approximately 20% of the treatment system's electricity consumption, or the equivalent power used by 100 to 125 average Pasadena homes).	✓		✓		
PSEG Pittsburg Solar Energy Center	CA	Pittsburg	Landfill	Private	Solar	25.4	Wholesale Electricity	2015	The project will help PG&E meet California's mandate that 33% of the energy sold by investor-owned utilities must come from renewable resources by 2020.			✓		

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
West County Wastewater District	CA	Richmond	Brownfield	Municipal	Solar	1	Onsite Use - General	2008	West County Wastewater District will purchase energy at a fixed price over the next 20 years, providing a cost-saving. PG&E's Self Generation Incentive Program mitigated project cost. The PV system is estimated to produce 30% of the wastewater facility's electricity needs.	✓				
Tequesquite Landfill	CA	Riverside	Landfill	Municipal	Solar	7.5	Wholesale Electricity	2015	A 25-year PPA will help Riverside Public Utilities minimize the effect of rising electricity costs.	✓				
Aerojet General Corporation Superfund Site	CA	Sacramento	Superfund	Private	Solar	6	Wholesale Electricity	2010	The project is anticipated to save more than $10 million in electricity over the cleanup project's 25-year life, due to the lower cost of electricity purchasing established by the PPA.	✓				
Fischer Properties: Depot Park	CA	Sacramento	Brownfield	Private	Solar	3	Wholesale Electricity	2010	The project provides more than 40% of the electricity load for the park during peak hours. That is equivalent to 6,335 barrels of oil, or removing 500 vehicles from the road.			✓		✓
Sutter's Landing Landfill Solar	CA	Sacramento	Landfill	Municipal	Solar	1.5	Wholesale Electricity	2014	Revenue from the power generated for and consumed by residents and businesses, and from lease payments, will be re-invested to fund park preservation and maintenance. Lease payments to city of $15,000 per year.		✓			✓
CO - COLORADO														
Aurora/Arapahoe Solar Array	CO	Aurora	Brownfield	Public	Solar	0.5	Community Owned/ Subscription	2013	System is demonstrating cost savings. As of April13, 2016, lifetime energy production was 1,980,738 kWh, with customer savings from energy production of $725,004.	✓				
Belmar Mixed Use Development	CO	Lakewood	Brownfield	Other	Solar	1.7	Rooftop	2008	The system supplies all the electricity for the parking garages at the shopping mall, which is equivalent to 5% of Belmar's energy use. A PPA uses RECs in exchange for below-retail electricity rates. The system generates enough energy to power 350 homes.	✓	✓	✓		
Boulder Cowdery Meadows Solar Array	CO	Boulder	Superfund	Private	Solar	0.5	Community Owned / Subscription	2013	System is demonstrating costs savings. As of April 13, 2016, lifetime energy production was 2,136,641 kWh, with customer savings from energy production of $462,168.	✓				

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Coyote Ridge Solar	CO	Fort Collins	Landfill Buffer	Municipal	Solar	1.95	Wholesale Electricity	2017	Project is a part of a statewide initiative to demonstrate how low-income community solar can help reduce energy costs for highest-need customers (i.e., those who spend 4% of income or more on utility bills). Project also provided thousands of hours in solar installation job training.	✓			✓	
Dreher Pickle Plant	CO	Fort Collins	State Brownfield	Municipal	Solar	0.62	Wholesale Electricity	2015	Community solar project - Estimated that customers will receive a 6.9% payback on their solar panels in the first year and an average annual payback of 9.5% over the solar array's lifetime.	✓				
Fort Carson	CO	Fort Carson	RCRA	Federal	Solar	2	Wholesale Electricity	2008	Project expected to save Fort Carson $500,000 in energy costs over the life of its 20-year contract with the utility.	✓				
New Rifle Mill	CO	Rifle	Other	Municipal	Solar	1.7	Onsite Use - General	2009	Siting the project on contaminated land already owned by the city saved taxpayers approx. $2 million. City entered into an agreement to purchase electricity for the next 20 years at a fixed rate below what the city currently pays for conventionally produced electricity.	✓				✓
Norwood Landfill Community Solar	CO	Norwood	Landfill	Municipal	Solar	0.2	Wholesale Electricity	2016	Will lower the electric bills of qualified low-income residents in SMPA's service territory.	✓				
Place Bridge Academy	CO	Denver	Landfill	Municipal	Solar	0.101	Onsite Use - General	2013	Schools are not required to pay up-front costs for the systems, and will realize an overall cost savings on their electricity bills. Schools will incorporate an education component. The following environmental benefits will also be realized: 142,274 kWh of electricity production; 291,377 pounds per year of annual CO2 emissions reduced; 318,713 miles per year equivalent reduction in vehicle miles driven and equivalent 11,207 trees planted.	✓		✓		✓
Summitville Mine Superfund Site	CO	Del Norte	Superfund	Federal	Hydro	0.032	Onsite Use - Green Remediation	2011	Hydroelectric plant will generate approximately 145,000 kWh per year – enough to power about 20 households, and prevent 120 metric tons of carbon dioxide from being released into the atmosphere every year. It is anticipated that the hydroelectric plant will provide 15 to 20% of the electricity needed to operate the existing water treatment plant.			✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
CT - CONNECTICUT														
Barkhamsted-New Hartford Landfill	CT	Barkhamsted and New Hartford	Superfund	Towns of Barkhamsted and New Hartford	Solar PV	1.50	Wholesale Electricity	2017	The lease payments help supplement the operating income of Regional Refuse Disposal District One, which continues to run a recycling program and transfer station.		✓			
Bethel Town Landfill Solar	CT	Bethel	Landfill	Municipal	Solar PV	0.948	Wholesale Electricity	2018	Through virtual net metering, 100% of the energy generated is used to power town buildings and operations, offsetting total town consumption. The Town of Bethel is now being supplied by green renewable energy with annual energy savings of 1,254,587 kWh and annual CO2 emissions reduction of 934 metric tons. The project secured an additional subsidy for the project via the State of Connecticut's Zero Emission Renewable Energy Credit (ZREC) program. The installation helped bring the town landfill back into compliance with the Connecticut Department of Energy and Environmental Protection.	✓	✓	✓		✓
Bozrah Landfill Solar	CT	Bozrah	Landfill	Municipal	Solar PV	3.1	Wholesale Electricity	2016	The portfolio will include two Tesla battery storage systems. The two battery systems will have an aggregate capacity of 1.5 MW and provide up to 6 MWh of electricity, enabling CMEEC to remotely dispatch stored solar energy for optimal grid performance.					✓
Bridgeport Landfill	CT	Bridgeport	MSW Landfill	Private	Solar	2.2	Wholesale Electricity	2016	The full energy park (2.2-MW solar and 2.8-MW fuel cell) expected to provide $7M to city in lease revenue over the course of the 20-year lease; create 92 jobs; and provide power for the equivalent of 5,000 homes annually.		✓	✓	✓	
Derby Landfill	CT	Derby	Landfill	Municipal	Solar	0.55	Wholesale Electricity	2015	Energy from panels will be used to reduce town's electricity expenses by 15-20% over the next two decades.	✓				
Ecology Park (AKA Branford Landfill Solar)	CT	Branford	Landfill	Town of Branford	Solar PV	-	Unknown	2018	The project will generate significant savings to the taxpayers in the form of lower utility payments.					✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Evansville Ave. Landfill Solar	CT	Meriden	Landfill	Municipal	Solar	1.1	Wholesale Electricity	2017	Solar project offsets power needs of co-located water pollution control facility. City will save anywhere from $31,708 to $106,222 annually, or $634,150 to $2.2 million over the 20-year contract term (depending on future cost of electricity). City will also receive annual tax payments over the 20-year contract totaling $235,923. No cost to the city for this project.	✓	✓			
Gallup's Quarry	CT	Plainfield	Superfund	Greenleaf Power	Biomass	37.50	Wholesale Electricity	2013	The 37.5-megawatt power plant uses waste wood to generate enough electricity to power the equivalent of about 40,000 homes in Plainfield. Connecticut Light & Power purchases 80% of the generated energy under a 15-year agreement with the facility owner, while the remaining energy contributes to the regional renewable energy certificate market.		✓	✓		
Hartford CT Landfill (Solar)	CT	Hartford	Landfill	Municipal	Solar	1	Wholesale Electricity	2014	The facility will sell excess electricity to the grid or, potentially, to the City of Hartford at a discounted rate that could save the City several hundred thousand dollars per year on its electricity bill. In addition, in 2012, Connecticut Light & Power selected the project to receive zero - emission renewable energy credits, or ZRECs. The ZRECs add 11 cents per kilowatt - hour to the price of electricity generated for sale by the solar collectors. The system will generate up to one megawatt of electricity, enough to power about 1,000 homes when operating at full capacity.	✓	✓	✓		
Newtown Landfill Solar	CT	Newtown	Landfill	Municipal	Solar	1	Wholesale Electricity	2018	Under the PPA, town will purchase the generated electricity at $0.0630 per kWh vs. current cost of $0.09795	✓				
North Haven Landfill	CT	North Haven	Landfill	Municipal	Solar	0.384	On-site Use - General	2017	Powers on-site wastewater treatment facility.					✓
Rogers Road Landfill	CT	Norwich	Landfill	Municipal	Solar PV	3	Wholesale Electricity	2017	The community has taken land with no other use and created a good reuse of a brownfield location by installing solar.					✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Stafford Landfill (CT)	CT	Stafford	Landfill	Town of Stafford	Solar PV	0.95	Wholesale Electricity	2016	Includes two other arrays in the city, combined these three arrays provide enough electricity to power 80% of the town's buildings. The system is projected to save the town $4.3 million over 15 years, and $12.3 million over 25 years. Utilizes a Tax Exempt Lease Purchase (TELP) and make use of a long-term Zero Emission Energy Credit (ZREC) contract to allow the town to own and operate the arrays outright, as well as virtual net-metering. Stafford's collection of solar arrays eliminates the equivalent greenhouse gas emissions from driving 7,410,973 miles in an average passenger car and CO2 emissions from 3,299,687 pounds of coal burned and carbon sequestered by 2,927 acres of U.S. forest for one year.	✓	✓	✓		✓
Wintergreen Ave. Landfill	CT	New Haven	MSW Landfill	Private	Solar	1	Wholesale Electricity	2016	The installation will provide minimum savings for the town of $30,000 per year.	✓				
Woodstock (CT) Landfill Solar	CT	Woodstock	Landfill	Municipal	Solar	1	Wholesale Electricity	2016	Installed at no cost to taxpayers and will save the town over $2.4 million over the next 20 years.	✓				
DE - DELAWARE														
DuPont Newport	DE	Newport	Superfund	Private	Solar	0.5	Wholesale Electricity	2013	Construction created nearly 120 jobs.				✓	
McKees Solar Park	DE	Newark	Landfill	Municipal	Solar	0.23	Wholesale Electricity	2014	Funding model wherein residential electric users can contribute $50 in return for a $0.01 per kWh rebate on one (1) 100 kilowatt-hour block of power generated from the park per month, which will displace the first 100 kwh of household consumption. Residents can also make outright tax-deductible donations to the park.			✓		✓
North and South Peninsula	DE	Wilmington	Brownfield	Greenwood Energy	Solar PV	1.95	Wholesale Electricity	2013	The project sells energy and SRECs to Delmarva Power & Light under separate long-term contracts.		✓			P
FL - FLORIDA														
Lake Worth Landfill	FL	Lake Worth	MSW Landfill	Municipal	Solar	2	Wholesale Electricity	2017	Helps meet city's commitment to diversifying the city's energy to clean and renewable energy sources			✓		

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
GA - GEORGIA														
Deptford Landfill	GA	Savannah	Landfill	Dulany Industries	Solar PV	1.20	Wholesale Electricity	2019	The installation turns a brownfield into a greenfield.					✓
Hickory Ridge Landfill	GA	Atlanta	Landfill	Municipal	Solar	1	Wholesale Electricity	2011	Will generate enough energy to meet the needs of 224 homes annually.			✓		
Jekyll Island Landfill	GA	Jekyll Island	Landfill	Georgia	Solar PV	1.00	Wholesale Electricity	2019	The Authority leases the land to Cherry Street Energy for about $2,000 a month for 30 years.		✓			
HI - HAWAII														
Kapolei Sustainable Energy Park	HI	Kapolei	RCRA	Private	Solar	1.2	Wholesale Electricity	2011	The system will produce enough electricity to power between 150 and 250 homes with clean, solar energy.			✓		
IA - IOWA														
Schaus-Vorhies Solar	IA	Fairfield	Brownfield	Private	Solar	0.5	Wholesale Electricity	2016	The system will pay for itself within 5-6 years, and cover 100% of the company's electrical needs on a net-annual bases. Total energy production (over 25 years) will prevent 10,587 metric tons of CO2 from entering the atmosphere, equivalent to about 11 million pounds of coal or 25 million miles driven in a typical passenger car.	✓		✓		
West Dubuque Solar Garden	IA	Dubuque	Brownfield	City of Dubuque	Solar PV	5.00	Wholesale Electricity	2017	The annual output of the system is equal to the annual usage of about 126 average Iowa homes. The Downtown Dubuque Solar Garden features an educational display and information to teach visitors about advancements in clean energy technology.			✓		✓
IL - ILLINOIS														
Exelon City Solar	IL	Chicago	Brownfield	Municipal	Solar	10	Wholesale Electricity	2010	During construction, the $60 million project created 200 jobs. The developers sourced much of its labor and building materials from local companies on Chicago's South Side. The system provides permanent work in the areas of operations, maintenance, and security. The project also expands the local tax base and generates revenues from the land lease.		✓		✓	✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Gobnob Wind Turbine Project	IL	Farmersville	Brownfield	State	Wind	0.9	Wholesale Electricity	2009	The Rural Electric Convenience Cooperative signed a 20-year lease agreement with the Department of Natural Resources for $1,200 per year. The system will result in a reduction in GHG emissions of 1,997 tons of carbon dioxide annually.		✓	✓		
Kokomo Solar Park	IL	Kokomo	Superfund	Private	Solar	7	Wholesale Electricity	2016	Provides 7 MW of clean power capacity to the community and is located on a remediated Superfund parcel of land			✓		
IN - INDIANA														
Crane Naval	IN	Crane	Landfill	U.S. Navy	Solar PV	17.00	Wholesale Electricity	2017	The installation is providing and promoting energy sustainability and bringing renewable energy options to the installation and neighboring communities. In exchange for providing secure, on-base land needed for the project, NSA Crane will receive in-kind consideration in the form of electrical infrastructure upgrades, such as a motor-operated disconnect switch, and a microgrid feasibility study to increase future base resiliency.					✓
Marion County Solar #1	IN	Indianapolis	Landfill	Private	Solar PV	5.2	Wholesale Electricity	2015	This solar project produces enough electricity to power over 700 homes and the equivalent to removing 7,000 tons of carbon dioxide from the environment every year.			✓		
Marion County Solar #2	IN	Indianapolis	Brownfield	Private	Solar PV	1.9	Wholesale Electricity	2015	This solar project produces enough electricity to power over 700 homes and the equivalent to removing 7,000 tons of carbon dioxide from the environment every year.			✓		
Reilly Tar & Chemical (Indianapolis)	IN	Indianapolis	Superfund	Private	Solar	10.8	Wholesale Electricity	2014	Under the 15-year PPA with Indianapolis Power and Light (IPL), developer Hanwha Q CELLS will sell electricity and environmental attributes from Maywood Solar Farm for 15 years. IPL will purchase 100% of the output at a set price ($.020/kWh) and will retain ownership of project RECs. The project created 75-100 jobs during construction and will continue to have a positive impact on the economy through ongoing operating and maintenance contracts with local firms during the 15- to 35-year operating period of the facility.	✓	✓		✓	

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Kokomo Wind Farm (Continental Steel)	IN	Kokomo	Superfund	Private	Wind	unknown	Onsite Use - Green Remediation	unknown	Three on-site wind turbines produce enough energy to offset at least half of the energy needed for ongoing groundwater treatment.					✓
KY - KENTUCKY														
Fort Campbell Solar Phase One	KY	Fort Campbell	Landfill	Federal	Solar	1.9	Onsite Use	2015	Helps Fort Campbell meet federal directives outlined in the American Renewable Energy Act, requiring federal installations to obtain 25 percent of their energy by renewable means by 2025.			✓		
Fort Campbell Solar Phase Two	KY	Fort Campbell	Landfill	Federal	Solar	3.1	Wholesale Electricity	2017	Combined with Phase One of the installation, provides a total of 5 MW of solar to Fort Campbell. Expected to reduce the post's energy load on the power grid and help save money that will be repurposed toward training soldiers.	✓		✓		
MA - MASSACHUSETTS														
Acton Landfill	MA	Acton	Landfill	Municipal	Solar	1.6	Wholesale Electricity	2013	If the market rate for electricity remains at least one penny per kWh above the fixed contract rate, the predicted cost savings from the landfill solar system totals over $325,000 for the 20 year period (more than $15,000 per year). If the market rate stays at the Town's average 2013 rate or increases, Acton will save over $1,700,000 over the 20 year period, or $85,000 per year.	✓				
Aquinnah Landfill	MA	Aquinnah	Landfill	Municipal	Solar	0.05	Onsite Use - General	2012	The array will produce enough energy to power the Town's Municipal electrical load including the Town offices, police & fire stations, library, street lights, and public bathrooms and eventually save the town over $10,000 per year in electricity costs.	✓				
Barnstable Landfill	MA	Barnstable	Landfill	Municipal	Solar	4.2	Wholesale Electricity	2014	Estimated annual savings for the town of over $270,000.	✓				
Beech St. Landfill	MA	Rockland	Landfill	Municipal	Solar	3.2	Wholesale Electricity	2014	The town has 25-year PPA with NextSun and has locked in a rate of $0.0699/kWh for the first year and 2% increase in annual power rates after that versus original rates of $0.07887/kWh. A land lease will generate revenue of $50,000 per year. The project will save Rockland taxpayers through lower electricity prices, saved tax revenue, and provide a hedge against future energy rate hikes.	✓	✓			

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Bellingham Landfill	MA	Bellingham	Landfill	Municipal	Solar	4.1	Wholesale Electricity	2017	Energy generated is being purchased by the town of Randolph, saving millions of dollars over the life of the project. Town will receive a total of over $3.5 million in lease payments and tax revenues for the project.	✓	✓			
Bent Mill Solar	MA	Gardner	Brownfield	Municipal	Solar	1	Wholesale Electricity	2014	City of Gardner benefits from the land lease and tax payments. Four local organizations are saving tens of thousands of dollars on their annual electricity bills, including GAAMHA, Inc., a non-profit provider of services for adults with disabilities. GAAMHA estimates they will see savings of at least $10,000 annually.	✓	✓			
Bolton Orchards	MA	Bolton	Brownfield	Private	Solar	6	Wholesale Electricity	2013	Chelmsford's Town Manager negotiated a 25-year Net Metering Power Sales Agreement (NMPSA) with Main Street Power, who owns and operates the facility. The Town of Chelmsford receives 25 years of discounted electricity rates for the energy produced by the solar facility under the NMPSA. The project will provide tax revenue to town of Bolton and power to town of Chelmsford (higher demand than Bolton).	✓	✓			
Bolton Orchards Phase II	MA	Bolton	Brownfield	Private	Solar	2.8	Wholesale Electricity	2016	The community solar project that enables residents to save money on their utility bills and support local solar.	✓				✓
Boxford Landfill	MA	Boxford	Landfill	Municipal	Solar	1	Wholesale Electricity	2017	Town touts economic benefits of approximately $3 million over the next 20 years, receiving: (1) nearly all of the town's municipal annual electricity needs from the solar project, using clean electricity that is approximately 40% cheaper than the town's current power purchase rate; (2) revenue in exchange for leasing the capped landfill to the solar project's owner and the partnership that acquired and constructed the project with plans to remain the long-term owner and operator; and (3) tax revenue for the life of the solar project. Solar will also power the equivalent of 200 homes.	✓	✓	✓		

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Braintree Landfill	MA	Braintree	Landfill	Municipal	Solar	1.26	Wholesale Electricity	2014	The Braintree Electric Light Department has an agreement to buy the electricity that the site produces at a competitive rate of 6.5 cents per kilowatt (from Braintree Electric Light Department general manager William Bottiggi). Over the course of a year the project is expected to generate 1,645,000 kilowatt-hours of electricity—enough to power to more than 200 homes.	✓		✓		
Brewster Landfill	MA	Brewster	Landfill	Municipal	Solar	1.23	Wholesale Electricity	2014	The project is expected to save town $75,685 in the first year.	✓				
Bridge Street Landfill	MA	Fairhaven	Landfill	Municipal	Solar	1.8	Wholesale Electricity	2013	The town is expected to save $1.5M over 30 years. A PPA allows town to avoid costs associated with solar system ownership.	✓				
Brockton Brightfield	MA	Brockton	Brownfield	Municipal	Solar	0.46	Wholesale Electricity	2006	Generates nearly $145,000 in annual revenue for the city, which goes towards paying off the cost to build and maintain the brightfield. It is estimated that the loan will be paid off in full by 2026, and the city will begin to directly profit from the sale of RECs and electricity. The brightfield has a module warranty of 20 years, and with an expected system life of 30-50 years, the city should see profits for 10 to 30 years.		✓			
Cedar Street Landfill	MA	Cohasset	Landfill	Municipal	Solar	0.42	Wholesale Electricity	2017	Town could net as much as $1.6 million in energy cost savings over the 20-year contract, depending on net metering credit rates. Solar will produce power equal to approximately 16% of the town's annual electric load.	✓				
Charles George Landfill	MA	Tyngsboro/ Dunstable	Landfill	Private	Solar	3.56	Wholesale Electricity	2017	Produces nearly 4,600,000 kWh of electricity per year, enough to power approximately 460 New England homes and avoid the release of over 3,500 tons of carbon dioxide annually from non-renewable power plants.			✓		
Chatham Landfill	MA	Chatham	Landfill	Municipal	Solar	1.8	Wholesale Electricity	2014	Estimated to save town $120,446 in the first year and more than $3.5M by the end of the 20-year PPA.	✓				
Chicopee Elks Landfill	MA	Chicopee	Landfill	Private	Solar	2.1	Wholesale Electricity	2015	Power sold to Chicopee Electric & Light at a discount, saving ratepayers money on their utility bill. 55 jobs created.	✓			✓	

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Chilmark Landfill	MA	Chilmark	Landfill	Municipal	Solar	0.099	Wholesale Electricity	2014	System offsets 60% of town's historical energy usage. In first year of operation, saved town $2,374 from net metering (as of Sept 2015).	✓				
Concord Landfill Phase I	MA	Concord	Landfill	Private	Solar	1.7	Wholesale Electricity	2014	Total installation (full 2.9 MW) expected to produce 2% of town's electricity needs. Enough energy to provide almost 400 homes with their annual energy needs.			✓		✓
Cottage Street Landfill	MA	Springfield	Landfill	Municipal	Solar	3.9	Wholesale Electricity	2014	Estimated to have brought $22 million of construction revenue to the region.				✓	✓
Cowles Gravel Solar	MA	Westfield	Brownfield	Private	Solar	2.6	Wholesale Electricity	2016	Solar development will provide lease revenue to the town. Developer made several site improvements, including grinding an existing stockpile on the site of more than 56,000 tons of asphalt from roads and other demolition and construction debris to grade the site for solar and erecting a fence to deter off-road vehicles from entering (which was a prior issue in the community).		✓			✓
Dorchester Solar Power Project	MA	Dorchester	Brownfield	Private	Solar	1.3	Wholesale Electricity	2012	Over a 30 year period, this system is expected to save approximately 4,000 pounds of sulfur dioxide, 1,800 pounds of nitrous oxide, and 1.8 million pounds of carbon dioxide. This is equivalent to the emissions produced in generating electricity for 260 average household.			✓		
Dover Landfill	MA	Dover	Landfill	Private	Solar	1.4	Wholesale Electricity	2017	Will allow Dover and Boston metro residents to enjoy local clean energy at no cost to join, while saving them 10 percent on their electricity bills. Expected to avoid approximately 1,300 metric tons of CO_2 each year, equivalent to removing 270 cars from the roads. Created local jobs. Helped Dover achieve Green Community status, which will allow the town to apply for additional grant money from the state.	✓		✓	✓	✓
Duxbury Landfill	MA	Duxbury	Landfill	Municipal	Solar	0.585	Wholesale Electricity	2014	The system should meet 15% of town's electricity needs and save $45,000 per year. The project will generate enough electricity for over 100 homes.	✓		✓		

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Eastham Landfill	MA	Eastham	Landfill	Municipal	Solar	0.627	Wholesale Electricity	2014	Savings from the system are estimated to be $34,010 in first year. The 627 kW array will provide green energy to the Town of Eastham, decreasing their carbon footprint and their utility bills.	✓		✓		
Emery Street Landfill	MA	Palmer	Landfill	Municipal	Solar	5	Wholesale Electricity	2017	Will generate clean solar energy and net metering credits that deliver energy savings to the Town of Andover, while the Town of Palmer receives long-term lease payments and tax revenue.	✓	✓			
Everett Solar Power Project	MA	Everett	Brownfield	Private	Solar	0.605	Wholesale Electricity	2010	The project provides added tax revenue for Everett and helps National Grid temporarily offset customer demand as the load in the area steadily increases.		✓			
Fairhaven Sanitary Landfill (Canton)	MA	Canton	Landfill	Municipal	Solar	5.6	Wholesale Electricity	2012	The electricity produced by the solar system is expected to save the town approximately $1.5 million over the course of the 30 year contract.	✓				
Falmouth Landfill	MA	Falmouth	Landfill	Municipal	Solar	4	Wholesale Electricity	2017	Total economic benefit to the community over the life of the project is projected to be over $14 million. Installation avoids the equivalent of 4,000 tons of CO2 emissions each year. Fifty (50) jobs created during construction.	✓		✓	✓	
Former Grasso Landfill	MA	Agawam	Landfill	Municipal	Solar	1.98	Wholesale Electricity	2013	Makes the nearby, energy-intensive Hood plant more competitive in today's challenging business environment, while providing new tax revenue to Agawam.		✓			✓
Greenfield Solar Farm	MA	Greenfield	Landfill	Municipal	Solar	2	Wholesale Electricity	2012	The system is projected to save city $250,000 in first year of operation and created 50 local jobs.	✓			✓	
Greenwood St. Landfill	MA	Worcester	Landfill	Municipal	Solar	8.1	Wholesale Electricity	2017	Created 150+ jobs, including an electrical crew of 50+ workers from the local IBEW 96. Produces 20% of city's power needs. Expected energy savings of up to $2M and revenue from energy credits in first 10 years valued at $10M. Will avoid 7,475 metric tons of CO2 annually, equivalent to the amount emitted from driving approximately 18,000,000 miles.	✓	✓	✓	✓	
Groton Landfill Solar	MA	Groton	Landfill	Municipal	Solar	2.93	Wholesale Electricity	2016	The installation will provide 25% of Groton Electric Light Department's required electricity during the middle of the day in the spring and fall.					✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Hartford Turnpike/ Shrewsbury Landfill	MA	Shrewsbury	Landfill	Municipal	Solar PV	3.8	Wholesale Electricity	2018	The installation will provide energy for 400-500 homes.			✓		
Harwich Municipal Landfill	MA	Harwich	Landfill	Municipal	Solar	1.5	Wholesale Electricity	2014	The project is expected to save the town about $300,000 per year.	✓				
Haverhill Solar Power Project	MA	Haverhill	Brownfield	Private	Solar	1	Wholesale Electricity	2010	Site serves to conduct load switching with neighboring feeders, providing National Grid with additional flexibility in serving customers in this area.					✓
Hill Street Landfill	MA	Norton	Landfill	Municipal	Solar	2	Wholesale Electricity	2016	The project will generate enough energy to power approximately 280 homes in New England and prevent the annual release of over 2,000 tons of carbon dioxide from non-renewable power plants. It also created 50 construction jobs.			✓	✓	
Howe Street Landfill	MA	Ashland	Landfill	Town of Ashland	Solar PV	1.00	Wholesale Electricity	2018	This installation is part of three total installations. The town entered into a 20-year Power Purchase Agreement (PPA). The installations provide more than $250,000 in annual savings in its building portfolio. Through net metering, 100% of the energy generated is used to power town buildings and operations, offsetting total town consumption. Additionally, this project brought the town landfill back into compliance with the Massachusetts Department of Environmental Protection. The installations provide: an annual energy savings of 2.2 million kWh; annual CO_2 emissions reduction of 1,632 metric tons; and enhanced landscaping to blend array into the natural environment and minimize the visual impact of the landfill system.	✓		✓		✓
Hull Wind II	MA	Hull	Landfill	Municipal	Wind	1.8	Wholesale Electricity	2006	Combined, Hull Wind I (not on contaminated land) and Hull Wind II produce approximately 11% of the town's electricity. Harvard University purchases 100% of the RECs for Hull Wind II, equal to about $1.5 million in revenue for Hull.		✓			

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Hunt Road Landfill	MA	Amesbury	Landfill	Municipal	Solar	6	Wholesale Electricity	2016	Allowed this unused landfill with little development potential to produce energy, tax revenue, and local construction jobs. Provides the city with discounted electricity rates as well as tax revenues. Produces enough electricity to power approximately 800 New England homes and avoid the release of over 6,000 tons of CO2 annually from non-renewable power plants.	✓	✓	✓	✓	
Huntington Avenue Landfill	MA	Metheun	Landfill	Municipal	Solar	1.3	Wholesale Electricity	2013	Methuen will see nearly $100,000 in energy savings per year by reducing the town's price per kWh by 40%. Under the terms of the PPA, Borrego Solar secured financing for the design, construction, and ongoing maintenance of the solar project, and will sell the power in the form of energy credits through National Grid Utility, produced by the project at $0.085 per kilowatt-hour, roughly $0.06 lower than the current rate.	✓	✓			
Indian Orchard Solar Facility	MA	Springfield	Brownfield	Other	Solar	2.3	Wholesale Electricity	2011	The project will generate $400,000 in annual property tax revenue to city of Springfield.		✓			
Iron Horse Park / Dow Solar	MA	Billerica	Superfund	Private	Solar	3.68	Wholesale Electricity	2016	The array will generate energy for four school systems and one local government through virtual net metering. Will supply an average of 20% of the offtakers' energy needs.	✓				
Kingston Landfill (wind)	MA	Kingston	Landfill	Municipal	Wind	2	Wholesale Electricity	2012	The project is expected to produce more than 100% of the electricity consumed by the municipal electric load of the Town of Kingston.	✓				
Lancaster Landfill	MA	Lancaster	Landfill	Municipal	Solar	0.5	Wholesale Electricity	2013	Energy generated is net metered to offset municipal building electricity needs, saving the town approximately $75,000 annually.	✓				
Lee Landfill	MA	Lee	Landfill	Municipal	Solar	2.6	Wholesale Electricity	2017	A 20-year PPA provides long-term offtaker of electricity for developer and long-term energy price assurance for towns (project serves both Lee and Lenox, MA).	✓				

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Lenox Landfill	MA	Lenox	Landfill	Municipal	Solar PV	0.748	Wholesale Electricity	2017	Lee and Lenox boards of selectmen have a plan to share a 20-year solar energy net meter-credit purchasing agreement. Lee will take 80% of the solar power generated, Lenox the remaining 20%, according to municipal officials from both communities. The town of Lee would save between $478,000 and $525,000 over the 20-year period on the electricity used to power the town's two public school buildings, water and wastewater treatment plants and other municipal facilities. In Lenox the wastewater treatment plant and the water treatment facility will yield a total savings of $131,162 over the 20 years.	✓				✓
Ludlow Landfill	MA	Ludlow	Landfill	Municipal	Solar	2.7	Wholesale Electricity	2013	Without a capital expenditure from the city or its taxpayers, Ludlow can purchase the energy produced by the solar energy system at a rate of $0.05 per kilowatt-hour, much less than the $0.09 per kilowatt-hour charged by the local utility. Depending on the solar system's efficiency, the town of Ludlow will save approximately $100,000–$140,000 a year on energy bills. Ludlow signed a 20-year contract to lease 17 acres of the old town landfill. In return for leasing the land, Borrego Solar secured private funds to finance the engineering, procurement, construction, and ongoing maintenance and operation costs associated with the project.	✓	✓			
Mashpee Solar	MA	Mashpee	Landfill	Private	Solar	2.1	Wholesale Electricity	2014	The total anticipated cost savings over the 25-year Power Purchase Agreement is anticipated at over $7 million. The system will generate sufficient electricity to offset a large portion of the electrical needs of the town at a substantial reduction in cost from current retail electricity rates. It will generate enough electricity to satisfy the needs of over 300 homes.	✓		✓		
Massachusetts Military Reservation (Otis)	MA	Sagamore	Superfund	Federal	Wind	4.5	Onsite Use - Green Remediation	2011	The turbines to offset electrical costs for powering numerous groundwater cleanup systems at the site.	✓				✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Montague Landfill Solar	MA	Montague	Landfill	Municipal	Solar PV	5.9	Wholesale Electricity	2018	As part of the project, both towns will receive energy credits offsetting their electricity costs over the next 20 years. The Town of Montague is the landlord of the newly energized solar site; the site is expected to garner tax revenues on otherwise unproductive land over the life of the project. The project is projected to offset annual carbon dioxide by 118,187 tons and power 16,000 average homes annually.		✓	✓		
Mount Tom Solar	MA	Holyoke	Brownfield	Private	Solar	5.76	Wholesale Electricity	2017	The installation produces enough electricity to power 1,800 homes for a year and reduce GHG emissions by 3,000 metric tons.			✓		
Needham Landfill	MA	Needham	Landfill	Municipal	Solar	3.7	Wholesale Electricity	2016	Expected to provide first year revenues from net metering (~$487,000), PILOT (~$93,600), and land lease (~$50,000).		✓			
New Bedford High School Solar	MA	New Bedford	Brownfield	Municipal	Solar	0.5	Wholesale Electricity	2012	The project will improve science education through the installation of an interactive digital "kiosk" and other tools so teachers at the High School and other schools can incorporate the solar project into their science lessons.					✓
North Adams Landfill	MA	North Adams	Landfill	Municipal	Solar	1.5	Wholesale Electricity	2015	In total across this installation plus three other solar sites in the city, North Adams receives nearly 100 % of municipal power from solar. The landfill installation represents the largest portion of this (approximately 40%).					✓
Northampton Landfill Solar	MA	Northampton	Landfill	Municipal	Solar PV	3.17	Wholesale Electricity	2017	The development is expected to produce the equivalent of 45% of the power used by municipal buildings, saving $250,000 in city energy costs in year one, and $7.5 million over 20 years. It is the equivalent of taking 444 homes off the grid, or 634 vehicles off the road.	✓		✓		✓
Oliver Street Landfill	MA	Easthampton	Landfill	Municipal	Solar	2.3	Wholesale Electricity	2012	The system was constructed at no cost to city. Borrego leases land for $1 and sells Easthampton electricity. For the duration of the 10 year PPA term, Easthampton will pay $0.06/kWh and has the option to extend the contract, purchase the solar power installation, or have it removed at year 11. The reduced cost per kWh of energy is estimated to save Easthampton over $1.4 million dollars in 10 years.	✓	✓			

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Osgood Landing Solar	MA	North Andover	State Brownfield	Private	Solar	6	Wholesale Electricity	2017	Power purchase agreement includes a 15% discount on electricity that is estimated to reduce the town's energy bill by $160,000 in the first year. Town will accumulate over $6M in energy savings and PILOT revenue over life of the project.	✓	✓			
Palmer Metropolitan Airfield Solar	MA	Palmer	State Brownfield	Private	Solar	6	Wholesale Electricity	2016	Town of Palmer will receive real and personal property tax revenue of approximately $2 million over the 20-year project term; three public entities – the Town of Leicester, the Town of Spencer, and Worcester State University, will together purchase all of the net metering credits from the energy generated by the project, resulting in millions of dollars in energy savings for these entities over the 20-year term of the energy agreements. Land owner, JenJill LLC of Wilbraham, Mass., which purchased the site and paid for its cleanup, will benefit from the long-term ground lease.		✓			
Pembroke Landfill Solar	MA	Pembroke	Landfill	Town of Pembroke	Solar PV	3.26	Wholesale Electricity	2017	The landfill is now generating clean renewable energy for the town.					✓
Philips Lightolier Wind	MA	Fall River	Brownfield	Private	Wind	2	Wholesale Electricity	2012	The installation will offset the production of nearly 30,000 tons of carbon dioxide over the lifetime of the project, supporting the state's GHG reduction goals; part of Philips Lightolier's plan to create a net zero energy manufacturing facility.			✓		
Pittsfield Municipal Landfill Solar	MA	Pittsfield	Landfill	Municipal	Solar	2.91	Wholesale Electricity	2017	Expected to save the city about $140,000 annually in energy costs.	✓				
Prospect Street Landfill	MA	Easton	Landfill	Municipal	Solar	1.9	Wholesale Electricity	2014	"The project will save the town approximately $200,000 annually and nearly $4,500,000 over the course of the 20-year contract. The system will produce the equivalent quantity of electricity consumed by 235 homes in one year. "	✓		✓		
Quaboag Landfill Solar	MA	Brookfield	Landfill	Municipal	Solar	0.434	Wholesale Electricity	2013	The installation will earn approximately $800,000 over 20 years for town through lease payments, PILOT, and reduced electricity costs. The electricity will power nearly all municipal functions, including schools, emergency response, street lighting and the Town Hall. This is equivalent to the total annual electrical usage of almost 100 average single-family homes.	✓	✓	✓		

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Randolph Landfill Solar	MA	Randolph	Landfill	Municipal	Solar	4.8	Wholesale Electricity	2017	The project will provide PILOT revenue of approximately $90,000 per year, plus lease revenues.		✓			
Ravenbrook Farms Landfill Solar	MA	North Carver	Landfill	Municipal	Solar	6	Wholesale Electricity	2014	Developer negotiated to allow town to collect more than $200k in back taxes owed via added land lease payments. Town will also collect tax revenue on installation going forward.		✓			
Raynham Landfill Community Solar	MA	Raynham	Landfill	Taunton Municipal Light Plant	Solar PV	3.00	Community Owned / Subscription	2018	Taunton Municipal Lighting Plant (TMLP) endeavors to embrace renewable energy as part of our portfolio. TMLP has been increasing the solar renewable production in their territory and this was an opportunity to reuse a landfill that would otherwise have no other purpose.					✓
Re-Solve Superfund Solar	MA	Dartmouth	Superfund		Solar	0.15	Onsite Use - Green Remediation	2012	The system to generate 90 percent of electricity for the groundwater treatment system; about 186,000 KWH/yr.	✓				
Revere Solar Power Project	MA	Revere	Brownfield	Private	Solar	0.75	Wholesale Electricity	2010	Located next to an active substation on Railroad Street that has encountered loading issues; solar project is designed to help alleviate this excessive loading.					✓
Rising Paper Solar	MA	Great Barrington	Brownfield	Private	Solar	3.2	Wholesale Electricity	2016	The project will produce enough clean energy to power the electrical needs of a local school district and the Town of Great Barrington's municipal buildings and a net economic benefit of more than $200,000 in just the first year. The project also allows for the preservation of wetlands and riverfront buffers on the site.	✓		✓		
Russells Mills Road Landfill	MA	Dartmouth	Landfill	Municipal	Solar	1.45	Wholesale Electricity	2013	The savings generated from the landfill solar energy system are approximately $3 million over the 20-year life of the PPA term. It generates tax revenue from the solar project as it is constructed within the town limits.	✓	✓			
Saugus Landfill Solar	MA	Saugus	Landfill	Municipal	Solar	1.66	Wholesale Electricity	2017	Projected to save the town more than $3 million in electricity costs over 20 years, in addition to generating $80,000 annually in additional revenue through a payment in lieu of taxes and the land lease payment	✓	✓			

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Scituate Landfill	MA	Scituate	Landfill	Municipal	Solar	3	Wholesale Electricity	2013	The system is expected to save town $200,000 per year from discounted energy rates. The Town pays Scituate Solar $0.084/ hour ($0.145/hr. to National Grid). Revenue to pay for municipal building energy costs. City paid nothing up front except legal fees of approximately $9,000. Project qualified for 1603 Treasury Grant and the SREC I program administered by the Massachusetts Department of Energy Resources.	✓	✓			
Shaffer Landfill (Iron Horse Park)	MA	Billerica	Superfund	Municipal	Solar	6	Wholesale Electricity	2014	The installation provides the town with certainty and predictability with respect to the revenue stream to be generated from the subject property over its 20 year term. The facility allows Billerica to reduce dependence on fossil fuels.	✓		✓		
Shirley Landfill	MA	Shirley	Landfill	Town of Shirley	Solar PV	1.35	Wholesale Electricity	2017	Estimated CO2 Offset (over the life of the system) 23,279 mT.			✓		
Silver Lake Solar Photovoltaic Facility	MA	Pittsfield	Brownfield	Other	Solar	1.8	Wholesale Electricity	2010	The installation contributes approximately $220,000 of annual property tax revenues to the City of Pittsfield.		✓			
Simonds Rd. Landfill	MA	Williamstown	Landfill	Municipal	Solar	2	Wholesale Electricity	2018	Anticipated that the project will generate at least $5 million of savings over 20 years; expected to displace 1,772 tons of CO2 annually.	✓		✓		
South Hadley Landfill	MA	South Hadley	Landfill	Municipal	Solar	0.08	Onsite Use - General	2012	Electricity generated partially offsets electrical consumption from the adjacent South Hadley Department of Public Works (approximately 50%).					✓
Stockbridge Landfill	MA	Stockbridge	Landfill	Municipal	Solar PV	0.9	Wholesale Electricity	2018	The project is utilizing otherwise unusable land to generate renewable power, all while saving the town approximately $60,000 annually in electricity cost reduction and new tax revenue. Over the 20-year life of this solar PV facility, the Town's projected economic benefit is upwards of $1 million. It also creates about 849 metric tons of CO2 offset annually, equivalent to 182 passenger vehicles driven for one year or annual electricity usage of 127 homes.	✓	✓	✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Stow Brownfield Solar	MA	Stow	Brownfield	Private	Solar	2.5	Wholesale Electricity	2013	The project pays the town of Stow $12,000 per year as payment in lieu of taxes, plus the property taxes as determined by the assessment, an amount that now comes in at a little less than $8,000 annually for the twelve acres.		✓			
Sudbury Landfill Solar	MA	Sudbury	Sudbury	Municipal	Solar	1.5	Wholesale Electricity	2013	Expected to save the equivalent of 1,310 metric tons of CO2 per year.			✓		
Sullivan's Ledge	MA	New Bedford	Superfund	Municipal	Solar	1.8	Wholesale Electricity	2014	The system is expected to save city $2.7 million over 20 years. Used a local (MA-based) capital firm, BlueWave, for development.	✓			✓	
Theophilus Smith Landfill	MA	Dennis	Landfill	Municipal	Solar	6	Wholesale Electricity	2014	The Dennis-Yarmouth School District and Dennis Water District will share approximately $500,000 to 695,000 in annual savings from installation. The town agrees to purchase the energy at a reduced rate and sell excess to the Dennis-Yarmouth Regional School District and the Dennis Water District at a reduced rate. Clean Focus owns and operates system at no cost to town.	✓				
W.R. Grace Solar	MA	Acton/ Concord	Superfund	Municipal	Solar	5.6	Wholesale Electricity	2016	The installation will provide the town more than $700,000 in PILOT revenue over 20 years. Offsets approximately 4,503 metric tons of carbon dioxide per year.		✓	✓		
Waltham Street Landfill	MA	Maynard	Landfill	Municipal	Solar	1.2	Wholesale Electricity	2013	Lease payments $2,500 per MW annually. Electricity generated by the panels goes into the regional grid; in return the utility (NSTAR) provides energy credits to the town.		✓	✓		
West Boylston Landfill	MA	West Boylston	Landfill	Municipal	Solar	1.5	Wholesale Electricity	2016	Net savings of about $1.8 million for the community over the life of the array.	✓				
West Tisbury Landfill	MA	West Tisbury	MSW Landfill	Private	Solar	0.884	Wholesale Electricity	2015	A 10-year PPA with extension options provides long-term energy cost assurance and savings for the town of up to $45,000 over the first 10 years of the PPA.	✓				
Westfield Landfill	MA	Westfield	Landfill	Municipal	Solar	2.5	Wholesale Electricity	2015	The city receives benefits from lease payments, payment in lieu of taxes (PILOT), and operational savings. The power is purchased by the Municipal Light Board, which provides electricity to municipal facilities at a reduced rate.	✓	✓			

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Westford St. Landfill	MA	Lowell	Landfill	Private	Solar	1.5	Wholesale Electricity	2014	The city is expected to save $1.5-$2.5 million a year, installed at no upfront cost to the city.	✓				
Weston Landfill	MA	Weston	Landfill	Municipal	Solar	2.27	Wholesale Electricity	2016	Town will receive one net metering credit for each kilowatt-hour of electricity generated by the solar array and received by Eversource (Nstar) over the course of the 20 year lease. These credits are applied to the electric bill received by the Town, thereby reducing how much money is spent on electricity used by the municipality and saving tax dollars.	✓				
Williamston Landfill	MA	Williamston	Landfill	Town of Williamston	Solar PV	1.90	Wholesale Electricity	2018	Williamstown will use energy from the array to power all of its municipal buildings and the fire district building and streetlights, as well as facilities of the regional school district. The discounted clean power will provide both savings and price stability to the town's energy budget by locking in a long-term price for electricity at less than half the price the town currently pays. The town will also receive property tax revenue from the landfill. A dashboard provides information on output and how this relates to various environmental offsets.	✓	✓	✓		✓
Woburn Landfill	MA	Woburn	Landfill	Municipal	Solar	3.4	Wholesale Electricity	2017	The installation is expected to generate more than $370,000 a year in savings for the city.	✓				
MD - MARYLAND														
Annapolis Renewable Energy Park	MD	Annapolis	Landfill	Municipal	Solar PV	16.8	Wholesale Electricity	2018	The city earns revenue by leasing the landfill to Annapolis Solar Park, saves money by purchasing some of the electricity at a rate less than what the City was paying and puts local businesses to work on the construction of the project. More than 100 green jobs were created or will be created in the city over the next 20 years as a result of this partnership. Financial and environmental benefits to the city over the next 20 years with advancement of energy efficiency for all local government-owned buildings.		✓	✓	✓	✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Former Ellicott City Landfill	MD	Ellicott City	Landfill	Private	Solar	1.2	Wholesale Electricity	2011	The installation provides approximately 90% of the annual electricity needs of Worthington Elementary School; SunEdison provided solar curricula for the Howard County Board of Education to use during classroom discussions of environmental sustainability and renewable energy					✓
Fort Detrick	MD	Frederick	SUperfund	Federal	Solar	18.6	Onsite Use - General	2016	Expected to provide nearly $3 million in cost avoidance over the duration of the 25-year electricity purchase agreement the Army has with the project's private developer and owner.	✓				
Forty West Landfill	MD	Hagerstown	Landfill	Private	Solar	2	Wholesale Electricity	2015	Across all EPGSolar installations (including 2 non-contaminated land projects), the County will receive more than $375,000 a year in rent and revenue with an estimated $100,000 in energy cost savings. (For ALL sites in the plan, not just Forty West Landfill.)	✓	✓			
Frederick County Landfill Solar	MD	Frederick	Landfill	Frederick County	Solar PV	1.90	Wholesale Electricity	2019	Through a net metering agreement, electricity generated by the solar array is transferred to Potomac Edison's power grid. The county offsets power costs at designated county facilities through a net metering agreement. The county will have access to renewable power at a fixed rate for at least the next 20 years, under the terms of a 20-year agreement between the county and TESLA Energy. The agreement also allows the county to purchase and own Solar Renewable Energy Certificates that the system generates for at least the next six years at a reduced rate of $22 (a savings of approximately $32).	✓	✓			✓
Hood's Mill Landfill	MD	Westminster	Landfill	Carroll County	Solar PV	0.00	Wholesale Electricity	2018	The project will yield a substantial amount of renewable energy, thereby reducing energy costs projected for the next 20 to 25 years. Department of Public Works staff anticipates up to 25% reduction in the County's energy bill for County facilities through these projects. A low fixed-rate of $.077 per kilowatt hour is guaranteed by the contract through 2037 for the 13.4 megawatt hours to be supplied by the solar panels.	✓				✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Resh Road Landfill (Resh S1)	MD	Hagerstown	Landfill	Municipal	Solar PV	2.5	Wholesale Electricity	2016	The county will generate power savings and rental revenue for unused ground, as well as cover all of its electricity needs over the next 20 years with clean renewable energy.		✓			✓
Washington County Rubble Landfill	MD	Williamsport	Landfill	Municipal	Solar	2.5	Wholesale Electricity	2015	The county will receive more than $375,000 a year in rent and revenue with an estimated $100,000 in energy cost savings. (For ALL sites in the plan, not just Rubble Landfill.)	✓	✓			
Washington County Rubble Landfill #2	MD	Williamsport	Landfill	Municipal	Solar PV	2.5	Wholesale Electricity	2015	The County will generate power savings and rental revenue for unused ground, as well as cover all of its electricity needs over the next 20 years with clean renewable energy.		✓			✓
ME - MAINE														
Belfast Landfill	ME	Belfast	Landfill	Municipal	Solar	0.122	Wholesale Electricity	2015	The system provides nearly 20% of the electricity load for the city's 11 municipal buildings. It is expected to generate $21,000 a year and pay for itself within 15 years.	✓				
Eliot Landfill Solar	ME	Eliot	Landfill	Town of Eliot	Solar PV	0.13	Wholesale Electricity	2019	The array was installed under a purchase agreement where the contractor installs and owns the array until the Town purchases it. The price will be determined based on Fair Market Value which is anticipated to be around $200,000. This solar array provides an opportunity to create clean, carbon free power from land which could not otherwise be used for development or other uses. The power generated by this array will be used to offset (about 95%) municipal accounts across the town of Eliot providing long term cost savings and carbon footprint reduction. Each year the landfill solar array is expected to produce 171,144 kWh of electricity offsetting over 180,000 lbs. of carbon pollution.			✓		✓
Highland Ave. Landfill	ME	South Portland	Landfill	Municipal	Solar	1	Wholesale Electricity	2017	The installation will provide roughly 12% of the electricity used by South Portland's municipal and school buildings					✓
Portland Landfill Solar	ME	Portland	Landfill	City of Portland	Solar PV	0.66	Wholesale Electricity	2018	The array will produce 1.2 million kWh per year or about the same as City Hall / Merrill Auditorium uses annually.					✓
Waldoboro Transfer Station Landfill	ME	Waldoboro	Landfill	City of Waldoboro	Solar PV	0.11	Wholesale Electricity	2018	The project will save the town $380,000 over the life of the system. Sundog Solar will install and own the solar installation and sell power to the town of Waldoboro for a lower rate than it currently pays.	✓				

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
MI- MICHIGAN														
Burcham Park Landfill	MI	East Lansing	Landfill	Town of East Lansing	Solar PV	0.30	Community Owned / Subscription	2018	Residential and commercial electric customers, including the City of East Lansing and the Capital Area Transportation Authority, signed a 25-year lease and paid $399 per panel to receive an annual credit of around $26 per panel on their electric utility bill for the solar power produced. In turn, they'll get a credit on their electric bill for the energy produced by those panels. Each lessee will receive a proportional percentage of utility bill credit that is equal to the amount of energy their lease produces. By using renewable resources to produce electricity, the solar park becomes eligible for renewable energy certificates (RECs). This solar park will make the Lansing area more sustainable and is a positive step in East Lansing's Climate Sustainability Plan to transition to cleaner, more renewable energy options. Subscribers, including the city government, will save money on their utility bills. The solar panels are capable of producing enough electricity each year to power about 60 homes.	✓		✓		✓
Coldwater Board of Public Utilities Solar Field Park	MI	Coldwater	Brownfield	Municipal	Solar PV	1.3	Wholesale Electricity	2018	This project presented a unique opportunity for Coldwater to turn a Brownfield site into a Brightfield site.					✓
MN - MINNESOTA														
Fridley Plant Solar	MN	N/A	Superfund	Private	Solar	0.147	Onsite Use - Green Remediation	2009	Solar panels provide 30 percent of the electrical energy needed for the remediation system on the southern side of the site. The amount of energy produced per year would supply enough power for four average-sized homes. The use of solar energy at the site reduces carbon dioxide equivalent emissions by 41,000 pounds per year.			✓		✓
Hutchinson Landfill	MN	Hutchinson	Landfill	Private	Solar	0.4	Onsite Use - General	2015	Used local companies for the installation (tenKSolar, Bloomington-based solar company who supplied the hardware and 975 panels and Hunt Electric - the contractor that installed the panels). Generates 15% of power needed for WWTP (next door).	✓				✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
MO - MISSOURI														
Busy Bee's Laundry	MO	Rolla	Brownfield	Private	Solar	0.56	Onsite Use - Green Remediation	2011	System installed to produce electricity needed for operating one 400-watt surface-mounted piston pump. Extracted more than 1,800 gallon of groundwater during the first four weeks of operation, at an average rate of 100-160 gallons per day, for ex situ treatment. The PV system is supplying an energy quantity within the range predicted in the project design phase.			✓		✓
MT - MONTANA														
Zortman-Landusky Mine	MT	N/A	Mine Lands	Federal/ Municipal	Wind	0.225	Onsite Use - Green Remediation	2012	Wind turbine offsets some of the $300,000 in annual power costs for long-term water treatment and monitoring at the site.	✓				✓
NC - NORTH CAROLINA														
Evergreen Packaging Landfill	NC	Haywood County	Landfill	Private	Solar	0.55	Wholesale Electricity	2010	Developer savings on land lease via 20-year agreement at $1/ year.					✓
ND - NORTH DAKOTA														
Arsenic Trioxide Site	ND	Lidgerwood, Wyndmere, Milnor and Hankinson	Superfund	Multiple	Geothermal	-	Onsite Use - General	2011	To ensure continued groundwater treatment and distribution, even during power outages, a geothermal heating and cooling system was installed to power the headquarters building where the District manages remote sensing of the system. This cost-effective approach reduces the facility's use of fossil fuels and lowers operation and maintenance costs.			✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
NE - NEBRASKA														
Former Nebraska Ordnance Plant	NE	Mead	Superfund	Private	Wind	0.01	Onsite Use - Green Remediation	2004	Wind turbine provides sufficient renewable energy for continued trichloroethene removal and explosives destruction by the aboveground treatment system during grid inter-tie operation. Provides electricity cost savings expected to total more than $40,000 over the next 15 years of treatment, based on an electricity rate of $0.0546/kWh at the time of wind turbine startup. Reduces consumption of utility electricity by 26%. Decreases CO_2 emissions by 24-32% during off-grid operation of the system's 230-volt submersible pump. Returns surplus electricity to the grid for other consumer use. Provides educational opportunities for Missouri University of Science and Technology students evaluating renewable energy, remediation, and electronic system technologies.	✓		✓		✓
NH - NEW HAMPSHIRE														
Milton Landfill Solar Garden	NH	Milton	MSW Landfill	Private	Solar	1	Wholesale Electricity	2016	Community solar model allows those who can't otherwise install solar to have access to solar energy; town has signed PPA, which provides energy cost savings.	✓				✓
NJ - NEW JERSEY														
Cinnaminson Landfill Solar	NJ	Cinnaminson	Superfund	Cinnaminson	Solar PV	8.00	Wholesale Electricity	2019	The array occupies 25 acres of reclaimed Superfund landfill space in Cinnaminson, NJ and will generate enough electricity to power more than 2,000 average-size New Jersey homes annually.			✓		✓
Bed Bath and Beyond Solar (Port Reading NJ)	NJ	Port Reading	State Brownfields	Private	Solar PV	2.1	Rooftop	2011	To date, the Bed Bath & Beyond 41 SunPower® systems have generated over 125 million kilowatt hours (kWh) of clean, solar energy, offsetting over 88,000 metric tons of carbon dioxide emissions. This is equivalent to the carbon sequestered by 1.4 million tree seedlings grown for 10 years.			✓		
Bernards Township Landfill	NJ	Bernards Township	Landfill	Municipal	Solar	3.68	Wholesale Electricity	2016	The array will generate more than $500,000 in revenue for the town via land lease and energy cost savings.	✓	✓			

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Brick Township Landfill	NJ	Brick Township	Superfund	Municipal	Solar	7	Wholesale Electricity	2014	The township estimates that the solar array will save about $13 million through discounted energy prices over the course of 15 years.	✓				
Campbell's Soup (combined projects #1 and 2)	NJ	Camden	Brownfield	Private	Solar	1.74 and 2.66	Wholesale Electricity	2017	Th fixed PPA rate is currently lower than the cost of traditional electricity for Campbell and provides the company with long-term visibility into this portion of its electricity costs.	✓				
Clean Harbors	NJ	Bridgeport	Landfill	Municipal	Solar	1.5	Onsite Use - Green Remediation	2011	The system reduces the $250,000 annual electric bill for cleanup by 90%. The revenue from the solar installation will fund continued groundwater treatment.	✓				✓
Diamond Chemical Co. Solar	NJ	East Rutherford	State Brownfields	Private	Solar PV	1.47	Onsite Use - General	2013	Provides a partial source of power for company operations. The use of solar energy lowers Diamond's energy costs, which saves money and enhances Diamond's competitiveness.					✓
FedEx Ground Distribution Hub	NJ	Woodbridge	Brownfield	Private	Solar	2.42	Wholesale Electricity	2009	The project generates 30% of the hub's electricity needs and an annual reduction of approximately 1,867 metric tons of CO2 emissions.			✓		✓
Fort Dix Solar	NJ	Pemberton Township	Landfill	Federal	Solar	16.5	Wholesale Electricity	2017	The project will produce enough energy to power 1,500 homes, avoiding more than 15,000 metric tons of CO2 emissions--the equivalent of removing 3,000 cars from the road.			✓		
Goya Foods Inc.	NJ	Jersey City	State Brownfields	Unknown	Solar PV	3.45	Rooftop	2015	The solar installation generates over 70% of the building's energy supply and provides a net zero carbon foot-print.			✓		✓
Hackensack Solar Farm	NJ	Hackensack	Brownfield	Other	Solar	1.06	Wholesale Electricity	2012	The project created construction and permanent jobs (number not specified).				✓	
Industrial Land Reclaiming Landfill	NJ	Edison	MSW Landfill	Private	Solar	21	Wholesale Electricity	2017	This installation adds to state's renewable energy resources without reducing the state's open space.			✓		
Jersey Gardens Mall Solar #1	NJ	Elizabeth	Landfill	Private	Solar PV	2	Rooftop	2012	The solar project generates the amount of power required for approximately 560 New Jersey homes. It is expected to generate the equivalent of 11% of the mall's electrical demand. The loan can be re-paid using Solar Renewable Energy Certificates (SRECs) generated by the solar installation.		✓	✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Jersey Gardens Mall Solar #2	NJ	Elizabeth	Landfill	Private	Solar PV	2.8	Rooftop	2012	The solar project generates the amount of power required for approximately 560 New Jersey homes. It is expected to generate the equivalent of 11% of the mall's electrical demand. The loan can be re-paid using Solar Renewable Energy Certificates (SRECs) generated by the solar installation.		✓	✓		✓
Kinsley Landfill	NJ	Deptford Township	Landfill	Municipal	Solar	11.18	Wholesale Electricity	2014	PSE&G's largest solar project to date; transformed 35 acres of unused landfill into solar field.			✓		
L&D Landfill	NJ	Eastampton, Lumberton, Mount Holly	Landfill	Private	Solar	12.93	Wholesale Electricity	2016	The system created 190 construction jobs. It also generates enough electricity to power 2,000 average NJ homes annually.			✓	✓	
Linden Solar Farm	NJ	Linden	Brownfield	Other	Solar	3.2	Wholesale Electricity	2011	The project created construction and permanent jobs (number not specified).				✓	
Macy's Corporate Services Solar	NJ	Edison	State Brownfields	Private	Solar PV	1.06	Rooftop	2012	The solar array supports Macy's energy independence and helps the company to operate more efficiently.					✓
Matrix Industrial Site Solar	NJ	Perth Amboy	State Brownfields	Private	Solar PV	1.17	Rooftop	2011	The development of the Matrix Solar Project was a result of a partnership with PSE&G to help them achieve their 80 MWp program goals. The development will produce enough solar electricity to power about 470 average-size homes.			✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Northport Industrial Center Solar	NJ	Elizabeth	State Brownfields	Private	Solar PV	1.25	Rooftop	2012	The project was financed in part by the PSE&G Solar Loan Program, which typically helps finance about 50% of a solar installation's total cost and accepts the Solar Renewable Energy Certificates (SRECs) that the system generates as payment for the loan. Renewvia Energy owns and operates the Northport solar project and sells power using PPAs (Power Purchase Agreements) with the building's tenants. The solar installation is expected to generate more than 1,500 mWh of electricity annually and IDI's tenants, Shipco Transport and Exel, Inc. expect to save at least $50,000 per year on their electricity bills. Because of Renewvia's unique structure, both of IDI's tenants benefit from the one net-metered system, and do so without the long-term commitments typical of PPA-backed projects. The system's annual carbon dioxide offset, a reduction in emissions of carbon dioxide or greenhouse gases, is expected to total 247 tons and over a 25-year period will reach 12,630 tons. That is the equivalent of annually removing 98 automobiles from the road or 1.2 million miles not driven, and equal to planting 122 acres of pine trees.	✓		✓		✓
Owens Corning Landfill	NJ	Gloucester Township	Landfill	Private	Solar	3	Wholesale Electricity	2017	The installation will bring in $830,000 in revenue for Gloucester Twp. from lease payments made by Marina Energy.		✓			
Park Elementary School Solar	NJ	Newark	State Brownfields	Municipal	Solar PV	0.51	Rooftop	2011	The school is using the installation to develop a green curriculum for students.					✓
Parklands Solar Farm	NJ	Bordentown Township	Landfill	Private	Solar	10.4	Wholesale Electricity	2015	PSE&G estimates that at the height of construction, there were approximately 100 people onsite working on the project in a range of jobs, including electricians, engineers, heavy equipment operators, ironworkers, laborers, and truck drivers.				✓	
Paulsboro Terminal Landfill	NJ	Paulsboro	Brownfield	Private	Solar	0.276	Onsite Use - Green Remediation	2002	The solar installation will generate 350,000 kWh/year and will power approximately 30% of demand for remediation of the terminal. A reduction of CO2 gases by 571,000 pounds per year is expected.			✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Pennsauken Landfill Renewable Energy Park-Solar	NJ	Pennsauken	Landfill	Other	Solar	2.6	Onsite Use - General	2008	All power from the installation sold to Aluminum Shapes aluminum company.					✓
Picatinny Burning Grounds Solar	NJ	Morris	Superfund	Federal	Solar	0.8	Onsite Use - General	2016	The installation provides the base with major energy cost savings as well as an on-base, secure, and reliable source of energy. It will save Army approximately $56,531 annually.	✓				✓
Princeton Landfill Solar	NJ	Princeton	Landfill	Private	Solar	2.7	Wholesale Electricity	2017	Solar energy is sold under a long-term PPA to Stony Brook Regional Sewerage Authority at a reduced rate, providing substantial savings to Stony Brook and its customers. Princeton receives the benefits of land lease payments in exchange for hosting the facility. Princeton is expected to realize over $455,000 from lease payments while Stony Brook is expected to realize more than $2.4 million in energy savings.	✓	✓			
Royal Wine Corporation Solar	NJ	Bayonne	State Brownfields	Unknown	Solar PV	1.15	Rooftop	2012	Royal Wine Corporation is utilizing a federal incentive program afforded by the American Recovery Act that allows a 30% federal grant on the project. Royal Wine will also participate in the New Jersey Clean Energy Program allowing companies to earn Solar Renewable Energy Certificates. The system is estimated to reduce the release of over 20,000 metric tons of carbon dioxide over the 20 year life expectancy of the project, or the equivalent to one of the following: more than 3,500 passenger cars not driven; 2.0 million gallons of gasoline not burned; 42,000 barrels of oil not consumed; 2,200 households' electricity use; 46,000 tree seedlings grown; or 200 acres of forest preserved from deforestation.		✓	✓		
Schering Corporation Solar	NJ	Summit	RCRA	Private	Solar PV	1.65	Rooftop	2009	The company will be able to use the clean energy supplied by the solar panels to meet about 12% of its peak energy needs.					✓
Silver Lake Solar Farm	NJ	Edison	Brownfield	Private	Solar	2.02	Wholesale Electricity	2010	PSE&G used a NJ contractor to build Silver Lake Solar Farm.				✓	
South Brunswick Landfill Solar	NJ	South Brunswick	Superfund	Private	Solar PV	13	Wholesale Electricity	2018	The installation reduces CO2 emissions that would otherwise be generated by 1,800 homes.			✓		

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Tinton Falls Solar	NJ	Tinton Falls	Mine Lands	Private	Solar	20	Wholesale Electricity	2013	Provided "hundreds" of highly skilled union and professional jobs during construction.				✓	
Trenton Solar Farm	NJ	Trenton	Brownfield	Other	Solar	1.3	Wholesale Electricity	2010	Creation of green jobs.				✓	
Wakefern Food Corporation Solar	NJ	Keasbey	State Brownfields	Private	Solar PV	2.38	Rooftop	2012	The solar installation will supply power to a refrigerated warehouse, helping lower Wakefern's long-term electricity costs and its greenhouse gas emissions, eliminating 2,000 metric tons of carbon-equivalent emissions from the atmosphere. This equates to removing the carbon dioxide emissions produced by approximately 390 vehicles. It is estimated that up to 35 jobs will be created as a result of this project.			✓	✓	✓
White Rose Foods Solar	NJ	Carteret	State Brownfields	Private	Solar PV	4.9	Rooftop	2012	Designed to supply 100% of the electricity needs at the grocer's dry warehouse facility and will displace approximately 2,400 metric tons of CO2 from the environment annually. The building that the facility is built on is owned by KTR Carteret and 380 Middlesex Solar LLC has a lease agreement with the owner.		✓	✓		✓
NM - NEW MEXICO														
Chevron Questa	NM	Questa	Superfund	Private	Solar	1	Wholesale Electricity	2011	The village of Questa has seen economic benefits from the project. Chevron worked with several local companies, adding close to $3 million to the local economy and an additional $2.5 million with other contractors in the New Mexico area.				✓	✓
Emcore Eubank Landfill	NM	Albuquerque	Landfill	Municipal	Solar	2	On-site Use - General	2013	Project development employed up to 16 engineers at various stages, over a dozen electrical contractors, and over 30 construction workers, laborers, equipment operators and truck drivers. Additional contractors included UL Engineers and Inspectors, and labor for fencing/signs and electrical enclosures made locally. The solar farm which will supply approximately 20 percent of the power requirements for EMCORE's Albuquerque facilities.				✓	✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
NV - NEVADA														
Nellis Air Force Base	NV	Las Vegas	RCRA	Federal	Solar	14.2	Onsite Use - General	2007	The system saves the USAF an estimated $1 million annually.	✓				
Nellis Solar Array II Generating Station	NV	Las Vegas	RCRA	Federal	Solar	15	Onsite Use - General	2016	Created ~150 jobs for site installation and NV Energy upgrades; new substation and distribution lines help provide system redundancy and protect AFB against power vulnerabilities; expected to provide emissions reductions of 27,000 tons annually.			✓	✓	✓
NY - NEW YORK														
Lawrence Aviation Industries Site Geothermal	NY	Port Jefferson Station	Superfund	Unknown	Geothermal	-	Onsite Use - General	2011	Uses onsite geothermal energy to condition interior air of both groundwater treatment plants. At each building, the extracted groundwater is immediately routed to the heat exchanger from which heated or cooled air (during winter or summer seasons, respectively) is transferred to the building ductwork at an average rate of 600 standard cubic feet per minute. This and other measures at the site offset an estimated 4.1 to 4.8 metric tons of carbon dioxide (equivalent) associated with each plant annually through use of renewable, geothermal energy.			✓		✓
Bethlehem Steel Winds (combined, two installations)	NY	Hamburg / Lackawanna	RCRA	Private	Wind	35	Wholesale Electricity	2007/2012	The project created approximately $190,000 in annual tax revenues for local communities and school districts. Created five permanent green jobs and 140 construction jobs in an area with high unemployment.		✓		✓	
Blydenburgh Landfill Solar II	NY	Hauppauge	Landfill	Town of Islip	Solar PV	2.25	Wholesale Electricity	2018	Agilitas Energy is leasing two closed landfills from the Town of Islip in Holbrook and Hauppauge for nearly $120,000 a year. The solar arrays are expected to generate enough electricity annually to power over 5,000 homes. The electricity generated from the solar arrays will be sold to PSEG Long Island, the transmission and distribution system operator of Long Island Power Authority, to provide clean energy for local residents under a 20-year power purchase agreement as part of the Feed-in-Tariff program.		✓	✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Clifton Park Solar	NY	Clifton Park	Landfill	Municipal	Solar	1	Wholesale Electricity	2017	Energy generated is estimated to be the equivalent of 90% of the town's energy usage. Th town will realize savings via remote net metering credits for this generation.	✓	✓			
Dennings Point Landfill Solar	NY	Beacon	Landfill	Municipal	Solar PV	2	Wholesale Electricity	2018	Savings to the city based on RFP assumptions is around $140,000 per year.	✓				
Emerson Street Landfill	NY	Rochester	Landfill	Municipal	Solar	2.6	Wholesale Electricity	2017	Under net metering, the city will receive a credit for the quantity of electricity generated each month. The credit amount is greater than the PPA rate, thus saving money for the city. It is anticipated that the city will realize savings of at least $80,000 per year, with total cost savings of over $2 million over the 25-year term of the PPA. Expected to avoid GHG emissions from approximately 500 passenger vehicles annually.	✓		✓		
Former Ferdula Landfill	NY	Frankfurt	Landfill		Wind		Onsite Use - Green Remediation	1998	The project avoids air emissions associated with consumption of grid electricity during soil treatment. It capitalizes on wind intermittency to provide the pulsed effect that is typically effective in venting operations. Approximately $14,000 was recovered in capital/installation costs for the wind system within one year due to avoided electricity. The project accrues annual O&M costs below $500, in contrast to potential $75,000 for a conventional soil vapor extraction (SVE) system.			✓		✓
Homeridae Project	NY	Olean	State Brownfields	Unknown	Solar PV	4.07	Wholesale Electricity	2019	This project is expected to reduce GHGs by up to 72,900 metric tons over the life of the underlying projects.			✓		
Hoosick Falls Landfill Solar Garden	NY	Village of Hoosick Falls	Landfill	Private	Solar	0.592	Wholesale Electricity	2015	In conjunction with the other structure-mounted installations on village-owned buildings, installation will save the Village $40,000 in the first full year of operation, and over $1,300,000 over 20 years.	✓				
Islip Municipal Town Landfill	NY	Hauppauge	Landfill	Municipal	Solar	0.05	Wholesale Electricity	2011	The project used an estimated 30 skilled craftsman on the job and the solar panels are "Buy America Act" qualified.				✓	✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Kings Park Solar Project	NY	Smithtown	Landfill	Smithtown	Solar PV	4.00	Wholesale Electricity	2019	The project will provide renewable energy to customers under a 20-year power purchase agreement. It effectively avoids the use of approximately 4,500 metric tons per year of carbon dioxide, the equivalent of removing more than 800 cars from the road. Construction of the project created approximately 50 jobs, employing mainly local labor. The project will create an ongoing economic benefit for the region, including an estimated $800,000 in additional revenue for Smithtown over its first 20 years in operations.		✓	✓	✓	✓
Lincoln Ave. Landfill Solar	NY	Holbrook	Landfill	Town of Islip	Solar PV	3.02	Wholesale Electricity	2018	The electricity generated from the solar arrays will be sold to PSEG Long Island, the transmission and distribution system operator of Long Island Power Authority, to provide clean energy for local residents under a 20-year power purchase agreement as part of the Feed-in-Tariff program.					✓
Long Island Solar Farm at Brookhaven National Laboratory	NY	Upton	Superfund	Federal	Solar	32	Wholesale Electricity	2011	The project created 200 plus full time equivalent jobs during construction and 2 full-time operational jobs. The system also provides price stability for electricity customers of Long Island Public Authority.				✓	✓
Madison County Agriculture and Renewable Energy Park	NY	Lincoln	Landfill	Municipal	Solar	0.05	Onsite Use - General	2011	Produces enough energy to offset 50% of the material recycling facility demand. Low cost land. Improvements are taxable and jobs were created. Any excess-electricity generated through the solar modules will be net-metered to the grid. It is estimated that the 50kW system will generate approximately 50,000 kWh power year; offsetting existing electric demand at the recycling facility.		✓		✓	✓
Olean Gateway "Solean"	NY	Olean	State Brownfield	Private	Solar	4	Wholesale Electricity	2017	Through arrangement with National Grid and Olean Gateway LLC, St. Bonaventure University will save an estimated $100,000 or more a year on its electric bill based on credits from the solar installation. The solar will also reduce the university's carbon footprint.	✓		✓		

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Troy Landfill Solar 1	NY	Troy	Landfill	Municipal	Solar PV	0.6	Wholesale Electricity	2018	City officials say will provide about 20% of Troy's municipal energy needs while helping the city save an estimated $2 million over the next 10 years. Projects like this support job creation and spur local investments all across the state.	✓			✓	✓
Ulster County Landfill Solar	NY	Ulster	Landfill	Municipal	Solar PV	1.9	Wholesale Electricity	2018	The solar installation avoids greenhouse gas emissions equivalent to burning 2.4 million pounds of coal or over 5,000 barrels of oil. This installation at the former landfill site will generate approximately 20% of all the electricity used by Ulster County Government alone. Not only is that good for the environment, it will reduce county expenses which is good news for property taxpayers.			✓		✓
Weibel Ave. Landfill	NY	Saratoga	Landfill	Municipal	Solar	4.2	Wholesale Electricity	2017	The project is expected to generate 40% of city's overall electricity needs and to avoid emissions of approximately 1,605 metric tons of CO2.			✓		✓
West Nyack Landfill	NY	Clarkstown	Landfill	Municipal	Solar	2.634	Wholesale Electricity	2014	The town expects to save about $4M over life of system (30 years).	✓				
West Park Landfill (Floyd Ackert Rd.)	NY	Esopus	Landfill	Municipal	Solar	0.6	Wholesale Electricity	2017	The project will generate revenue by selling net metering credits.		✓			
Williamson Landfill	NY	Williamson	Landfill	Municipal	Solar	1.5	Wholesale Electricity	2014	The system is expected to generate enough power for all town facilities. The town anticipates $27,000 in savings in 2015 and up to $1.5 million in savings over the course of 25 years.	✓				
OH - OHIO														
Brooklyn Landfill Solar	OH	Brooklyn	Landfill	Municipal	Solar PV	4	Wholesale Electricity	2018	The county can save as much as $3 million on utility bills over the next 25 years through the solar agreement. The 20-year land lease will help the City of Brooklyn offset maintenance costs of approximately $400,000 over the course of the next 20 years.	✓	✓			✓
Cuyahoga Metropolitan Housing Authority	OH	Cleveland	Brownfield	Municipal	Solar	1.1	Wholesale Electricity	2013	Cuyahoga Metropolitan Housing Authority will save several million dollars over the life of the solar panels.	✓				
Dayton Tech Town	OH	Dayton	Brownfield		Geothermal		Onsite Use - General	2010	Expected annual savings are over $66,000 and 300,000 kwH/ year related to sustainable building and geothermal system combined.	✓				

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Former Newark Processing Co.	OH	Newark	Brownfield	City of Newark	Solar PV	1.50	Wholesale Electricity	2017	Solarvision made use of partially tainted land and a floodplain to develop this ground-mounted array to supply electricity for the city's water treatment plant.					✓
Medical Center Company Solar	OH	Cleveland	Brownfield		Solar	1.5	Wholesale Electricity	2014	Partnered with Case Western Reserve University's Solar Durability and Lifetime Extension research Center to assist with their research and data collection goals.					✓
Pilkington North America	OH	Northwood	Brownfield	Private	Solar	0.25	On-site Use - General	2011	Solar array supplies approximately 12% of the R&D center's power requirements. A feasibility study determined a 2 MW system would be built in phases to maximize funding stream and lessen the financial burden through the sale of RECs.		✓			✓
Toledo Zoo	OH	Toledo	Brownfield	Private	Solar	2.1	Onsite Use - General	2014	Installation provides power to Toledo Zoo (about 30% of zoo's total electricity needs). The zoo estimates energy savings to be in the range of $200,000.	✓				
Wood County Landfill	OH	Bowling Green	Landfill	Municipal	Wind	7.2	Wholesale Electricity	2004	The system supports municipal utility and reduces the amount of power they have to purchase from other generators; provides enough electricity to power approximately 2,500 residential customers.			✓		✓
OK - OKLAHOMA														
Altus Air Force Base	OK	Altus	RCRA	Federal	Solar	0.0002	Onsite Use - Green Remediation	2007	Relying on an off-grid, 200-watt PV array to power a submersible pump used for recirculation of water through the bioreactor. During initial operations (2003-2005), the system recirculated groundwater at a rate ranging from approximately 600 to 1,650 gallons per day (gpd), at an average of 922 gpd. Use of the onsite solar energy also avoided significant consumption of materials and other resources (including project funds) otherwise needed to connect to the electricity grid.			✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Guthrie Green	OK	Tulsa	Brownfield	Foundation	Geothermal w/solar		Onsite Use - General	2012	A geothermal exchange well field circulates water that feeds ground source heat pumps in the neighboring Tulsa Paper Company building and the Hardesty Visual Arts Center, reducing their heating and cooling costs by approximately 60%. Using the innovative Rygan technology, the well field has a capacity of 600 tons of heating and cooling.	✓				
OR - OREGON														
Corvallis Municipal Airport	OR	Corvallis	Superfund	Municipal	Solar	0.1	Wholesale Electricity	2017	Array will generate enough electricity to power at least 75% of the energy consumed by City-paid Pacific Power meters at the airport					✓
PA - PENNSYLVANIA														
Casselman Wind Power Project	PA	Traverses Summit, Black, and Addison	Mine Lands	Private	Wind	35	Wholesale Electricity	2008	Expected to generate approximately $245,000 in direct economic benefit to region annually, through combo of taxes, easement payments, and direct landowner payments. Up to 150 construction jobs created.		✓		✓	
Frey Farm Landfill	PA	Conestoga	Landfill	Municipal	Wind	3.2	Wholesale Electricity	2011	Turbines provide 21-25% of power needs for nearby Turkey Hill Dairy (enough to make five million gallons of ice cream). The installation will reduce the dairy's annual greenhouse gas emissions by roughly 5,900 tons, the equivalent of ~1,000 cars, or decreasing demand for foreign oil by 12,000 barrels. Turbines provide energy diversification and reduced electrical costs.	✓		✓		
Highland North Wind Farm	PA	Cambria County	Mine Lands	Private	Wind	75	Wholesale Electricity	2012	Generates approximately $5.5 million in tax revenue to the state, local townships and Forest Hills School District over the life of the project; over $3 million in local goods and services for operation and maintenance over the life of the project		✓			
Highland Wind Farm	PA	Cambria County	Mine Lands	Private	Wind	62.5	Wholesale Electricity	2009	They system will generate approximately $4 million in local goods and services for operation and maintenance over the life of the project. Creates $4.5 million in tax revenue to state, local townships and school districts over the life of the project and 9 full-time O&M staff.		✓		✓	✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
York County Landfill Solar	PA		Landfill	Municipal	Solar	0.3	Onsite Use - Green Remediation	2014	The system generates about 300,000 kWh of electricity each year and reduces the facility's dependence on fossil fuels. Generates power for the site's general energy needs, including ongoing management of groundwater treatment systems and office buildings.			✓		✓
RI - RHODE ISLAND														
A Street Facility Solar	RI	Johnston	Landfill	Town of Johnston	Solar PV	3.90	Wholesale Electricity	2018	The town of Johnston is putting vacant, unusable land back to work to benefit their taxpayers with electricity savings, enhance tax payments and scholarships for the senior high school students. The former landfill is producing clean energy for town buildings while also generating tax revenue.		✓			✓
East Providence Landfill Solar Farm	RI	East Providence	RCRA	Municipal	Solar	2.25	Wholesale Electricity	2014	City leases land for $40,000 per year for 18 acres (installation may be expanded in the future). Property tax to city is $30,600 per year, based on the 20% of full valuation of tangible equipment per the corresponding PILOT agreement.		✓		✓	
Forbes Street Solar Project II (FSSPII)	RI	East Providence	Landfill	City of East Providence	Solar PV	4.10	Wholesale Electricity	2018	Forbes Street Solar Project II is expected to produce enough energy to serve nearly 500 Rhode Island households. Under a 20-year PPA with National Grid, the solar plant will provide electricity to customers of Narragansett Electric Co., a subsidiary of National Grid.			✓		✓
Kilvert Street Solar	RI	Warwick	State Brownfields	City of Warwick	Solar PV	6.30	Wholesale Electricity	2018	The city entered into a 25 year lease agreement. The output of the Kilvert Street solar array is projected to be 8,360,200 kWh per year, which equates to approximately 11,202,668 pounds of carbon eliminated annually.		✓	✓		
North Providence Landfill	RI	North Providence	RCRA	Municipal	Solar PV	2.6	Wholesale Electricity	2018	The solar installation is expected to provide approximately $120,000 in new revenue annually and to generate enough power to supply electricity to roughly 2500 homes annually.		✓	✓		

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Rose Hill Landfill	RI	South Kingston	Superfund	Town of South Kingstown	Solar PV	3.78	Wholesale Electricity	2018	The solar arrays were built at no cost to the municipalities and 25% of the power generated will be sold back to the municipalities. All municipal buildings in both towns, including the school districts, have access to power generated at the solar facilities. The Towns of South Kingstown and Narragansett, as well as the University of Rhode island will receive energy credits over the life of the project. In conjunction with two other installations in the area this array contributes to: approximately 9,343 tons of annual carbon dioxide offset and 924 average homes powered annually.		✓	✓		✓
University of Rhode Island (URI) Disposal Area	RI	South Kingston	Superfund	URI	Solar PV	2.70	Wholesale Electricity	2018	Part of the West Kingston Town Dump/URI Disposal Area Superfund Site. The solar arrays were built at no cost to the municipalities and 25% of the power generated will be sold back to the municipalities. All municipal buildings in both towns, including the school districts, have access to power generated at the solar facilities. The Towns of South Kingstown and Narragansett, as well as the University of Rhode island will receive energy credits over the life of the project. In conjunction with two other installations in the area this array contributes to: approximately 9,343 tons of annual carbon dioxide offset and 924 average homes powered annually.		✓	✓		✓
West Kingston Town Dump	RI	South Kingston	Superfund	Town of West Kingston	Solar PV	1.20	Wholesale Electricity	2018	Part of the West Kingston Town Dump/URI Disposal Area Superfund Site. The solar arrays were built at no cost to the municipalities and 25% of the power generated will be sold back to the municipalities. All municipal buildings in both towns, including the school districts, have access to power generated at the solar facilities. The Towns of South Kingstown and Narragansett, as well as the University of Rhode island will receive energy credits over the life of the project. In conjunction with two other installations in the area this array contributes to: approximately 9,343 tons of annual carbon dioxide offset and 924 average homes powered annually.		✓	✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
SC - SOUTH CAROLINA														
Savannah River's Biomass Steam Plant	SC	Hopewell Township	Superfund	Federal	Biomass	20	Onsite Use - General	2008	Energy savings of more than $34.4 million annually. Created more than 27 full-time jobs on-site, with over 600,000 hours of construction and operational labor in construction period (30 months).	✓			✓	
TN - TENNESSEE														
Bristol Demolition Landfill	TN	Hermitage	Landfill	Municipal	Solar	0.2	Wholesale Electricity	2012	The city leases the land for $6,000 annually and sells the electricity generated at the landfill site to Tennessee Valley Authority via the local energy provider, Bristol Tennessee Essential Services, for $0.21/kWh. The contract specifies a twelve-and-a-half-year term of use with another twelve-and-a-half-year extension. After the initial term of the agreement, the kW rate will go down to $0.01/ kWh, but the $6,000 annual lease fee will stay the same. The city receives about 10 percent of the revenue generated from the system and EcoLogical Energy Systems (the project developer) gets 90 percent. This system will produce approximately 300,000 kW of solar electricity annually with a lifetime guarantee of 30 years. The array provides enough electricity to power about fifty homes in the area and offsets over 6,000 tons of carbon dioxide annually.		✓	✓		✓
RSI Brightfields One	TN	Bristol	Brownfield	Private	Solar	0.2	Wholesale Electricity	2012	The project used TN-produced solar panels.					✓
Somerville Solar Project	TN	Somerville	Landfill	Somerville	Solar PV	2.70	Wholesale Electricity	2019	The array will generate approximately 4 million kWh of renewable electricity each year, equivalent to the annual electricity usage of 260 local homes.			✓		
Volkswagen Chattanooga	TN	Chattanooga	RCRA	Private	Solar	9.5	Wholesale Electricity	2013	The project is expected to meet 12.5% of the energy needs of Volkswagen's Chattanooga manufacturing plant during full production and 100% during non-production periods. Equivalent to avoiding CO2 emissions of nearly 2,000 passenger vehicles per year, or the equivalent amount of electricity needed to power nearly more than 1,000 average American homes annually.			✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
TX - TEXAS														
Central Texas Veterans Landfill Solar	TX	Temple	Landfill	Federal	Solar	2.94	Wholesale Electricity	2012	Installation saves the U.S. Department of Veterans Affairs $300,000 per year in energy costs	✓				
Grove Landfill	TX	Austin	Landfill		Solar		Onsite Use - Green Remediation	2006	Avoided installation of utility lines and associated air emissions from construction equipment (and additional consumption of grid-supplied electricity) by using the PV energy system wherever possible.			✓		✓
Pantex Renewable Energy Project (PREP)	TX	Amarillo	Superfund	Federal	Wind	11.5	Wholesale Electricity	2014	An estimated $2.8 million annual energy savings for DOE.	✓				
Tessman Road Municipal Solid Waste Landfill	TX	San Antonio	Landfill	Private	Solar	0.13	Wholesale Electricity	2009	Site uses a flexible solar cover. Republic and CPS Energy will study and document the results of this installation for use in the deployment of solar energy covers on owned landfills throughout the region.					✓
UT - UTAH														
Salt Lake City Landfill	UT	Salt Lake City	Landfill	Municipal	Solar	1	Wholesale Electricity	2015	Combined with a solar installation on its roof, landfill solar allow the city public safety building to achieve net zero energy.			✓		✓
VA - VIRGINIA														
Bedford Landfill Solar	VA	Bedford	Landfill	Municipal	Solar	3.3	Wholesale Electricity	2017	Will generate around 6,000,000 kWh of energy per year, equivalent to the amount of electricity consumed by more than 500 average American homes annually					✓
Crozet Orchard	VA	Crozet	Superfund	Private	Solar		Onsite Use - Green Remediation	2007	Avoids costs and greenhouse gas emissions associated with consumption of grid electricity during the treatment process.			✓		✓
VI - VIRGIN ISLANDS														
Former St. Croix Alumina Plant	VI	St Croix	RCRA		Wind, Solar	0	Onsite Use - Green Remediation	2002 2003 2006	Wind-driven turbine compressors drive compressed air into hydraulic skimming pumps. Solar PV powers some recovery wells. These systems avoid air emissions associated with consumption of grid electricity during petroleum recovery.			✓		✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
VT - VERMONT														
Elizabeth Mine Solar	VT	Stafford	Superfund	Private	Solar	7	Wholesale Electricity	2017	Developer used local civil, mechanical, and electrical contractors for the project, driving employment for local economies during installation. Grid upgrades completed during construction benefited the community with an improved electrical system that upgraded the reliability of the entire system. Project will avoid 6,000 tons of CO2 annually, equivalent to emissions from combustion of 14,000 barrels of oil; equal the carbon sequestration from almost 5,000 acres of forest; and provide electricity sufficient to power 1,200 homes annually.			✓	✓	✓
Hartford VT Landfill Solar	VT	Hartford	Landfill	Municipal	Solar	1	Wholesale Electricity	2016	Saved the town $28,516.99 in calendar year 2016, offsetting electricity costs for the Wendell A. Barwood Arena, Town Hall, and wastewater plant.	✓				
Long View Forest Solar	VT	Hartland	State Brownfields	Long View Forest, Inc.	Solar PV	0.75	Wholesale Electricity	2019	The solar project is expected to produce approximately 900,000 kWh per year, enough to power approximately 125 homes annually. Together, Mascoma and the Montshire Museum of Science will realize approximately $700,000 of savings on their electricity bills over the 25-year term of the agreement.	✓		✓		
Lyndonville Solar East	VT	Lyndonville	Brownfield	Private	Solar	0.485	Wholesale Electricity	2018	The benefit to Lyndonville Electric Company for Lyndonville Solar West and East combined over life of contract is expected to be $150,000-$200,000.	✓				
Lyndonville Solar West	VT	Lyndonville	Brownfield	Private	Solar	0.5	Wholesale Electricity	2018	The benefit to Lyndonville Electric Company for Lyndonville Solar West and East combined over life of contract is expected to be $150,000-$200,000.	✓				
Rutland Landfill (Stafford Hill)	VT	Rutland	Landfill	Municipal	Solar	2.3	Wholesale Electricity	2015	The utility plans to lease the dormant landfill from the city for 25 years, with a 25-year option, for $30,600 a year.		✓			

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
South Burlington Landfill	VT	South Burlington	Landfill	City of South Burlington	Solar PV	2.20	Wholesale Electricity	2017	The solar array will employ Vermont's industry-leading virtual net-metering program. The City and School District will receive net-metering credits on electric bills for specified meters, at a significant discount compared to their value. The 25-year contract will provide the opportunity for long-term savings and predictable electric pricing—the projected savings could be $2 million to $5 million.	✓				✓
Townshend Landfill	VT	Townshend	Landfill	Municipal	Solar	0.15	Wholesale Electricity	2014	A community solar project providing power to 15 residences as well as the Town Hall and town library.					✓
Windham Solid Waste Management District	VT	Brattleboro	Landfill	Municipal	Solar PV	5	Wholesale Electricity	2018	The project will generate annual lease revenue for the Windham Solid Waste Management Division and will also provide significant savings on electric costs for member communities through participation in a group net metering arrangement.		✓			✓
WI - WISCONSIN														
Beloit Coal Ash Landfill	WI	Beloit	Landfill	Municipal	Solar	2.3	Wholesale Electricity	2016	Enough clean energy to power 500 local homes.			✓		
MATC PV Evaluation Lab	WI	Milwaukee	Landfill	Private	Solar	0.54	Onsite Use - Training	2010	The estimated energy savings in the first year of operation is $70,300. Energy produced at the site will be used to operate the Milwaukee Public Television transmitter that is located at the site. This will be the first public television transmitter in the country that will transition to being neutral to the energy grid. The facility also will serve as a training center for technicians, designers, site assessors, electricians, sales personnel and other professionals in the fields of renewable energy.	✓				✓
Refuse Hideaway Landfill	WI	Middleton	Superfund	State	Solar	0.01	Onsite Use - Green Remediation	2010	The solar array generates clean power to offset the needs of the remediation systems. A Madison-based company was hired to install a 44-solar panel array, capable of generating 12,000 kilowatt-hours per year. Energy from the system is then returned to the power grid, and the DNR is credited on its next energy bill.			✓	✓	✓

Through the RE-Powering America's Land initiative, the EPA encourages renewable energy development on potentially contaminated land, landfills, and mine sites when aligned with the community's vision for the site. Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills and compiles this information in its Project Tracking Matrix. The following list tracks benefits associated with completed sites identified and reported by parties directly involved with their respective projects (e.g., information from the associated city, town, or county; site owners; developers; utilities; and/or financiers) or from other EPA resources. Common benefits reported include revenues from land leases and taxes, electricity cost savings associated with the reduced need to purchase power from the grid, job creation, reduced greenhouse gas emissions, et al. This resource is for informational purposes only. **Please note that the benefits listed here are not a comprehensive representation of all benefits associated with completed renewable energy projects on contaminated lands and such benefits are calculated in various ways; nevertheless, this list illustrates the breadth of benefits being realized and highlighted across the country by those developing these types of installations.**

Site/Project Name	State	City	Type of Site	Site Ownership Type	RE Type	Project Capacity (MW)	Project Type	Completion Date	Summary of Benefits Identified in Publicly Available Sources	Energy Savings	Revenue	Environmental	Job Creation	Other
Sky Park Solar	WI	Eau Claire	Landfill	Private	Solar	1	Wholesale Electricity	2017	Community solar project. Revenue neutral for Xcel Energy; consumers who purchase panels will receive credits for 25 years. City receives lease revenue from developer. The city offsets 100% of power for their municipal swimming pool with 116kW in credits from the installation.		✓			✓
WY - WYOMING														
Chevron Casper Wind Farm	WY	Casper	RCRA	Private	Wind	16.5	Wholesale Electricity	2009	Created approximately 20 construction jobs, 1.5 permanent jobs.				✓	
Dave Johnston Mine / Glenrock Wind I and III	WY	Glenrock	Mine Lands	Private	Wind	276	Wholesale Electricity	2008/2009	The system produces enough electricity to supply 66,800 households for one year.			✓		
Warren AFB Wind	WY	Cheyenne	RCRA	Federal	Wind	3.32	Wholesale Electricity	2009	Expected to save the Air Force more than $11.4 million in energy costs over the 20 years. The annual estimated energy production is approximately $575,000 with a simple payback period of 14 years.	✓				