RE-POWERING AMERICA'S LAND INITIATIVE:

# BENEFITS MATRIX



Office of Communications, Partnerships, and Analysis Office of Land and Emergency Management Across the United States, communities are generating revenue, realizing energy cost savings, and creating jobs when redeveloping formerly contaminated sites with renewable energy projects. Community goals such as meeting a local clean energy goal, cleaning up a former brownfield, or protecting greenspace may stimulate action on a project.

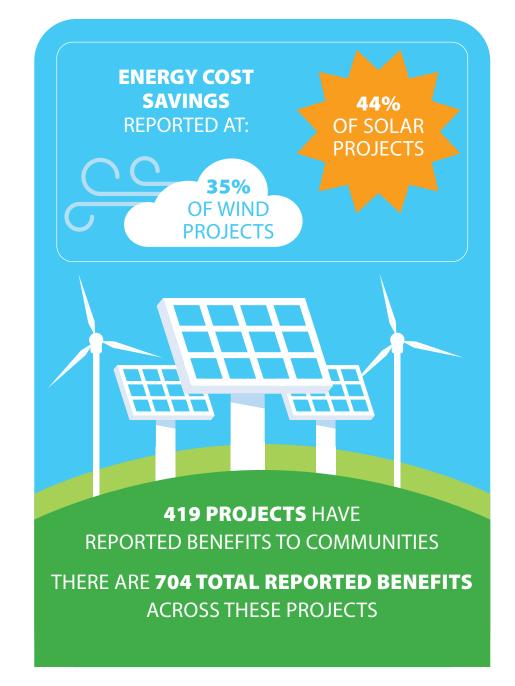
If you are considering developing a renewable energy project in your community, the information presented here can be used to educate stakeholders on the benefits of redeveloping formerly contaminated sites. <a href="EPA's RE-Powering America's Land Initiative">EPA's RE-Powering America's Land Initiative</a> (RE-Powering Initiative) presents the latest benefits findings from publicly available information from fact sheets, case studies and other resources on 419 projects across the country.

# **In this Report**

- <u>Summary findings</u> show nearly 44% of projects reporting energy cost savings.
- <u>The list of projects</u> details community benefits for hundreds of projects. Examples of sites across the country exhibit benefits in a variety of technology types—wind, solar, biomass, and geothermal.
- If you are considering developing a renewable energy project in your community, the list may help you locate an example project in your community or a nearby community. Further, you can cross-reference the site benefit information with additional information in the October 2021 Tracking Matrix.
- Read information about <u>environmental justice</u>, <u>community solar projects</u> and mine-scarred lands.

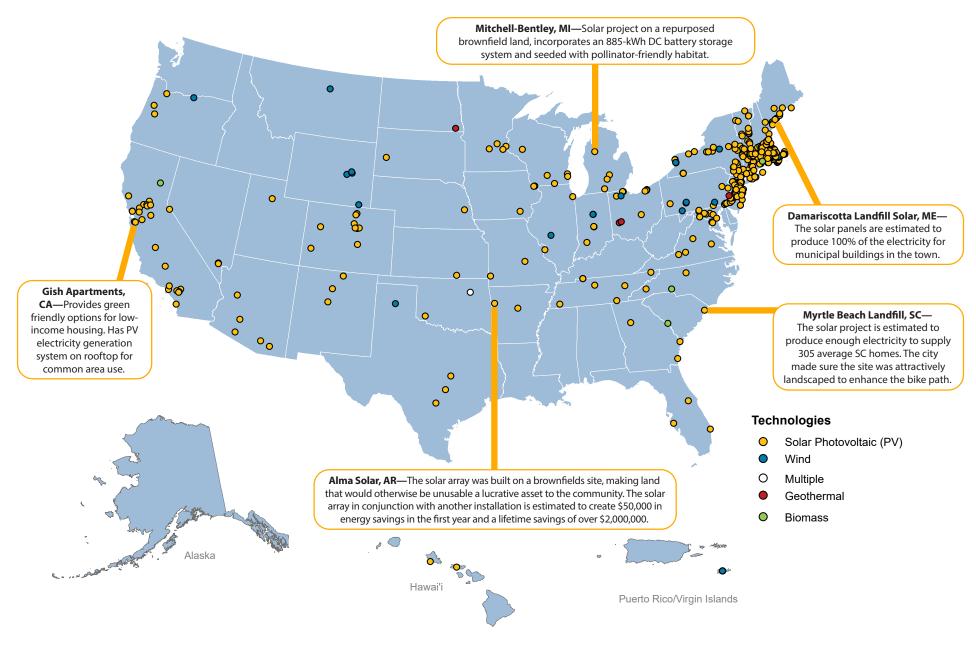
Energy cost savings are consistently one of the top three reported benefits for renewable energy projects. Other benefits include job creation, revenue from land leases and taxes, and environmental benefits including reduced greenhouse gas emissions.

<sup>1</sup> To date, the RE-Powering Initiative has identified 459 renewable energy installations on contaminated lands, landfills, and mine sites with a cumulative installed capacity of 1,973.0 megawatts (MW) in a total of 46 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 epagov/re-powering/re-powering-tracking-matrix.





# Renewable Energy Projects with Reported Environmental and Economic Benefits





# **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.<sup>2</sup>



<sup>2</sup> 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.



#### **Inside the Numbers**

RE-Powering has documented benefits for 41 renewable energy projects 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 704 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.

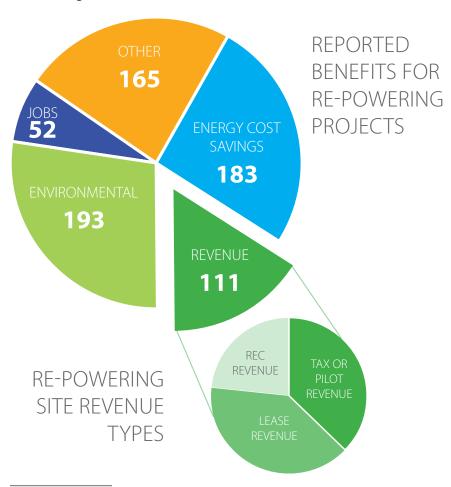
Many of these contaminated lands redeveloped with renewable energy were no longer revenue generators for the community or their owners. Renewable energy provides a unique opportunity for a return to revenue. For RE-Powering sites, revenue can typically be broken into three categories tax or payment in lieu of taxes (PILOT), lease or renewable energy credits (RECs).



California Valley Solar Ranch in San Luis Obispo County. Photo credit: Bechtel.

# Reported Benefits for Renewable Energy Projects on Contaminated Lands 3,4

The "other" category in all charts includes: secondary economic benefits to the community resulting from jobs created (e.g., more customers for the local diner); secondary use of renewable energy installation as tools for learning and data gathering; and the ability to use renewable energy installations for distributed generation.



<sup>3</sup> Pie chart represents number of benefits across 704 total benefits identified with the 419 renewable energy projects on contaminated sites with reported benefits.



<sup>4</sup> Revenue types at these installations include renewable energy credits (REC), taxes or payment in lieu of taxes (PILOT) and lease revenue, projects may have more than one type of revenue.

# **RE-Powering Projects Benefit Underserved Communities**

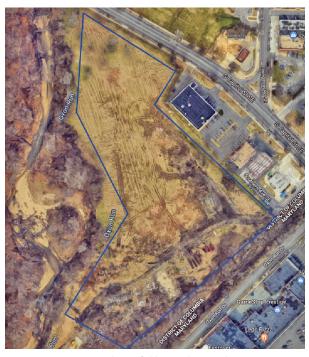
EPA's RE-Powering America's Land Initiative encourages renewable energy development on current and formerly contaminated lands, landfills and mine sites when such development is aligned with the community's vision for the site. The Initiative identifies the renewable energy potential of thousands of sites included in the RE-Powering mapper tool. And provides other useful resources such as the Tracking Matrix, Best Practices and trainings for communities, developers, industry, state and local governments or anyone interested in reusing these sites for renewable energy development.

Communities near contaminated sites are typically overburdened and underserved, creating environmental justice concerns. "Approximately 60 percent of the sites to receive funding for new cleanup projects are in historically underserved communities." (source: EPA news release on Superfund investments from the Bipartisan Infrastructure Law, 12.17.21). For example, more than 1 in 4 Black and Hispanic Americans live within three miles of a Superfund site, a higher share than the overall population, and thousands of these contaminated sites exist nationally. EPA is investing \$1 billion to initiate cleanup and clear the backlog of 49 previously unfunded Superfund sites and advance progress at dozens of other sites.

Renewable energy development offers many advantages to communities interested in finding a beneficial reuse for contaminated sites. The benefits from placing renewable energy on contaminated lands are numerous and range from revenue generated to environmental protection benefits.

The RE-Powering Initiative seeks to encourage renewable energy development on these underutilized lands in communities with environmental justice concerns. This can be achieved by providing data, tools, best practices, case studies, examples of benefits and outreach resources to encourage renewable energy development on contaminated lands, landfills and mining sites (collectively "RE-Powering sites").

Below are a few of examples of RE-Powering sites reporting benefits that assist the overburdened and underserved in their communities.



3.6 acre Oxon Run brownfields site. Photo credit: DOEE DC.

#### Oxon Run, Washington, DC

The Oxon Run community solar installation is the largest clean energy project in the District focused on serving neighborhood residents. The 2.65 MW solar installation covers approximately 3.6 acres of an underutilized brownfields site with solar panels. About 750 eligible low- to moderate-income households will receive up to \$500 a year to help reduce electricity bills by half. The project had local subcontractor hiring requirements and preference points. The system reduces air pollution and asthma by reducing electricity from fossil fuels.

The environmental benefits include approximately 30,000 metric tons of greenhouse gas (GHG) emissions avoided. This is equivalent to removing more than 6,300 cars from the road for a year, or to planting 777,000 tree seedlings grown for 10 years. Site redevelopment also included beautification of the area through the restoration of native pollinator plantings and planting pollinator meadows, native plant and shrub landscaping throughout. The solar installation went online in 2020.





Ribbon-cutting ceremony for the Delanco Landfill. Photo credit: Soltage.

#### **Delanco Landfill Community Solar in Delanco, New Jersey**

The <u>Delanco Landfill Community Solar</u> project was completed in 2021 and will provide energy to more than 700 subscribers in Public Service Enterprise Group (PSEG) territories. The 3.1 MW project will support 51% low- to moderate-income residents, who will receive guaranteed savings on their electric bills for 20 years with no cancelation fees and save an estimated \$120 annually. The solar project has created more than 35 local jobs.

# Ventron/Velsicol - Duke Realty Superfund site in Wood-Ridge/Carlstadt Townships, New Jersey

The <u>Ventron/Velsicol - Duke Realty Solar Project</u> is a 2.3 MW community solar project in New Jersey. The <u>Ventron/Velsicol Superfund site</u> was the location of a mercury processing plant that operated at the site from 1929 until 1974. The solar project came online in 2020 and generates electricity for 380 local homes.

The project provides energy equity and access for all. It directs 51% of the electricity it produces to low- and moderate-income households.



The 6140 Route 209 Solar Site, Kerhonkson, NY. Photo credit: Nexamp.

#### 6140 Route 209 Solar Site in Kerhonkson, New York

The 6140 Route 209 Community solar project is located on a former sand mine and became operational in 2019. Subscribers in the community solar program benefit from the clean energy produced and save 10-15% on their regular electric costs. This site is also part of the New York State Energy Research and Development Authority (NYSERDA) Solar for All program, with 1 MW of the project reserved specifically for income-eligible NY residents who apply through NYSERDA. Income-eligible New Yorkers can save up to \$180 annually through the Solar for All program. The 5.6 MW installation reduces 10,044,000 pounds (lbs) of carbon dioxide (CO2) annually.

### Norwood Community Solar in Norwood, Colorado

The rural electric cooperative San Miguel Power Association partnered with GRID Alternatives to develop this 0.2-MW community solar array that will reduce energy costs for 30-40 income-qualified households. Subscriptions of up to 2 kW of generation per household are free of charge to qualified applicants and allow access for five years, after which residents may reapply.

### Coyote Ridge Solar in Fort Collins, Colorado

Located on nine acres of landfill buffer in Fort Collins, CO, this 1.96-MW community solar partnership was planned and developed by electric cooperative Poudre Valley Rural Electric Association and GRID Alternatives. The subscriber model includes 70% of output earmarked for nonprofit and low-income customers. The project also provided more than 1,000 hours of hands-on solar job training during construction.

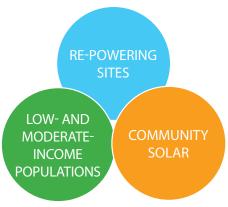


# Community Solar Model Aides in Addressing Environmental Justice Concerns

Many of the RE-Powering sites that are serving the overburdened and underserved communities use a community solar model. This model is well suited to assist communities and individuals with both reducing power costs and providing renewable energy options where they would otherwise not exist.

The <u>U.S. Department of Energy</u> defines community solar as any solar project or purchasing program, within a geographic area, in which the benefits of a solar project flow to multiple customers such as individuals, businesses, nonprofits and other groups. In most cases, customers are benefitting from energy generated by solar panels at an off-site array.

Community solar allows everyone to benefit from solar energy, even if they cannot install solar panels on their property. Community solar customers subscribe or lease a portion of the solar panels in the array, and they typically receive an electric bill credit for electricity generated by their share of the community solar system—like someone who has rooftop panels installed on their home. Programs may also have options for selling or donating subscriptions.



Community solar can make a positive impact in low- and moderate-income (LMI) areas. Community solar can overcome financing, contract flexibility, project size and siting challenges that largely shut out LMI homes, apartments and small businesses from the solar market, while offering added local economic development benefits if the community solar project itself is located in LMI areas.

The RE-Powering Initiative provides data, tools, best practices, case studies and outreach resources to encourage renewable energy development on RE-Powering sites. RE-Powering sites are uniquely suited for siting community solar because they are frequently located in or near LMI areas, often do not have other reuse options due to contamination or restrictions on the property and are located near transmission lines and population centers. RE-Powering sites represent a large and varied collection of sites that include former Superfund sites, brownfields, landfills, and mine sites, as well as other formerly contaminated sites under various federal and state cleanup.

# **Mine Scarred Lands Incentives, Initiatives and Projects**

As many states and communities are moving toward more sustainable energy options and even net-zero energy production, mine-scarred lands are becoming attractive options for siting renewable energy. Often a skilled technical workforce is located nearby, infrastructure is in place and the mine lands have been graded and could be suitable for solar panels and wind turbines with little additional surface disturbance needed. Looking to the future, the RE-Powering Initiative hopes these mine lands become a major part of the benefits matrix. Currently, EPA's RE-Powering Initiative is tracking several renewable energy projects on former coal mine lands in the Appalachian Basin that are in various stages of development.

Several groups and states are working to create incentives and initiatives that take advantage of the unique conditions surrounding mine-scarred lands. For example, through its Mining the Sun Initiative, The Nature Conservancy is working with partners to make it easier to put renewable energy facilities on already developed sites across Nevada, rather than on healthy, undeveloped lands that are important for clean water, open space and wildlife. In Nevada, closed mining lands offer the biggest opportunity for this use.

Even in the Appalachian Coal Basin, where coal has been a dominate energy source for decades, renewable energy is seeing support. With its mountainous terrain and extensive coal mining legacy, there are few places that may seem less hospitable for renewable energy than West Virginia. However, West Virginia's long coal mining history has created optimal conditions for solar development—several hundred square miles of previously cleared mine lands waiting for redevelopment. Many of these abandoned mine lands have existing infrastructure, including roads and transmission lines, and are in proximity to major markets for energy.





Coal mining operation in West Virginia. Photo credit: Kate Wellington.

**West Virginia** leaders, businesses and communities are beginning to explore this <u>opportunity</u>. For example, <u>West Virginia Senate Bill 583</u> has preferential utility cost recovery to encourage development of up to 400 MW of solar on former mining sites, closed landfills, brownfields, hazardous waste sites and certain other preferred sites.

**Virginia** is also working to install renewable energy on abandoned coal mine lands. The Nature Conservancy and Dominion Energy Virginia are collaborating to develop utility-scale solar projects on former surface mines in the coalfields of Southwest Virginia. One such project is the <u>Highlands Solar project</u>, which will repurpose roughly 1,200 acres of the former Red Onion surface mine and surrounding properties in Wise and Dickenson Counties. The project will generate approximately 50 MW of solar energy, enough to power 12,500 homes at peak output. Additional benefits to the area include an increase in local tax revenues, the ability to provide additional funding through Solar Siting Agreements and the creation of clean energy jobs. This project will support the goals of the <u>Virginia Clean Economy Act</u>, which requires Dominion Energy Virginia and American Electric Power to retire electric generating units located in the Commonwealth that emit carbon as a by-product of combusting fuel to generate electricity by 2045 and 2050, respectively.

In **Kentucky**, the old Martiki coal mine is slated to become the <u>Martin County Solar Project</u>, a 200 MW solar farm on 1,200 acres. The project is projected to produce enough energy to power the equivalent of more than 33,000 Kentucky homes and create 11 fulltime Kentucky Jobs. Construction is expected to begin in 2022, and the solar project should be commercially operational by early 2024.

As more mine lands are mined out or closed due to a declining market, the RE-Powering Initiative looks to help identify both <u>policy</u> to support the development of these lands and identify the <u>lands</u> themselves that might be suitable for renewable energy development.



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
AR - ARKANSAS														
ALMA SOLAR	AR	Alma	State Brownfields	Municipal	Solar PV	0.52	Unknown	Unknown	The solar array was built on a brownfield site, making land that would otherwise be unusable a lucrative asset to the community. The array in conjunction with another installation is estimated to create \$50,000 in energy savings in the first year and a lifetime savings of over \$2,000,000.	<b>✓</b>				<b>√</b>
BLANEY HILL SOLAR FARM	AR	Conway	Landfill	Municipal	Solar PV	1.00	Wholesale Electricity	2020	Estimated to generate enough to power more than 150 homes annually. The lifetime power production from Blaney Hill Solar Farm is estimated to reduce the city's carbon footprint by the equivalent of CO2 emissions from 2,623,045 gallons of gasoline.			✓		
AZ - ARIZONA														
AJO SOLAR PROJECT	AZ	Ajo	Mine Lands	Private	Solar PV	5.00	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.				✓	<b>~</b>
BAGDAD MINE SOLAR	AZ	Bagdad (census- designated)	Mine Lands	Private	Solar PV	15.00	Wholesale Electricity	2011	Power generated by the solar is sold to Freeport-McMoRan at a set rate under the terms of a 25-year PPA. Generates 15 megawatts of electricity, enough to power about 3,000 homes.			✓		<b>√</b>
APACHE POWDER	AZ	Benson	Superfund	Private	Solar PV	0.04	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.	✓		<b>√</b>		
DESERT STAR SOLAR PLANT	AZ	Buckeye	Landfill	Municipal	Solar PV	10.00	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.				✓	1
TUCSON INTERNATIONAL AIRPORT AREA	AZ	Tucson	Superfund	Non-profit	Solar PV	2.50	Unknown	2017	The project is estimated to produce renewable energy offsetting more than two-thirds of the airport terminal's use of energy, saving the TAA \$35,000 per month in power costs and reducing the airport's consumption of fossil-based grid energy.	<b>~</b>		✓		



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CA - CALIFORNIA														
LEVIATHAN MINE	CA	Alpine County	Superfund	Private	Solar PV	-	Onsite Use - Green Remediation	2011	Solar energy is used for four remote monitoring stations at key seeps and creeks and for an onsite emergency shower unit. Each monitoring station was custom built by EPA Region 9 staff to include a PV array for battery charging; multiprobe sonde to measure water quality parameters of streams impacted by AMD; and satellite telemetry for hourly data collection and transmission to EPA offices.			✓		<b>√</b>
REGULUS SOLAR POWER PLANT	CA	Bakersfield	Brownfields	Unknown	Solar PV	82.00	Wholesale Electricity	2015	The project is estimated to 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.		<b>✓</b>		<b>√</b>	<b>√</b>
CAMP PENDLETON LANDFILL	CA	Camp Pendleton	Superfund	Federal	Solar PV	1.50	Onsite Use - General	2011	The Naval Facilities Engineering Command anticipates the system will save the Marine Corps approximately \$336,000 yearly in electricity costs while more than tripling its previous solar energy capacity.	<b>✓</b>				
CLOVERDALE SOLAR	CA	Cloverdale	Landfill	Unknown	Solar PV	1.80	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.			✓		
INDIAN VALLEY WOOD PRODUCTS CAMPUS	CA	Crescent Mills	Brownfields	Non-profit	Biomass	3.00	Onsite Use - General	2019	The Sierra Institute will generate renewable electricity and thermal outputs for the community at an appropriate rate of return, stimulate employment related to wood products in the area, and help improve the health of the forest in the Sierra Nevada mountains.			<b>√</b>	<b>√</b>	<b>√</b>
FRONTIER FERTILIZER	CA	Davis	Superfund	Private	Solar PV	0.07	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.	<b>√</b>		✓		
WESTERN REGIONAL SANITARY LANDFILL	CA	Lincoln	Landfill	Private	Solar PV	0.01	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.	✓			✓	



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FOOTHILL LANDFILL SOLAR	CA	Linden	Landfill	County	Solar PV	5.30	Wholesale Electricity	2020	The project won a Top Project of the Year Award in the Environment + Energy Leader Awards program because the installation is a leading example of how to best repurpose underutilized land for maximum energy savings. The solar project is great for the environment and it helps offset the cost of rising electric costs to local taxpayers. This project in coordination with a landfill gas system has helped the county lower their emissions by over 28,500 tons annually.	- 1		✓		✓
LAWRENCE LIVERMORE NATIONAL LABORATORY	CA	Livermore	Superfund	Federal	Solar PV	3.30	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 PV	0.00	Onsite Use - Green Remediation	2007	Green remediation provides annual electricity cost savings of \$2,839.	<b>~</b>		✓		
TRAVIS AFB	CA	Near Fairfield	Superfund	Federal	Solar PV	0.01	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 PV	3.10	Wholesale Electricity	2017	Produces enough electricity to power 500 homes.			✓		
NASA JET PROPULSION LABORATORY (JPL)	CA	Pasadena	Superfund	Federal	Solar PV	0.56	Rooftop	2011	Under a 20-year PPA, 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).			<b>√</b>		✓
PSEG PITTSBURG SOLAR ENERGY CENTER	CA	Pittsburg	RCRA	Private	Solar PV	25.40	Wholesale Electricity	2015	Helps PG&E meet California's mandate that 33% of the energy sold by investor-owned utilities must come from renewable resources by 2020.			✓		
MCE SOLAR ONE (CHEVRON RICHMOND REFINERY)	CA	Richmond	Landfill	Private	Solar PV	10.50	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.				✓	✓
WEST COUNTY WASTEWATER DISTRICT	CA	Richmond	Brownfields	Municipal	Solar PV	1.00	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.	<b>√</b>				



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
TEQUESQUITE LANDFILL	CA	Riverside	Landfill	Municipal	Solar PV	7.50	Wholesale Electricity	2015	A 25-year PPA will help Riverside Public Utilities minimize the effect of rising electricity costs.					<b>√</b>
AEROJET GENERAL CORPORATION SUPERFUND SITE	CA	Sacramento	Superfund	Private	Solar PV	6.00	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.	<b>√</b>				
FISCHER PROPERTIES: DEPOT PARK	CA	Sacramento	Brownfields	Private	Solar PV	3.00	Onsite Use - General	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.			✓		<b>√</b>
SUTTER'S LANDING LANDFILL SOLAR	CA	Sacramento	Landfill	Municipal	Solar PV	1.50	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.		<b>√</b>			✓
GISH APARTMENTS	CA	San Jose	Brownfields	Non-profit	Solar PV	-	Rooftop	Unknown	Provides green friendly options for low-income housing. Has PV electricity generation system on rooftop for common area use.			✓		✓
NATIONAL SEMICONDUCTOR CORP.	CA	Sunnyvale	Superfund	Private	Solar PV	2.00	Rooftop	2008	The electricity generated is equivalent to that used by approximately 1,500 homes. The panels replace an amount of carbon equivalent to the emissions of 450 passenger cars for one year or that absorbed by 667 acres of pine forests.			✓		
WEST RIVERSIDE LANDFILL (SF1)	CA	West Riverside	Landfill	Municipal	Solar PV	3.94	Wholesale Electricity	2020	The county to secured a 25-year lease with the project developer. A Power Purchase Agreement is in place with the Lake Elsinore Unified School District (LEUSD). The project is part of Southern California Edison's Renewable Energy Self-Generation Bill Credit Transfer program (RES-BCT). Utilizing the RES-BCT program, solar generated from West Riverside Landfill SF1 offsets part of the energy costs for LEUSD schools and administration buildings. The developer also installed proper landfill cover and provided neighborhood beautification around the perimeter of the landfill.	<b>V</b>	<b>*</b>			<b>√</b>



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CO - COLORADO														
AURORA/ARAPAHOE SOLAR ARRAY	СО	Aurora	Brownfields	Municipal	Solar PV	0.50	Community Owned / Subscription	2013	System is demonstrating costs savings. As of April 13, 2016, lifetime production was 1,980,738 kWh, with customer savings from energy production of \$725,004.	<b>✓</b>				
BOULDER COWDERY MEADOWS SOLAR ARRAY	СО	Boulder	Landfill	Private	Solar PV	0.50	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.	<b>✓</b>				
PLACE BRIDGE ACADEMY	СО	Denver	Landfill	Municipal	Solar PV	0.10	Onsite Use - General	2013	The schools are not required to pay up-front costs for the systems, and will realize an overall cost savings on their electricity bills. The schools will incorporate an education component. The following environmental benefits are also estimated to 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.	<b>*</b>		<b>√</b>		<b>√</b>
FORT CARSON	СО	Fort Carson	RCRA	Federal	Solar PV	2.00	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.	<b>✓</b>				
COYOTE RIDGE SOLAR	СО	Fort Collins	Landfill Buffer	Municipal	Solar PV	1.95	Community Owned / Subscription	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.	<b>*</b>			<b>√</b>	<b>√</b>
DREHER PICKLE PLANT	СО	Fort Collins	Brownfields	Municipal	Solar PV	0.60	Community Owned / Subscription	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.	<b>✓</b>				
BELMAR MIXED-USE DEVELOPMENT	СО	Lakewood	Brownfields	Various	Solar PV	1.70	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.	<b>✓</b>	✓	✓		
NORWOOD LANDFILL COMMUNITY SOLAR	СО	Norwood	Landfill	Unknown	Solar PV	0.20	Community Owned / Subscription	2016	Will lower the electric bills of qualified low-income residents in SMPA's service territory.	<b>✓</b>				
NEW RIFLE MILL	СО	Rifle	Other	Municipal	Solar PV	1.70	Onsite Use - General	2009	Siting the project on contaminated land already owned by the city saved taxpayers approximately \$2 million.					<b>✓</b>



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	СТ	Barkhamsted and New Hartford	Superfund	Municipal	Solar PV	1.50	Wholesale Electricity	2017	The lease payments help supplement the operating income of RRDD1, which continues to run a recycling program and transfer station.		<b>√</b>			
BETHEL TOWN LANDFILL SOLAR	СТ	Bethel	Landfill	Municipal	Solar PV	0.95	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. Annual energy savings of 1,254,587 kWh Annual CO2 emissions reduction of 934 metric tons. Secured an additional subsidy for the project via the State of Connecticut's Zero Emission Renewable Energy Credit (ZREC) program. Brought the town landfill back into compliance with the Connecticut Department of Energy and Environmental Protection.		✓	<b>✓</b>		✓
BOZRAH LANDFILL SOLAR	СТ	Bozrah	Landfill	Municipal	Solar PV	3.10	Wholesale Electricity	2016	The portfolio also includes 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.					<b>√</b>
ECOLOGY PARK (AKA BRANFORD LANDFILL SOLAR)	СТ	Branford	Landfill	Municipal	Solar PV	-	Unknown	2018	The project will generate significant savings to the taxpayers in the form of lower utility payments.	<b>√</b>				
BRIDGEPORT LANDFILL	СТ	Bridgeport	Landfill	Municipal	Solar PV	2.20	Wholesale Electricity	2016	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.		<b>√</b>	<b>√</b>	✓	
CHESHIRE LANDFILL SOLAR	СТ	Cheshire	Landfill	Municipal	Solar PV	0.98	Wholesale Electricity	2018	As of October 2020, the installation had produced enough electricity to equal planting over 67,000 trees, equivalent to over 290,000 gallons of gas and over 230,000 pounds of methane.			✓		
DERBY LANDFILL SOLAR	СТ	Derby	Landfill	Municipal	Solar PV	0.74	Wholesale Electricity	2015	Energy from panels will be used to reduce town's electricity expenses by 15-20% over the next two decades.	✓				



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
EAST HAVEN LANDFILL SOLAR	СТ	East Haven	Landfill	Municipal	Solar PV	1.17	Wholesale Electricity	2021	Through Connecticut's virtual net metering program, the town will credit the energy produced by this solar installation against several buildings, including two schools, a recreation center, and police department. The town signed a 20-year lease agreement and a power purchase agreement with Greenskies. Over the next 20 years, the town is expected to save around \$1.4 million in electricity costs and generate additional revenue in annual lease payments.	<b>*</b>	<b>√</b>			<b>√</b>
FAIRFIELD LANDFILL	СТ	Fairfield	Landfill	Municipal	Solar PV	1.30	Wholesale Electricity	2017	Expected to power 25% of wastewater treatment plant electricity needs.	<b>✓</b>				
WINTERGREEN AVE. LANDFILL	СТ	Hamden	Landfill	Municipal	Solar PV	1.00	Wholesale Electricity	2016	Savings of \$30,000 for the town per year.	<b>✓</b>				
HARTFORD CT LANDFILL (SOLAR)	СТ	Hartford	Landfill	Municipal	Solar PV	1.00	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.	✓	<b>√</b>	✓		
EVANSVILLE AVENUE LANDFILL	СТ	Meriden	Landfill	Municipal	Solar PV	1.10	Wholesale Electricity	2017	Solar project offsets power needs of co-located water pollution control facility. The 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). The city will also receive annual tax payments over the 20-year contract totaling \$235,923. No cost to the city for this project.	✓	<b>~</b>			
MIDDLETOWN LANDFILL - WESTON	СТ	Middletown	Landfill	Municipal	Solar PV	-	Unknown	2019	As part of a Virtual Net Metering project, one solar field is shared by Wilton with the town of Weston, and the other field is Wilton's alone. The electricity will be allocated to Wilton schools and municipal buildings.					✓
MIDDLETOWN LANDFILL - WILTON	СТ	Middletown	Landfill	Municipal	Solar PV	-	Unknown	2019	As part of a Virtual Net Metering project, one solar field is shared by Wilton with the town of Weston, and the other field is Wilton's alone. The electricity will be allocated to Wilton schools and municipal buildings.					<b>√</b>



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
NEWTOWN LANDFILL SOLAR	СТ	Newtown	Landfill	Municipal	Solar PV	1.00	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	СТ	North Haven	Landfill	Municipal	Solar PV	0.38	Onsite Use - General	2017	Powers on-site wastewater treatment facility					✓
ROGERS ROAD LANDFILL	СТ	Norwich	Landfill	Municipal	Solar PV	3.00	Wholesale Electricity	2017	Taking land in a community that has no other use and putting solar on that, is good reuse of a brownfield location.					✓
GALLUP'S QUARRY	СТ	Plainfield	Superfund	Private	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 REC market.	<b>*</b>	<b>√</b>	<b>√</b>		
SOLVENTS RECOVERY SERVICE OF NEW ENGLAND	СТ	Southington	Superfund	Unknown	Solar PV	0.05	Onsite Use - Green Remediation	2018	The installation of solar panels on the cap in September 2018 will provide the energy needed for future operation and maintenance at the site.			<b>√</b>		
STAFFORD LANDFILL (CT)	СТ	Stafford	Landfill	Municipal	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.  • The equivalent CO2 emissions from 3,299,687 pounds of coal burned.	<b>*</b>	<b>~</b>	<b>✓</b>		✓
									The carbon sequestered by 2,927 acres of U.S. forest for one year.					
WOODSTOCK (CT) LANDFILL SOLAR	СТ	Woodstock	Landfill	Municipal	Solar PV	1.00	Wholesale Electricity	2016	Installed at no cost to taxpayers; anticipated to save the town over \$2.4 million over the next 20 years.	<b>V</b>				



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
DC - WASHINGTON DC														
OXON RUN	DC	Washington, DC	Brownfields	Municipal	Solar PV	2.65	Community Owned / Subscription	2020	The system delivers free electricity (offsetting \$500 annually) to approximately 750 households in the surrounding community. This Oxon Run project is using an underutilized brownfield site contaminated with petroleum residues. The project had local subcontractor hiring requirements and preference points. The system reduces air pollution and asthma by reducing electricity from fossil fuels, 30,000 metric tons of GHG emissions avoided, equivalent to removing more than 6,300 cars from the road for a year, or planting 777,000 tree seedlings grown for 10 years. Site redevelopment includes restoration of native pollinator plantings, planting of pollinator meadows, and native plant and shrub landscaping throughout.	✓ ·		✓ 	✓ 	<b>✓</b>
DE - DELAWARE														
MCKEES SOLAR PARK	DE	Newark	Landfill	Municipal	Solar PV	0.23	Community Owned / Subscription	2014	Funding model wherein residential electric users can contribute \$50 in return for a \$0.01 per kWh rebate on one (1) 100 kilowatthour 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.			✓		<b>√</b>
DUPONT NEWPORT	DE	Newport	Superfund	Private	Solar PV	0.55	Wholesale Electricity	2013	Construction created nearly 120 jobs.				<b>✓</b>	
ASHLAND SOLAR CARPORTS	DE	Wilmington	Landfill	Private	Solar PV	0.90	Onsite Use - General	2020	The installation will help the company reach their 2025 Sustainability goals. The solar installation powers Ashland's campus, the onsite solar project also delivers renewable energy certificates (RECs) to Ashland. The project will generate enough electricity annually to power the equivalent of approximately 160 typical households.		✓	✓		✓
NORTH AND SOUTH PENINSULA	DE	Wilmington	Brownfields	Private	Solar PV	1.95	Wholesale Electricity	2013	The project sells energy and SRECs to Delmarva Power & Light under separate long-term contracts.		<b>✓</b>			<b>✓</b>



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
FL - FLORIDA														
LAKE WORTH LANDFILL	FL	Lake Worth	Landfill	Municipal	Solar PV	2.00	Wholesale Electricity	2017	Helps meet city's commitment to diversifying energy to clean and renewable energy sources.			<b>✓</b>		
KENNETH P. KSIONEK COMMUNITY SOLAR FARM AT THE STANTON ENERGY CENTER (SEC)	FL	Orlando	Landfill	Municipal	Solar PV	13.00	Community Owned / Subscription	2017	The installation will generate enough electricity to power an estimated 2,100 homes.			<b>/</b>		
BEE RIDGE LANDFILL / ROTHENBACH PARK	FL	Sarasota	Landfill	Municipal	Solar PV	0.25	Wholesale Electricity	2008	The solar panels are expected to produce 250 kilowatts of clean energy, enough energy to power 55 average homes. Operating them prevents the release of more than 654,000 pounds of carbon dioxide into the atmosphere each year.			<b>✓</b>		
GA - GEORGIA														
HICKORY RIDGE LANDFILL	GA	Atlanta	Landfill	Private	Solar PV	1.00	Wholesale Electricity	2011	Enough energy to meet the needs of 224 homes annually.			<b>✓</b>		
JEKYLL ISLAND LANDFILL	GA	Jekyll Island	Landfill	Municipal	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.		<b>✓</b>			
DEPTFORD LANDFILL	GA	Savannah	Landfill	Private	Solar PV	1.20	Wholesale Electricity	2019	"The beautiful thing is this is a brownfield being turned into a greenfield," said CEO of Hannah Solar, which installed the panels.					✓
HI - HAWAI'I		'	<u>'</u>	'	'	<u> </u>		<u>'</u>		<u>'</u>				
KAPOLEI SUSTAINABLE ENERGY PARK	HI	Kapolei	RCRA	Private	Solar PV	1.20	Wholesale Electricity	2011	The system will produce enough electricity to power between 150 and 250 homes with clean, solar energy.			<b>✓</b>		
IA - IOWA														
DOWNTOWN DUBUQUE SOLAR GARDEN	IA	Dubuque	Other	Private	Solar PV	0.90	Wholesale Electricity	2017	The Downtown Dubuque Solar Garden features an educational display and information to teach visitors about advancements in clean energy technology and its annual output is equal to the annual usage of about 126 average lowa homes.			<b>√</b>		<b>√</b>
WEST DUBUQUE SOLAR GARDEN	IA	Dubuque	Other	Municipal	Solar PV	3.90	Wholesale Electricity	2017	Annual output is equal to the annual usage of about 126 average lowa homes. The Downtown Dubuque Solar Garden features an educational display and information to teach visitors about advancements in clean energy technology.			✓		✓



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
SCHAUS-VORHIES SOLAR	IA	Fairfield	Brownfields	Private	Solar PV	0.50	Wholesale Electricity	2016	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.	<b>\</b>		<b>√</b>		
IL - ILLINOIS														
EXELON CITY SOLAR	IL	Chicago	Brownfields	Municipal	Solar PV	10.00	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.		<b>~</b>		<b>√</b>	<b>√</b>
GOBNOB WIND TURBINE PROJECT	IL	Farmersville	Brownfields	State	Wind	0.90	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 is estimated to result in a reduction in GHG emissions of 1,997 tons of carbon dioxide annually.		<b>✓</b>	✓		
AMERICAN BOTTOMS SOLAR PROJECT	IL	Sauget	Other	Municipal	Solar PV	2.00	Unknown	2020	The behind-the-meter solar project was built on the Sauget Sanitary Development & Research Association's (SSDRA) buffer property, and will help the facility save on electricity and lock in energy rates over 25-year period through a power purchase agreement (PPA). The project will also incorporate pollinator habitats for native, local species to increase the population of local pollinators.	<b>√</b>		<b>√</b>		
IN-INDIANA														
CRANE NAVAL	IN	Crane	Landfill	Federal	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, onbase 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.					<b>√</b>
MARION COUNTY SOLAR #1	IN	Indianapolis	Landfill	Private	Solar PV	5.20	Wholesale Electricity	2015	This solar project (along with Marion County Solar #2) produces enough electricity to power over 700 homes and the equivalent to removing 7,000 tons of carbon dioxide from the environment every year.			✓		



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
MARION COUNTY SOLAR #2	IN	Indianapolis	Brownfields	Private	Solar PV	1.90	Wholesale Electricity	2015	This solar project (along with Marion County Solar #1) produces enough electricity to power over 700 homes and the equivalent to removing 7,000 tons of carbon dioxide from the environment every year.			<b>√</b>		
REILLY TAR & CHEMICAL (INDIANAPOLIS)	IN	Indianapolis	Superfund	Private	Solar PV	10.80	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 contracts for equipment and labor with local firms during the 15-35-year operating period of the facility.	<b>✓</b>	<b>✓</b>		✓	
KOKOMO SOLAR PARK	IN	Kokomo	Superfund	Private	Solar PV	7.00	Wholesale Electricity	2016	Provides 7 MW of clean power capacity to the community and is located on a remediated Superfund parcel of land.			<b>√</b>		
KOKOMO WIND FARM (CONTINENTAL STEEL)	IN	Kokomo	Superfund	Private	Wind	-	Onsite Use - Green Remediation	2017	Three on-site wind turbines produce enough energy to offset at least half of the energy needed for ongoing groundwater treatment.	<b>✓</b>		✓		
KS - KANSAS														
STROTHER FIELD INDUSTRIAL PARK	KS	Winfield	Superfund	Various	Solar PV	0.06	Rooftop	2014	The solar array is expected to reduce the company's carbon footprint by 56 metric tons a year, the equivalent of planting 46 acres of mature forest.			<b>√</b>		
KY - KENTUCKY														
FORT CAMPBELL SOLAR PHASE ONE	КҮ	Fort Campbell	Landfill	Federal	Solar PV	1.90	Onsite Use - General	2015	Helps Fort Campbell meet federal directives outlined in the American Renewable Energy Act, requiring federal installations to obtain 25% of their energy by renewable means by 2025.			✓		<b>✓</b>
FORT CAMPBELL SOLAR PHASE TWO	KY	Fort Campbell	Landfill	Federal	Solar PV	3.10	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.			✓		<b>√</b>



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
MA - MASSACHUSETT	S													
ACTON LANDFILL	MA	Acton	Landfill	Municipal	Solar PV	1.60	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.	<b>✓</b>				
W.R. GRACE SOLAR	MA	Acton/ Concord	Superfund	Municipal	Solar PV	5.50	Wholesale Electricity	2016	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.		<b>√</b>	<b>√</b>		
FORMER GRASSO LANDFILL	MA	Agawam	Landfill	Municipal	Solar PV	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.		<b>√</b>			<b>√</b>
HUNT ROAD LANDFILL	MA	Amesbury	Landfill	Private	Solar PV	6.00	Wholesale Electricity	2016	Allowed this unused landfill with little development potential to produce energy, tax revenue, and local construction jobs; produces enough electricity to power approximately 800 New England homes and prevent the annual release of over 6,000 tons of carbon dioxide from non-renewable power plants; and provides the city with discounted electricity rates as well as substantial tax revenues.	✓	✓	✓	<b>*</b>	
TITCOMB SOLAR ARRAY	MA	Amesbury	Landfill	Municipal	Solar PV	4.50	Wholesale Electricity	2019	This solar array will reduce the release of carbon dioxide and other air pollutant discharges while also producing electricity. It will also generate revenue for the city from PILOT and lease payments, as well as energy credits totaling nearly \$4 million over the next 20 years.		✓	✓		
AQUINNAH LANDFILL	MA	Aquinnah	Landfill	Municipal	Solar PV	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.	<b>√</b>				



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
HOWE STREET LANDFILL	MA	Ashland	Landfill	Municipal	Solar PV	1.00	Wholesale Electricity	2018	This installation is part of three total installations. The town entered into a 20-year 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:  Annual energy savings of 2.2 million kW  Annual CO2 emissions reduction of 1,632 metric tons  Enhanced landscaping to blend array into the natural environment and minimize the visual impact of the landfill system	<b>*</b>		<b>*</b>		✓
NYANZA WASTE DUMP SUPERFUND SITE	MA	Ashland	Superfund	Unknown	Solar PV	5.80	Wholesale Electricity	2020	The clean energy produced from the solar array will support the town of Ashland.					<b>✓</b>
BARNSTABLE LANDFILL	MA	Barnstable	Landfill	Municipal	Solar PV	4.20	Wholesale Electricity	2014	Estimated annual savings for the town of over \$270,000.	<b>✓</b>				
BELLINGHAM LANDFILL SOLAR	MA	Bellingham	Landfill	Municipal	Solar PV	2.70	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.	<b>~</b>	<b>√</b>			
BERKLEY LANDFILL SOLAR	MA	Berkley	Landfill	Private	Solar PV	3.60	Wholesale Electricity	2017	The landfill solar farm will generate enough energy to power nearly 700 homes. Berkley has PILOT agreements with the solar farm developers – so the solar farms are generating revenue for the town.		<b>√</b>	✓		
BEVERLY LANDFILL SOLAR	MA	Beverly	Landfill	Municipal	Solar PV	5.00	Community Owned / Subscription	2020	Provides enough electricity to power 745 homes for a year. 37% of the energy credits from this site are subscribed to Beverly Public Schools. Over 100 Beverly residents have subscribed to the community solar system. Subscribers accrue energy credits that will reduce their electric bill.	<b>√</b>		<b>√</b>		
IRON HORSE PARK / SHAFFER LANDFILL	MA	Billerica	Superfund	Municipal	Solar PV	5.99	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 6-MW facility allows Billerica to reduce dependence on fossil fuels and gain significant long-term energy cost savings.	✓		<b>√</b>		



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
IRON HORSE PARK ASBESTOS LANDFILL SOLAR	MA	Billerica	Superfund	Private	Solar PV	6.00	Wholesale Electricity	2017	Along with the other Iron Horse Park solar installations, the site will generate energy for four school systems.	<b>✓</b>		<b>✓</b>		
IRON HORSE PARK/DOW SOLAR	MA	Billerica	Superfund	Private	Solar PV	3.68	Wholesale Electricity	2016	The site will generate energy for four school systems and one local government through virtual net metering; will supply an average of 20% of the offtakers' electricity needs at costs below local utility rates. It will offset nearly 6.9 million pounds of carbon dioxide, the equivalent of burning more than 3.3 million pounds of coal, annually.	1		<b>✓</b>		
BOLTON ORCHARDS	MA	Bolton	Brownfields	Private	Solar PV	6.00	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).	<b>*</b>	✓			
BOLTON ORCHARDS PHASE II	MA	Bolton	Brownfields	Private	Solar PV	2.80	Community Owned / Subscription	2016	Community solar project that enables residents to save money on their utility bills and support local solar.	<b>✓</b>				<b>√</b>
BOXFORD LANDFILL	MA	Boxford	Landfill	Municipal	Solar PV	1.00	Wholesale Electricity	2017	The town touts economic benefits of ~53 million over the next 20 years: (1) will receive nearly all the town's municipal annual electricity needs from the solar farm, electricity that is not only clean but approximately 40% cheaper than the town's current power purchase rate; (2) will receive revenue in exchange for leasing the capped landfill to the solar project's owner, SunRaise Investments, LLC and GG Renewables, the partnership that acquired and constructed the project with plans to remain the long-term owner and operator; and (3) will receive tax revenue for the life of the solar project. Solar will also power the equivalent of 200 homes and offset the equivalent to a million pounds of coal burning.	<b>√</b>	✓	✓		
BRAINTREE LANDFILL	MA	Braintree	Landfill	Municipal	Solar PV	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.	<b>V</b>		<b>√</b>		



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
BREWSTER LANDFILL	MA	Brewster	Landfill	Municipal	Solar PV	1.23	Wholesale Electricity	2014	The project is expected to save town \$75,685 in the first year.	✓				
BROCKTON BRIGHTFIELD	MA	Brockton	Brownfields	Municipal	Solar PV	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.	i	<b>✓</b>			
QUABOAG LANDFILL SOLAR	MA	Brookfield	Landfill	Municipal	Solar PV	0.43	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.	<b>√</b>	<b>✓</b>	<b>Y</b>		
FAIRHAVEN SANITARY LANDFILL (CANTON)	MA	Canton	Landfill	Municipal	Solar PV	5.60	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.	<b>√</b>				
CHATHAM LANDFILL	MA	Chatham	Landfill	Municipal	Solar PV	1.80	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.	<b>✓</b>				
CHICOPEE ELKS LANDFILL	MA	Chicopee	Landfill	Private	Solar PV	2.10	Wholesale Electricity	2015	Power sold to Chicopee Electric & Light at a discount, saving ratepayers money on their utility bill. Fifty-five jobs created.	<b>✓</b>			✓	
M.T. SULLIVAN LANDFILL	MA	Chicopee	Landfill	Private	Solar PV	2.00	Wholesale Electricity	2017	The solar array generates enough energy to power 400 homes in the region.			<b>√</b>		
MT SULLIVAN LANDFILL SOLAR	MA	Chicopee	Landfill	Private	Solar PV	2.50	Wholesale Electricity	2017	Produces enough energy to power about 400 homes in the area.			<b>✓</b>		
CHILMARK LANDFILL	MA	Chilmark	Landfill	Municipal	Solar PV	0.10	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 September 2015).	<b>√</b>				
CEDAR STREET LANDFILL	MA	Cohasset	Landfill	Municipal	Solar PV	0.42	Wholesale Electricity	2017	The 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.					



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
CONCORD LANDFILL PHASE I	MA	Concord	Landfill	Municipal	Solar PV	1.70	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.			<b>✓</b>		<b>/</b>
RE-SOLVE SUPERFUND SOLAR	MA	Dartmouth	Superfund	Unknown	Solar PV	0.15	Onsite Use - Green Remediation	2012	System to generate 90% of electricity for the groundwater treatment system; about 186,000 kWh/yr.	~		✓		
RUSSELLS MILLS ROAD LANDFILL	MA	Dartmouth	Landfill	Municipal	Solar PV	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.	<b>✓</b>	✓			
THEOPHILUS SMITH ROAD LANDFILL	MA	Dennis	Landfill	Municipal	Solar PV	6.00	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.	1				
DORCHESTER SOLAR POWER PROJECT	MA	Dorchester	Brownfields	Private	Solar PV	1.30	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.			<b>\</b>		
DOVER LANDFILL SOLAR	MA	Dover	Landfill	Private	Solar PV	1.40	Community Owned / Subscription	2017	Will allow Dover and Boston metro residents to enjoy local clean energy at no cost to join, while saving them 10% on their electricity bills; expected to offset approximately 1,300 metric tons of CO2 each year, equivalent to removing 270 cars from the roads or planting 1,250 acres of forest; created local jobs; helped Dover achieve Green Community status, which will allow the town to apply for additional grant money from the state.	1		✓	<b>√</b>	<b>*</b>
DUXBURY LANDFILL	MA	Duxbury	Landfill	Municipal	Solar PV	0.59	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.	✓		✓		
EAST BRIDGEWATER LANDFILL SOLAR	MA	East Bridgewater	Landfill	Private	Solar PV	3.20	Wholesale Electricity	2017	The city will receive 25% of the value of electricity generated at the landfill site in the form of net metering credits, which the city will be able to use to purchase its own energy. The estimated value to the city is \$320,000 each year. In terms of the environmental benefit, the solar energy produced on the landfill will offset the carbon emissions of more than 12,000 passenger cars per year or carbon emissions by 5,500 homes.	<b>✓</b>		<b>✓</b>		



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EASTHAM LANDFILL	MA	Eastham	Landfill	Municipal	Solar PV	0.63	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.	<b>V</b>		~		
OLIVER STREET LANDFILL	MA	Easthampton	Landfill	Municipal	Solar PV	2.30	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.	<b>✓</b>				
PROSPECT STREET LANDFILL	MA	Easton	Landfill	Municipal	Solar PV	1.90	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.	<b>✓</b>		<		
EVERETT SOLAR POWER PROJECT	MA	Everett	Brownfields	Private	Solar PV	0.61	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.		<b>✓</b>			
BRIDGE STREET LANDFILL	MA	Fairhaven	Landfill	Municipal	Solar PV	0.58	Onsite Use - General	2013	The town is expected to save \$1.5M over 30 years. A PPA allows town to avoid costs associated with solar system ownership.	<b>~</b>				
PHILIPS LIGHTOLIER WIND	MA	Fall River	Brownfields	Private	Wind	2.00	Wholesale Electricity	2012	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.			✓		<b>✓</b>
FALMOUTH LANDFILL	MA	Falmouth	Landfill	Municipal	Solar PV	4.30	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; 50 jobs created during construction.	<b>V</b>		<b>√</b>	<b>√</b>	
FITCHBURG GAS & ELECTRIC LIGHT COMPANY	MA	Fitchburg	State Brownfields	Private	Solar PV	1.00	Wholesale Electricity	2017	The project can independently power 144 homes.			✓		
BENT MILL SOLAR	MA	Gardner	State Brownfields	Municipal	Solar PV	1.00	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 nonprofit provider of services for adults with disabilities. GAAMHA estimates they will see savings of at least \$10,000 annually.	<b>√</b>	<b>√</b>			



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RISING PAPER SOLAR	MA	Great Barrington	Landfill	Private	Solar PV	3.20	Wholesale Electricity	2016	Will produce enough clean energy to power the electrical needs of a local school district and the Town of Great Barrington's municipal buildings. Net economic benefit of more than \$200,000 in just the first year. Project also allows for the preservation of wetlands and riverfront buffers on the site.	<b>√</b>		✓		
GREENFIELD SOLAR FARM	MA	Greenfield	Landfill	Municipal	Solar PV	2.00	Wholesale Electricity	2012	The system is projected to save city \$250,000 in first year of operation and created 50 local jobs.	<b>✓</b>			✓	
GROTON LANDFILL	MA	Groton	Landfill	Municipal	Solar PV	2.93	Wholesale Electricity	2016	Will provide 25% of Groton Electric Light Department's required electricity during the middle of the day in the spring and fall.					<b>√</b>
GROVELAND WELLS SOLAR	MA	Groveland	Superfund	Municipal	Solar PV	3.60	Wholesale Electricity	2013	The solar array provides power for more than 500 homes.			✓		
FMR INDUSTRIAL	MA	Halifax	State Brownfields	Private	Solar PV	6.00	Community Owned / Subscription	2019	The system will deliver bill credits to community solar subscribers who are National Grid customers (commercial and residential) located throughout the state.	<b>✓</b>				<b>√</b>
HARWICH MUNICIPAL LANDFILL	MA	Harwich	Landfill	Municipal	Solar PV	4.50	Wholesale Electricity	2014	The project is expected to save the town about \$300,000 per year.	<b>✓</b>				
HAVERHILL SOLAR POWER PROJECT	MA	Haverhill	Brownfields	Private	Solar PV	1.00	Wholesale Electricity	2010	Site serves to conduct load switching with neighboring feeders, providing National Grid with additional flexibility in serving customers in this area.					<b>√</b>
OLD GROVELAND RD. LANDFILL SOLAR	MA	Haverhill	Landfill	Municipal/ Private	Solar PV	2.80	Unknown	2021	The project combines PV energy production battery storage to feed 4,650,000 kWh into the utility grid annually. In partnership with the city of Haverhill, energy savings, lease revenue, and tax income are estimated at \$3.9 million over 20 years.	<b>V</b>	<b>√</b>			<b>√</b>
MOUNT TOM STATION	MA	Holyoke	State Brownfields	Private	Solar PV	5.76	Wholesale Electricity	2017	Enough electricity to power 1,800 homes for a year and reduce GHG emissions by 3,000 metric tons.			✓		
HUDSON/STOW LANDFILL SOLAR	MA	Hudson	Landfill	Private	Solar PV	5.00	Wholesale Electricity	2017	Produces enough energy to power about 1,000 homes in the area.			<b>✓</b>		
HULL WIND II	MA	Hull	Landfill	Municipal	Wind	1.80	Wholesale Electricity	2006	Combined, Hull Wind I (not on CL) 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.		<b>√</b>			
LANCASTER LANDFILL	MA	Lancaster	Landfill	Municipal	Solar PV	0.50	Wholesale Electricity	2013	Energy generated is net metered to offset municipal building electricity needs, saving the town approximately \$75,000 annually.	<b>V</b>				



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
LEE LANDFILL (WILLOW HILL ROAD)	MA	Lee	Landfill	Private	Solar PV	2.60	Wholesale Electricity	2017	The 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).	<b>✓</b>				
LENOX LANDFILL	MA	Lenox	Landfill	Municipal	Solar PV	0.75	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 array just about covers our municipal needs," said Lee Selectman Thomas Wickham. 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.	<b>√</b>				✓ 
LEXINGTON LANDFILL	MA	Lexington	Landfill	Municipal	Solar PV	1.40	Wholesale Electricity	2016	The solar facility provides the town of Lexington with credits on their electricity bills and is estimated to produce 2,770,000 kWh in its first year of production. The solar project, together with solar systems already installed on Lexington's school and library rooftops, will power 45% of the municipality's electric load.	<b>✓</b>		<b>√</b>		<b>V</b>
WESTFORD ST. LANDFILL	MA	Lowell	Landfill	Municipal	Solar PV	1.50	Wholesale Electricity	2014	The city is expected to save \$1.5-\$2.5 million a year, installed at no upfront cost to the city.	~				
LUDLOW LANDFILL	MA	Ludlow	Landfill	Municipal	Solar PV	2.70	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.	✓	<b>~</b>			



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
SYLVESTER RAY CONSTRUCTION & DEMOLITION DEBRIS LANDFILL	MA	Marshfield	Landfill	Private	Solar PV	3.87	Wholesale Electricity	2013	"The town buys electricity from whoever it buys from, but we give them credit for it," O'Donnell (developer owner) said. "They pay 10 cents (for power), and they get 14 cents, so they make 4 cents per kilowatt-hour for everything being made (at the solar farm), and the value is expected to go up in the next 20 years." It is estimated the town would save \$4 million on energy costs over two decades, while collecting property taxes on the 20 acres of land where the array is being built.	<b>√</b>	<b>✓</b>			
MASHPEE LANDFILL SOLAR	MA	Mashpee	Landfill	Municipal	Solar PV	2.10	Wholesale Electricity	2014	The total anticipated cost savings over the 25-year PPA 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.	<b>V</b>		<b>√</b>		
WALTHAM STREET LANDFILL	MA	Maynard	Landfill	Municipal	Solar PV	1.20	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.		<b>√</b>	<b>√</b>		
HUNTINGTON AVENUE LANDFILL	MA	Metheun	Landfill	Municipal	Solar PV	1.30	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.	<b>V</b>	✓			
MONTAGUE LANDFILL SOLAR	MA	Montague	Landfill	Municipal	Solar PV	5.90	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. Approximately, 118,187 tons of annual carbon dioxide offset and 16,000 number of average homes powered annually.		✓	✓		
NEEDHAM LANDFILL	MA	Needham	Landfill	Municipal	Solar PV	3.70	Wholesale Electricity	2016	Expected to provide first year revenues from net metering (approximately \$487,000), PILOT (approximately \$93,600), and land lease (approximately \$50,000).		<b>√</b>			



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NEW BEDFORD HIGH SCHOOL SOLAR	MA	New Bedford	Brownfields	Private	Solar PV	0.50	Wholesale Electricity	2012	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.					<b>√</b>
SULLIVAN'S LEDGE	MA	New Bedford	Superfund	Municipal	Solar PV	1.76	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.	~			✓	
NORFOLK LANDFILL PHASE I	MA	Norfolk	Landfill	Municipal	Solar PV	0.55	Wholesale Electricity	2012	Combined with Phase II, the panels will provide the town with a benefit of \$230-250,000 per year.	<b>✓</b>				
NORFOLK LANDFILL PHASE II	MA	Norfolk	Landfill	Municipal	Solar PV	1.05	Wholesale Electricity	2012	Combined with Phase I, the panels will provide the town with a benefit of \$230-250,000 per year.	<b>✓</b>				
NORTH ADAMS LANDFILL	MA	North Adams	Landfill	Municipal	Solar PV	3.50	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%).					<b>✓</b>
FMR LUCENT TECHNOLOGIES	MA	North Andover	State Brownfields	Private	Solar PV	6.00	Wholesale Electricity	2016	The town entered into an agreement with Osgood Solar to purchase discounted energy produced the solar array. By purchasing clean energy from Osgood Solar, coupled with a 20-year PILOT agreement, the Town of North Andover will accumulate over \$6M in energy savings and PILOT revenue. Further, the town has zero capital invested in, and no operational responsibility for, the solar facility.	<b>V</b>	<b>√</b>			
OSGOOD LANDING SOLAR	MA	North Andover	State Brownfields	Private	Solar PV	6.00	Wholesale Electricity	2016	PPA includes a 15% discount on electricity that is estimated to reduce the town's energy bill by \$160,000 in the first year. The town will accumulate over \$6M in energy savings and PILOT revenue over life of the project.	<b>~</b>	<b>√</b>			
RAVENBROOK FARMS LANDFILL	MA	North Carver	Landfill	Private	Solar PV	6.00	Wholesale Electricity	2014	Developer negotiated to allow town to collect more than \$200k in back taxes owed via added land lease payments. The town will also collect tax revenue on installation going forward.		<b>✓</b>			
NORTHAMPTON LANDFILL SOLAR	MA	Northampton	Landfill	Municipal	Solar PV	3.17	Wholesale Electricity	2017	Expected to produce the equivalent of 45% of the power used by municipal buildings, said Narkewicz, saving \$250,000 in city energy costs in year one, and \$7.5 million over 20 years. Equivalent of taking 444 homes off the grid, or 634 vehicles off the road.	<b>√</b>		<b>✓</b>		<b>√</b>



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HILL STREET LANDFILL	MA	Norton	Landfill	Municipal	Solar PV	2.00	Wholesale Electricity	2016	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. Created 50 construction jobs.			<b>√</b>	<b>√</b>	
EMERY STREET LANDFILL	MA	Palmer	Landfill	Municipal	Solar PV	5.03	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. Produces enough energy for 820 typical U.S. homes.	<b>√</b>	<b>√</b>	<b>√</b>		
PALMER METROPOLITAN AIRFIELD SOLAR	MA	Palmer	Brownfields	Private	Solar PV	5.90	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	Municipal	Solar PV	3.26	Wholesale Electricity	2017	The landfill is now generating clean renewable energy for the town.					<b>~</b>
PITTSFIELD MUNICIPAL LANDFILL	MA	Pittsfield	Landfill	Municipal	Solar PV	2.91	Wholesale Electricity	2017	Expected to save the city about \$140,000 annually in energy costs.	~				
SILVER LAKE SOLAR PHOTOVOLTAIC FACILITY	MA	Pittsfield	Superfund	Private	Solar PV	1.80	Wholesale Electricity	2010	The installation contributes approximately \$220,000 of annual property tax revenues to the City of Pittsfield.		<b>√</b>			
PLAINVILLE LANDFILL	MA	Plainville	Landfill	Private	Solar PV	6.00	Wholesale Electricity	2017	The town could receive over \$2 million in new revenue from the former landfill that has sat idle for over a decade in the form of a PILOT agreement. This solar farm, in conjunction with two other solar on landfill sites (located in East Bridgewater and Randolph), are also expected to reduce carbon emissions by more than 14,000 tons, which is the equivalent of removing the impact of carbon dioxide (CO2) emissions from almost 2,000 homes.		✓	✓		



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RAFFAELE ROAD SOLAR PROJECT	MA	Plymouth	Brownfields	Private	Solar PV	5.67	Wholesale Electricity	2014	The project is creating environmental benefits – the 7,410,000 kWh of clean energy generated by this project each year is equivalent in terms of CO2 reductions to removing more than 1,000 cars from the road or preserving almost 3,000 acres of forest annually. In addition, the savings that New Bedford is expected to enjoy are substantial, amounting to more than \$10 million over the life of the project.	<b>V</b>		<b>√</b>		
RANDOLPH LANDFILL SOLAR	MA	Randolph	Landfill	Private	Solar PV	4.80	Wholesale Electricity	2017	Project will provide PILOT revenue of about \$90,000 per year, plus lease revenues.		✓			
RAYNHAM LANDFILL COMMUNITY SOLAR	MA	Raynham	Landfill	Municipal	Solar PV	3.00	Community Owned / Subscription	2018	Taunton Municipal Lighting Plant endeavors to embrace renewable energy as part of our portfolio. We have been increasing the solar renewable production in our territory and this was an opportunity to reuse a landfill that would otherwise have no other purpose.					<b>√</b>
REHOBOTH LANDFILL (MA)	MA	Rehoboth	Landfill	Municipal	Solar PV	2.49	Wholesale Electricity	2015	The solar array connects directly to the national electrical grid and is expected to generate approximately \$2 million in revenue for the Town of Rehoboth during a 20-year power purchase agreement (PPA).	<b>✓</b>				
REVERE SOLAR POWER PROJECT	MA	Revere	Brownfields	Private	Solar PV	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.					<b>√</b>
BEECH ST. LANDFILL	MA	Rockland	Landfill	Municipal	Solar PV	3.20	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.	<b>√</b>	✓			
MASSACHUSETTS MILITARY RESERVATION (OTIS)	MA	Sagamore	Superfund	Federal	Wind	4.50	Onsite Use - Green Remediation	2011	The turbines to offset electrical costs for powering numerous groundwater cleanup systems at the site.	<b>√</b>		✓		
SAUGUS LANDFILL SOLAR	MA	Saugus	Landfill	Municipal	Solar PV	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 PILOT and land lease payments.	<b>✓</b>	<b>✓</b>			



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 PV	3.00	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.	✓	✓			
SHIRLEY LANDFILL	MA	Shirley	Landfill	Municipal	Solar PV	1.35	Wholesale Electricity	2017	Estimated CO2 Offset (over the life of the system) 23,279 metric tons.			<b>√</b>		
HARTFORD TURNPIKE/ SHREWSBURY LANDFILL	MA	Shrewsbury	Landfill	Municipal	Solar PV	3.80	Wholesale Electricity	2018	Will provide energy for 400-500 homes.			<b>√</b>		
SOUTH HADLEY LANDFILL	MA	South Hadley	Landfill	Municipal	Solar PV	0.08	Onsite Use - General	2012	Electricity generated partially offsets electrical consumption from the adjacent South Hadley Department of Public Works (~50%).					<b>✓</b>
COTTAGE STREET LANDFILL	MA	Springfield	Landfill	Municipal	Solar PV	3.90	Wholesale Electricity	2014	Estimated to have brought \$22 million of construction revenue to the region.				<b>✓</b>	<b>✓</b>
INDIAN ORCHARD SOLAR FACILITY	MA	Springfield	Brownfields	Municipal	Solar PV	2.00	Wholesale Electricity	2011	The project will generate \$400,000 in annual property tax revenue to City of Springfield.	!	<b>√</b>			
STOCKBRIDGE LANDFILL	MA	Stockbridge	Landfill	Municipal	Solar PV	0.90	Wholesale Electricity	2018	Utilizing otherwise unusable land to generate renewable power, all while saving the town about 849 metric tons of CO2 offset annually, equivalent to 182 passenger vehicles driven for one year or annual electricity usage of 127 homes. Expected savings of \$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.	✓	✓	<b>√</b>		✓
STOW BROWNFIELD SOLAR	MA	Stow	Brownfields	Private	Solar PV	2.50	Wholesale Electricity	2013	The project pays the Town of Stow \$12,000 per year as PILOT, 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 12 acres.		✓			
SUDBURY LANDFILL	MA	Sudbury	Landfill	Municipal	Solar PV	1.50	Wholesale Electricity	2013	Expected to save the equivalent of 1,310 metric tons of CO2 per year.			<b>✓</b>		



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
TISBURY LANDFILL	MA	Tisbury	Landfill	Municipal	Solar PV	1.20	Wholesale Electricity	2014	On an annual basis, the solar array can more than offset the electricity used for the town's municipal buildings, including the West Tisbury School. West Tisbury has estimated that it will save \$63,427 per year as a result of the solar installation. Energy generated by the installation is fed into the utility grid. In exchange, the utility lowers the energy bill for the municipal buildings.	<b>✓</b>				
CHARLES GEORGE LANDFILL	MA	Tyngsboro/ Dunstable	Superfund	Private	Solar PV	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.			✓		
BIRD MACHINE LANDFILL	MA	Walpole	Landfill	Private	Solar PV	4.75	Wholesale Electricity	2017	The town receives PILOT with the Bird Machine solar farm and the Bird landfill solar array that would pay the town a total of \$2.1 million spread out over the next 25 years.		<b>✓</b>			
WEST BOYLSTON LANDFILL	MA	West Boylston	Landfill	Municipal	Solar PV	1.50	Community Owned / Subscription	2017	Net savings of about \$1.8 million for the community over the life of the array.	<b>√</b>				
BERKSHIRE TRUCK PLAZA	MA	West Stockbridge	State Brownfields	Private	Solar PV	3.00	Wholesale Electricity	2016	This solar array will produce enough clean energy to power 500-700 residences in West Stockbridge, in addition to the added tax revenue.		<b>√</b>	✓		
WEST TISBURY LANDFILL	MA	West Tisbury	Landfill	Municipal	Solar PV	0.88	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.	<b>√</b>				
COWLES GRAVEL SOLAR	MA	Westfield	Brownfields	Private	Solar PV	2.60	Wholesale Electricity	2016	Solar development will provide lease revenue to the town. The 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).		<b>✓</b>			<b>√</b>



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WESTFIELD LANDFILL	MA	Westfield	Landfill	Municipal	Solar PV	2.50	Wholesale Electricity	2015	The city receives benefits from lease payments, PILOT, and operational savings. The power is purchased by the Municipal Light Board, which provides electricity to municipal facilities at a reduced rate.	<b>√</b>	<b>√</b>			
WESTON LANDFILL	MA	Weston	Landfill	Municipal	Solar PV	2.27	Wholesale Electricity	2016	The town will receive 1 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.	<b>V</b>				
HIX BRIDGE ROAD LANDFILL	MA	Westport	Landfill	Municipal	Solar PV	0.62	Wholesale Electricity	2019	Ameresco is leasing the land housing the solar panels from Westport and making an annual PILOT to the town.		<b>✓</b>			
WILBRAHAM LANDFILL	MA	Wilbraham	Landfill	Municipal	Solar PV	0.75	Wholesale Electricity	2016	The benefit to Town of Wilbraham from the project is \$100,000 annually for 20 years, which is enough to pay for the town's municipal energy costs each year.	✓				
WILLIAMSTON LANDFILL	MA	Williamston	Landfill	Municipal	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.	<b>✓</b>	✓	<b>✓</b>		✓
SIMONDS RD. LANDFILL	MA	Williamstown	Landfill	Municipal	Solar PV	2.00	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.	<b>~</b>		<b>✓</b>		
WOBURN LANDFILL	MA	Woburn	Landfill	Municipal	Solar PV	3.40	Wholesale Electricity	2017	Expected to generate more than \$370,000 a year in savings for the city.	<b>✓</b>				
GREENWOOD ST. LANDFILL	MA	Worcester	Landfill	Municipal	Solar PV	8.10	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 offset 7,475 metric tons of carbon annually, equivalent amount emitted from driving approximately 18 million miles.	✓	✓	<b>✓</b>	<b>V</b>	



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
MD - MARYLAND														
ANNAPOLIS RENEWABLE ENERGY PARK	MD	Annapolis	Landfill	Municipal	Solar PV	16.80	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 put 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.		<b>*</b>		<b>✓</b>	<b>√</b>
FORMER ELLICOTT CITY LANDFILL	MD	Ellicott City	Landfill	Municipal	Solar PV	1.20	Onsite Use - General	2011	Provides ~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	<b>✓</b>				✓
PANORAMA LANDFILL SOLAR	MD	Fort Washington	Landfill	Municipal	Solar PV	6.60	Community Owned / Subscription	2019	The project will produce enough energy to power 1,100 homes in the region. It is qualified under the Maryland Community Solar Energy Generating System program. The energy generated by the projects will directly benefit qualified residential off-takers who are situated within PEPCO Maryland's service territory.			<b>√</b>		<b>√</b>
FORT DETRICK	MD	Frederick	Superfund	Federal	Solar PV	18.60	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.	✓				
FREDERICK COUNTY LANDFILL SOLAR	MD	Frederick	Landfill	Municipal	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 RECs that the system generates for at least the next six years at a reduced rate of \$22 (a savings of approximately \$32).	<b>√</b>	<b>√</b>			<b>√</b>
FORTY WEST LANDFILL	MD	Hagerstown	Landfill	Municipal	Solar PV	2.00	Wholesale Electricity	2015	Across ALL EPGSolar installations (totaling 20 MW), 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.)	<b>✓</b>	✓			
RESH ROAD LANDFILL (RESH S1)	MD	Hagerstown	Landfill	Municipal	Solar PV	2.50	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.		✓			✓



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
HOOD'S MILL LANDFILL	MD	Westminster	Landfill	Municipal	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.	<b>✓</b>				<b>√</b>
WASHINGTON COUNTY RUBBLE LANDFILL #1	MD	Williamsport	Landfill	Municipal	Solar PV	2.50	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.)	<b>V</b>	<b>√</b>			
WASHINGTON COUNTY RUBBLE LANDFILL #2	MD	Williamsport	Landfill	Municipal	Solar PV	2.50	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.		<b>✓</b>			✓
ME - MAINE														
BELFAST LANDFILL	ME	Belfast	Landfill	Municipal	Solar PV	0.12	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.	✓				
BRUNSWICK LANDING (BIOMASS)	ME	Brunswick	Superfund	Private	Biomass	1.00	Wholesale Electricity	2014	The facility has the capacity to generate up to 1 megawatt of electricity; almost 33% of current electrical requirement at Brunswick Landing. Power plant will greatly reduce or eliminate electricity delivered over CMP's distribution grid to the campus. PPA with VGV will allow MRRA to continue to offer a belowmarket electricity rate (currently 11.5 cents per kilowatt hour). The Digester will help eliminate organic waste by re-using and recycling it.	<b>√</b>		<b>√</b>		<b>✓</b>
BRUNSWICK LANDING (SOLAR)	ME	Brunswick	Superfund	Private	Solar PV	1.50	Wholesale Electricity	2018	A solar array at Brunswick Landing will power 13% of the energy needs for the self-contained micro-grid supplying energy to almost 2 million square feet of commercial and industrial space at the site of Brunswick's former Naval air base. The array will produce roughly 1,970,780 kilowatt-hours or 1.9 megawatt hours of electricity each year, offsetting the equivalent of over 3.4 million miles driven in a gas-powered car.			<b>✓</b>		<b>√</b>



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
DROWNE ROAD LANDFILL SOLAR	ME	Cumberland	Landfill	Municipal	Solar PV	0.47	Wholesale Electricity	2019	The solar array is expected to produce 600,000 kilowatt hours of electricity each year. It was built at no upfront cost to the town through a PPA. ReVision Energy expects the town to see savings of roughly \$20,000 in the first year. The solar array will be used to offset electric use in the town's municipal buildings. They expect savings of more than \$100,000 over the next 10 years, and eventually over \$1,000,000.	<b>✓</b>		<b>√</b>		
DAMARISCOTTA LANDFILL SOLAR	ME	Damariscotta	Landfill	Municipal	Solar PV	0.07	Wholesale Electricity	2020	The solar panels are estimated to produce 100% of the electricity for municipal buildings.					<b>✓</b>
ELIOT LANDFILL SOLAR	ME	Eliot	Landfill	Municipal	Solar PV	0.13	Wholesale Electricity	2019	The array was installed under a Plan 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 \$196,000. 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 CMP 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 pounds of carbon pollution.			<b>✓</b>		✓
GRANDYOATS	ME	Hiram	Brownfields	Private	Solar PV	-	Onsite Use - General	2016	The solar panels power everything at the facility including computers and ovens, thus moving GrandyOats toward their goal of being a net-zero carbon emissions facility. The solar array generates more than 95,000 kWh of clean energy per year. Powering the facility with clean energy instead of fossil fuels eliminates the amount of greenhouse gas emissions generated by driving an average passenger vehicle for 160,000 miles.	<b>V</b>		✓		
OAKLAND TRANSFER STATION	ME	Oakland	Landfill	Municipal	Solar PV	5.00	Wholesale Electricity	2020	The town is expected to save nearly \$1 million in power costs over the next two decades. The solar farm also houses a butterfly feeding ground.	✓		✓		
PORTLAND LANDFILL SOLAR	ME	Portland	Landfill	Municipal	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.					<b>✓</b>



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
HIGHLAND AVE. LANDFILL	ME	South Portland	Landfill	Municipal	Solar PV	1.00	Wholesale Electricity	2017	Will provide roughly 12% of the electricity used by South Portland's municipal and school buildings.	1				
TREMONT LANDFILL SOLAR	ME	Tremont	Landfill	Municipal	Solar PV	0.15	Wholesale Electricity	2019	The town used to pay between \$ 0.17 and \$ 0.18 per kWh of electricity. They now pay \$ 0.125 per kWh for solar electricity, resulting in instant savings.	<b>✓</b>				
WALDOBORO TRANSFER STATION LANDFILL	ME	Waldoboro	Landfill	Municipal	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 system and sell power to the Town of Waldoboro for a lower rate than it currently pays.	<b>√</b>				
MI - MICHIGAN														
MITCHELL-BENTLEY	MI	Cadillac	Brownfields	Municipal	Solar PV	0.50	Community Owned / Subscription	2021	Solar project on a repurposed brownfield land, incorporates an 885 kWh DC battery storage system, and seeded with pollinator-friendly habitat.			✓		<b>✓</b>
COLDWATER BOARD OF PUBLIC UTILITIES SOLAR FIELD PARK	MI	Coldwater	Brownfields	Municipal	Solar PV	1.30	Wholesale Electricity	2018	This project presented a unique opportunity for Coldwater to turn a Brownfield site into a Brightfield site.					<b>✓</b>
BURCHAM PARK LANDFILL	MI	East Lansing	Landfill	Municipal	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 RECs. "This solar park will make the Lansing area more sustainable and represents another step in East Lansing's Climate Sustainability Plan to transition to cleaner, more renewable energy options. Best of all, the city – and many who surround it economically since subscribers, including the city government, will save money on their utility bills," says Pivot Energy's CEO, Rick Hunter. The community solar project cost \$600,000 and the solar panels are capable of producing enough electricity each year to power about 60 homes.	<b>√</b>		<b>\</b>		✓



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
EATON RAPIDS LANDFILL	MI	Hamlin Township	Landfill	Municipal	Solar PV	0.54	Wholesale Electricity	2014	Eaton Rapids Solar LLC will own and operate the facility, which is expected to generate 658MWh of solar generated electricity annually for the City Eaton Rapids Electrical Utility. The lower cost power will be purchased by The City of Eaton Rapids and distributed to residential and commercial ratepayers in the community. The project is also expected to generate enough power to meet one-third of the community's renewable energy requirements under the State's Renewable Portfolio Standard regulations.	✓				✓
MN - MINNESOTA														
SENECA COMMUNITY SOLAR GARDEN	MN	Eagan	Landfill	Municipal	Solar PV	1.00	Community Owned / Subscription	2018	The solar garden will produce just under 1 megawatt of electricity – the equivalent of powering about 164 homes.			✓		
HUTCHINSON LANDFILL	MN	Hutchinson	Landfill	Municipal	Solar PV	0.40	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).					✓
WASHINGTON COUNTY LANDFILL (MN)	MN	Lake Elmo	Superfund	Municipal	Solar PV	0.04	Onsite Use - General	2016	MPCA constructed a solar energy system on the landfill to supply energy for ongoing operation of the leachate and gas collection systems.					<b>√</b>
MILWAUKEE LANDFILL SOLAR	MN	Milwaukee	Landfill	Municipal	Solar PV	2.25	Wholesale Electricity	2021	Reuse of a landfill near Mitchell International Airport that could not be developed for other uses now hosts 7,200 solar panels, and will generate 2.25 megawatts of clean energy, enough to power nearly 500 homes. The project was built and will be maintained at no cost to taxpayers while also contributing an annual lease payment to the City for this site. The installation will also provide grid resiliency to the 128th Refueling Wing of the Wisconsin Air National Guard, allowing them a backup source of power.		✓	<b>√</b>		<b>√</b>
LINDENFELSER LANDFILL	MN	St. Michael	Landfill	Municipal	Solar PV	-	Onsite Use - General	2016	The solar panels are being used to provide power for equipment set up at the sites to collect the methane gas and leachate produced by decomposing fill.					✓



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	Brownfields	Private	Solar PV	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.	<b>*</b>		<		
ORONOGO-DUENWEG MINING BELT SUPERFUND SOLAR SITE	МО	Web	Superfund	Private	Solar PV	2.20	Community Owned / Subscription	2021	The site will generate the equivalent in energy of that consumed by about 400 homes in the area.			<b>√</b>		
MT - MONTANA														
ZORTMAN-LANDUSKY MINE	MT	N/A	Mine Lands	Federal/ Municipal	Wind	0.23	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.	~		<b>✓</b>		
NC - NORTH CAROLINA														
REVENTURE - BIOMASS	NC	Charlotte	Superfund	Private	Biomass	3.60	Unknown	2015	The first 20 megawatts of power from the plant to qualify for triple credits.		<b>✓</b>			
EVERGREEN PACKAGING LANDFILL	NC	Haywood County	Landfill	Private	Solar PV	0.55	Wholesale Electricity	2010	Developer savings on land lease via 20-year agreement at \$1/year.					✓
ND - NORTH DAKOTA		<u>'</u>		<u>'</u>										
ARSENIC TRIOXIDE SITE	ND	Lidgerwood, Wyndmere, Milnor and Hankinson	Superfund	Municipal	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 costeffective approach reduces the facility's use of fossil fuels and lowers operation and maintenance costs.			<b>~</b>		<b>√</b>
NH - NEW HAMPSHIRE														
MILTON LANDFILL SOLAR GARDEN	NH	Milton	Landfill	Municipal	Solar PV	1.00	Community Owned / Subscription	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.	<b>✓</b>				✓



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
NJ - NEW JERSEY														
ROYAL WINE CORPORATION SOLAR	NJ	Bayonne	State Brownfields	Unknown	Solar PV	1.15	Rooftop	2012	RWC will be utilizing a federal incentive program afforded by the American Recovery Act that allows a 30% federal grant on the project. In addition to this program, Royal Wine will participate in the New Jersey Clean Energy Program allowing companies to earn Solar RECs. The system that was installed 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.		*	*		
BERNARDS TOWNSHIP LANDFILL	NJ	Bernards Twp	Landfill	Municipal	Solar PV	3.68	Wholesale Electricity	2016	Will generate more than \$500,000 in revenue for the town via land lease and energy cost savings	<b>~</b>	✓			
PARKLANDS SOLAR FARM	NJ	Bordentown Township	Landfill	Private	Solar PV	10.14	Wholesale Electricity	2014	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.				<b>√</b>	
BRICK TOWNSHIP LANDFILL	NJ	Brick Township	Superfund	Municipal	Solar PV	7.00	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.	<b>✓</b>				
CLEAN HARBORS	NJ	Bridgeport	Landfill	Private	Solar PV	1.50	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.	<b>√</b>		<b>✓</b>		



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AMERICAN CYANAMID CO	NJ	Bridgewater	Superfund	Various	Solar PV	1.60	Onsite Use - General	2013	The solar system, will produce an expected 1,140,000 kWh annually. The PV power is connected to the site's utility meter and is expected to supplement 88% of the consumption used at the ballpark. Some environmental benefits equivalent to the 1,141,510 kWh annually can be described as follows: -805 Metric Tons of CO2 -Annual greenhouse gas emissions from 168 passenger vehicles -CO2 emissions from 90,291 gallons of gasoline consumed -CO2 emissions from the electricity use of 131 homes for one year -Carbon sequestered annually by 660 acres of U.S. forests -CO2 emissions from burning 3.5 railcars' worth of coal	<b>√</b>		<b>*</b>		
CAMPBELL'S SOUP #1	NJ	Camden	Brownfields	Private	Solar PV	1.74	Wholesale Electricity	2017	Both Campbell's Soup project have a 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.	<b>√</b>				
CAMPBELL'S SOUP #2	NJ	Camden	Brownfields	Private	Solar PV	2.66	Wholesale Electricity	2017	Both Campbell's Soup project have a 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.	<b>√</b>				
WELSBACH & GENERAL GAS MANTLE (CAMDEN RADIATION)	NJ	Camden and Gloucester	Superfund	Private	Solar PV	9.00	Rooftop	2011	The system has the capacity to produce 9.0 MW of electricity – enough to power more than 1,500 homes. It will generate the equivalent of up to 80% of the Terminal's power demand. The system is expected to offset more than 8,100 tons of carbon dioxide, approximately the same amount that would be offset by planting 400,000 trees or removing 1,200 cars from the road.			✓		
CARLSTADT SCIENTIFIC CHEMICAL PROCESSING, INC.	NJ	Carlstadt	Superfund	Municipal	Solar PV	2.00	Unknown	2020	A solar company leases the former Scientific Chemical property for \$10,000 a year in rent for the property, they have a 20 year lease agreement. The Mayor noted that almost nothing can be built on the site due to its contamination.		<b>√</b>			✓
WHITE ROSE FOODS SOLAR	NJ	Carteret	State Brownfields	Private	Solar PV	4.90	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.		<b>√</b>	<b>√</b>		<b>√</b>



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CINNAMINSON LANDFILL SOLAR	NJ	Cinnaminson	Superfund	Municipal	Solar PV	13.00	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. The Cinnaminson Solar Farm is the 33rd Solar 4 All project, with six built on landfill sites and four built on brownfield sites.			<b>√</b>		<b>~</b>
DELANCO LANDFILL COMMUNITY SOLAR	NJ	Delanco Township	Landfill	Municipal	Solar PV	3.10	Community Owned / Subscription	2021	The project will provide energy to more than 700 subscribers in Public Service Enterprise Group (PSEG) territories. 51 percent of the project's subscribers are low and moderate income residents, who will receive guaranteed savings on their electric bills for 20 years with no cancelation fees, and save an estimated \$120 annually. The project has created more than 35 local jobs.	<b>V</b>			<b>\</b>	<b>√</b>
KINSLEY LANDFILL	NJ	Deptford Township	Landfill	Private	Solar PV	11.18	Wholesale Electricity	2014	Transformed 35 acres of unused landfill into solar field.			✓		
EDGEBORO LANDFILL	NJ	East Brunswick	Landfill	Municipal	Solar PV	4.30	Wholesale Electricity	2011	Installation of solar panels utilized landfill surface to create green energy for beneficial use that supplement the energy generated by the LFG production.					<b>√</b>
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 operations. The use of solar energy lowers Diamond's energy costs, which saves money and enhances Diamond's competitiveness.					<b>√</b>
L&D LANDFILL	NJ	Eastampton, Lumberton, and Mount Holly	Superfund	Private	Solar PV	12.93	Wholesale Electricity	2015	The system created 190 construction jobs. It also generates enough electricity to power 2,000 average New Jersey homes annually.			✓	<b>√</b>	
INDUSTRIAL LAND RECLAIMING LANDFILL	NJ	Edison	Landfill	Private	Solar PV	7.75	Wholesale Electricity	2016	Adds to state's renewable energy resources without reducing the state's open space.			<b>✓</b>		<b>/</b>
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.					<b>/</b>
SILVER LAKE SOLAR FARM	NJ	Edison	Brownfields	Private	Solar PV	2.02	Wholesale Electricity	2010	PSE&G used a NJ contractor to build Silver Lake Solar Farm.				<b>√</b>	
HANDSON AVENUE LANDFILL	NJ	Egg Harbor Township	Superfund	Private	Solar PV	10.66	Wholesale Electricity	2016	The developer has a 15-year lease agreement and two five-year extensions optional along with an option to buy from the landfill owner.		✓			



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PRICE LANDFILL	NJ	Egg Harbor Township	Superfund	Private	Solar PV	4.20	Unknown	Unknown	Under the agreement, the township will not foreclose on the property, while the developer for the project, will pay back more than \$290,000 in back taxes and interest.		<b>✓</b>			
JERSEY GARDENS MALL SOLAR #1	NJ	Elizabeth	Landfill	Private	Solar PV	2.00	Rooftop	2012	Generates approximately the amount of power required for 564 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 SRECs generated by the solar system.		✓	<b>√</b>		<b>√</b>
JERSEY GARDENS MALL SOLAR #2	NJ	Elizabeth	Landfill	Private	Solar PV	2.80	Rooftop	2012	Generates approximately the amount of power required for 564 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 SRECs generated by the solar system.		✓	<b>√</b>		
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 system's total cost and accepts the SRECs that the system generates as payment for the loan. Renewvia Energy owns and operates the Northport solar project and sells power using PPAs with the building's tenants. The solar system 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.	<b>~</b>		<b>✓</b>		✓
OWENS CORNING LANDFILL	NJ	Gloucester Township	Landfill	Private	Solar PV	3.00	Wholesale Electricity	2017	Will bring in an additional \$830,000 in revenue for Gloucester Township, coming from lease payments made by Marina Energy.		<b>✓</b>			
HACKENSACK SOLAR FARM	NJ	Hackensack	Brownfields	Private	Solar PV	1.06	Wholesale Electricity	2012	Created construction and permanent jobs (number not specified).				<b>√</b>	



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HIGHLAND PARK SOLAR	NJ	Highland Park	Landfill	Municipal	Solar PV	0.64	Wholesale Electricity	2019	The Highland Park Solar Storage System will combine a 1,764 panel, 605 kWh DC solar farm with 2,000 kilowatt-hour Tesla batteries. The solar panels are expected to provide enough electricity to power about 100 homes annually and also charge the batteries, which will be used to lessen voltage fluctuations that are inherent to grid connected solar systems due primarily to issues like intermittent cloud cover. The learnings from the Highland Park Solar Storage System will ultimately enable better integration of renewable energy onto the electric grid, which will allow for even more solar energy projects in New Jersey and better grid reliability.			✓		✓
HOPATCONG LANDFILL SOLAR	NJ	Hopatcong	Landfill	Municipal	Solar PV	1.54	Wholesale Electricity	2020	According to the Mayor of Hopatcong, "The Borough of Hopatcong is the Landlord, and we fully support this effort to fully reduce our carbon footprint—and to have conscious efforts to support our environment. The Borough will receive \$15,500 per Megawatt installed, we are starting at about 1.5 MW and can expand this solar field further in the future." Additionally, during construction the project employed more than 100 union workers.	<b>✓</b>		<b>✓</b>	<b>✓</b>	
PICATINNY BURNING GROUNDS SOLAR	NJ	Jefferson and Rockaway Townships	Superfund	Federal	Solar PV	0.80	Onsite Use - General	2016	Provides base with major energy cost savings as well as an on-base, secure, and reliable source of energy. Will save Army approximately \$56,531 annually.	<b>✓</b>				<b>~</b>
GOYA FOODS INC.	NJ	Jersey City	State Brownfields	Unknown	Solar PV	3.45	Rooftop	2015	Generates over 70% of the building's energy supply and provide a net zero carbon foot-print.			✓		<b>✓</b>
KEARNY LANDFILL	NJ	Kearny	Landfill	Municipal	Solar PV	3.00	Wholesale Electricity	2011	The array has enough photovoltaic cells to power up between 450 and 675 single-family homes.			<b>✓</b>		
WAKEFERN FOOD CORPORATION SOLAR	NJ	Keasbey	State Brownfields	Private	Solar PV	2.38	Rooftop	2012	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.			<b>√</b>	✓	✓
LINDEN SOLAR FARM	NJ	Linden	Brownfields	Private	Solar PV	3.20	Wholesale Electricity	2010	Created construction and permanent jobs (number not specified).				✓	



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TOWN OF LIVINGSTON MUNICIPAL COMPLEX SOLAR	NJ	Livingston	State Brownfields	Municipal	Solar PV	0.05	Rooftop	2013	The solar panels allow the town to create their own energy, making the town more self-reliant, in addition to cutting down on the amount of pollution and greenhouse gasses produced.			<b>√</b>		<b>✓</b>
MULLICA HILL COLD STORAGE SOLAR	NJ	Mullica Hill	State Brownfields	Private	Solar PV	2.67	Onsite Use - General	2016	The solar field at Mullica Hill Cold Storage will provide the facility with clean, green, low-cost energy. The state-of-the-art system monitors and adjusts the orientation of the solar arrays to maximize energy generation for Mullica Hill Cold Storage.			<b>√</b>		<b>✓</b>
PARK ELEMENTARY SCHOOL SOLAR	NJ	Newark	State Brownfields	Municipal	Solar PV	0.51	Rooftop	2010	Developing a green curriculum for students.					<b>✓</b>
PAULSBORO TERMINAL LANDFILL	NJ	Paulsboro	Brownfields	Private	Solar PV	0.28	Onsite Use - Green Remediation	2002	Solar to generate 350,000 kWh/year and will power approximately 30% of demand for remediation of the terminal. Reduction of CO2 gases by 571,000 pounds per year.			<b>√</b>		
FORT DIX LANDFILL SOLAR	NJ	Pemberton Township	Superfund	Federal	Solar PV	16.50	Wholesale Electricity	2017	Will produce enough energy to power 1,500 homes, reducing more than 15,000 metric tons of carbon dioxide emissionsthe equivalent of removing 3,000 cars from the road.			<b>√</b>		
PENNSAUKEN BROWNFIELD SOLAR	NJ	Pennsauken	Brownfields	Private	Solar PV	15.20	Wholesale Electricity	2019	The solar panels generate enough electricity to power more than 2,500 homes annually.			<b>✓</b>		
PENNSAUKEN LANDFILL RENEWABLE ENERGY PARK-SOLAR	NJ	Pennsauken	Landfill	Municipal	Solar PV	2.60	Onsite Use - General	2008	All power from the installation sold to Aluminum Shapes aluminum company.					<b>V</b>
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 MW program goals. They will produce enough solar electricity to power about 470 average-size homes.			<b>✓</b>		<b>✓</b>
BED BATH AND BEYOND SOLAR (PORT READING NJ)	NJ	Port Reading	State Brownfields	Private	Solar PV	2.10	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.			<b>√</b>		



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PRINCETON LANDFILL SOLAR	NJ	Princeton	Landfill	Municipal	Solar PV	2.70	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.	<b>✓</b>	✓			
SOUTH BRUNSWICK LANDFILL SOLAR	NJ	South Brunswick	Superfund	Private	Solar PV	13.00	Wholesale Electricity	2018	Reduces CO2 emissions that would otherwise be generated by 1,800 homes.			<b>✓</b>		
STAFFORD PARK SOLAR FARM	NJ	Stafford Twp	Landfill	Private	Solar PV	6.00	Onsite Use - General	2011	"This model green energy project will create jobs and clean energy, and is consistent with Governor Christie's commitment to developing more solar projects on landfills," Commissioner Martin said.			<b>√</b>	<b>√</b>	
SCHERING CORPORATION SOLAR	NJ	Summit	RCRA	Private	Solar PV	1.65	Rooftop	2009	Will be able to use the clean energy supplied by the solar panels to meet about 12% of its peak energy needs.					<b>✓</b>
TINTON FALLS SOLAR	NJ	Tinton Falls	Mine Lands	Private	Solar PV	20.00	Wholesale Electricity	2013	Provided "hundreds" of highly skilled union and professional jobs during construction.				<b>√</b>	
TOMS RIVER SOLAR FARM	NJ	Toms River	Superfund	Private	Solar PV	28.90	Wholesale Electricity	2021	The project includes a 27.4 MW grid-connected system and an adjacent 1.5 MW net-metered solar system which powers BASF's ongoing remediation efforts at the site. Close to one hundred union workers participated in the project construction. BASF leased 166 acres of the site for the solar array system.		✓	<b>√</b>	<b>√</b>	
TRENTON SOLAR FARM	NJ	Trenton	Brownfields	Private	Solar PV	1.30	Wholesale Electricity	2010	Creation of green jobs.				✓	
FEDEX GROUND DISTRIBUTION HUB	NJ	Woodbridge	Brownfields	Private	Solar PV	2.42	Rooftop	2009	Generates 30% of the hub's electricity needs; annual reduction of approximately 1,867 metric tons of CO2 emissions.			✓		<b>✓</b>
VENTRON/VELSICOL - DUKE REALTY	NJ	Wood-Ridge/ Carlstadt Township	Superfund	Private	Solar PV	2.30	Community Owned / Subscription	2020	The project generates electricity to 380 local homes and is a community solar project. The project was designed and executed to provide energy equity and access for all and provides 51% of the electricity it produces to low- and moderate-income households.			<b>√</b>		<b>√</b>



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NM - NEW MEXICO														
EMCORE EUBANK LANDFILL	NM	Albuquerque	Brownfields	Municipal	Solar PV	2.00	Onsite Use - General	2013	Project development employed up to 16 engineers at various stages, over a dozen electrical contractors, 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% of the power requirements for EMCORE's Albuquerque facilities.				<b>√</b>	<b>√</b>
CHEVRON QUESTA PROJECT	NM	Questa	Superfund	Private	Solar PV	1.00	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.				✓	<b>√</b>
NV - NEVADA														
NELLIS AFB SOLAR ARRAY II GENERATING STATION	NV	Las Vegas	RCRA	Federal	Solar PV	15.00	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.			<b>√</b>	✓	✓
NELLIS AFB SOLAR FACILITY SITE I	NV	Las Vegas	RCRA	Federal	Solar PV	13.20	Onsite Use - General	2007	The system saves the USAF an estimated \$1 million annually.	<b>✓</b>				
NY - NEW YORK														
DENNINGS POINT LANDFILL SOLAR	NY	Beacon	Landfill	Municipal	Solar PV	2.00	Wholesale Electricity	2018	Savings to the city based on RFP assumptions is around \$140,000 per year	<b>✓</b>				
SYMPAUG SOLAR PROJECT	NY	Bethel	Landfill	Municipal	Solar PV	0.95	Wholesale Electricity	2018	The project brought the town landfill back into compliance with the Connecticut Department of Energy and Environmental Protection. Through virtual net metering, 100% of the energy generated is used to power town buildings and operations, offsetting total town consumption, providing the Town of Bethel green renewable energy. A twenty year power purchase agreement is in place between the town and the developer. Annual energy savings of 1,254,587 kWh and annual CO2 emissions reduction of 934 metric tons.	<b>✓</b>		✓		✓
HOLTSVILLE ECOLOGY SOLAR SITE	NY	Brookhaven	Landfill	Municipal	Solar PV	1.70	Wholesale Electricity	2018	The Renewable Energy Generating Facility is managed by Agilitas Energy LLC, who have a Power Purchase Agreement with PSEG Long Island and a Site Lease Agreement with the Town.		<b>√</b>			<b>√</b>



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PAPERMILL ROAD LANDFILL SOLAR	NY	Brookhaven	Landfill	Municipal	Solar PV	1.20	Wholesale Electricity	2018	The solar facility will generate enough power to provide electricity to over 1,000 homes, 24 hours a day. The developer has a Power Purchase Agreement with PSEG Long Island and a Site Lease Agreement with the Town.		✓	<b>√</b>		<b>√</b>
HONEYWELL WATER TREATMENT PLANT	NY	Camillus	Other	Private	Solar PV	1.50	Onsite Use - Green Remediation	2016	Solar panels provide electric power for Honeywell's Pump Station in Camillus and 100% renewable power for air monitoring equipment.			✓		
MADISON COUNTY LANDFILL (CANASTOTA)	NY	Canastota	Landfill	Municipal	Solar PV	0.05	Onsite Use - General	2014	Powers the recycling building at the landfill.					<b>√</b>
WEST NYACK LANDFILL	NY	Clarkstown	Landfill	Municipal	Solar PV	2.36	Wholesale Electricity	2014	The town expects to save about \$4M over life of system (30 years).	<b>✓</b>				
CLIFTON PARK LANDFILL	NY	Clifton Park	Landfill	Municipal	Solar PV	1.00	Wholesale Electricity	2017	Energy generated is estimated to be the equivalent of 90% of the town's energy usage; the town will realize savings via remote net metering credits for this generation (town source)	<b>✓</b>	✓			
DEWITT LANDFILL SOLAR	NY	DeWitt	Landfill	Municipal	Solar PV	2.66	Wholesale Electricity	2020	Over the life of the project, it is projected to save over \$2 million on our municipal energy costs; approximately \$70,000 per year. That \$2 million savings represents a carbon reduction of 2,605 metric tons, the equivalent of taking 510 vehicles off the road. The site also serves as a grassland bird sanctuary; by instituting a minimal lawn mowing regime we maintain a grassland habitat that accommodates several Endangered, Threatened, Special Concern and High Priority bird species, including: Northern Harrier, Grasshopper Sparrow, Eastern Meadowlark, and Bobolink.	<b>~</b>		✓		<b>√</b>
ACCABONAC SOLAR FARM	NY	East Hampton	Landfill	Municipal	Solar PV	1.10	Wholesale Electricity	2019	The system was built and operates at no cost to the town, through a 20 year fixed PPA. The town receives annual lease payments from the developer for the land.		✓			
WEST PARK LANDFILL (FLOYD ACKERT RD.)	NY	Esopus	Landfill	Municipal	Solar PV	0.60	Wholesale Electricity	2017	Project will generate revenue by selling net metering credits.		✓			
FORMER FERDULA LANDFILL	NY	Frankfurt	Landfill	Unknown	Wind	-	Onsite Use - Green Remediation	1998	Avoids air emissions associated with consumption of grid electricity during soil treatment. Capitalizes on wind intermittency to provide the pulsed effect that is typically effective in venting operations. Recovered \$14,000 in capital/installation costs for the wind system within one year due to avoided electricity. Accrues annual O&M costs below \$500, in contrast to potential \$75,000 for a conventional soil vapor extraction (SVE) system.	<b>√</b>		✓		



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GLOVERSVILLE LANDFILL	NY	Gloversville	Landfill	Municipal	Solar PV	4.98	Community Owned / Subscription	2021	The solar array will provide power at a 10% discount to both the school district and the city itself; 60% of the electricity generated is reserved for local residents and small businesses who receive a 10% reduction in electricity costs if they subscribe. Expected to save the City of Gloversville about \$1.88 million on electricity costs over 20 years.	<b>*</b>				
BETHLEHEM STEEL WINDS I	NY	Hamburg / Lackawanna	RCRA	Private	Wind	20.00	Wholesale Electricity	2007	Combined with Steel Winds II, 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.		<b>✓</b>		✓	
BETHLEHEM STEEL WINDS II	NY	Hamburg / Lackawanna	RCRA	Private	Wind	15.00	Wholesale Electricity	2012	Combined with Steel Winds I, 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.		<b>√</b>		<b>√</b>	
BLYDENBURGH LANDFILL SOLAR I	NY	Hauppauge	Landfill	Municipal	Solar PV	0.05	Wholesale Electricity	2011	Used an estimated 30 skilled craftsman on the job. Solar panels are "Buy America Act" qualified. Energy production covers landfill's energy needs and allows town to sell back energy to the Long Island Power Authority or convert into energy credits. Information kiosks about solar energy allow local students to learn about alternative energy production.	1	<b>√</b>		<b>√</b>	<b>√</b>
BLYDENBURGH LANDFILL SOLAR II	NY	Hauppauge	Landfill	Municipal	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 PPA as part of the Feed-in-Tariff program.		<b>√</b>	<b>√</b>		<b>√</b>
LINCOLN AVE. LANDFILL SOLAR	NY	Holbrook	Landfill	Municipal	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 PPA as part of the Feed-in-Tariff program.					<b>√</b>



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6140 ROUTE 209 SOLAR SITE	NY	Kerhonkson	Mine Lands	Municipal	Solar PV	5,6	Community Owned / Subscription	2019	Subscribers in the community solar program benefit from the clean energy produced and are able to save money on their regular electric costs. This site is also part of the NYSERDA Solar for All program, with 1 MW of the project reserved specifically for income-eligible NY residents who apply through NYSERDA. Annual CO2 Reduction of 10,044,000 Pounds.	<b>√</b>		<b>✓</b>		
BETHLEHEM STEEL SUN	NY	Lackawanna	RCRA	Private	Solar PV	4.00	Wholesale Electricity	2014	The solar farm is expected to produce enough electricity for 1,600 single-family homes.			<b>✓</b>		
BETHLEHEM STEEL SUN SITE 2	NY	Lackawanna	RCRA	Private	Solar PV	9.00	Wholesale Electricity	Unknown	The 26,000 panels being installed here are sitting atop otherwise nuisance land that is undevelopable and providing power to some universities in the WNY area.					<b>✓</b>
MADISON COUNTY AGRICULTURE AND RENEWABLE ENERGY PARK	NY	Lincoln	Landfill	Municipal	Solar PV	0.05	Onsite Use - General	2011	Produces enough energy to offset 50% of the material recycling facility's 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.		<b>√</b>		<b>√</b>	1
MONROE LANDFILL SOLAR	NY	Monroe	Landfill	Municipal	Solar PV	1.93	Community Owned / Subscription	Unknown	This project will bring sustainable sources of energy to the community and save the Town of Monroe about \$5 million over the life of the system.	<b>√</b>		<b>✓</b>		
MOUNT KISCO LANDFILL SOLAR	NY	Mount Kisco	Landfill	Municipal	Solar PV	0.58	Community Owned / Subscription	2020	Mount Kisco is receiving \$100,000 a year in its lease agreement with BQ Energy for the land over the next 25 years. The project is serving about 100 residents and small businesses. The project provides economic benefits in the form of revenue to the village from the land lease.		<b>√</b>			<b>√</b>
HOMERIDAE PROJECT	NY	Olean	State Brownfields	Unknown	Solar PV	3.90	Wholesale Electricity	2019	This project is expected to reduce GHGs by up to 72,900 metric tons over the life of the underlying projects.			<b>√</b>		
OLEAN GATEWAY "SOLEAN"	NY	Olean	State Brownfields	Private	Solar PV	4.00	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.	✓		<b>√</b>		
OLEAN GATEWAY "SOLEAN" WEST	NY	Olean	State Brownfields	Private	Solar PV	1.50	Wholesale Electricity	2016	Power sold to Olean General Hospital.					<b>√</b>



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
PATTERSUN NY #1	NY	Patterson	Landfill	Municipal	Solar PV	0.94	Wholesale Electricity	2015	Sells power via remote net metering to Trinity Pawling High School under a long term agreement.					<b>✓</b>
LAWRENCE AVIATION INDUSTRIES SITE GEOTHERMAL	NY	Port Jefferson Station	Superfund	Unknown	Geothermal	0.05	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.			<b>√</b>		<b>*</b>
EMERSON STREET LANDFILL	NY	Rochester	Landfill	Municipal	Solar PV	2.60	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 approx. 500 passenger vehicles annually.	<b>√</b>		<b>√</b>		
TANNERY ROAD LANDFILL	NY	Rome	Landfill	Municipal	Solar PV	2.80	Wholesale Electricity	2016	Repurposing of otherwise undevelopable land as a solar electric generating project. This electricity supplies a portion of the City of Rome's electrical load at a lower rate than traditionally produced electricity.	<b>~</b>				<b>✓</b>
WEIBEL AVENUE LANDFILL	NY	Saratoga Springs	Landfill	Municipal	Solar PV	2.50	Wholesale Electricity	2017	Expected to generate 40% of city's overall electricity needs and to avoid emissions of approximately 1,605 metric tons of CO2.			<b>✓</b>		<b>✓</b>
SAUGERTIES TOWN LANDFILL	NY	Saugerties	Landfill	Municipal	Solar PV	2.80	Community Owned / Subscription	2020	The Town of Saugerties will purchase 40% of the project's total energy output, according to Town Supervisor Fred Costello Jr. Approximately 800,000 kilowatts of the town's cut will power 80% of town facilities and the savings will ultimately extend to taxpayers. The remainder of the energy produced will be sold to an estimated 150 Saugerties homes and businesses. The company has signed a 25-year lease with the town; the lease agreement costs the company \$30,000 annually and \$15,000 of taxes per year from the project will go toward the county, town and local school system. Residents who switch to energy produced by the solar farm will have guaranteed savings — at least 10% savings on their energy bill.		✓ ·			



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	Municipal	Solar PV	4.00	Wholesale Electricity	2019	The project will provide renewable energy to customers under a 20-year PPA. 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.		< ·	✓   	<b>✓</b>	<b>✓</b>
TONAWANDA LANDFILL	NY	Tonawanda	Landfill	Municipal	Solar PV	2.60	Wholesale Electricity	2019	The system covers about 10 acres and will produce about 2.6 megawatts of electricity, enough to power about 450 homes. Every kilowatt generated will be sold to offset electricity costs for municipal facilities. During the first year of operation the town should save about \$80,000.	<b>1</b>		<b>✓</b>		
TONAWANDA LANDFILL (WALES AVENUE)	NY	Tonawanda	Landfill	Unknown	Solar PV	1.10	Wholesale Electricity	2019	The arrays (installed at the site of the Tonawanda Landfill and on municipal owned buildings), will bring energy costs down for municipal buildings and operations throughout Tonawanda. "The benefits from this project, both fiscal and environmental, are substantial," said Dan Montante, president of Montante Solar. "Not only will the power provided from these panels bring the city's electricity costs down (the arrays will offset upwards of 85% of the city's energy usage), it will also stabilize those energy costs, which can otherwise be unpredictable."	<b>√</b>		✓		
TROY LANDFILL SOLAR 1	NY	Troy	Landfill	Municipal	Solar PV	0.60	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.	1			✓	<b>√</b>
ULSTER COUNTY LANDFILL SOLAR	NY	Ulster	Landfill	Municipal	Solar PV	1.90	Wholesale Electricity	2018	Avoiding the greenhouse gas emissions equivalent to burning 2.4 million pounds of coal or over 5,000 barrels of oil. This installation at the former RRA 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 our expenses which is good news for property taxpayers.			<b>✓</b>		<b>✓</b>
LONG ISLAND SOLAR FARM AT BROOKHAVEN NATIONAL LABORATORY	NY	Upton	Superfund	Federal	Solar PV	32.00	Wholesale Electricity	2011	Created 200 plus full time equivalent jobs during construction, 2 full-time operational jobs. The system also provides price stability for electricity customers of Long Island Public Authority.				✓	<b>√</b>



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HOOSICK FALLS SOLAR GARDEN	NY	Village of Hoosick Falls	Landfill	Municipal	Solar PV	0.59	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.	<b>✓</b>				
WALLKILL LANDFILL	NY	Wallkill	Landfill	Municipal	Solar PV	2.00	Wholesale Electricity	2016	As part of the 20-year contract, Wallkill will earn a flat fee of \$15,000 a year, plus earn money off the power it generates through a deal with utility Orange & Rockland. The Town Supervisor said the earnings are expected to average \$137,000 a year and increase by 2-3% yearly, though the rate could vary	✓	<b>√</b>			
WARWARSING LANDFILL SOLAR	NY	Warwarsing	Landfill	Municipal	Solar PV	1.10	Unknown	2017	The \$2 million installation is being done at no cost to the town by Solar Liberty of Buffalo. The panels will be used to help power town-run buildings. The Town Supervisor said once the project is complete, the town will save about \$31,000 in the first year.	<b>~</b>				<b>√</b>
WILLIAMSON LANDFILL	NY	Williamson	Landfill	Municipal	Solar PV	1.50	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.	<b>✓</b>				
OH - OHIO														
WOOD COUNTY LANDFILL	ОН	Bowling Green	Landfill	Municipal	Wind	7.20	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.			✓		<b>√</b>
BROOKLYN LANDFILL SOLAR	ОН	Brooklyn	Landfill	Municipal	Solar PV	4.00	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.	<b>√</b>	✓			
CUYAHOGA METROPOLITAN HOUSING AUTHORITY	ОН	Cleveland	Brownfields	Municipal	Solar PV	1.10	Wholesale Electricity	2013	Cuyahoga Metropolitan Housing Authority will save several million dollars over the life of the solar panels.	<b>✓</b>				
MEDICAL CENTER COMPANY SOLAR	ОН	Cleveland	Brownfields	Unknown	Solar PV	1.00	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.					<b>√</b>



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DAYTON TECH TOWN	ОН	Dayton	Brownfields	Unknown	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.	~				
THE NATIONAL CENTER FOR MEDICAL READINESS AT CALAMITYVILLE	ОН	Fairborn	Brownfields	Private	Geothermal	-	Onsite Use - General	2005	Although the groundwater onsite is not potable, it was repurposed for use in an energy-saving geothermal system for heating and cooling.					✓
NAPOLEON SOLAR PROJECT	ОН	Napoleon	Landfill	Municipal	Solar PV	3.54	Wholesale Electricity	2012	The facility is connected to the City of Napoleon's electric system, providing transmission savings.	<b>✓</b>				
FORMER NEWARK PROCESSING CO.	ОН	Newark	Brownfields	Municipal	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.					✓
PILKINGTON NORTH AMERICA	ОН	Northwood	Brownfields	Private	Solar PV	0.25	Onsite Use - General	2011	Solar array supplies approximately 12% of the R&D center's power requirements. A feasibility study determined a 2MW system would be built in phases to maximize funding stream and lessen the financial burden through the sale of RECs.		<b>✓</b>			✓
TOLEDO ZOO SOLAR	ОН	Toledo	Brownfields	Private	Solar PV	2.10	Onsite Use - General	2014	The zoo estimates energy savings to be in the range of \$200,000. Installation provides power to Toledo Zoo (about 30% of zoo's total electricity needs).	<b>✓</b>				
OK - OKLAHOMA														
ALTUS AIR FORCE BASE	OK	Altus	RCRA	Federal	Solar PV	0.00	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.			<b>√</b>		
GUTHRIE GREEN	ОК	Tulsa	Brownfields	Foundation	Geothermal w/ solar PV	-	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.	<b>1</b>				



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OR - OREGON														
COLUMBIA RIDGE LANDFILL	OR	Arlington	Landfill Buffer	Private	Wind	100.00	Wholesale Electricity	2004	Columbia Ridge Landfill is a platform for wind power and a demonstration technology project designed to generate either renewable energy or clean fuels.					✓
NORTHWEST PIPE & CASING/HALL PROCESS COMPANY	OR	Clackamas	Superfund	Municipal	Solar PV	0.03	Onsite Use - General	2011	The solar array on-site offsets approximately 30,700 kilowatt hours annually from energy generated from conventional sources.			<b>√</b>		
CORVALLIS MUNICIPAL AIRPORT	OR	Corvallis	Superfund	Municipal	Solar PV	0.10	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					✓
SEQUENTIAL BIODIESEL SOLAR	OR	Eugene	Brownfields	Private	Solar PV	0.03	Rooftop	2006	The roof over the fueling pumps is built of 224 solar modules, some with clear backing to allow the sunlight to shine through, which composes part of a 33.6 kilowatt solar electric system that also keeps you dry while you're getting fuel. Creates a weather tight roof out of solar modules.					<
PA - PENNSYLVANIA														
AMBLER PENNSYLVANIA BOILER HOUSE	PA	Ambler	Brownfields	Private	Geothermal	-	Onsite Use - General	2012	The building is LEED Platinum certified by the U.S. Green Building Council, due in great part to its geothermal heating and cooling system and extensive use of recycled materials during construction.					<b>√</b>
HIGHLAND NORTH WIND	PA	Cambria County	Mine Lands	Various	Wind	75.00	Wholesale Electricity	2012	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		<b>✓</b>			
HIGHLAND WIND	PA	Cambria County	Mine Lands	Private	Wind	62.50	Wholesale Electricity	2009	The 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.		✓		✓	<b>√</b>
FREY FARM LANDFILL	PA	Conestoga	Landfill	Municipal	Wind	3.20	Onsite Use - General	2011	Turbines provide 21-25% of power needs for nearby Turkey Hill Dairy (enough to make five million gallons of ice cream). 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.	✓		<b>√</b>		



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YORK COUNTY LANDFILL SOLAR	PA	Hopewell Township	Superfund	Municipal	Solar PV	0.30	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.			✓		
PALMERTON ZINC PILE	PA	Palmerton	Superfund	Non-profit	Solar PV	0.02	Rooftop	2018	The system is able to produce enough electricity to cover 100% of the building's energy needs and is preventing 49,560 pounds of carbon dioxide emissions each year.	<b>✓</b>		<b>✓</b>		
HAZELWOOD GREEN'S MILL 19 SOLAR	PA	Philadelphia	State Brownfields	Non-profit	Solar PV	2.00	Rooftop	2019	A former brownfield site, 100% of the complex's total electricity usage will be offset by energy generated on site.	~				
PASEO VERDE SOUTH APARTMENTS	PA	Philadelphia	Brownfields	Private	Solar PV	-	Onsite Use - General	2013	Environmentally sensitive features include green and blue roofs, designed to retain and slowly release rainfall to urban storm drains, permeable paving, water gardens to retain and manage water, solar panels, and the use of local, recyclable and renewable materials.					✓
CASSELMAN WIND POWER PROJECT	PA	Traverses Summit, Black, and Addison	Mine Lands	Private	Wind	34.50	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.		~		<b>√</b>	
RI - RHODE ISLAND														
PICILLO FARM	RI	Coventry	Superfund	Various	Wind	1.50	Wholesale Electricity	2016	The Town of West Warwick owns and operates this project and receives net-metering credits for the energy that it produces.	~				
DEXTER STREET SOLAR	RI	East Providence	State Brownfields	Unknown	Solar PV	2.80	Wholesale Electricity	2021	The project will save Rhode Island Public Transit Authority (RIPTA) on electric costs. Under a remote net energy agreement with the project's developer RIPTA will receive energy credits for power generated by the solar panel array. RIPTA officials estimate that buying the credits from Kearsarge will save the transit authority at least \$250,000 annually. The energy installation brought new life to an already-disturbed property in need of remediation. The solar power the site will generate means less carbon emissions and new tax revenue from an underused propriety. The Mayor noted the solar project not only removes millions of pounds of CO2 from the environment, but also produced dozens of job opportunities.	<b>*</b>	<b>✓</b>	<b>✓</b>	✓	✓



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FORBES STREET SOLAR PROJECT I (FSSPI)	RI	East Providence	Landfill	Municipal	Solar PV	3.70	Wholesale Electricity	2014	The 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. Also created jobs. Power will be dedicated to the town, a wastewater treatment plant, and nearby school.		✓		<b>√</b>	
FORBES STREET SOLAR PROJECT II (FSSPII)	RI	East Providence	Landfill	Municipal	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.			<b>√</b>		<b>√</b>
A STREET FACILITY SOLAR	RI	Johnston	Landfill	Municipal	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.		<b>√</b>			<b>√</b>
NORTH PROVIDENCE LANDFILL	RI	North Providence	RCRA	Municipal	Solar PV	2.60	Wholesale Electricity	2018	Expected to provide approximately \$120,000 in new revenue annually and to generate enough power to supply electricity to roughly 2500 homes annually		<b>√</b>	<b>√</b>		
ROSE HILL LANDFILL	RI	South Kingston	Superfund	Municipal	Solar PV	4.70	Wholesale Electricity	2018	The solar array came 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 facility. 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:  Tons of Annual Carbon Dioxide Offset: Approx. 9,343  Number of Average Homes Powered Annually: 924		✓	<b>✓</b>		<b>✓</b>



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
UNIVERSITY OF RHODE ISLAND (URI) DISPOSAL AREA	RI	South Kingston	Superfund	University	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: Tons of Annual Carbon Dioxide Offset: Approx. 9,343 Number of Average Homes Powered Annually: 924		✓	✓		<b>✓</b>
WEST KINGSTON TOWN DUMP	RI	South Kingston	Superfund	Municipal	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: Tons of Annual Carbon Dioxide Offset: Approx. 9,343 Number of Average Homes Powered Annually: 924		✓	✓		✓
KILVERT STREET SOLAR	RI	Warwick	State Brownfields	Municipal	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.		✓	✓		
SC - SOUTH CAROLINA														
SAVANNAH RIVER'S BIOMASS STEAM PLANT	SC	Aiken	Superfund	Federal	Biomass	20.00	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).	<b>√</b>			<b>√</b>	
MYRTLE BEACH LANDFILL	SC	Myrtle Beach	Landfill	Unknown	Solar PV	2.00	Wholesale Electricity	2020	The solar project is estimated to produce enough electricity to supply 305 average South Carolina households. The city made sure the site was attractively landscaped to enhance the bike path.			✓		



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TN - TENNESSEE														
BRISTOL DEMOLITION LANDFILL	TN	Bristol	Landfill	Municipal	Solar PV	0.20	Wholesale Electricity	2012	The city leases the land for \$6,000 annually and sells the electricity generated at the landfill site to TVA via the local energy provider, Bristol Tennessee Essential Services (BTES), 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% of the revenue generated from the system and EES gets 90%. 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.		✓	✓		✓
VOLKSWAGEN CHATTANOOGA	TN	Chattanooga	RCRA	Private	Solar PV	9.50	Wholesale Electricity	2013	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.			<b>✓</b>		<b>✓</b>
BINKLEY SOLAR FARM	TN	Hermitage	Landfill	Private	Solar PV	0.20	Wholesale Electricity	2012	Solar generates power for the Binkley's construction recycling operation at the site. Binkley family expects to recoup investment by 2018. First landfill solar installation in TN.	<b>✓</b>				
RSI BRIGHTFIELDS ONE	TN	Oak Ridge	Superfund	Private	Solar PV	1.25	Wholesale Electricity	2012	Used TN-produced solar panels.					✓
SOMERVILLE SOLAR PROJECT	TN	Somerville	Landfill	Municipal	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.			✓		
TX-TEXAS														
PANTEX RENEWABLE ENERGY PROJECT (PREP)	TX	Amarillo	Superfund	Federal	Wind	11.50	Onsite Use - General	2014	Project will provide an estimated \$2.8M annual energy savings for DOE.	<b>✓</b>				
GROVE LANDFILL	TX	Austin	Landfill	Non-profit	Solar PV	-	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.			<b>√</b>		



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TESSMAN ROAD MUNICIPAL SOLID WASTE LANDFILL	TX	San Antonio	Landfill	Private	Solar PV	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.					<b>√</b>
CENTRAL TEXAS VETERANS LANDFILL SOLAR	TX	Temple	Landfill	Federal	Solar PV	2.94	Onsite Use - General	2012	Installation saves the U.S. Department of Veterans Affairs \$300,000 per year in energy costs	<b>√</b>				
UT - UTAH														
SALT LAKE CITY LANDFILL	UT	Salt Lake City	Landfill	Municipal	Solar PV	1.00	Unknown	2014	Combined with a solar installation on its roof, landfill solar allow the city public safety building to achieve net zero energy.			✓		<b>✓</b>
VA - VIRGINIA														
BEDFORD SOLAR FARM	VA	Bedford	Landfill Buffer	Municipal	Solar PV	3.30	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	State Brownfields	Private	Solar PV	0.00	Onsite Use - Green Remediation	2007	Avoids costs and greenhouse gas emissions associated with consumption of grid electricity during the treatment process.	~		<b>✓</b>		
STONE BREWING COMPANY	VA	Richmond	Brownfields	Private	Solar PV	-	Rooftop	2016	This facility has pursued LEED Silver certification through the use of eco-friendly materials and design practices that include 100,000 square-feet of photovoltaic solar panel.					<b>✓</b>
SALEM VA MEDICAL CENTER SOLAR	VA	Salem	Landfill	Federal	Solar PV	1.60	Onsite Use - General	2013	Will provide 10% of campus electricity needs, saving the VA about \$160,000 in costs each year.	<b>V</b>				
VI - VIRGIN ISANDS														
FORMER ST. CROIX ALUMINA PLANT SOLAR I	VI	St Croix	RCRA	Unknown	Solar PV	0.00	Onsite Use - Green Remediation	2003	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. (Benefits are from multiple projects.)			<b>√</b>		
FORMER ST. CROIX ALUMINA PLANT SOLAR II	VI	St Croix	RCRA	Unknown	Solar PV	0.00	Onsite Use - Green Remediation	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. (Benefits are from multiple projects.)			<b>√</b>		



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FORMER ST. CROIX ALUMINA PLANT WIND I	VI	St Croix	RCRA	Unknown	Wind	-	Onsite Use - Green Remediation	2002	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. (Benefits are from multiple projects.)			✓		
FORMER ST. CROIX ALUMINA PLANT WIND II	VI	St Croix	RCRA	Unknown	Wind	-	Onsite Use - Green Remediation	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. (Benefits are from multiple projects.)			✓		
VT - VERMONT														
WINDHAM SOLID WASTE MANAGEMENT DISTRICT	VT	Brattleboro	Landfill	Municipal	Solar PV	5.00	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.		<b>√</b>			✓
COVENTRY LANDFILL	VT	Coventry	Landfill Buffer	Private	Solar PV	2.70	Wholesale Electricity	2015	System produces 3,029 MWh per year.			<b>✓</b>		
HARTFORD VT LANDFILL SOLAR	VT	Hartford	Landfill	Municipal	Solar PV	1.00	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.	<b>√</b>				
LONG VIEW FOREST SOLAR	VT	Hartland	State Brownfields	Private	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	Brownfields	Private	Solar PV	0.49	Wholesale Electricity	2018	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	Brownfields	Private	Solar PV	0.50	Wholesale Electricity	2018	Benefit to Lyndonville Electric Company for Lyndonville Solar West and East combined over life of contract is expected to be \$150,000-\$200,000					✓
THE CREAMERY	VT	Richmond	Brownfields	Private	Solar PV	-	Onsite Use - General	2018	Fully net zero buildings through solar arrays.			<b>✓</b>		



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RUTLAND LANDFILL (STAFFORD HILL)	VT	Rutland	Landfill	Municipal	Solar PV	2.30	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.		<b>✓</b>			
SOUTH BURLINGTON LANDFILL	VT	South Burlington	Landfill	Municipal	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," said South Burlington City Manager Kevin Dorn.	<b>√</b>				✓
ELIZABETH MINE SUPERFUND SITE	VT	Strafford	Superfund	Private	Solar PV	7.00	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 offset 6,000 tons of CO2 annually, equal to emissions from the combustion of 14,000 barrels of oil; equal the carbon sequestration from almost 5,000 acres of forest; and provides electricity sufficient to power 1,200 homes annually			<b>√</b>	<b>√</b>	<b>√</b>
TOWNSHEND LANDFILL	VT	Townshend	Landfill	Municipal	Solar PV	0.15	Community Owned / Subscription	2014	Community solar project providing power to 15 residences as well as the town hall and town library.					<b>√</b>
WALLINGFORD SAND AND GRAVEL SOLAR	VT	Wallingford	State Brownfields	Private	Solar PV	3.20	Wholesale Electricity	2019	The solar panel ground-mount array is projected to produce 3,291,000 kilowatt hours of electricity in its first year. The estimated carbon offset is equivalent to the CO2 emissions from 406 homes' electricity use for one year and 296,750,995 smartphones charged.			<b>✓</b>		
GOODYEAR INDUSTRIAL CAMPUS	VT	Windsor	Brownfields	Non-profit	Solar PV	0.50	Onsite Use - General	2019	The solar array system that contributes towards both the town's and region's renewable energy goals. All renewable energy generated from the array is being purchased locally. The lease payments from the operator of the solar array will help pay off the cleanup loan and invest in the local businesses in this area.		<b>√</b>	<b>✓</b>		✓



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WI - WISCONSIN														
BELOIT COAL ASH LANDFILL	WI	Beloit	Landfill	Private	Solar PV	2.30	Wholesale Electricity	2016	Generates clean power for 500 local households.			<b>V</b>		
SKY PARK SOLAR	WI	Eau Claire	Landfill	Private	Solar PV	1.00	Community Owned / Subscription	2017	Community solar project. Revenue neutral for Pcel Energy; consumers who purchase panels will receive credits for 25 years. The city receives lease revenue from developer. The city offsets 100% of power for their municipal swimming pool with 116kW in credits from the installation.		<b>√</b>			<b>\</b>
REFUSE HIDEAWAY LANDFILL	WI	Middleton	Superfund	State	Solar PV	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 a year. Energy from the system is then returned to the power grid, and the DNR is credited on its next energy bill.			<	<b>\</b>	
MATC PV EVALUATION LAB	WI	Milwaukee	Landfill	Private	Solar PV	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.	*				<b>√</b>
WV - WEST VIRGINIA			·	<u>'</u>	•	,								
AMERICAN PUBLIC UNIVERSITY SYSTEM ACADEMIC CENTER	WV	Ranson and Charles Town	Brownfields	University	Solar PV	-	Rooftop	2010	The building earned gold certification under the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) program, thanks in part to the building's energy-efficient design and solar panels on the roof that provide a portion of the facility's energy.					✓
AMERICAN PUBLIC UNIVERSITY SYSTEM FINANCIAL CENTER	WV	Ranson and Charles Town	Brownfields	University	Solar PV	-	Onsite Use - General	2012	The solar array provides approximately half the energy required to run the financial center—that's enough electricity to power 30 average-sized homes. The parking lot also includes 14 charging stations that employees, visitors and residents can use to recharge their electric or hybrid vehicles.			<b>√</b>		<b>√</b>
CHEVRON CASPER WIND FARM	WY	Casper	RCRA	Private	Wind	16.50	Wholesale Electricity	2009	Created approximately 20 construction jobs, 1.5 permanent jobs.				<b>✓</b>	



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
WARREN AFB WIND	WY	Cheyenne	Superfund	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.	<b>✓</b>				
DAVE JOHNSTON MINE / GLENROCK WIND I	WY	Glenrock	Mine Lands	Private	Wind	118.50	Wholesale Electricity	2008	The three systems produce enough electricity to supply 66,800 households for one year.			<b>√</b>		
DAVE JOHNSTON MINE / GLENROCK WIND III	WY	Glenrock	Mine Lands	Private	Wind	39.00	Wholesale Electricity	2009	The three systems produce enough electricity to supply 66,800 households for one year.			✓		
AMERICAN PUBLIC UNIVERSITY SYSTEM ACADEMIC CENTER	WV	Ranson and Charles Town	Brownfields	University	Solar PV	-	Rooftop	2010	The building earned gold certification under the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) program, thanks in part to the building's energy-efficient design and solar panels on the roof that provide a portion of the facility's energy.					✓
AMERICAN PUBLIC UNIVERSITY SYSTEM FINANCIAL CENTER	WV	Ranson and Charles Town	Brownfields	University	Solar PV	-	Onsite Use - General	2012	The solar array provides approximately half the energy required to run the financial center—that's enough electricity to power 30 average-sized homes. The parking lot also includes 14 charging stations that employees, visitors and residents can use to recharge their electric or hybrid vehicles.			<b>√</b>		<b>√</b>
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	WY	Glenrock	Mine Lands	Private	Wind	118.5	Wholesale Electricity	2008	The three systems produce enough electricity to supply 66,800 households for one year.			✓		
DAVE JOHNSTON MINE / GLENROCK WIND III	WY	Glenrock	Mine Lands	Private	Wind	39	Wholesale Electricity	2009	The three systems produce enough electricity to supply 66,800 households for one year.			<b>√</b>		
WARREN AFB WIND	WY	Cheyenne	Superfund	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.	<b>✓</b>				

