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Alternative Energy Projects at Superfund Sites Status Update and Highlights from across the Country September 2017

Alternative Energy Installations – September 2017

As of September 2017, alternative energy¹ facilities are located at 51 Superfund sites. They support 53 alternative energy projects with an installed capacity of over 320 megawatts (MW).² Nearly twothirds are solar powered. Wind, solar and landfill gas facilities make up about 90 percent of the projects. 63 percent of these efforts have an installed capacity of 1 MW or more. The largest current alternative energy facility is a 37.5-MW biomass

Alternative Energy at Superfund Sites

Number of Superfund Sites:	51	
Installed Capacity (MW):	320	
Estimated Annual Output (MWh):	888,553*	
* Output information publicly available for 35 of the 51 sites.		

energy plant at the Gallup's Quarry site in Connecticut. About 31 percent of these projects offset on-site energy demands of cleanup efforts or directly power site-related cleanup activities.

EPA's Superfund Redevelopment Initiative (SRI) also tracks renewable energy projects at Superfund sites that are in the planning and construction stages. Projects under development include a 6-MW solar project at the Nyanza Chemical Waste Dump in Massachusetts, a 1-MW solar project at the Somersworth Landfill in New Hampshire and a 3-MW solar project at Pacific Coast Pipe Lines in California.



¹ Alternative energy is defined here as non-fossil and non-nuclear based sources of energy.

² These figures are estimates. They are based mainly on publicly available information.

Alternative Energy Installations, by Superfund Site

Site	Site ID	Technology Type
AEROJET GENERAL CORP.	CAD980358832	solar
APACHE POWDER CO.	AZD008399263	solar
	AZD008399263	wind
BETHLEHEM STEEL CORP /LACKAWANNA PLANT ³	NYD002134880	wind
BRICK TOWNSHIP LANDFILL	NJD980505176	solar
BROOKHAVEN NATIONAL LABORATORY (USDOE)	NY7890008975	solar
CAMP PENDLETON MARINE CORPS BASE	CA2170023533	solar
CENTRAL LANDFILL	RID980520183	landfill gas
CHARLES GEORGE RECLAMATION TRUST LANDFILL	MAD003809266	solar
CHEVRON QUESTA MINE	NMD002899094	solar
CONTINENTAL STEEL CORP.	IND001213503	solar
	IND001213503	wind
E.I. DU PONT DE NEMOURS & CO., INC. (NEWPORT PIGMENT PLANT LANDFILL)	DED980555122	solar
ELIZABETH MINE	VTD988366621	solar
ELLSWORTH AIR FORCE BASE	SD2571924644	solar
F.E. WARREN AIR FORCE BASE	WY5571924179	wind
FMC CORP. (FRIDLEY PLANT)	MND006481543	solar
FORT DETRICK AREA B GROUND WATER	MDD985397249	solar
FORT DIX (LANDFILL SITE)	NJ2210020275	solar
FRONTIER FERTILIZER	CAD071530380	solar
GALLUP'S QUARRY	CTD108960972	biomass
GE - HOUSATONIC RIVER	MAD002084093	solar
GROVELAND WELLS	MAD980732317	solar
INTERMOUNTAIN WASTE OIL REFINERY	UT0001277359	solar
IRON HORSE PARK	MAD051787323	solar
JET PROPULSION LABORATORY (NASA)	CA9800013030	solar
LANDFILL & DEVELOPMENT CO.	NJD048044325	solar
LAWRENCE AVIATION INDUSTRIES, INC.	NYD002041531	geothermal
LAWRENCE LIVERMORE NATIONAL LABORATORY	CA2890012584	solar
LOWRY LANDFILL	COD980499248	landfill gas
MARSHALL LANDFILL	COD980499255	solar
MARTIN-MARIETTA, SODYECO, INC.	NCD001810365	biomass
NATIONAL SEMICONDUCTOR CORP.	CAD041472986	solar
NEBRASKA ORDNANCE PLANT (FORMER)	NE6211890011	wind
NORTH CAROLINA STATE UNIVERSITY (LOT 86, FARM UNIT #1)	NCD980557656	solar
OAK RIDGE RESERVATION (USDOE)	TN1890090003	solar
OMEGA HILLS NORTH LANDFILL	WID000808568	landfill gas
OTIS AIR NATIONAL GUARD BASE/CAMP EDWARDS	MA2570024487	wind
PANTEX PLANT (USDOE)	TX4890110527	wind
PEMACO MAYWOOD	CAD980737092	solar

Site	Site ID	Technology Type
PETERSON/PURITAN, INC.	RID055176283	solar
PICILLO FARM	RID980579056	wind
PINE BEND SANITARY LANDFILL	MND000245795	landfill gas
REFUSE HIDEAWAY	WID980610604	solar
REILLY TAR & CHEMICAL CORP. (INDIANAPOLIS PLANT)	IND000807107	solar
RE-SOLVE, INC.	MAD980520621	solar
SAVANNAH RIVER SITE (USDOE)	SC1890008989	biomass
SOUTHSIDE SANITARY LANDFILL	IND980607360	landfill gas
SULLIVAN'S LEDGE	MAD980731343	solar
SUMMITVILLE MINE	COD983778432	hydroelectric
TUCSON INTERNATIONAL AIRPORT AREA	AZD980737530	solar
W.R. GRACE & CO., INC. (ACTON PLANT)	MAD001002252	solar
YORK COUNTY SOLID WASTE AND REFUSE AUTHORITY LANDFILL	PAD980830715	Solar
Notes:		
³ Not on NPL		
USDOE – U.S. Department of Energy		

Alternative Energy Spotlight: L&D Landfill – Community Solar Supports Utility-Scale Project on Underutilized Site

In 2016, the Public Service Electric and Gas Company (PSE&G) completed construction of a 12.93 MW solar farm on the Landfill & Development Co. Superfund site in Burlington County, New Jersey. PSE&G owns and operates the solar farm as part of its Solar 4 All Program. Solar 4 All is a community solar (sometimes called "shared solar") program which focuses on solar development at landfills and brownfields in New Jersey, giving new purpose to land that would otherwise have limited development opportunities.

Community solar refers to a type of solar project development that allows members of a community to own a stake in or subscribe to the energy output of a solar project and see the value of electricity generated reflected on their utility bills. Community solar projects can be utility owned, third party owned or community/special purpose entity (SPE) owned. A community solar development approach provides opportunity to invest in a solar project not otherwise available to community members i.e., people that can't or don't want to put solar on their roof due to ownership, high up front cost, space or shading limitations.



More information on Community Solar: <u>https://www.epa.gov/sites/production/files/2016-</u> 12/documents/epa repowering community solar discussion paper final 120716 508.pdf

Video of Landfill (Not EPA): <u>https://www.youtube.com/watch?v=WSu7QhrESmY</u>

For more information about EPA's Superfund Redevelopment Initiative, visit: <u>http://www.epa.gov/superfund redevelopment initiative</u>.