

Environment & Science

A new approach to energy: Using old landfill sites to generate solar power

David Gorn November 18 2016

Workers install solar panel frames at the Milliken Landfill in Ontario. DAVID GORN

SLIDESHOW



Sprinkled throughout Southern California are large pockets of toxic land, vacant 100-plus-acre warts of unusable space — most of it old landfills. Now there’s a movement to rehabilitate those sites by using them for alternative energy projects, transforming huge hills of debris into generators of wind, methane gas and solar energy.

These efforts help cut greenhouse gas emissions, create jobs, make a little cash for local communities and in some cases help clean up the site itself.

Milliken landfill is one of those sites. Closed since 1999, it rises like a small mountain near Ontario International Airport, with one of the best views in the area.

On the flat stretch of land at the top of the landfill, Mary Esper supervises the installation of a large solar project by the Brea-based PV Navigator. It's expected to start generating electricity by the end of this year.

Two dozen men in hardhats and yellow vests brace themselves as they set up hundreds of metal frames that will hold almost 10,000 solar panels.

The tricky challenge of building on a landfill

The completed frames sit in large black plastic tubs that resemble tall, round plastic wading pools. They're evidence of how tricky it is to build up here.

Because this is a closed landfill, construction crews aren't allowed to drill into it for support, so they pour 4,500 pounds of concrete into each plastic tub – a little more than one cubic yard of concrete per tub — to form the solid feet for the array of solar panels.

This site is just one of about 30 large toxic dumps littering Southern California's urban landscape.

At his office in Brea, PV Navigator President Ian Webster points out all of the landfill sites in Los Angeles, Riverside and Orange counties on a giant wall map. They ring the dense L.A. area like a chunky necklace.

"Historically, these landfills — they were on the edge of the boundaries between cities," Webster explains. "As the Los Angeles basin has infilled [over] time, these landfills are now completely surrounded by homes."

MORE FROM THIS TOPIC
Infrastructure

- November 18 2016 Using old landfill sites to generate solar power
- November 17 2016 Consumer advocates seek interest for overbilled DWP customers
- October 26 2016 Culver City, Newport Beach to sue FAA over new flight paths

POPULAR NOW ON KPCC

- November 18 2016 Meet the alt-right of LA
- November 16 2016 Leonard Cohen died in sleep after fall, manager says
- November 16 2016 Californians are already having their marijuana charges downgraded

