#### July 2015 | Issue 14



# News Digest from EPA's RE-Powering America's Land Initiative

# 📐 S P O T L I G H T

RE-Powering to Release Electronic Decision Tree Tool

#### **Electronic Decision Tree**

RE-Powering is excited to announce the upcoming release of its electronic decision tree! The decision tree guides users through a process to screen sites for suitability for solar photovoltaic (PV) or wind installations.

Although the RE-Powering screening tool does not substitute for a detailed site-specific assessment, it does offer context-specific information regarding the various considerations that go into such screenings. It is designed such that experienced professionals can quickly navigate through the decision tree, while less experienced stakeholders can access additional information as they make their way through the questions. The tool has two basic modules: (1) one module in which users are presented with a series of questions suitable for yes, no, or "skip" responses and a brief contextual text to assist in answering such questions; and (2) a second module, referred to as a "companion guide," that serves to provide additional insight or strategies for responding to screening criteria.

Look for this tool coming soon!

#### **Our Mission**

EPA launched *RE-Powering America's Land:* Siting Renewable Energy on Potentially Contaminated Lands, Landfills and Mine Sites to encourage the siting of renewable energy on thousands of currently and formerly contaminated properties across the nation.

#### Get Updates from RE-Powering

Click to subscribe to EPA's RE-Powering Listserv

EPA recently launched <u>@EPAland</u> on Twitter to help you learn about what is being done to protect and clean up our land. Stay up to date on topics including <u>site cleanups</u>, learn about <u>renewable energy technologies</u> on contaminated sites, <u>sustainable materials</u> <u>management</u>, and understand how EPA responds to <u>hazardous material emergencies</u>. Follow <u>@EPAland</u> and join the conversation: <u>https://twitter.com/@EPAland</u>



## Success Story – EPA Administrator Visits RE on CL Site

In May, EPA Administrator Gina McCarthy visited the closed and capped West Winton landfill in Hayward, Calif., which is set to host 19,000 solar panels by next year. The 60-acre landfill is a highlight of the <u>Regional Renewable Energy Procurement</u> (R-REP) arrangement, a coordination of 19 public agencies working together to build 186 solar energy projects throughout Alameda, Contra Costa, San Mateo and Santa Clara counties. West Winton is in Alameda County. "This site is a model example of an innovative project that is cutting carbon pollution and fighting climate change," said Administrator McCarthy. "The potential benefits of contaminated land-siting opportunities are big; if solar PV were located on even a modest percentage of contaminated and landfill sites in California tracked by EPA, it would be enough to power hundreds of thousands of homes."

Upon completion, West Winton will be the largest solar landfill installation in developer SunEdison's portfolio and will produce enough energy to power 1,200 homes. The installation will contribute 6.6 megawatts (MW) to R-REP, more than 20% of the collaboration team's planned 31 MW. Over the 20-year lifespan of the panels, the project is predicted to help cut Alameda County's energy costs by more than \$15 million.

### Focus On – Washington County, Maryland

Washington County, Maryland, is positioning itself as a solar leader with its plan for the <u>installation of</u> <u>more than 20 MW of solar</u> on more than 130 acres at various sites throughout the county. The solar projects are being installed in phases and are expected to be completed in 2016.

The plan includes solar installations on three county landfills: 2 MW at the active Forty West Landfill, 2.5 MW at a dormant county rubble landfill, and up to 4 MW at the closed Resh Road Landfill. The Forty West and rubble landfill installations are complete, and Resh Road is in progress.

The county solar plan results from a public-private partnership comprising the county, Spear Point Energy, EPG Solar, and Northern Energy & Power. EPG Solar will finance, install, and own the solar systems, which are being constructed at no cost to the county. Once completed in 2016, the portfolio of solar projects will fully offset the county's annual electricity usage of 14–15 MW. Annual benefits to the county are expected to include more than \$375,000 in rent and an estimated \$100,000 in energy cost savings.

#### **Tribes Look to Renewable Energy to Remediate Brownfields**

Many tribes, particularly in the West and Alaska, are dealing with <u>contamination on reservation lands</u>, which are often located near mining or other polluting industries. Increasingly, tribes are turning to renewable energy to accompany or facilitate brownfield cleanup, and some are receiving EPA assistance to do so. In 2014, EPA announced a \$200,000 Brownfields grant for the <u>Ute Mountain Ute</u> <u>Tribe</u> in support of the tribe's efforts to clean up the Old Towaoc landfill near Towaoc, Colo. Redevelopment plans for the site include solar panels for use on-site at the Ute Mountain Ute Reservation. The U.S. Department of Energy's (DOE's) Tribal Energy Program <u>funded a solar feasibility</u> study for the tribe in 2012.

The Tribal Energy Program maintains a list and map of tribal energy projects.



EPA Administrator Gina McCarthy at the West Winton Landfill Event

Using publically available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills. To date, the RE-Powering Initiative has identified over 150 completed projects with a cumulative capacity of over 1 gigawatt. Find out more in RE-Powering's Project Tracking Matrix.

Want to learn more about the RE-Powering Initiative? See RE-Powering's new <u>Program Overview</u> to learn more about the Initiative's tools and resources, as well as about the benefits associated with siting renewable energy developments on contaminated properties.

#### In the News

#### City of Richmond Trains Renewable Energy Workforce

RE-Powering America's Land partners with <u>EPA's Environmental Workforce Development and Job</u> <u>Training Grants Program</u>, which provides competitive grant funding to recruit, train and place unemployed and under-employed residents, including low-income and minority residents, of solid and hazardous waste affected communities. Such funding is available to nonprofit organizations and governmental entities who provide residents with the skills and certifications needed to secure fulltime employment in the environmental field.

These grants can be used to support a variety of environmental training which would include training in the installation of technologies that use alternative energy or alternative fuels. One grantee in particular, the <u>City of Richmond, California</u>, demonstrates the real world environmental career opportunities these training programs can help create in the renewable energy sector.

<u>RichmondBUILD</u>, a public-private partnership that the city launched in 2006, trains local residents for careers in the fast-growing, high-wage environmental and construction industries. The EPA's environmental job training program allows RichmondBUILD to prepare participants for work in the renewable energy field, as well as in the assessment, cleanup and reuse of brownfields and Superfund sites. Investments in renewable energy, in particular, are on the rise. "Clean energy jobs are the future," says Sal Vaca, Director of Employment and Training at RichmondBUILD. "Under the EPA training grant, our program has been able to support the solar investments that are a priority in California."

Interest in renewable energy has also inspired some local residents to install solar panels on their homes. Three RichmondBUILD graduates were hired by SolarCity to install panels on residential units in the area. Since graduating as part of cohort 25 in November 2014, Julius Guillebeau, Endy Varela and Victor Naives have had steady work as installers, earning \$15 per hour and building their resumes as skilled workers.

As of today, the City of Richmond has placed over 40 graduates in solar jobs, including more than 25 graduates hired by Marin Clean Energy to work on an upcoming solar project that will be installed on a brownfield site. Since 2009, over 250 people have been trained through EPA's Environmental Workforce Development and Job Training Grants Program, with nearly 200 finding employment.

#### USDA Invests \$6.7 Million in 544 Renewable Energy and Energy Efficiency Projects Nationwide

On June 10, U.S. Department of Agriculture (USDA) Secretary Tom Vilsack <u>announced that the agency</u> <u>is investing more than \$6.7 million</u> in 544 renewable energy and energy efficiency projects across the nation. <u>The USDA's Rural Energy for America Program</u> provides grants and guaranteed loan financing to agricultural producers and small businesses in rural areas for installing renewable energy systems or for energy efficiency projects. Funds are distributed on a continuous cycle and can be used for the purchase, installation, and construction of biomass, geothermal, small hydropower, wind, solar, and ocean renewable energy systems.

#### **Obama Administration Announces Key Initiatives to Support Solar Energy**

In partnership with the DOE and U.S. Department of Defense, President Obama announced the expansion of the <u>Solar Ready Vets</u> program in April. This project expansion follows the success of solar pilot programs on three bases in 2014. Two of the bases, Camp Pendleton in California and Fort Carson in Colorado, have solar facilities sited on decommissioned landfills.

The President also <u>announced in July</u> the Administration's intent to address climate change, promote clean energy, and create jobs by increasing access to solar energy, especially in low- and moderate-income communities. The initiative includes steps to increase community solar, such as the establishment of a National Community Solar Partnership. Contaminated land sites are being increasingly used for community solar installations, which provide access to solar for residents who do not own their roofs or are otherwise precluded from installing solar.

# **Upcoming Events**



# Join us in Chicago: September 2-4

Brownfields Training Conference. September 2-4, 2015, Chicago, Illinois. This is the premier conference and trade show focused on environmental revitalization and economic redevelopment. The 2015 Brownfields Conference includes three days of training, networking, and business development. Come learn more about the RE-Powering Initiative at a number of sessions, including:

• *RE-Powering Affiliate Meeting*. September 3, 11:30 AM–12:30 PM. RE-Powering is sponsoring an informal discussion of the process, barriers, and strategies associated with the development of renewable energy on brownfields and other contaminated properties. Come share your experiences and learn about ways to pursue renewable energy on brownfields and accrue the associated economic and environmental benefits.

- Getting Past Liability Concerns to Find Value When Planning for Renewables on Contaminated Properties. September 2, 4:50 PM-5:20 PM. This session will provide an overview of the common liability concerns related to siting renewable energy projects on properties with former or current contamination concerns. In addition, federal and state resources and policy tools specific to these types of projects will be discussed, and strategies for getting past potential liability issues will be identified. The session will also provide an opportunity for participants to ask questions about real and perceived liability issues at sites in their communities and learn how to get these projects done.
- Exploring Renewable Energy on Brownfields and Landfills: RE-Powering America's Land Electronic Decision Tree Tool. September 3, 10:15 AM–10:45 AM. This session will provide an interactive demonstration of RE-Powering America's Land's Electronic Decision Tree tool, which provides users the ability to consider site-specific characteristics in their evaluation of the property's renewable energy potential for either solar or wind. These decision trees walk the user through a series of questions to allow the user to document site attributes, explore site potential, and learn about available resources and next steps. The session will discuss the many factors that contribute to the renewable energy potential of a site, including technical potential, load considerations, the policy/regulatory context of such investments, and economics.

<u>Renewable Energy Markets 2015.</u> October 18–20, 2015, Washington, D.C. The Renewable Energy Markets conference convenes clean energy stakeholders–including generators, marketers, utility representatives, purchasers, policymakers, and regional stakeholders– to discuss issues related to national and international markets for renewable energy. The event is organized by the nonprofit Center for Resource Solutions and co-sponsored by the U.S. Environmental Protection Agency's Green Power Partnership program.

#### **Upcoming and Recent Webinars**

**WINDExchange Webinar: The Wind Vision,** U.S. Department of Energy, July 15, 2015. The DOE's WINDExchange hosted a <u>webinar</u> July 15, 2015, to introduce and discuss the DOE <u>Wind Vision</u> analysis and report. DOE and national laboratory representatives reviewed the *Vision*, which assesses the effects of a scenario in which U.S. wind power supplies 10% of the nation's electrical demand in 2020, 20% in 2030, and 35% in 2050. Presenters also discussed the roadmap to achieving the *Vision*.

**Bringing Alternative Energy Projects to Superfund Sites**, U.S. Environmental Protection Agency, June 25, 2015. Nationally, Superfund sites have been put back into beneficial use producing energy from solar, wind, hydro-electric, biomass, and landfill gas-to-energy projects. <u>This archived EPA-sponsored</u> <u>webinar</u> explores several site-specific case study examples and details how the potential for alternative energy was assessed, steps to facilitate reuse that would also be compatible with the remedy, and any economic or environmental incentives used to make these projects fiscally possible.

#### **New Resources**

energy on recycled land.

Climate Change in the United States: Benefits of Global Action. EPA's new report examines how the impacts and damages of climate change in the United States can be avoided or reduced with global action. The report summarizes peer-reviewed results from the Climate Change Impacts and Risk Analysis (CIRA) project, which looked at more than 20 sectors related to health, infrastructure, electricity, water resources, agriculture and forestry, and ecosystems, and examined two possible futures: one in which we do nothing to reduce carbon pollution, and one with global action. The CIRA analysis shows that the United States can achieve major benefits with global action to curb greenhouse gas

emissions. One way to curb these emissions is through clean renewable



<u>Effective Practices for Implementing Local Climate and Energy Programs</u>. EPA recently published a series of 19 tip sheets covering topics such as marketing and communications (effective messaging, traditional media strategies, community-based social marketing, and testimonial videos) and working with specific types of stakeholders (institutional partners, contractors, experts, utilities, early adopters, volunteers). The tip sheets are based on the experience and expertise of EPA's Climate Showcase Communities.

<u>U.S. Wind Industry First Quarter 2015 Market Report</u>. According to this new publication from the American Wind Energy Association, the U.S. wind energy industry installed 131 MW and 68 turbines in the first quarter of 2015. The United States now has an installed wind capacity of 66,008 MW generated by 48,000 turbines, with more than 13,000 MW under construction.

<u>Analysis of the Impacts of the Clean Power Plan.</u> This U.S. Energy Information Administration report analyzes the EPA's Clean Power Plan and examines indicators of the proposed rule's impacts on energy markets under varying assumptions regarding economic growth, electricity demand, and fuel prices.

<u>NREL Model Leases and PPAs.</u> The National Renewable Energy Laboratory (NREL) provides samples of leases and Power Purchase Agreements for solar customers and installers to use as a template.

To Own or Lease Solar: Understanding Commercial Retailers Decisions to Use Alternative Financing Models. This NREL report breaks down the costs and benefits of different financing models for PV solar.

<u>Best Practices Handbook for the Collection and Use of Solar Resource Data for Solar Energy</u> <u>Applications.</u> This NREL handbook helps industry leaders collect and solar resource information at every step in the solar energy project. Before a solar installation can occur, information regarding the quality and reliability of a fuel source must be understood by the developer. <u>NREL Report Shows Big Potential for the Future of Shared Solar</u>. A new NREL report estimates the market potential for shared solar and shows how shared solar programs could vastly expand the customer base for solar energy.

<u>A Review of Avian Monitoring and Mitigation Information at Existing Utility-Scale Solar Facilities.</u> This report by NREL and Argonne National Laboratory assesses the incidence, monitoring, and mitigation of avian fatality at solar energy facilities. It summarizes bird fatalities from solar installations, which can occur through collision with the project site or result in habitat degradation and fragmentation.

<u>Community Renewable Energy Development Information</u>. DOE's Green Power Network recently revised and expanded its Frequently Asked Questions related to community renewable energy development to help state policymakers, utilities, and consumers understand how to design and implement community solar programs.

# **Contact Us**

For more information, contact Marc Thomas via email at <u>thomas.marc@epa.gov</u> or visit <u>http://epa.gov/renewableenergyland/.</u>

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