

# RENEW300

INCREASING RENEWABLE ENERGY FOR LOW-INCOME FAMILIES



*Solar photovoltaic (PV) panels on the roofs of North Lincoln Homes; the Denver Housing Authority is a Renew300 Partner (Denver, CO)*

## EXPANDING CLEAN ENERGY ACCESS TO ALL AMERICANS UNDER RENEW300

**HUD's Renew300 initiative triples the federal renewable energy target set in the President's Climate Action Plan from 100 megawatts to 300 megawatts.** Launched in 2013, the President's Climate Action Plan calls for a target of 100 megawatts (MW) of installed capacity of on-site renewable energy at federally subsidized housing by 2020. In July 2015, HUD and the U.S. Department of Energy (DOE) partnered to expand this target to 300MW by allowing the inclusion of community and shared solar systems, thus launching the Renew300 initiative. By allowing community and shared solar, interested building owners and residents can now participate towards this goal, regardless of whether their properties are suited for on-site renewable energy generation systems.

**Renewable energy has very real economic and ecological benefits, encouraging clean jobs for our communities and driving the economy.** According to solar provider Everyday Energy, solar photovoltaics produced more jobs per unit than fossil fuel or other renewables, with over 100,000 workers currently employed in the solar power industry. In addition to creating jobs, renewable energy offers a significant opportunity for costs savings. In total, 300MW roughly translates to 426,000,000 kilowatt hours per year. At 11 cents per kilowatt hour, this adds up to nearly \$47 million in annual energy savings. Renew300 also represents tangible savings for the natural environment and will help to improve public health outcomes in the long term. The 300MW target is equivalent to approximately 293,749 tons of greenhouse gas emissions avoided each year, the equivalent of over 33,000,000 gallons of gasoline consumed.

**HUD is supporting federally-assisted residential building owners and operators by increasing their access to resources for renewable energy and providing technical assistance to help partners meet their goals.** Residential scale renewable energy installations are beginning to reach "grid parity" with traditional sources of power, and HUD expects this trend to continue over the next several years. HUD, the Department of Energy, Treasury, USDA, and other agencies are working to partner with banks, philanthropies, and other stakeholders to encourage investments and help match resources with viable renewable energy projects. HUD is also supporting Renew300 partners by providing technical assistance and resources on its renewable energy web portal and recruiting new partners to meet the 300MW goal.

## BY THE NUMBERS

**300MW**

HUD's goal is to reach 300 megawatts of installed renewable energy capacity on federally assisted housing by 2020

**\$47  
MILLION**

Estimated annual energy savings or revenue from 300 MW of solar panels, at today's average energy cost of 11 cents per kilowatt hour

**100K**

Estimated number of workers employed in the solar industry

**60,000**

Installing 300MW of renewable energy reduces GHG emissions equivalent to taking 60,000 cars off the road.



# HUD STRATEGIES TO MEET RENEW300

HUD is working with the Department of the Treasury, the U.S. Department of Agriculture, and other federal partners to meet the ambitious goals of Renew300. The following strategies are being taken by HUD to help support the adoption of on-site renewable energy and community solar in federally subsidized housing across the nation:



IDENTIFY SOURCES OF CAPITAL, FINANCING, AND ADDITIONAL TECHNICAL ASSISTANCE AVAILABLE FOR OWNERS AND OPERATORS



RECRUIT NEW PARTNERS BY HOSTING A SERIES OF PUBLIC EVENTS PROMOTING ON-SITE RENEWABLES AND COMMUNITY SOLAR SYSTEMS



DEVELOP STANDARDIZED CONTRACTS, TEMPLATES, AND POWER PURCHASE AGREEMENTS (PPAs) FOR OWNERS AND OPERATORS



BUILD LINKAGES BETWEEN FINANCIAL AND HOUSING INDUSTRY LEADERS AND PROVIDE RESOURCES TO FACILITATE STREAMLINED RENEWABLE ENERGY PROJECTS

## RENEW300 CASE STUDIES

### DENVER'S PIONEERING POWER PURCHASE AGREEMENT

#### Denver Housing Authority

The Housing Authority of the City and County of Denver (DHA) became one of the first public housing authorities in the country to install solar photovoltaic systems across an entire sector of their portfolio using a Power Purchase Agreement (PPA).

DHA sought a long-term renewable energy source for its housing portfolio that would ensure predictable utility costs. After soliciting proposals through a competitive process, DHA partnered with Oak Leaf Energy Partners, Enfinity America Corporation, and Namaste Solar to establish a long-term contract for the installation and operation of this large-scale solar electric project. These private partners own and manage the systems and provide solar energy for the multifamily properties. DHA also secured low-cost debt financing through Qualified Energy Conservation Bonds.

PPAs provide a cost-effective financing solution building owners and managers that cannot afford the initial costs of installing renewable energy systems. In Denver, the PPA allowed DHA to install over 10,000 panels on 350 sites serving 665 residences with no up-front capital investment required. DHA's solar initiative created 40 new green jobs in Denver and is estimated to reduce 3,479 tons of carbon emissions.

**Read more at:** <https://www.hudexchange.info/onecpd/assets/File/Renewables-in-Practice-Case-Study-Denver-Housing-Authority.pdf>

### CREATIVE SOLUTIONS TO FINANCING SOLAR FOR AFFORDABLE HOUSING

#### National Housing Trust

Energy costs are a critical component of housing affordability. Fluctuating utility prices can quickly make housing unaffordable for low-income families on tight budgets.

NHT/Enterprise Preservation Corporation, the real estate affiliate of the National Housing Trust, preserves affordable housing by purchasing and renovating properties at risk of converting to market rate. In response to the volatility of energy costs, NHT/Enterprise Preservation Corporation installed solar systems on their multifamily properties and established a new business entity to own and operate these systems, called NHT Renewable.

NHT Renewable's first solar project was completed in Fall 2014 with the installation of 14 solar energy systems across 13 buildings in Washington, D.C. While continuing to expand solar across their existing portfolio, NHT Renewable is assisting peer developers who seek to do the same. NHT Renewable has also created a suite of templates and legal documents for use when undertaking solar projects on properties with multiple investors and lenders.

The NHT Renewable approach yields multiple benefits for stakeholders: energy savings, stabilized power costs, and no up-front investments are all incentives for property owners to install solar. These solar installations also create green jobs and reduce carbon emissions from multifamily properties.

**Read more at:** <https://www.hudexchange.info/onecpd/assets/File/Renewables-in-Practice-Case-Study-NHT.pdf>

# TECHNICAL RESOURCES FOR RENEW300

HUD, Treasury, and USDA are partnering with the Department of Energy (DOE) and the Environmental Protection Agency (EPA) to provide federally-assisted housing owners technical resources to meet their renewables goals. These and other resources are described below and also can all be found on HUD's Renew300 website:

## HUD'S RENEW300 WEBSITE

The HUD [Renew300 website](#) provides a one-stop shop for those interested in renewable energy installation on federally-assisted housing. On the Renew300 website, stakeholders interested in renewable energy can:

- **Become a Renew300 Partner** by committing to the installation of renewable energy at your federally assisted property or join into an existing or planned community solar installation
- **Request direct technical assistance** designed to help federally-assisted property owners scope, finance, and install renewable energy projects
- **View the latest technical resources**, HUD guidance, case studies, and other online resources around renewable energy projects and approval processes

## OTHER RENEWABLE ENERGY RESOURCES

### U.S. Department of Energy SunShot Initiative:

The SunShot Initiative drives research, manufacturing, and market solutions to make the abundant solar energy resources in the U.S. more affordable and accessible for all Americans.

<http://energy.gov/eere/sunshot/sunshot-initiative>

### National Renewable Energy Laboratory:

NREL develops clean energy and energy efficiency technologies and practices, advances related science and engineering, and provides knowledge and innovations to integrate energy systems at all scales.

<http://www.nrel.gov/>

### U.S. EPA Renewable Energy Ready Homes Resources:

EPA developed the Renewable Energy Ready Homes (RERH) specifications to educate builders on how to assess and equip new homes with a set of features that make it easier and less expensive for homeowners to install solar energy systems after the home is constructed. Resources on this web page include the RERH specifications and checklists and the RERH Solar Site Assessment Tool.

[http://www.energystar.gov/index.cfm?c=rerh.rerh\\_index](http://www.energystar.gov/index.cfm?c=rerh.rerh_index)

### Better Buildings Challenge for Multifamily Properties:

The Better Buildings Challenge (BBC) website provides best practices, guides, tools, and webinars for BBC partners and allies, some of whom are pursuing renewables.

<http://energy.gov/eere/better-buildings>

### Database of State Incentives for Renewables & Efficiency (DSIRE):

DSIRE provides a comprehensive source of information on incentives and policies that support renewable energy and energy efficiency in the United States. DSIRE is operated by the N.C. Clean Energy Technology Center at N.C. State University and funded by the U.S. Department of Energy.

<http://www.dsireusa.org/>

### Federal Financing Guide for Clean Energy Deployment:

This guide targets state, local, and tribal leaders, along with their partners in the private sector, to make it easier for them to find capital for energy efficiency and clean energy projects.

<http://energy.gov/eere/slsc/downloads/guide-federal-financing-energy-efficiency-and-clean-energy-deployment>

### Solar Powering America:

Solar Powering America, provides resources on solar energy in the U.S. Resources include lists of solar-related databases, funding programs, guides, interactive tools, newsletters, webpages, and white papers.

<http://energy.gov/eere/solarpoweringamerica/solar-powering-america-home>

### SunShot Initiative Community and Shared Solar Page:

This page includes SunShot-funded cooperative awards and other resources for organizations interested in investing in solar together.

<http://energy.gov/eere/sunshot/community-and-shared-solar>

# HOW TO JOIN RENEW300

**Are you a federally-assisted housing owner or operator? Do you want to install renewable energy sources on your property or join into a community or shared solar installation?**

If you are interested in joining Renew300, please visit the website at: <https://www.hudexchange.info/programs/renewable-energy/>



For more information, please visit the Renew300 website: <https://www.hudexchange.info/programs/renewable-energy/>

[hud.gov/resilience](http://hud.gov/resilience)

