

CASE STUDY | PARK CITY, UTAH

PARK CITY (population 7,558), with its high elevation and heavy winter snowfalls, may not seem like the ideal location for solar, but Park City sees itself as “an ideal location for showcasing new technologies and that city leaders are uniquely capable of setting an example of a synergistic approach to sustainable energy that cities across the west and the nation can model.”ⁱ

Park City is focused both on leading by example, installing solar on municipal facilities, and working collaboratively with other jurisdictions in Northern Utah through the Wasatch Solar Challenge, one of the Department of Energy’s 22 [Rooftop Solar Challenge](#) teams.

Park City has a City Council that is very supportive of sustainability and renewable energy goals, and which, in 2009, adopted an [Environmental Strategic Plan](#) with objectives related to clean and renewable energy. The city is ranked sixteenth in the country for the percentage of its power purchased through Green Power Purchase programs, and was named one of the Environmental Protection Agency’s two Green Power Communities of the Year in 2010.ⁱⁱ In addition to solar, Park City has undertaken a \$1.2 million energy upgrade on its municipal facilities (following an energy efficiency study of 20 city facilities) and has invested in geothermal heat pumps on several facilities.



Park City recently developed and sold 13 affordable housing units. The Snow Creek Cottages are equipped with numerous green features, including solar panels and a ground-source heat pump for heating and cooling.

Since 2009, Park City has installed [four solar projects](#) on municipal facilities. The largest project, an 18.8kw system on City Hall, was completed in December 2010 with EECBG funding. The city also has a 5.5kw system at Creekside Park and a 5.4kw system on the Ice Arena, both of which were funded through Blue Sky Grants from Rocky Mountain Power’s Blue Sky program. The fourth project is a 14.4kw installation spread across 13 affordable housing units (which also have geothermal heat pumps) in the Snow Creek Affordable Housing Unit, financed through affordable housing in lieu fees.

The city is planning to complete two additional installations in 2012 – they are currently working through the RFP process for these. One will be a 22kw system on their Police Building that will be completed with EECBG funds plus grant money from Rocky Mountain Power’s Blue Sky program. The second installation will be a 54kw system on the city’s Transit Center that is being funded via the Department of Transportation.

Currently, a [web-monitoring tool](#) shows output from the City Hall installation. This tool allows residents to see daily, weekly, monthly, and lifetime system performance, as well as panel-by-panel performance and lifetime environmental benefits. These web-monitoring tools will also be available for the two installations that are expected to be completed in 2012.



Park City installed 80 solar panels on its City Hall building in 2010. These panels provide enough electricity for three average Utah homes and produce the energy equivalent of burning 23,000 pounds of coal each year.

In 2011, Park City conducted a feasibility study on the solar potential of 34 city-owned sites. A major factor considered in the feasibility study was snow-loading, as a number of the buildings were designed prior to the implementation of Park City's current elevation-specific snow load requirements and their roofs would not be able to meet the additional load requirements of the solar panels. The study made recommendations for solar installations on 14 sites – including both the Police Building and Transit Center which will be getting solar arrays in 2012.ⁱⁱⁱ

On the community level, Park City will waive permitting fees up to \$1,000 for residential and commercial installations.^{iv} The city's permitting fee structure is based on the size of the project, and a \$1,000 fee is equivalent to about an \$80,000 project. This covers nearly all residential projects and most of the commercial projects being installed. "We're really hoping to remove that disincentive to projects," said Tyler Poulson, the city's Environmental Sustainability Program Manager.

The city has also created a website, www.parkcitygreen.org, which includes information on a range of topics, from green cleaning supplies to home energy audits. When it comes to solar, the website includes useful information on how systems work such as questions to ask installers as well as links to resources like cost calculators and information on available rebates and tax credits.

"To the extent possible, making sure all that info is public and available is really valuable and important," noted Poulson.

Currently, Park City is working with five other communities through the Wasatch Solar Challenge, as one of the teams funded through DOE's Rooftop Solar Challenge. The communities that are participating in the Wasatch Solar Challenge are working together to address issues related to solar adoption – including streamlining the permitting process across jurisdictions, updating zoning codes, and addressing issues related to interconnection and financing.

Going forward, Park City is looking to increase its use of renewable energy, including solar, as a municipal government. The city has also been researching financing strategies that have been successfully implemented at the local level, and which have led to an increase in solar. Additionally, Park City has followed developments on the state level that expand project financing options, such as Power Purchase Agreements for local governments and non-profits. The city is also interested in legislation that enhances consumer choice and makes offsite renewable energy projects more attractive.

"Over the next 12 months, hopefully a lot of things will start moving us to the next level and the Wasatch Solar Challenge is a big catalyst for that," said Poulson of Park City's efforts. "Solar is certainly something that is high on our radar."

ⁱ Energy Dynamics Lab and Jon M. Huntsman School of Business, "Renewable Energy: A Path Forward for Park City." <http://www.parkcitygreen.org/Community/Community-Footprint/Documents/Renewable-Energy-Park-City-Study.aspx>

ⁱⁱ Renewable Energy. <http://www.parkcity.org/index.aspx?page=738>

ⁱⁱⁱ URS Corporation and Intermountain Wind and Solar, "Solar Photovoltaic Feasibility Study for Park City Municipal Corporation."

^{iv} "Park City Waives Building and Inspection Fees for Renewable Energy: Goal is to Encourage New Residential and Commercial Projects." <http://www.parkcity.org/Modules/ShowDocument.aspx?documentid=7452>