Federal Energy and Water Management AWARDS

2013

(background) Fort Carson's first U. S. Green Building Council platinum-level LEED-certified facility, the 4th Armored Brigade Combat Team Brigade and Battalion Headquarters, features a 482 kilowatt ground-mounted, tracking photovoltaic system.

(above) Fort Carson installed a computerized weather-tracking irrigation system in 2012 that uses global positioning system technology and weather stations on post to apply the right amount of water based on current weather conditions. It is anticipated that the system will reduce water use by 20 percent and save more than $300,000 per year.

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Fort Carson completed several projects and instrumental planning efforts in FY 2012 that contributed to its net-zero objectives and reduced its energy intensity by 14.7 percent and water intensity by 8 percent from their respective baselines. The site team partnered with multiple organizations to develop innovative solutions, including the National Renewable Energy Laboratory to execute a Net-Zero Assessment and Recommendations report, and the Pacific Northwest National Laboratory to develop water balancing report and strategy related to Fort Carson's net-zero water strategy. The Fort Carson team also coordinated with the U.S. Army Corps of Engineers to investigate opportunities to use wastewater effluent to expand its existing non-potable irrigation system.

Fort Carson also implemented lighting retrofits, chiller replacements, and expansion of the energy management control system in FY 2012, which are estimated to save more than $60,000 annually. The site also constructed a Leadership in Energy and Environment Design (LEED) Platinum-certified facility, and partnered on two Department of Defense efforts to demonstrate leading edge technologies for combined heat and power and biomass gasification.