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## Impressive Savings Achieved by Federal Energy Leaders

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With more than 350,000 buildings, the federal government is the largest energy consumer in U.S. To recognize the efforts made by government agencies to reduce energy, water and emissions, the DOE has honored 32 recipients for the 2015 Federal Energy and Water Management Awards.

These individuals and organizations have achieved an annual savings of 646 billion BTUs of energy, 165 million gallons of water, and more than \$13.5 million last year – an equivalent to eliminating the average annual energy use of more than 7,200 households. Learn how they shrunk their energy spend.

#### General Services Administration

Comprehensive renovations at the Whipple Federal Building in FY 2014 reduced energy by 42% compared to the 2009 baseline. The project was the first major upgrade since 1969 for the 700,000-square-foot property located in Fort Snelling, MN. The facility converted from a standard chiller and boiler system to a geothermal ground source heat pump system. A 15 kW solar system was installed on the roof, and 60% of the hot water demand is met through a solar thermal system. The project also includes fan-wall air handlers, heat wheels for energy recapture, and advanced meters for monitoring and analysis. Over the next 40 years, these upgrades are expected to save \$13 million in utility costs.



*Over 640 billion BTUs of energy, 165 million gallons of water and \$13.5 million were saved by government properties last year. The Whipple Federal Building uses geothermal, solar, heat recovery wheels and advanced controls to cut its energy spend. PHOTO COURTESY OF GSA*

#### Department of the Interior

In FY 2014, the Animas-La Plata Permanent Operating Facility became the Bureau of Reclamation's first LEED certified building in the region. A combination of a passive solar wall, high-efficiency lighting and HVAC, and natural lighting provide 51% efficiency over standard requirements. Located in Durango, CO, the building's remaining electricity demand is met with renewable hydroelectric power and transmitted through a dedicated transmission line.

#### Desert National Wildlife Refuge

The Administrative Office and Visitor Center at the Corn Creek Field Station is a LEED Platinum facility. The new building achieves zero net-energy use with 91.5 kW of solar photovoltaic arrays and 23.5 tons of water source heat pumps, as well as heat-reflecting colored paint, a cool roof and integrated daylighting. This Las Vegas facility has a total annual renewable energy production of approximately 608.3 million BTU. Efficient lighting and energy recovery ventilation offer 30% savings compared to an average building.

#### Fish and Wildlife Service

The Northeast Regional Office building is a LEED Gold facility with a payback of only seven years. Providing at least 12% of the facility's power, a 108 kW net-metered solar array installed over a new cool roof generates about 192 megawatt-hours annually. The project installed air-tight ductwork with added insulation, energy recovery ventilation and 26 rooftop HVAC units, all with upgraded automated controls. Other strategies for this Hadley, MA property include daylighting, solar film, efficient lighting, and occupancy sensors and timers, which contribute to an annual energy savings of 2.4 billion BTU.