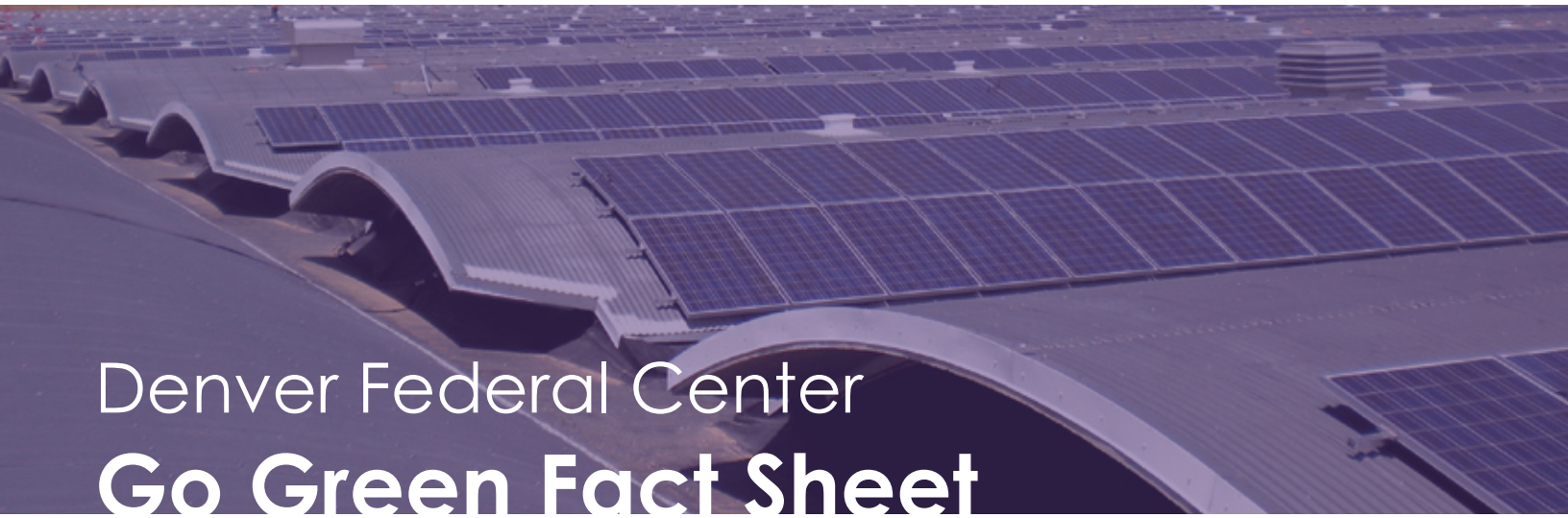

Denver Federal Center
Go Green Fact Sheet

Sustainability is an economic, social, and environmental concept. It is a means of configuring civilization and human activity so society and its members are able to meet their needs and express their greatest potential in the present, while preserving natural ecosystems for the future.

The Denver Federal Center (DFC) is committed to becoming one of the most sustainable campus in the United States by the year 2020. To do this, we are working on projects that allow us to be more eco-friendly.

Solar

• At the end of 2011, GSA completed an additional 7 million kWh of solar photovoltaic work. The 29,302 new panels bring the site total to 35,464 solar panels and will increase the site energy produced form solar energy from 2% to 17% of the DFC's electrical needs annually. The combined capacity of all the solar arrays is enough to power around 1,064 residential homes.

• Installed a solar hot water package on the roof Building 95 for the domestic hot water system. The solar hot water system is estimated to save approximately $6,300 worth of natural gas each year, and has a payback period of 11 years.

• Replaced traditional lights with solar path lights reducing maintenance costs and saving $10,000 annually in electricity costs.

Water Conservation

• Completed a new water treatment in Building 25's cooling tower to reduce the water drained to the sewer system, saving at least 800,000 gallons of water per year.

• Installed a pervious concrete parking lot that is more than 100,000 square feet to support our green storm water program.

• Re-landscaped large areas with drought-resistant vegetation, known as xeriscaping, to reduce water consumption.

• Installed water sensors to monitor moisture conditions in soils and only permits watering when needed.

Energy Conservation

• Significantly reduced air emissions and cost savings through 34 boiler replacements, retrofits, and upgrades. This resulted in another 20% reduction of DFC energy use.

• Replaced 19 regular, fuel-powered vehicles with zero-emissions vehicles. The DFC also has another 13 Slow Speed Electric Vehicles and two golf carts on site. We have 30 level one electric vehicle charging stations and are installing 11 dual output (level one and level two) electric vehicle charging stations.

• Installed three Coolerado CoolerTM (indirect evaporative cooling) units in Building 41 that provide six tons of cooling each. These units are estimated to conserve at least 25 percent more energy per ton than a traditional high efficiency air-conditioning system would use.

Other Sustainable Practices

• The Colorado Environmental Leadership Program awarded the DFC with a Gold Leader designation for its environmental management system at the DFC. The system focuses on identifying, prioritizing, controlling, and improving those elements of an organization that interact with the environment.

• The DFC implemented an ISO 50001 Energy Management System which is similar to the above EMS system above except it focuses on energy efficiency.

• Installed carports in four large parking lots that allowed GSA to reduce the DFC's impact of the urban heat island effect. The parking lot lights were replaced with LED fixture mounted under the carports to reduce nighttime light pollution, that disrupts birds migratory patterns.