

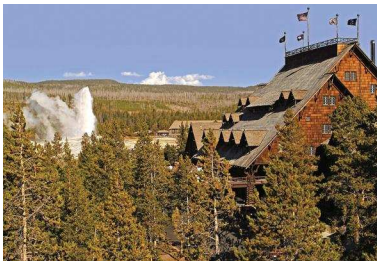


碳减排先锋  
Defensores do Clima  
クライメート・セイバーズ  
Climate Savers



# A new feature in US National and State Parks – CO<sub>2</sub> savings.

**Xanterra is the largest park concessionaire in the United States, operating facilities such as hotels, restaurants, retail stores, marinas and transportation systems.**



**Old Faithful Inn**  
Yellowstone National Park, Wyoming, USA.

## How Xanterra has promised to fight climate change

Xanterra's commitment with WWF is to reduce CO<sub>2</sub> emissions 10% below its 2000 emissions by the year 2015.

Xanterra's specific targets for reducing its emissions are calculated on a per property basis. Actions range from implementing sophisticated renewable energy generation systems and energy management controls to seasonally shutting down systems and educating employees on energy conservation. In addition, there are literally hundreds of minor measures being employed to save energy at varying locations across the country.

Other specific targets include:

- Increasing the amount of renewable energy purchases in Xanterra's power portfolio to at least 3% of its total purchases by the year 2015
- Retrofitting more than 25,000 inefficient incandescent lamps with efficient compact fluorescent or alternative lamps
- Installing energy management controls in appropriate areas.

## The Xanterra achievement

Xanterra has made impressive progress on these commitments. Total company wide greenhouse gas emissions declined significantly from 2000 – 2007 while visitor numbers remained somewhat flat. Total CO<sub>2</sub> emissions have been reduced by 13.3% (16.6% normalized for revenue) over that period.

This reduction, possibly the company's most significant environmental achievement, can be attributed to a combination of on-site renewable energy generation systems (primarily solar PV), wind power purchases, fuel switching (from heating fuel oil to propane), extensive lighting retrofits (between 2000 and 2008 more than 57,000 lighting retrofits were carried out) and strategic conservation programs (especially targeted area shutdowns, more energy control systems in rooms and facilities, and efficiency upgrades).

Regarding renewables, Xanterra used 6,945,723 kWh per year in renewable wind, solar, or geothermal energy in 2007 (although Xanterra uses a large amount of hydroelectric power, which is not included in these figures). This represents 16.5% of all national park electricity usage and 11.5% of all Xanterra operations' electricity usage.

Xanterra has now exceeded its ten-year Climate Savers greenhouse gas emission-reduction goal of 10%, and is well on its way to reaching its 2015 Environmental Vision goal of a 30% reduction.

**“Xanterra offers hospitality in the great National and State Parks of the US. The natural wilderness and beauty of these places makes them unique and precious environments – so it is wholly appropriate for Xanterra to be committed to the protection of our global environment. Our partnership with WWF, the world's leading conservation organisation, through the Climate Savers program, is a valuable and important part of our positive work for the world's climate and natural environment.”**

**Chris R. Lane**  
Vice President, Environmental Affairs

## **Good news from Death Valley**

A one-megawatt solar photovoltaic (PV) energy system was constructed at Xanterra's Death Valley operation in 2008. This system, the size of five football fields, consists of more than 5,700 solar panels. It will generate more than 2.2 million kWh per year for the next 30 years or more: this is enough electricity to power more than 500 homes.

It is reducing Xanterra's greenhouse gas emissions by 832 tons per year, making a total reduction of 20,790 tons of CO<sub>2</sub> over the system's 25 year warranty life, a company-wide reduction of more than 1% annually.

This system is not only one of the largest non-utility PV energy systems in the country; Xanterra believes it is also the largest in the entire U.S. tourism industry and among all national park concessioners.

Overall, Xanterra powers 16.5% of its national park operations with renewable energy. In addition to the Death Valley system, Xanterra has four other PV systems installed in its operations. The system at Rocky Mountain National Park's retail store atop Trail Ridge Road (a 2,400 watt roof-mounted PV system) is unique in that it is off-grid and uses a battery bank for storage of electricity.

## **Controlling the energy – and the cooking**

Energy controls have been installed in several Xanterra locations. In 2006, Maumee Bay State Park began using a state-of-the-art computerized energy management system called Automated Logic. Through this system, the chief engineer remotely monitors cabins for energy usage, detects if there is a malfunction in any mechanical equipment, sets temperatures prior to guest arrival, and prevents pipes from freezing in winter, all with the touch of a finger at a computer at his desk. This saves money while improving the guests' experience.

At many other Xanterra locations, energy management controls, occupancy sensors, programmable thermostats and Energy Misers(tm) are reducing energy usage. At the South Rim of the Grand Canyon, for example, Xanterra installed 325 occupancy-sensing, digitally-programmable thermostats. At Yellowstone, Energy Miser(tm) controls shut down vending machines when they are not in use, saving up to 25% in refrigeration costs per machine.

At Mount Rushmore, Xanterra has implemented the latest in kitchen technology, a variable speed hood control system. This system senses heat and particulate matter (smoke), automatically modulating the fan motors up or down depending upon usage. If a grill is shut down during a slow period, the hood reacts accordingly and lowers its speed.

The resulting energy savings have been impressive. The hoods save approximately \$19,000 per year, enough to pay for themselves in just over one year. This includes savings from the electricity that runs the motors as well as saving on heating and cooling by not sending conditioned air outside. Greenhouse gas emissions savings are estimated at 180 tons per year from this unit alone.