



## Colorado Carbon Fund Helps Arvada Rec Center Go Green

### *Solar Thermal Energy Collection System to Cut Heating Costs 30 Percent*

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Denver (Feb.22, 2011) – An innovative state program to reduce greenhouse gases is helping an Arvada recreation center save money and become more energy efficient by providing its own heat from solar thermal energy.

The Apex Park and Recreation District flipped the “on” switch for a solar thermal energy collection system atop its recreation center in October. The Colorado Carbon Fund, a program of the Governor’s Energy Office, funded the system as part of a statewide effort to support community-based projects that promote clean technologies. In partnership with The Climate Trust, The Colorado Carbon Fund selected the Apex Center project as one that will result in significant greenhouse gas reductions, cost savings and independence from fossil fuels.

“This installation will reduce the center’s heating cost by at least 30 percent,” said Mike Miles, Executive Director of Apex Park and Recreation District. Prior to the installation, the center, which sees more than 1 million visitors each year, was heated by natural gas, costing the district more than \$144,000.

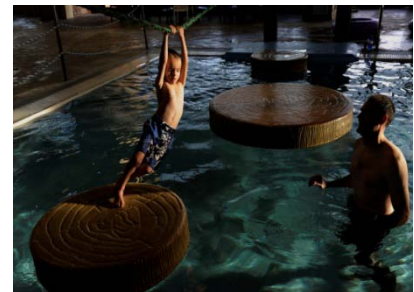
The system, built atop Apex’s 168,500 square foot recreation center on 72<sup>nd</sup> Avenue, took volunteers about five months to install, a process overseen by Justin Howe, Apex Center Building Engineer. The structure includes 291 solar collectors, 9,000 glass tubes and 3-1/2 miles of pipe. Boulder-based Lumos Solar manufactured the heat pipe collectors, a reliable, dependable and durable technology first used in space exploration. The power generation process is fairly simple: the sun heats fluid in the pipe collectors, which in turn heats the water in the recreation center’s boilers.

Since each of the 291 collectors is capable of generating 60,000 BTUs per day, the energy savings will add up quickly. In addition to the 30 percent reduction in annual energy costs, the installation will pay for itself in less than four years. The project will also reduce carbon dioxide and other greenhouse gases.

Since its start in 2007, the Colorado Carbon Fund has reduced greenhouse gas emissions in Colorado by 50 more than million pounds by funding projects through tax-deductible donations that support clean technologies to promote local economic growth and environmental health.

Projects funded by the Colorado Carbon Fund must meet three basic criteria:

- Provide new or additional benefits: A high quality offset project is one that would not have happened without the specific funding provided by the purchase of carbon offsets.
- Are rigorously measured and verified: The benefits of the offset project must be measured and verified by an independent third party over the entire length of the project.
- Have lasting benefits: The effects of the offset project must be long-lasting, not temporary.



The solar project is the latest, and one of the largest, energy-saving endeavors by Apex Park and Recreation District. During the past four years, the district has invested \$80,000 in energy efficiency for a payback of nearly \$450,000 in cost savings. “We feel this project is a great example of local government working for its community,” said APRD Board President Jim Whitfield. “With the help of great staff, community volunteers and leadership, sustainable projects delivered like this one are a great example of fiscal and environmental responsibility. It’s a component of our continual mission to provide the best recreational experience to our community while reducing our effect on the environment. Now that we have completed this phase we would like to serve as a resource to any other governmental entities considering a similar implementation.”



Home owners can follow the lead of the Apex project and go solar to save money too. Rebates are available for home-owners interested in solar energy by visiting [RechargeColorado.com](http://RechargeColorado.com).

A fact sheet on the program is available at

[http://www.coloradocarbonfund.org/images/uploads/content/Project\\_C\\_Overview.pdf](http://www.coloradocarbonfund.org/images/uploads/content/Project_C_Overview.pdf)

A short video of Apex's project is available at <http://apexprd.org/apex-center-powers-costs-saving-solar-thermal-energy-system>