

Liberty Science Center

Liberty Science Center
Saves Nearly
\$800K
and Reduces
Carbon Footprint by **40%**



Goal:

- Improve energy efficiency for 295,000 square feet of museum space
- Optimize facility's solar PV system

Noveda Solution:

- EnergyFlow Monitor™ to monitor energy use in real-time
- SunFlow Monitor™ to monitor performance of the solar PV system in real-time

Results:

- 43% reduction in energy usage
- Nearly \$800K in energy savings
- 40% reduction in carbon footprint
- <3 month payback period

Liberty Science Center (LSC) is a 295,000 square foot museum that services over 1 million guests a year through its onsite, offsite and online experiences. In April 2008, LSC installed the Noveda EnergyFlow Monitor™ and SunFlow Monitor™, to track energy use and to monitor the performance of the facility's solar photovoltaic system, respectively.

After the first night in use, EnergyFlow Monitor™ data showed that the facility was consuming three times more energy than originally estimated. The facility operations staff at LSC discovered, for example, that, between the hours of 10:00pm and 6:00am, their air handling units were running in occupied mode, bringing hot, humid air back into

the building and wasting energy. By readjusting the night settings, daily electrical consumption was reduced by approximately 11%.

Having access to the Noveda real-time data enabled LSC staff to track energy use, drive new energy savings initiatives and monitor their impact in real-time. Some of the the initiatives include:

- Turning off booster pumps for hot water at night
- Adjusting lighting hours (25% savings)
- Cycling major equipment to maximize efficiency and comfort
- Upgrading lighting fixtures

As a result, the museum reduced its energy usage by more than 40% with minimal maintenance costs. The energy savings resulted in a 40% reduction in CO₂ emissions. The payback on the investment in Noveda's technology was less than three months.

**Request a
Free Demo**

To find out how we can help your organization improve building performance and reduce energy costs,

email: sales@noveda.com

Real Benefits. In Real-Time