



Munich RE ensures economic and environmental sustainability

Munich RE, international organization with over 50 locations worldwide had the goal to be carbon neutral by 2012. It has a major campus in Princeton, NJ in need of energy efficiency upgrades and energy management to improve employee comfort and reduce overall energy use.

Ecosave was chosen as the building automation controls partner to upgrade the campus to a web-based Automated Logic Building Automation System (BAS).

The project encompassed four buildings and allowed the company to improve its ranking on the Dow Jones Sustainability Index.

As a result of a successful energy saving track record, Ecosave has worked on projects at additional sites throughout the US



THE SOLUTIONS THAT HAVE BEEN IMPLEMENTED IN THE PRINCETON CAMPUS ARE:

- Both comfort level and energy usage are being measured and verified at each level of building operations: central cooling plant, air handling systems, and each occupant zone thermostat.
- A series of dynamic reset control algorithms continuously balance the comfort needs of the occupants with the optimization of energy consumption by the heating, ventilation, air conditioning, and lighting systems.
- Airflow is regulated in each occupant zone with the use of highly efficient Electronically Commutated Motors (ECM) and ventilation airflow is reset based on the actual mix of outside air in the system.
- Through the BAS, air and water systems utilize integrated temperature and static reset based on real-time zone load requirements. Also, demand control ventilation is implemented in high occupancy zones to insure that CO2 levels are minimized without impacting nearby occupant zones and their energy usage.
- A lighting upgrade was performed by an outside contractor for this project. Ecosave will be a full service provider moving forward.

SUMMARY OF RESULTS

Annual savings
\$475,613

Total investment
\$1,964,210

Electricity Savings
50%

Pay back period
2.4 Years

CO2 savings per year
255 tons

Donation of Native Seedlings: Ecosave donates to Greening Australia, one native seedling for every tonne of CO2 and every 100 kilolitres of water saved, which additionally enhances the environment.

To find out more about this project or to discuss how Ecosave can help you save money and resources, **phone +1 (215) 785 6750** or **visit www.ecosaveinc.com**.