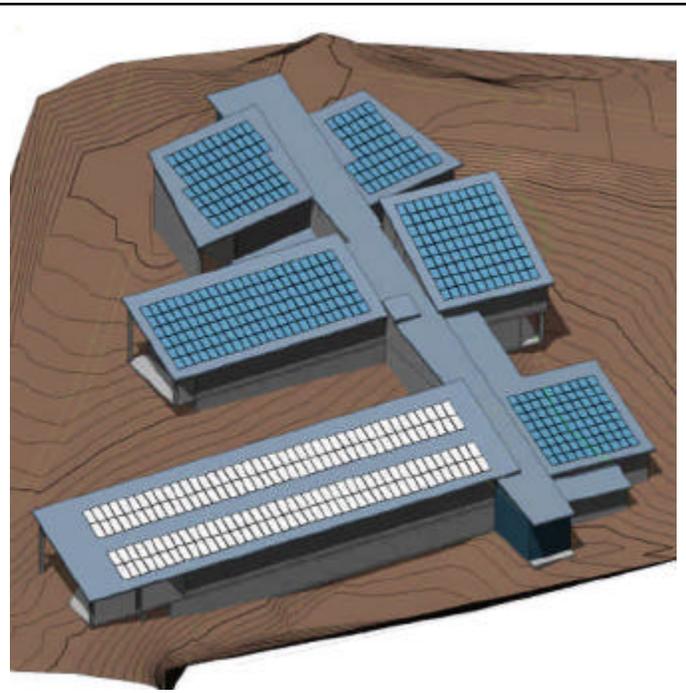


Advancing Renewable Energy in Your State

REPS, RECs and CO₂e – New Opportunities for Improving Your Bottom Line

Many states have already adopted Renewable Energy and Energy-Efficiency Portfolio Standards (REPS) where the utilities are required to meet an increasing amount of their loads with renewables and energy-efficiency. Other states are considering their own plans and Congress is now debating whether or not to require a national standard. The environmental attributes of this green power, which values the difference between green strategies like solar and efficiency and conventional sources of energy production, are quantified as Renewable Energy Certificates (RECs). For a utility to meet its obligation to utilize a certain amount of renewable energy, it can either implement its own renewable solutions or encourage others to implement them. If it buys from others, then the proof is in the documented RECs. Across the country the value of just the RECs is often close to twice the utility's cost of production. This, in effect, triples the rate at which utilities will buy renewable energy. Maybe you thought solar energy was too expensive to implement. Think again. Solar, implemented on your own buildings, has the potential to be one of the best investments you make.



A current Innovative Design project in North Carolina has 168 solar thermal collectors and 446 photovoltaic panels integrated into the roof. The system will produce enough renewable energy to offset the buildings' total demand, or it could be sold to the local utility to meet the utility's obligations to increase renewable energy use.

Additionally, there is another factor worth considering. European countries, in an effort to mitigate climate change, have capped carbon releases and developed a trading market for carbon that has helped to move these countries to a greener path. The US's voluntary system, which lacks mandatory caps on carbon emissions, is having only a fraction of the impact of Europe's. However, since 2003 the Chicago Climate Exchange and various NGOs have been laying the ground work for carbon cap-and-trade and, because of our country's growing concern over climate change, we are now poised to see legislation that will establish limits on greenhouse gas emissions. If enacted, the implication is that the value of carbon offsets would likely grow from a fraction of a cent per kilowatt-hour to perhaps 2 cents per kilowatt-hour or more, putting the premium more in line with European amounts. The key to capturing these savings is in the monitoring. Are you monitoring your energy saving systems?



In all our new projects, we are monitoring the solar water heating systems, photovoltaic systems, daylighting and even our rainwater savings (savings being equivalent to the energy required to move and treat water). Aggregating these savings and selling the carbon savings is possible today. The benefits, both environmentally and financially, will only grow. Plus, the real-time monitoring of the systems greatly enhances the educational opportunities.

A final point also merits your attention. To encourage the use of renewable energy, many states as well as the federal government have enacted tax credits and other incentives to individuals and companies that implement them. Up until now, there has been limited success in public facilities being able to take advantage of these incentives. This is also changing.

We are currently assisting the City of Raleigh, NC in soliciting proposals from private solar developers in which the solar developers will put up all the money for the installation of a one megawatt photovoltaic system and then construct and operate the system. After 6 to 10 years, once the investors with the solar developer have capitalized on the tax advantages, recouped all their original investment and made a profit, the system will be turned over to the City. This investment in solar energy is made so attractive because in North Carolina (like in other states) there is a REPS standard and to meet their obligation, the local utility is, in turn, soliciting 20 year green power purchase agreements. Once the solar developer transfers the solar system to the City, the money generated from both the power produced and the RECs will go to the City of Raleigh.

These changes will have an impact on you. We can help you in making it be a positive one.

Stimulus Funding Opportunities

On February 17th, the American Recovery and Reinvestment Act of 2009 was signed into law. Part of this recovery plan specifically addresses energy.

Key to how the proposals will be evaluated is the projected energy savings, carbon reduction, and job creation.

As you begin to evaluate the best strategies to use your stimulus funding, I hope you will consider how Innovative Design can help you.



Nevada Solar One

This 64 megawatt solar thermal power plant was completed in 2007, and meets the energy demands of 40,000 U.S households. Innovative Design was the facility architect and an integral part of the design team on this project.



Innovative Design
www.innovativedesign.net

850 West Morgan Street, Raleigh, NC 27603
Ph: 919.832.6303 Fax: 919.832.3339

