Investing in our solar industry makes sense. Solar energy is clean, renewable and has zero emissions. Solar investments create jobs and help facilitate our nation’s energy independence. Using solar energy in place of traditional fossil fuels for heating and cooling reduces greenhouse gases and usually saves consumers’ money on utility bills.

But for building owners considering installing solar photovoltaic panels on a new roof, the biggest hurdle is typically justifying the up front costs. For those facing this dilemma in 2011, the federal government has made a move that could dramatically simplify your quandary. In December, the government announced that it would offer commercial and industrial companies 100% first-year bonus depreciation to install solar photovoltaic equipment on the roof. The program retroactively applies to installations that occurred since September 8, 2010 and it will last until January 1, 2012.

**Federal Tax Incentive Programs in the U.S.**

This new federal incentive program is one of several recent efforts the U.S. has made to grow the solar industry. The most significant federal program put in place prior to this came from the Emergency Economic Stabilization Act of 2008. In an effort to respond to the financial crisis of the time, the government offered commercial and residential property owners a 30% investment tax credit (ITC) for solar installations. Soon after it was enforced, in an unprecedented move to support the solar industry, the government extended the ITC for residential and commercial solar installations for the next eight years, making available the 30% credit through December 31, 2016.

The ITC program for solar installations was rolled into the American Recovery and Reinvestment Act of 2009, enacted in February of 2009. As part of this act, Congress enacted an amendment to the program and added a renewable energy grant program, which is administered by the U.S. Department of Treasury. Created in August of 2009 in response to the fact that many contractors and developers did not have taxable income to make use of the 30% ITC, this amendment allows qualified recipients to take an upfront cash grant equal to 30% of the applicable project cost. Originally set to expire at the end of 2010, the grant-in-lieu of the ITC program has been extended through 2011.

**State Tax Incentives**

Individual states also sponsor their own pro-solar programs. Among the top solar friendly states, in terms of incentives, are California (especially the southern region), New Jersey, Pennsylvania, Maryland, Delaware and Ohio. Examples of state incentive programs follow:

- State Tax Credits and/or Deductions in 25 States
- State Local Property Tax Exemptions for Renewable Energy in 35 States
• State Sales Tax Exceptions for Renewables in 25 States
• State and/or Utility Rebate Programs in 40 States
• State or Utility Grants for Renewable Energy Technologies in 23 States
• State or Utility Loan Programs in 38 States
• Net Metering in 44 states*

* Through the net metering program, utilities in 44 states provide a credit for the amount of renewable energy that is created. The program works as follows: if a solar PV array generates more electricity than what is required to run the facility at a given point in time, the owner earns a credit that can be used when his/her solar array is generating less electricity than what it requires. This credit must be used within 12 months.

The Lifespan of the Roof: A Critical Factor Impacting Payback on Solar Installations

Imperative to consider when planning a solar roof project is the lifespan of the roofing product installed beneath the solar photovoltaic system. In the states (mentioned above) that offer the most incentive programs, the estimated anticipated payback on solar photovoltaic investments is just one to four years. In states without as much support, the estimated time for payback is three to seven years. With such a favorable time period predicted to reap financial rewards from the solar investment, it would be a financial catastrophe for a building owner to experience a premature failure of the roofing product beneath the solar system. Such failures could also damage the solar equipment, or at minimum would instigate additional significant costs to tear off the solar equipment along with the damaged roof, and then reinstall the solar system on a new roofing system.

Most solar photovoltaic systems for roofs have a predicted lifespan of 20 to 25 years. Building owners should be diligent in ensuring that they choose a roofing system with a proven track record that is comparable or greater. A word of caution: while many roofing manufacturers offer warranties for 20 years or more, very few roofing products have a proven track record of lasting that long. Furthermore, these warranties will not cover the significant costs of damaged solar panels, nor of any associated reinstallation costs.

Applying Solar Photovoltaic Technology to Your Roof

Are any of the following questions on your mind?

• How is solar photovoltaic energy generated?
• How is solar energy purchased and what is the approximate cost?
• What is the best solar panel product to purchase?
• What is the distribution channel?
• Who can I talk to regarding the possibility of purchasing solar for my roof?

For more details about the new federal incentive program of 100% bonus first year depreciation, click here: [http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US06F](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US06F)

To learn more about the 30% ITC and the grant in lieu of the ITC incentive programs, click here: [http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US53F](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US53F)

The U.S. Department of Energy’s Database of State Incentives for Renewables & Efficiency has information about solar incentives available in your state: [www.dsireusa.org](http://www.dsireusa.org).

Additional Resources:


For more information about the Solar Power industry or FiberTite Roof Systems, please call Seaman Corporation at 800-927-8578, [or click here](http://www.fibertite.com).