

Backgrounder: Success of the Section 1603 Treasury Program

In Brief:

- The tremendous success of the multi-year Investment Tax Credit (ITC) for solar energy projects exemplifies the importance of stable policy for the private sector and reveals a high return on public investment in solar energy in terms of economic benefits, domestic job creation, energy security, and lower costs for consumers.
- By any objective measure, the 2008 economic crisis severely restricted the private sector capital that is typically used to finance renewable energy projects that utilize ITCs. The Section 1603 Treasury Program provides needed marketplace liquidity by allowing taxpayers to receive a direct federal grant in lieu of taking the ITC that they were otherwise entitled to receive.
- The Section 1603 Treasury Program is a proven success, and taxpayers are getting a good return on investment. Due in large part to liquidity provided by this important incentive, the U.S. solar industry grew 109% in 2011 over 2010 and currently employs over 100,000 American workers. Furthermore, the price for solar panels fell 50% in 2011 alone, and costs continue to fall.
- To provide marketplace certainty and continue reaping the substantial economic and energy policy benefits associated with renewable energy production, Congress should extend the Section 1603 Treasury Program.

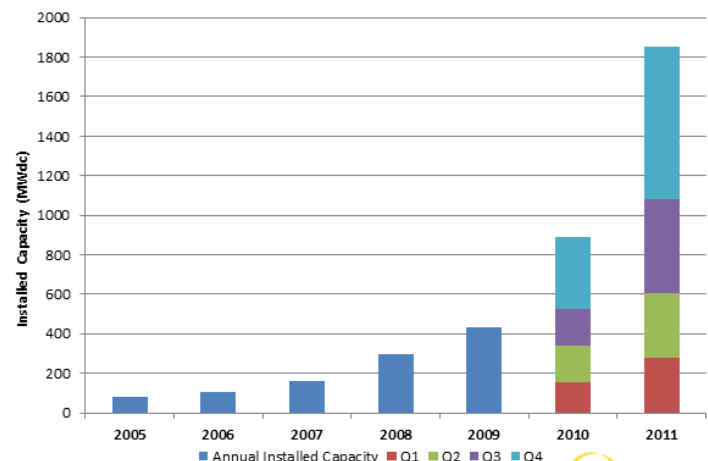
Background:

The *Energy Policy Act of 2005* (P.L. 109-58) created tax incentives for solar energy – a new 30% investment tax credit (ITC) for commercial and residential solar energy systems that applied from January 1, 2006 through December 31, 2007. These credits were extended for one additional year in December 2006 by the *Tax Relief and Health Care Act of 2006* (P.L. 109-432). In 2007, global investment in clean energy topped \$100 billion, with solar energy as the leading clean energy technology for venture capital and private equity investment. The solar tax credits helped to create unprecedented growth in the U.S. solar industry from 2006-2007. Solar electric capacity installed in 2007 was double that installed in 2006.

In 2008, Congress passed legislation on a bi-partisan basis that provided an eight-year extension of the commercial and residential solar ITC. The bill also permitted utilities to use the credit, making solar energy more affordable for ratepayers.

The market certainty provided by a multiple year extension of the residential and commercial solar ITC has helped annual solar installations grow by over 1,600% since the ITCs were implemented in 2006 – a compound annual growth rate of 76%.

U.S. PV Installations



Source: SEIA/GTM Research Solar Market Insight, "2011 Year In Review"

Importance of Tax Equity Financing and Credit Liquidity

The 2008 economic crisis rendered solar and other renewable energy tax incentives of little immediate value. Prior to the financial crisis, many large-scale renewable energy projects relied upon third-party tax equity investors to monetize the value of federal renewable energy incentives. The economic downturn drastically reduced the availability of tax equity, severely limiting the financing available for renewable energy projects.

Tax equity is the term used to describe the passive financing of an asset or project by large tax-paying entities that can utilize tax incentives to offset future tax liabilities.

Tax equity investors in renewable energy projects receive a return on investment based on the income from the project, but also on federal income tax deductions (through the utilization of tax credits). Renewable energy developers typically do not have sufficient taxable income to benefit directly from these tax credits and must partner with tax equity investors in order to finance projects.

The pool of tax equity investors is typically limited to the largest and most sophisticated financial firms, and the 2008 economic crisis significantly reduced the market demand among these entities for tax equity.

According to a report published by the Bipartisan Policy Center in March 2011, the number of tax equity investors in renewable energy declined from approximately 20 in 2007 to 13 in 2008 and only 11 in 2009. The associated decline in overall tax equity financing provided to renewable energy projects was equally dramatic, falling from \$6.1 billion in 2007 to \$3.4 billion in 2008 and \$1.2 billion in 2009.



Sources: U.S. Department of The Treasury, US Partnership for Renewable Energy Finance, and Leading Tax Equity Market Participants

Section 1603 Treasury Program

In response to the dramatic decline in capital available for renewable energy projects, the *American Recovery and Reinvestment Act* included important modifications to the ITC and other energy tax incentives to address the lack of available tax equity financing, including the Section 1603 Treasury Program. This program allows solar and other renewable energy developers to receive a direct federal grant in lieu of taking the ITC that they were otherwise entitled to receive.

The goals of this modification were to simplify financing for renewable energy projects and to provide access to capital during a time when project developers' tax burdens were inadequate to capitalize on tax incentives and tax equity financing was both scarce and expensive. The program has been very successful in achieving these goals.

It is important to note that the 1603 Treasury Program does not significantly increase the overall cost to the federal government of tax incentives for solar energy projects. Instead, the program primarily affects the timing of when ITCs for solar projects can be utilized.



Section 1603 Treasury Program has been a Resounding Success

Due in large part to liquidity provided by this important incentive, the solar industry grew by 109% in 2011 over 2010, making it one of the economy's fastest growing sectors. The solar industry employs over 100,000 American workers in all 50 states. In its preliminary evaluation of the Section 1603 Treasury Program, conducted at the request of the House Ways and Means Committee, DOE's Lawrence Berkley National Laboratory, noted:

[T]he Section 1603 program provides significant economic value to many renewable power projects, relative to the PTC or even ITC. Specifically, the grant program reduces the market's dependence on scarce and/or costly third-party tax equity, and also in many cases provides more direct or face value to renewable power projects than does the PTC. In addition, a number of indirect or ancillary benefits favor the grant from a renewable project developer's perspective, potentially helping to drive additional renewable capacity additions.

The 1603 Program revived the renewable energy industry in 2009 when the lack of tax equity financing in late 2008 halted many projects. Since enactment, the 1603 Treasury Program awarded grants for more than 33,000 solar projects totaling \$2.09 billion and driving over \$4.87 billion in private sector investment in the industry across 47 states. The program has leveraged \$25.8 billion in private sector investment for a wide range of energy technologies in all 50 states.

Cost-Effective Policy Supports Private-Sector Innovation and Efficiency

The U.S. solar market installed 1,855 MW of photovoltaic (PV) generating capacity in 2011, up from 887 MW in 2010. Cumulative solar electric capacity in the U.S. is now more than 4,460MW, enough to power 892,000 homes.

In 2011 alone, the price of solar panels fell by 50%. Solar is a diverse technology, and costs will continue to drop as the industry achieves greater efficiencies and economies of scale.

Congress Should Extend the Section 1603 Program:

Tax equity has not recovered to pre-recession activity and the rates of return demanded by investors in today's marketplace remain prohibitively high. A December 2011 report by the law firm Mintz Levin estimated that tax equity investors in solar projects required returns from 7.5% to as high as 17%, compared to pre-recession levels of 6% to the low teens.

Due to economic conditions, a large gap persists between the amount of financing renewable energy developers need to build a thriving U.S.-based clean-tech industry and what money is available. Expiration of the 1603 Treasury Program in 2011 is projected to reduce the availability of financing from an estimated \$7.5 billion in 2011 to approximately \$3.6 billion in 2012 – a reduction of more than 50%. Therefore, to continue this successful, job-creating program, SEIA encourages Congress to extend the 1603 Treasury Program and explore ways to improve the liquidity and efficiency of the solar ITC.

About the Solar Energy Industries Association®

Established in 1974, the Solar Energy Industries Association is the national trade association of the U.S. solar energy industry. Through advocacy and education, SEIA® and its 1,100 member companies are building a strong solar industry to power America. As the voice of the industry, SEIA works to make solar a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy.

For more information, please visit www.seia.org.