April 15, 2013

Via Email: tax.reform@mail.house.gov
The Honorable Kevin Brady - Chair
The Honorable Mike Thompson – Vice Chair
Energy Tax Reform Working Group
House Ways and Means Committee

Subject: SolarCity Comments to Energy Tax Reform Working Group

Dear Congressmen Brady and Thompson:

Intro to SolarCity

SolarCity is a national leader in clean energy services. With operations in 14 states and with over 3,000 employees, SolarCity has made energy more affordable for thousands of individuals and businesses. Our vision is to create the most compelling energy company of the 21st century by delivering cleaner, cheaper power through distributed generation.

Overview of Tax Reform Comments

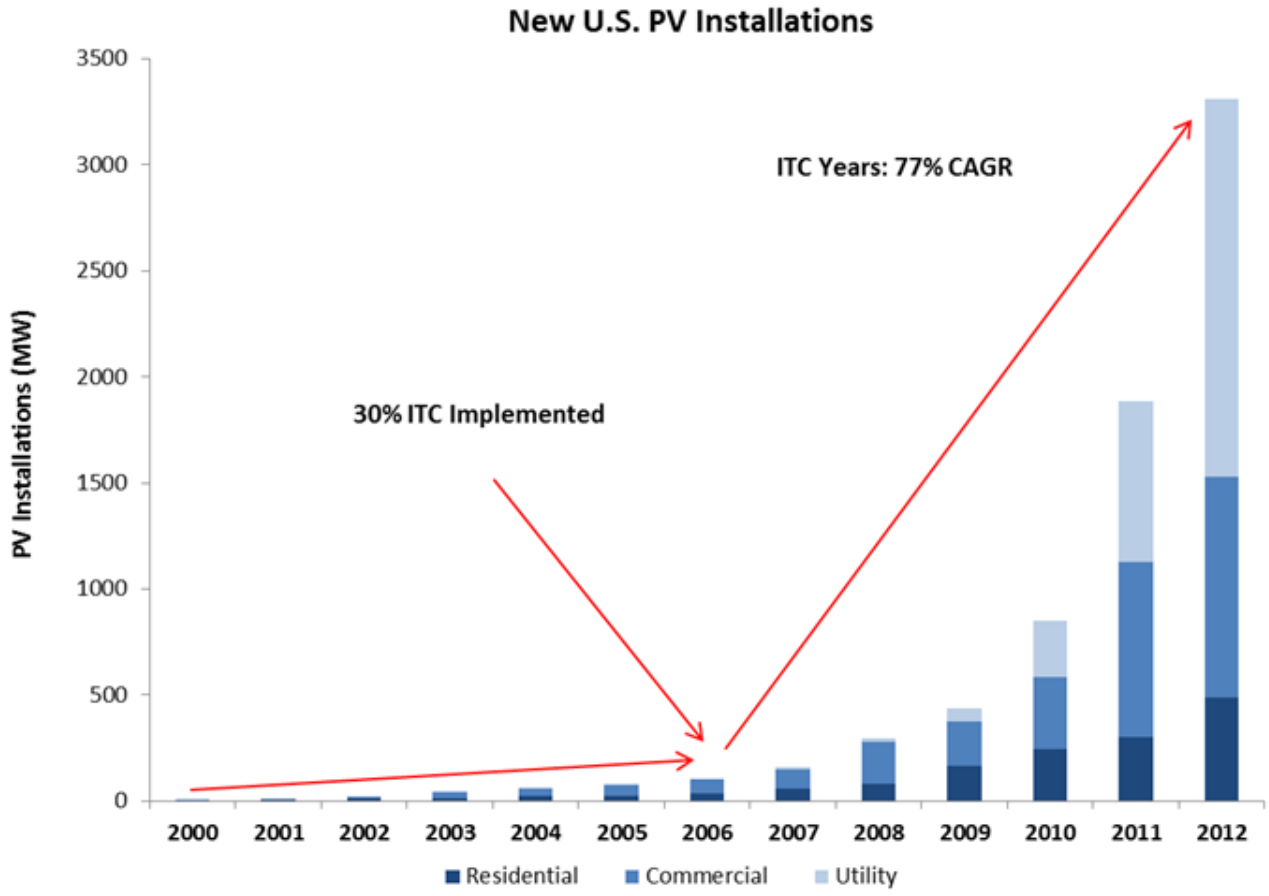
The investment tax credit (ITC) for solar technology is a perfect example of an effective federal incentive producing the positive returns on investment that Congress should expect from any energy policy: creating domestic jobs, significantly and consistently reducing costs, and deploying thousands of megawatts of domestic energy capacity. That success from the solar ITC should be protected and continued, and this effective policy model should be used to drive the deployment of energy storage, residential energy efficiency, and geothermal heat pumps.

Solar Investment Tax Credit

The 30-percent solar investment tax credit was created as a part of the 2005 Energy Policy Act and went into effect at the beginning of 2006.[1] Since then, photovoltaic solar (PV) installations in the U.S. have grown by a staggering compound annual growth rate of 77-percent.

[1] The Energy Policy Act of 2005 (P.L. 109-58) created a 30-percent 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). The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) included an eight-year extension of the commercial and residential solar ITC, eliminated the monetary cap for residential solar electric installations, and permitted utilities and alternative minimum tax (AMT) filers to utilize the credits. Under current law, after December 31, 2016, the 30-percent commercial solar ITC is set drop to a permanent 10-percent credit.

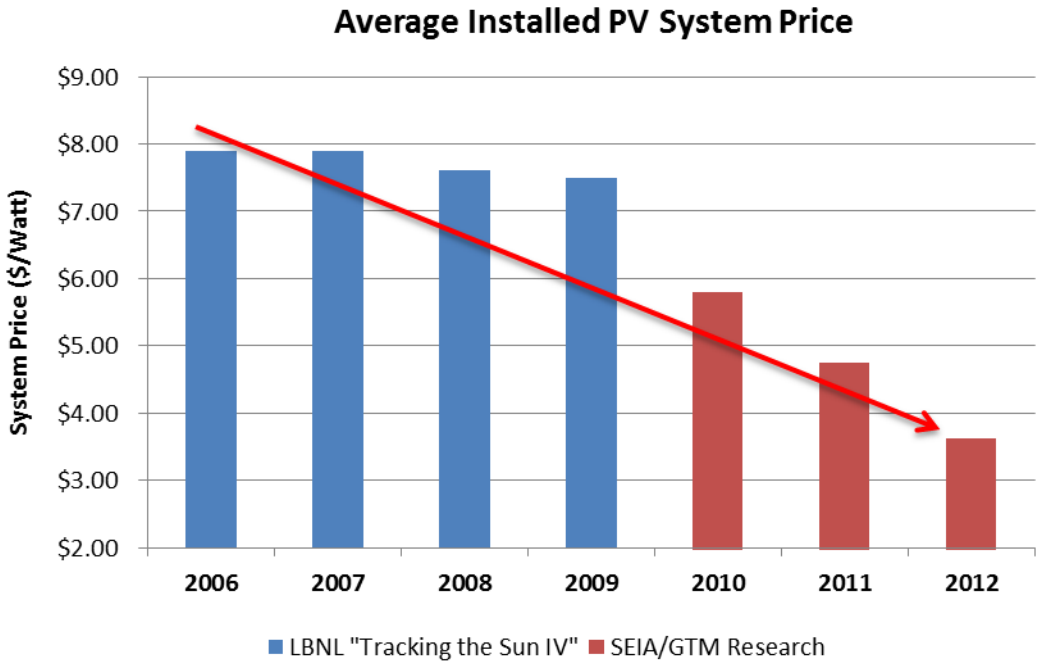
To illustrate it another way: In 2006, the entire U.S. solar industry installed 96 megawatts (MW) of solar electric property. Six years later, in 2012, the industry installed 3300 MW. Cumulative solar capacity in the U.S. now exceeds 7700 MW, enough to power more than 1.2 million homes.



Source: Solar Energy Industries Association/GTM Research

The success of the ITC is not only demonstrated in massive deployment, it is also shown in job creation and cost reduction. Today, the U.S. solar industry employs more than 119,000 Americans, in over 5600 companies, across the entire country. This is more than double the number of industry jobs from just three years ago.

The scale of growth and the innovation by companies have driven down the cost of solar technology. In 2012 alone, the price of solar panels dropped by over 40-percent, and the installed cost of solar has dropped more than 50-percent since the creation of the investment tax credit.



SolarCity has had a significant role in growing the distributed generation market within the solar industry. Our company introduced innovative financing options to homeowners (i.e., the lease and PPA models) and allowed middle-class families that have a good credit history to go solar for no money down and receive guaranteed solar production every year. This democratization of the solar value proposition, along with every major advance in the U.S. solar industry, has only been possible because of the predictability and stability that came with the eight-year ITC extension in 2008.

As demonstrated by the thousands of jobs created, the cost reductions, the thousands of megawatts of clean energy deployed and even the money going back to the Treasury[2], the solar investment tax credit has been an immensely successful energy policy. This deployment policy must be protected and replicated for other commercial-ready technologies, such as energy storage, that require the cost reductions that can only come from scale and stability.

[2] Using the third-party ownership model, the solar investment tax credit delivers a positive return to the Treasury of between 1-10% over 30 years. U.S. Partnership for Renewable Energy Finance, *Paid in Full: An Analysis of the Return to the Federal Taxpayer for Internal Revenue Code § 48 Solar Energy Investment Tax Credit*, July 2012.

Energy Storage

The distributed energy storage industry is where the solar photovoltaic industry was in 2005. There are commercial-ready technologies, there is a market desire and an infrastructure need, but the initial cost is too high. There is no disagreement on the benefits of energy storage: backup power, grid stability, voltage regulation, reserve capacity, energy security and load shifting. The way to grow the industry, and thereby bring down the cost, is through a long-term incentive that allows businesses to plan and innovate, and allows growing scale to bring down costs.

Geothermal Heat Pumps

Beyond solar technology and storage, there is another excellent example of an effective commercial-stage technology that needs a deployment incentive on par with other clean energy technologies. Geothermal heat pumps, that use the ground or ground water as a thermal energy source to heat a structure or as a thermal energy sink to cool a structure, are one of the most efficient renewable technologies available for space conditioning and water use in buildings.

The Section 48 tax credit for geothermal heat pumps covers only 10-percent of the installed cost of the eligible equipment, while solar water heating, fuel cells, and microturbines – in the same Section 48 incentive – receive a 30-percent ITC. This disparate treatment is particularly noticeable in the Section 48 commercial tax credit because, in the Section 25D personal tax credit, all of the same energy technologies (solar water heating, fuel cells, etc, and geothermal heat pumps) all receive a 30-percent credit. Due to this imbalance of incentives, geothermal heat pumps have failed to realize the deployment potential seen by the wind and solar industries.

If the Section 48 investment tax credit for geothermal heat pumps was put on par with the other ITC technologies, companies would quickly pursue the change to finance these systems to homes and businesses and bring the same deployment success that has occurred in the solar industry.

Residential Energy Efficiency

The current state of residential energy efficiency policy is stagnant. Anemic and uncertain short-term policy rewards business as usual but fails to move or grow the market. Buildings represent 40-percent of the energy use in the United States and residential buildings are the most difficult to reach with policy because of the rapid turnover in the occupancy of residential housing stock. In order to overcome that structural inertia, a residential energy efficiency policy has to incentivize new business models, provide a robust benefit that is in place for a long period of time, and reward measurable performance.

Residential energy efficiency needs a 30-percent investment tax credit in order to achieve the catalytic growth that has been demonstrated in other energy sectors. The credit must be contingent upon third-party verification that the investment has achieved at least a one-third improvement in the residence's energy efficiency.

Conclusion

Solar is competing against energy sources that have been incentivized for decades and continue to be protected with permanent advantages in the tax code. Any tax reform effort should recognize how successful the modern solar industry has been with a strong incentive for what has been a relatively brief few years.

Tax Reform should protect and expand pro-growth areas of the tax code that have shown success and demonstrated a strong return on investment. The solar investment tax credit is an ideal example of a policy that has created jobs, reduced costs, and deployed clean domestic energy capacity across the country.

Rather than shy away from all energy tax incentives, this reform process should identify and replicate those incentives that achieve their policy goals. In that way, energy storage, geothermal heat pumps, and residential energy efficiency could see the same deployment growth, job creation and cost reductions that the solar industry has experienced. And most importantly, the solar investment tax credit should be continued and protected so that it may continue to be the true success story in U.S. clean energy policy.

Thank you for considering our comments. Please contact us for any additional information.

Sincerely,

John M. Stanton
Vice-President for Government Affairs
SolarCity