

# THE CASE FOR THE SOLAR INVESTMENT TAX CREDIT

## In Brief:

- The tremendous success of the Investment Tax Credit 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.
- Through Q2 2015, 40 percent of new electric capacity added in the U.S. this year has come from the solar industry
- Since the solar Investment Tax Credit was passed in 2006, more than 170,000 American solar jobs have been created, and \$72 billion has been invested in solar installations nationwide.
- In the face of a still recovering economy, the ITC provides market certainty for industry to continue making long-term investments in solar energy projects, U.S. manufacturing facilities and supply chain expansion.

## Background

The *Energy Policy Act of 2005* (P.L. 109-58) created a new 30 percent Investment Tax Credit (ITC) for commercial and residential solar energy systems that applied from Jan. 1, 2006 through Dec. 31, 2007. The ITC was extended for one additional year in December 2006 by the *Tax Relief and Health Care Act of 2006* (P.L. 109-432). In its first year of implementation, the ITC spurred unprecedented growth in the U.S. solar industry and led to the doubling of installed solar electric capacity by 2007. By then, global investment in clean energy topped \$100 billion, with solar energy leading all other clean energy technologies in venture capital and private equity investment.

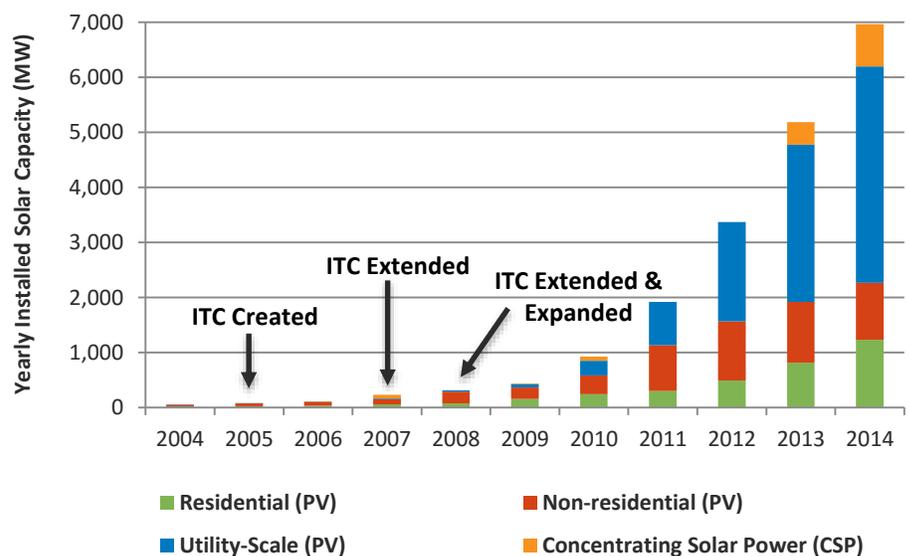
In 2008, Congress passed legislation on a bipartisan basis that provided an eight-year extension of the commercial and residential solar ITC. It also removed a \$2,000 monetary cap on the total credit that could be claimed by a homeowner installing a rooftop residential solar electric system. The bill also permitted utilities to use the credit, making solar energy more affordable for ratepayers.

## The ITC Fuels Dramatic Growth in Solar Installations

The market certainty provided by a multiple year extension of the residential and commercial solar ITC has helped annual solar installations grow by over 6,500 percent since the ITC was implemented in 2006 – representing a compound annual growth rate of 48 percent.

The U.S. now has over 22,700 MW of installed solar electric capacity, with a new solar project installed every 2.5 minutes in 2014. The solar ITC also

Yearly U.S. Solar Installations



supported two new utility-scale solar thermal electric power plants that operate day or night, cloudy or bright, using stored thermal energy.

## The Growing U.S. Solar Workforce and Supply Chain

The solar industry has grown from 17,000 employees in 2006 to nearly 174,000<sup>1</sup> today. They work at more than 8,000 companies, the vast majority being small businesses, in all 50 states. Additional job growth is expected as the industry continues to expand in the future. The ITC has a positive ripple effect to reach beyond project development to enable growth and maturation of the broader solar supply chain – including manufacturers, “mom and pop” retail stores, plumbers, electricians, distributors and salesmen in small towns and large cities across the country. As U.S. manufacturers compete with companies around the globe, the ITC is a critical policy mechanism to ensure robust demand for solar energy components in the U.S. market.

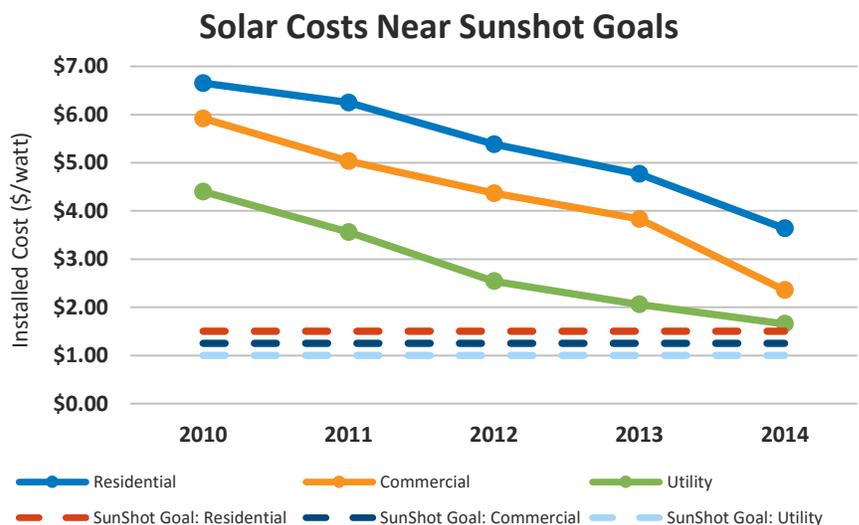
## The Falling Cost of Solar for Consumers

The overall growth of the solar industry, made possible by the ITC, has led to sharp reductions in the cost of solar energy. Since the implementation of the ITC in 2006, the average cost of solar has dropped by more than 73%. Utility-scale costs have dropped by more than 64% since 2010, reaching \$1.49 per watt in Q2 2015, while residential costs have dropped 48% since 2010 to \$3.50 per watt in Q2 2015.

The existence of the ITC through 2016 provides market certainty for companies to develop long-term investments in manufacturing capacity that drive competition and technological innovation, which, in turn, lowers costs for consumers.

## An Engine for U.S. Job Creation and Growth

Due in large part to the availability of a multi-year ITC, the solar industry grew by 34 percent in 2014 over 2013, making it the fastest growing energy source in the U.S. economy. Like all energy industries in the U.S., stable federal policy for the solar industry allows small and large businesses to make investment and hiring decisions with confidence. This certainty ensures a greater return for taxpayers, as supply chain partners recognize long-term market opportunities and scale up manufacturing capacity. Growth in the competitive solar industry continues to drive innovation and cost reductions that lead to lower prices for consumers.



<sup>1</sup> The Solar Foundation, *National Solar Jobs Census 2014*