

The *National Solar Jobs Census* is a product of The Solar Foundation®, an independent 501(c)(3) nonprofit organization whose mission is to increase understanding of solar energy through strategic research that educates the public and transforms markets. First conducted in 2010, the *Census* surveys solar employers and quantifies solar jobs across all solar technologies and industry subsectors. Our inaugural *Census* established the first credible employment baseline for the domestic solar industry. Since this industry continues to undergo a period of rapid evolution and growth, The Solar Foundation® has found it critical to update its data annually. *Census 2014* represents the fifth annual installment of current employment figures and projected growth in the United States solar industry.

Record-Breaking Growth

The U.S. solar industry currently provides opportunities for nearly 174,000 solar workers in all 50 states and is creating jobs at a rate nearly 20 times higher than employment growth in the overall economy. Over the five years covered by the *Census* series, we have found that solar employment has grown by 86%, representing over 80,000 new workers.

This growth continues to be driven by massive growth in demand for solar energy systems over the last decade. In the year the *Census* series began, the U.S. solar industry installed 929 megawatts (MW) of solar capacity. In 2014, over 7,200 MW were installed. The strong relationship between capacity increases and job growth becomes evident when one considers that collectively, demand-side industry sectors (installation, sales and distribution, and project development) make up 76% of all solar industry employment.

2014 marked the second consecutive year in which employment growth was near or above 20 percent, as well as the second time that growth exceeded the previous year's projections.



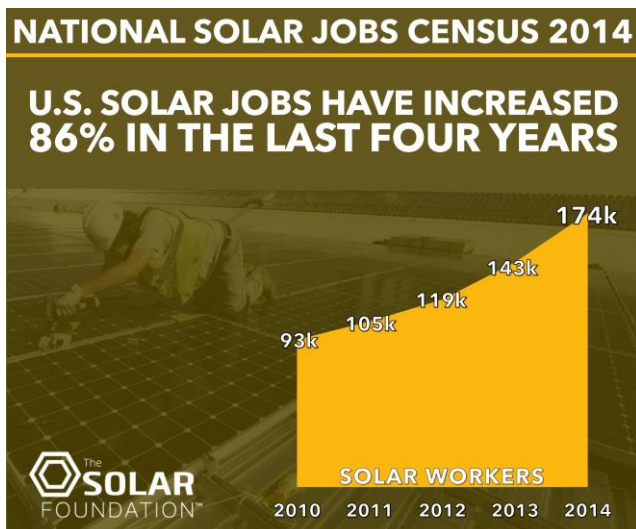
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Short Term Optimism; Long Term Uncertainty

Over the next 12 months, solar companies expect to add a total of 36,000 new solar workers, representing 20.9% employment growth over 2014. This estimate compares with a projected 1% increase in employment in the overall economy over the same period.

Many companies, however, are concerned about the impact that scheduled changes to the 30% federal investment tax credit (ITC) will have on their business and employment. Approximately 75% of businesses indicated the 30% ITC has significantly helped their business. Despite its importance, the 30% ITC is scheduled to drop down to 10% for commercial projects, and disappear completely for residential, a change that 60% of companies expect will impact their future business prospects.

Companies in the installation sector – the largest employer of solar workers – expect to be hit especially hard, with nearly 62% expecting to lay off staff or contractors once the ITC changes after December 2016.



Continued Sector Growth

Census 2014 shows that solar companies in most sectors added workers. Installation firms continue to account for over half the jobs in the solar industry, currently employing 97,031 solar workers. This represents an interesting milestone, as the installation sector now employs more workers than were in the entire industry just five short years ago. The manufacturing sector added over 2,600 workers, showing significant growth for the first time since 2011. Sales and distribution employment grew – albeit slightly – and project development firms added workers at a 24% growth rate. Since November 2013, one out of every 78 new jobs created in the U.S. was created by the solar industry.

Sector	2010 Jobs	2011 Jobs	2012 Jobs	2013 Jobs	2014 Jobs	2013-2014 Growth	2010-2014 Growth	2015 Projected Employment
Installation	43,934	48,656	57,177	69,658	97,031	39.3%	120.9%	118,942
Manufacturing	24,916	37,941	29,742	29,851	32,490	8.8%	30.4%	37,194
Sales & Distribution	11,744	13,000	16,005	19,771	20,185	2.1%	71.9%	25,480
Project Development	no category	no category	7,988	12,169	15,112	24.2%	89.2% (2012-2014)	18,004
Other*	12,908	5,548	8,105	11,248	8,989	-20.1%	-30.4%	10,439
Total	93,502	105,145	119,016	142,698	173,807	21.8%	85.9%	210,060

*Changes in the number of jobs in the “Other” category between years are not necessarily a reflection of actual increases or decreases in employment, but may instead be due to changes in the types of jobs included in this category.

Other Key Findings from *Census 2014*

- The solar workforce is becoming more efficient. In 2014, the U.S. solar industry required about 15.5 workers per installed megawatt, down from 19.5 in 2012.
- Eighty-five percent of the more than 31,000 new solar workers added since November 2013 are completely new jobs, rather than existing positions that have added solar responsibilities.
- Since 2010, employers have reported growing difficulties in finding and hiring new talent.
- Wages paid to solar workers remain competitive with similar industries and provide many living-wage opportunities. Solar installation firms pay an average wage of \$20-24 per hour, with the mean wage for these workers rising by 1.6% over the previous year. Manufacturers pay their assemblers nearly \$18 per hour, while internal sales staff at these firms earn approximately \$44 per hour. Overall, solar salespeople have a wide range of pay, from about \$30 to more than \$60 per hour, and solar designers receive \$30-40 per hour.
- The solar workforce is increasingly diverse, with select demographic groups (i.e., Latino/Hispanic, Asian/Pacific Islander, and African American solar workers, along with women and veterans of the U.S. Armed Forces) representing a larger percentage of the solar workforce than was observed in last year’s *Census*. These higher percentages, coupled with overall growth in solar employment, mean these workers are growing in absolute number as well as in terms of percentage of the workforce. Women account for over 37,500 solar workers (21.6% of total), up from about 26,700 in 2013. Nearly 17,000 veterans are employed by solar companies, compared with just over 13,000 the previous year.

The full report can be downloaded for free at www.tsfcensus.org

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