



The Solar Investment Tax Credit (ITC): An Economic Engine for the United States

Just last year, global investment in clean energy topped \$115 billion – with solar energy as the leading clean energy candidate for venture capital and private equity investment. Nations across the globe are competing to corner the market on solar energy technologies, and to capitalize on the job growth potential and economic gain associated with this promising industry. The ITC provides the necessary financial support and catalyzing market forces to ensure the growth of this emerging technology.

Expected Growth in U.S. Solar Industry

| Year | Photovoltaic Installation | New Jobs Created |
|------|---------------------------|------------------|
| 2007 | 170 MW | 6,000 |
| 2008 | 225-300 MW | 9,000 - 12,000 |
| 2009 | 790 MW | 30,000 |

The Solar Tax Credit Has Already Succeeded in Creating Jobs, Driving Investment, and Increasing Electricity

Jobs

- An estimated 6,000 high-quality jobs were created in the solar sector in 2007 and another 9-12,000 are expected in 2008.
- As of today, there are over 100 utility-scale solar energy projects in planning stages that represent the potential for approximately 56,000 megawatts of electric power, **over 100,000 construction jobs and 20,000 permanent jobs.**
- An analysis just completed by Navigant Consulting, a world-class consulting firm specializing in energy economics, concluded that **if the Solar Investment Tax Credit is not extended, there will be \$8.1 billion in lost investment and a net 39,400 jobs lost (this is the total of direct, indirect, and induced) in the solar PV sector alone in 2009.**

Investment

- More than \$2 billion was invested by companies and Wall Street has raised billions of dollars more for solar companies, foreseeing the global demand for renewable energy sources. If the ITC is not extended immediately, there will be **\$8.1 billion in lost investment in 2009 alone.**

Electricity production

- For large, utility-scale solar, there are approximately 100 projects that have filed with Bureau of Land Management and several dozen more on private lands. These projects average 700 MW each in size. **None of these projects will be built without the 8-year ITC extension and expansion.**

Real-Life Business Impact of Losing the Solar Tax Credit

- 4,300 MW of generating capacity will not be built.
 - At \$4/MW, this represents a loss of **\$17 Billion of investment**.
 - If 250 MW needs about 1,500 construction workers, then **4.3 GW will mean a loss of about 26,000 construction jobs**.
 - If 250 MW needs about 70 full time operators, then 4.3 GW means a loss of about **1200 highly paid O&M jobs**.
- Dozens of manufacturing plant expansions and utility-scale solar power plants will be put on hold or cancelled. Here are just a few examples:
 - A new solar manufacturing plant in **Albuquerque, New Mexico** will be forced to scale down its operation to 350 employees from a projected 1,500. The local economy is expected to lose \$400 million.
 - A PV manufacturer has selected **Greenville, Michigan** for 6 new manufacturing facilities. These plants will create 1,200 jobs in a community hard hit by the recession.
 - **Butte, Montana** is home to one of the largest polysilicon plants in the world, producing feedstock material for solar panels. Expansion of this plant, an investment of over \$1 billion, is on hold.
 - **Merrimack, New Hampshire** is home to one of the largest PV equipment manufacturers in the world. The company will build their next factory in Asia if the ITC is not extended.
- Every announced CSP plant project will be put on hold; these utility scale solar plants would produce more than 4,000 MW of electricity that could power one million homes.

Announced CSP Plant Projects in United States

| Installation Name & Technology Developer | Technology Type | Output (MW) |
|--|-----------------|--------------|
| Stirling Energy SDG&E Plant | Dish-Engine | 300 |
| Ausra & PG&E Plant | LFR | 177 |
| Victorville Hybrid Gas-Solar Plant | Trough | 50 |
| Sopogy Demonstration Plant | MicroCSP | 1 |
| Solel PG&E Plant | Trough | 553 |
| Sterling Energy Systems SCE Plant | Dish-Engine | 500 |
| Sterling Energy Systems SCE Plant Exp. | Dish-Engine | 350 |
| Ausra & Florida Power & Light Plant | LFR | 300 |
| Sterling Energy | Dish-Engine | 300 |
| Sterling Energy SDG&E Plant Exp 1 | Dish-Engine | 300 |
| Harper Lake Solar Plant | Trough | 250 |
| Arizona Public Services / Abengoa | Trough | 280 |
| BrightSource Energy Ivanpha 1, 2 and 3 | Tower | 400 |
| Emcore / SunPeak Power | Lens CPV | 200 |
| Palmdale Hybrid Gas Solar Plant | Trough | 50 |
| Future US CSP contract potential | | 4,011 |