



# The Solar Investment Tax Credit (ITC): An economic engine for the United States

Just last year, global investment in clean energy topped \$100 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 Solar Industry:

Year	Photovoltaic Installation	New Jobs Created
2007	170 MW	6000
2008	225-300 MW	9-12,000
2009	790 MW	30,000

*The solar ITC 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 one hundred thousand construction jobs and 20,000 permanent jobs.**
- An analysis just completed by Navigant Consulting, a world-class consulting firm specializing in energy economics, has provided these results:
  - **If the Solar Investment Tax Credit is not extended, there will be \$8.1 billion in lost investment and a net 39,800 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.**

*A study recently conducted for the Western Governors’ Association showed that for every 1,000 MMW of large-scale solar built in the southwest, 3,4400 construction jobs will be created; 250 permanent jobs will be created; \$500 million in state tax revenue will be generated; and over \$5.8 billion will be added to the gross state output.*

## Timeline for Planning and Construction of Concentrating Solar Power Facility

Year 1	Year 2	Year3	Year 4	Year5	Year 6
Planning, site Acquisition*	Negotiation, execution of power purchase agreement	Permitting		Site improvement, construction, testing Order, install turbines & other equipment	
Transmission study**		Construction of new transmission lines if required***			
			Obtain Financing		

### Real-Life Business Impact of losing the ITC

- A new solar manufacturing plant in **Albuquerque, New Mexico** will be forced to scale down its operation to 350 employees from a projected 1500. The local economy is expected to also expected to lose \$400 million.
- A PV manufacturer has selected **Greenfield, 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.
- PG&E has proposed purchasing 553 MW of power (equivalent in size to a typical natural gas or coal plant) from what will be the world's largest concentrating solar facility in the Mojave Desert. This represents an investment of \$1.5 to \$2.0 billion, an increased tax base in **San Bernardino County, California** in a relatively depressed area, and construction, operation and maintenance jobs. Without an extension of the ITC, this project could be in jeopardy or face significant delay.
- A new solar power plant located 70 miles southwest of **Phoenix, Arizona** scheduled to go into operation by 2011 would not go on-line without the benefits of the ITC. The 280 MW facility is expected to generate revenue of around \$4 billion, bringing over \$1 billion in economic benefits to the state of Arizona and enough electricity to power 70,000 homes.

### Announced CSP Plant Construction in United States:

Installation Name & Technology Developer	Technology Type	Output (MW)	Status
Stirling Energy SDG&E Plant	Dish-Engine	300	Feasibility
Ausra & PG&E Plant	LFR	177	Feasibility
Victorville Hybrid Gas-Solar Plant	Trough	50	Feasibility
Sopogy Demonstration Plant	MicroCSP	1	Feasibility
Olel PG&E Plant	Trough	553	Planning
Sterling Energy Systems SCE Plant	Dish-Engine	500	Planning
Sterling Energy Systems SCE Plant Exp.	Dish-Engine	350	Planning
Ausra & Florida Power & Light Plant	LFR	300	Planning
Sterling Energy	Dish-Engine	300	Planning
Sterling Energy SDG&E Plant Exp 1	Dish-Engine	300	Planning
Harper Lake Solar Plant	Trough	250	Planning
Arizona Public Services RFP	TBD	250	Planning
BrightSource Energy Ivanpha 2 and 3	Tower	300	Planning
Emcore / SunPeak Power	Lens CPV	200	Planning
Palmdale Hybrid Gas Solar Planbt	Trough	50	Planning
Avingoe, AZ	Trough	280	Planning
<b>Future US CSP contract potential</b>		<b>3881 MW</b>	