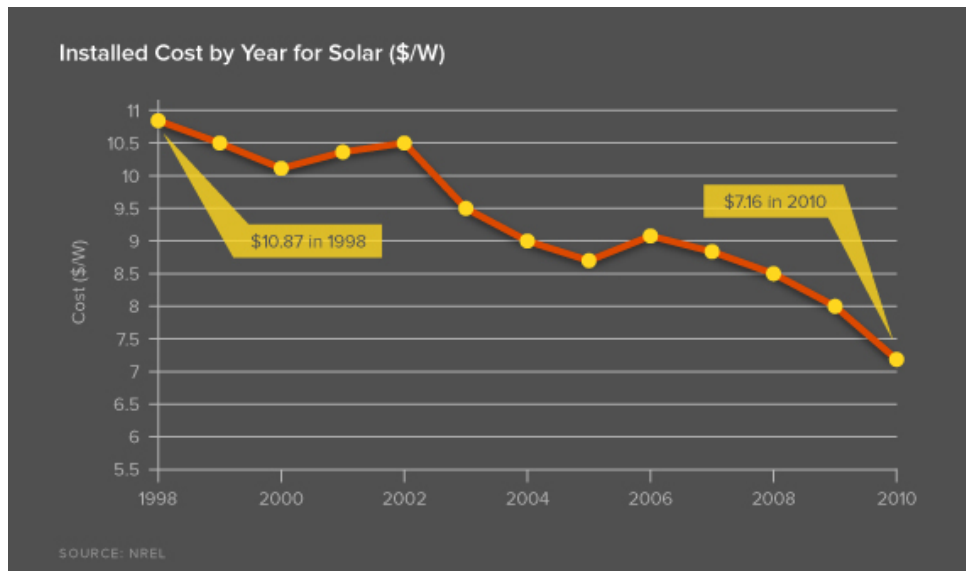


Solar Power: Time To Shine?

Renewable energy sources such as Solar power have become an increasingly popular energy resource over the years thanks to decreasing prices and increased awareness via reduced production costs, green energy advocates, government incentives and panel manufacturers' marketing efforts.

Although solar power is still approximately three times more expensive than electricity produced by natural gas, prices have fallen by two thirds since 2008. To further solar power's affordability, federal and state governments are offering tax breaks and subsidies.



The federal government offers a tax credit of 30 percent for the gross cost of solar panel installation for residents and businesses. On top of the tax credit, each state offers its own incentives for all forms of renewable energy, including solar.

The Department of Energy (DOE) rolled out the **SunShot Initiative** in 2007 to decrease solar energy system costs by 75% before 2020. When this goal is reached, systems will even be affordable without any rebates or tax cuts. The main goal has been to drive innovative technology.

Under the initiative, the DOE began backing the company 1366 Technologies this October with a \$150-million loan. 1366 believes their new manufacturing process will significantly cut costs, making prices competitive with that of coal.

New thin-film photovoltaic cell technologies are also bringing down the costs and large companies like GE are beginning to manufacture the panels. In October GE announced plans to build the largest thin-film panel factory in the United States.

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Market Update

Why "Amber" News?
The Greek word for Amber is "electron" and the Latin term for Like Amber is "electrius", which is where the English word for electricity is derived.

Solar Power: Time To Shine? (cont)

These initiatives are not only bringing down costs, they are creating jobs and with their implementation, protecting the environment.

Solar's portion of the power business remains small but has great potential to flourish. According to the U.S. Energy Information Administration (EIA), solar power is capable of providing many times the total current energy demand.

To read more about the U.S. Department of Energy (DOE) SunShot Initiative go to <http://www1.eere.energy.gov/solar/sunshot/#>. For more Information on state, local, utility and federal incentives and policies that promote renewable energy and energy efficiency visit: <http://www.dsireusa.org/>.

Have solar costs come down enough for your facility? See the example of a Ft. Worth, Texas territory cost comparison*:

| | 2006 | 2011 |
|--------------------------------|------------------|------------------|
| Cost Per Watt: | \$9.00 | \$7.00 |
| System Size: | 1,000 kW | 1,000 kW |
| kWh Produced Each Year: | 1.45 Million | 1.45 Million |
| Gross Cost: | \$9,000,000.00 | \$7,000,000.00 |
| Federal Tax Credit: | \$(2,700,000.00) | \$(2,100,000.00) |
| Oncor Rebate: | \$ - | \$(1,000,000.00) |
| Net Cost: | \$6,300,000.00 | \$3,900,000.00 |

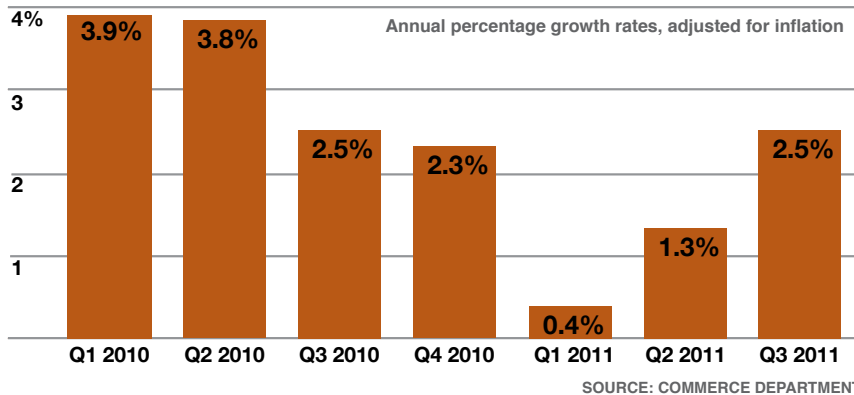
The same system cost 1.6 times more in 2006 than it would now.

*These are simply estimates calculated by RPM based on real numbers from NREL and a solar panel installer. While every state in the US is given the same federal tax credit, each state adds its own incentives. For example, New Jersey offers a yearly payback through their **surplus agreements** for the first 15 years of your systems life which could slash costs up to 60%.

Solar Power Facts

- Low-temperature solar collectors also absorb the sun's heat energy, but instead of making electricity, use the heat directly for hot water or space heating in homes, offices, and other buildings.
- Covering 4% of the world's desert area with photovoltaics could supply the equivalent of all of the world's electricity.
- The Gobi Desert alone could supply almost all of the world's total electricity demand.
- Passing of Bill 632 restricts any Home Owner's Association from banning solar panels on home rooftops.
- Photovoltaic cells are used to transform energy from the sun directly into electrical power. The amount of electricity generated by a cell depends on a few things including device size, weather and length of exposure to light.
- Since the sun is an intermittent energy source, another electricity source would need to provide power during the evening or during a storm when light is not present or potent. Highest electricity demand is during the day time so the 'back-up' energy source would be used sparingly.
- Using solar energy produces no air or water pollution and no greenhouse gases.

GROSS DOMESTIC PRODUCT



The nation's economy gained much-needed strength in the third quarter, as the pace of growth nearly doubled compared to the previous three months.

According to an advanced estimate released on October 27, U.S. gross domestic product grew 2.5% - almost double the second quarter. A poor 0.4% growth in the first three months of the year was followed by a slightly more promising 1.3% increase in the second quarter.

Stronger consumer spending significantly contributed to the growth, helping to make up for cuts in government spending.

An increase of at least 3% is needed to create enough jobs to lower the unemployment rate but economists aren't expecting to see that rise even through 2012.

Oil and Gas Update

EIA projects average household heating expenditures for natural gas, propane, and heating oil will increase by 3 percent, 7 percent, and 8 percent, respectively, this winter (October 1 to March 31) compared with last winter, while electricity heating

expenditures fall by less than 1 percent. Average expenditures for households that heat with oil are forecasted to be higher than in any previous winter.

This forecast reflects higher prices for natural gas, propane, and heating oil, and slightly milder weather than last winter in much of the nation contributing to lower consumption in many areas.

EIA expects the U.S. average refiner acquisition cost of crude oil to average \$99 per barrel in 2011 and \$98 per barrel in 2012, compared with \$100 per barrel and \$103 per barrel, respectively, in the previous Outlook.

Natural gas working inventories ended September 2011 at 3.4 trillion cubic feet (Tcf), about 2.6 percent, or 91 billion cubic feet (Bcf), below the 2010 end-of-September level. EIA expects that working natural gas inventories will approach last year's high levels by the end of the injection season, typically October-November each year. The projected Henry Hub natural gas spot price averages \$4.15 per million British thermal units (MMBtu) in 2011, \$0.24 per MMBtu lower than the 2010 average. EIA expects the rate of growth in domestic natural gas production to slow in 2012, with the Henry Hub spot price averaging \$4.32 per MMBtu.

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GROSS DOMESTIC PRODUCT

