



Top 10 Solar Energy Myths

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- 1 *Solar Energy Systems (thermal or solar electric) are too expensive.* System Installations are more affordable than they have ever been in 40 years. Photovoltaic (solar electric) modules cost per watt, installed, started at \$32 a watt, now at an all time low of under \$4. Solar Incentives cover a minimum of 30% all the way up to 85% of the costs of a system, relative to fossil fuels.
- 2 *Typical home owner won't live in their home long enough to make their solar investment back.* A solar system actually increases the value of the home. For every \$1,000 that has been saved in annual electric costs, your home's value rises \$15,000. (U.S. Department of Housing and Urban Development), not including the benefit of lower utility cost.
- 3 *Solar systems are ugly, large and bulky.* Solar panels can be used as building materials. Now, modules have become virtually seamless with solar shingles. Solar cells can be combined with slate, metal, fiber-cement, and asphalt roofing. They can be used as skylights and windows or other architectural components.
- 4 *Solar panels require constant maintenance.* Typically, the solar panels rarely require maintenance or cleaning. The rest of the system components, require no more than any other electrical equipment.
- 5 *Solar panels do not work in cold, cloudy places/states.* Germany, who ranks low in sunny days similar to Washington State, is the solar energy capital of the world. In fact, when the solar panels are cold, they are able to better conduct electricity. If the sun is shining, energy is produced.
- 6 *Solar modules require more energy to manufacture than they will ever generate in their lifetime.* According to a U.S. Department of Energy study that analyzes several different module technologies, solar modules will generate more energy in their lifetime than was required to produce them. At modern photovoltaic module efficiencies, energy production payback is generally within 4 – 6 years, based on local utility rates.
- 7 *The solar panels cannot withstand harsh climates (snow, hail, winds, sleet, disasters).* Solar Panels built to code can withstand most climates and applications. The color of solar panels is dark which aids in melting snow. They can withstand the forces of a hurricane when made and installed to latest codes.
- 8 *Solar systems are unreliable and inconsistent.* On the contrary, solar electric systems can be more reliable than utility power companies. Typical solar modules warranty lasts 25 years or more. They have no moving parts and off-grid systems are not subject to power outages, as energy storage provides continuous operation. In fact, solar technologies are used to power many vital systems: aircraft warning lights, railroad crossing signals, navigational buoys, etc.
- 9 *I cannot use solar energy because I don't have enough sunlight and no Southern roof exposure.* Most of America is bathed with sunlight. Cloudy areas still generate energy, but may require more solar, like the Pacific Northwest. East/West roof exposure is also effective based on application, as well as the use of ground mounted systems, trackers, or concentrators.
- 10 *Solar energy is inefficient and does not produce enough energy.* According to the U.S. Department of Energy, photovoltaic module efficiency has more than quadrupled since the 1970's. With an average between 14-20%. It sits in the same efficiency range as the gas in your car.