

Sierra SunTower

A New Blueprint for Solar Energy



eSolar heralds a new era of solar energy with the unveiling of Sierra SunTower. Challenges that once thwarted widespread solar thermal power generation —including cost, speed of deployment, and environmental sustainability—have now been met. eSolar delivers a new blueprint for solar energy in California and beyond.

The eSolar Module

- 10 acres
- 1 tower
- 1 thermal receiver
- 12,000 mirrors reflecting the power of 10,000 suns
- 2.5 MW powering 2,000 households with clean, renewable energy

Sierra SunTower Quick Facts

- 2 modules
- 20 acres
- 2 towers
- 2 65-ton natural recirculation thermal receivers
- 1 refurbished 1947 GE steam turbine generator
- Steam temperature 440° C
- Steam pressure 60 bar
- 24,000 mirrors reflecting the power of 20,000 suns
- 5 MW of clean, renewable energy supplied to 4,000 Southern California Edison households through a power purchase agreement
- Only operating solar thermal power tower plant in the US

Sierra SunTower Benefits

- **Southern California Homes** – Sierra SunTower will produce 5 MW of electricity powering up to 4,000 homes.
- **Job Creation** – The project created over 250 construction jobs and 21 permanent jobs.
- **Local Community** – Sierra SunTower provides a new local tax base, as well as direct and indirect economic benefits during development, construction and operation.
- **Greenhouse Gases** – 5 MW of clean solar power generation will offset more than 7,000 tons of CO₂ each year.
- **Clean and Reliable** – Efficient and clean solar power is reliably available during peak demand.

Environmental Facts

The 5 MW output of Sierra SunTower will reduce CO₂ emissions by 7,000 tons per year. For perspective, Sierra SunTower's annual impact is equivalent to:

- Planting 5,265 acres of trees
- Removing 1,368 automobiles from the road
- Saving 650,000 gallons of gasoline

Supported by industry and government officials:

"eSolar is proving that California's energy and environmental leadership are advancing carbon-free, cost-effective energy that can be used around the world."

Arnold Schwarzenegger
Governor of California

"The City of Lancaster is proud to be home to the nation's newest solar power tower plant. This plant and eSolar's progressive growth plans throughout the Antelope Valley are the crown jewels in our ongoing effort to truly become the Alternative Energy Capital of the World."

R. Rex Parris
Mayor of Lancaster

"eSolar demonstrates that pristine wildlands do not have to be sacrificed in order to keep the lights on with clean energy. eSolar's efforts to reduce its impact on the surrounding environment demonstrates a level of foresight we hope to see from other solar developers in the future."

David Myers
Executive Director, The Wildlands Conservancy

"Southern California Edison is proud to serve power from eSolar's Sierra SunTower to our customers. We are continually looking for ways to enhance our industry-leading portfolio of clean, renewable power, and we applaud eSolar for its part in California's clean energy future."

Stuart Hemphill
Senior Vice President of Power Procurement,
Southern California Edison

eSolar

3355 W. Empire Avenue, Suite 200, Burbank, CA 91504
818-303-9500 tel | 818-303-9501 fax | www.esolar.com

© Copyright 2009-2010 eSolar, Inc. All rights reserved. All trademarks are the property of their respective owners. Reference herein does not constitute or imply affiliation with, endorsement, or recommendation of eSolar, Inc. products by the respective trademark owners.