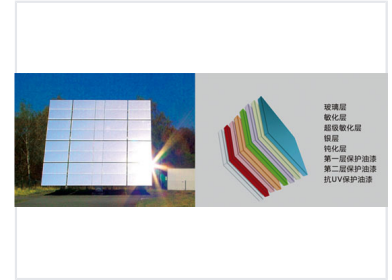


# Heliostat Power Generation System

Heliostat technology employs mirrors to concentrate sunlight onto a receiver atop a tower. This concentrated solar energy is then used to generate electricity.



## Overview

### Heliostat Power Generation System

This advanced power generation system utilizes a precise field of mirrors to concentrate sunlight onto a receiver located atop a tower. By actively tracking the sun's movement, the system maintains optimal reflection throughout the day to maximize energy capture. The concentrated solar energy is converted into heat to generate steam, which drives a high-efficiency turbine to produce consistent electricity.

## Mirror Technology

### Mirror Layer Structure

| Layer Number | Composition Component     |
|--------------|---------------------------|
| 1            | Glass Layer               |
| 2            | Sensitization Layer       |
| 3            | Super Sensitization Layer |
| 4            | Silver Layer              |
| 5            | Passivation Layer         |
| 6            | First Protective Paint    |
| 7            | Second Protective Paint   |
| 8            | Anti-UV Protective Paint  |

## System Operation

### Power Generation Workflow

- Solar concentration via heliostat field
- Heat conversion at tower receiver
- Steam production
- Turbine and generator power conversion

### Sun Tracking Control

Computer-Controlled, Dynamic Tracking, Optimal Reflection