

ies Independent Energy Solutions

Solar Electric Engineering & Construction



design / build
commercial
industrial
utility
public agency
military
grid-tied
off-grid
rebates



Renewable Energy Snapshot



- 2009 - Only **11.6%** of all energy came from renewable energy
 - Wind, solar, geothermal, hydroelectric
- Renewable energy generations goals from California's Air Resource Board
 - 20% by 2013
 - 25% by 2016
 - 33% by 2020
- California Energy Commission's Renewable Energy
 - Market-based incentives
 - Consumer rebates
- California Public Utilities Commission
 - Incentive programs provide cash back
 - Budget of >\$2 billion over 10 years
 - Goal is to reach **1,940MW** of installed solar capacity by 2016

Importance of Renewable Energy Generation



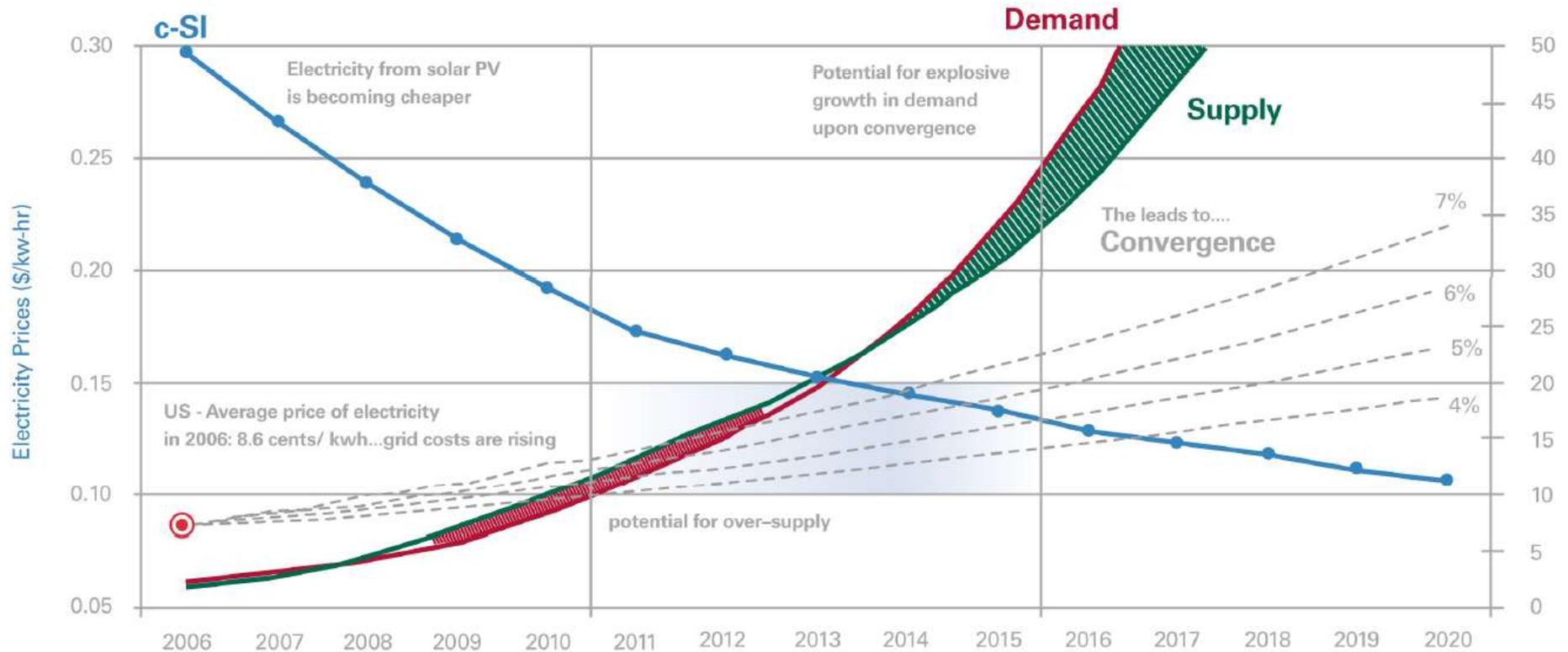
- Unanticipated increase on local energy demands
- Slower than expected generating capacity
- Stage two electricity alerts
- Rolling blackouts



- Renewable energy:
 - Stabilizes electricity prices
 - Provides environment benefit
 - Provides peak usage coverage
 - Provides electricity to high-demand, high-congestion areas
 - Proves affordable and reliable

The Opportunity

Solar PV industry outlook



Renewable Energy - Economic Benefits



- **Using IES as an example of economic benefits**
 - Generate annual revenue of \$13.8M
 - Spend \$1.3M on local labor
 - Purchase \$8.2M on goods for project
 - Contract \$1.2M for services
- **Independent Energy Solutions is an environmentally friendly company whose purpose is to:**
 - Help our customers save money while helping them become energy independent
 - Serve people without access to conventional power
 - Raise the industry's standards through leadership by example
 - Create jobs in the community

Who We Are and What We Do

- Woman owned turn-key Design / Build Photovoltaics Firm



- Engineering Excellence
 - IES Leads in Innovation
 - In-House Engineering Department
 - Electrical PE on Staff
 - NABCEP Certified Engineers on Staff
- IES Executes:
 - Best Practices Project Management
 - 
 - 
 - Construction Management
 - EM385 40h Cert Foreman
 - CQM Cert Foreman
 - Highly Skilled Construction Crews
 - Construction Licenses
 - B (General Contractor)
 - C10 (Electrical)
 - L-11 License in Arizona
 - Field Installation Team
 - Journeymen Electricians
 - Experienced PV Installers
 - NABCEP Certification
 - Field Service Team
- Consulting
 - Engineering
 - Feasibility Studies
 - Project Development
 - 3rd Party Commissioning
 - System Performance Optimization

Our Business and Customers



- **Vertical Market Focus**

- Military / Federal Government
- Utility
- Commercial / Industrial
- Municipal / Public Works

- **Experts in Complex Solar PV Solutions**

- Grid Tied (Net Metering)
 - Roof Mount
 - Ground Mount
 - Solar Carports
- Off Grid PV/Diesel Hybrids
 - Micro Utility Grid
 - Facility Power

- To date, IES has Designed and Built more than 300 Commercial PV Systems (Ranging from 10kW to 1.2 MW)

• Proudly measured by the company we keep....



SAN DIEGO STATE UNIVERSITY



University of California San Diego



SOUTHERN CALIFORNIA EDISON

An EDISON INTERNATIONAL Company



Chula Vista Police Department
Protecting Today, Securing Tomorrow



City of Encinitas



ISIS PHARMACEUTICALS



the new children's museum



Solar Electric Engineering & Construction

Environmental Economic Impact



- Average commercial project size
 - 914 kW dc
- Annual energy production
 - 1,447,000 kWh/yr
- CO2 reduction
 - 1,135 tons in the first year
- Environmental equivalent of
 - Not driving **3,693,587 miles/yr**
 - Planting **19.5 acres of trees/yr**
 - Powering **246.9 homes/yr**



Securing Continued Economic Impact



- Serve California energy needs with continued renewable energy incentives
- Ensure Cash Grants Program and tax credit remain available
- Secure project financing to provide attractive ROI
- Tradable Renewable Energy Credits
 - TRE C
- Drive renewable energy goals beyond 2020

Major Financial Services Firm Parking Structures, 1.2 MW dc



