

# PARK SOLAR SYSTEMS



## Why Go Solar?

- Produce your own electricity, paying **YOURSELF** for the energy **YOU** produce every month instead of paying the utility co.
- Long-term dependability and relatively high yields can make an **investment** in solar a financially sound decision.
  - State rebates and federal tax incentives may pay for more than 65% of the total installation cost.
  - Your investment may pay for itself in approximately 3 to 8 years, depending on local energy costs. Ask for this projection in the proposal.
- Manufacturers warranty the power output of each panel for 25 years.

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## Why Go Solar?

- Lock in a low, fixed rate for decades of clean energy and protecting yourself from utility rate increases.
- Reduce load on local area electrical systems.
- “Green Marketing” opportunities
- Enhance the value of your property.
- Distributed system locations can prolong the life of the park’s electrical system.

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## How Much Solar to Install?

- Return on Investment
  - Eliminate higher tiers of expensive electricity on the park’s master meter utility bill.
  - By offsetting common area loads only, you do not risk having to share “rebates” with residents.
  - Producing electricity that will be sold to residents (producing more than your common area usage)
    - Pros
    - Cons

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## What are the steps?

- Park Energy Use Analysis
- Rebates & Incentives
- Engineering & Design
- Installation
- Monitoring
- Maintenance



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## Reasons for Utility Rate Increases

- *Electricity prices outpaced inflation since the 1970s*
- *With deregulation, residential rates have been on the rise, increasing from 7 to 14% since 2001*
- *For the most part, master-metered MHPs have been protected from rate hikes with the CPUC's cap on tiers 1 and 2*
- *However....*

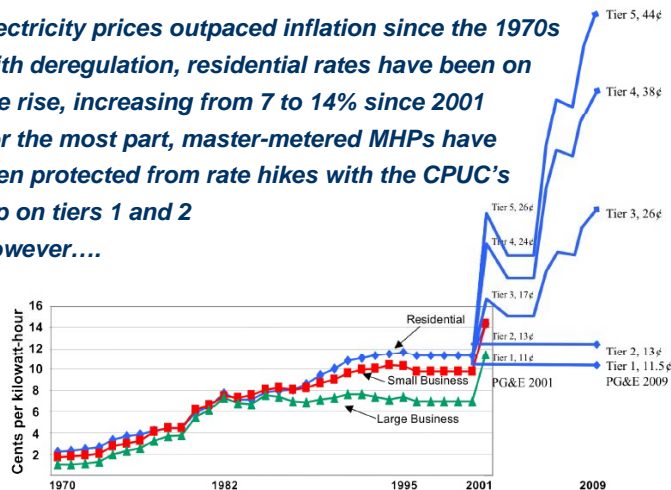


Fig. 4. Residential electric rates in California from 1970 to 2001 increased at a 6.7% compound annual rate (source: CPUC "Electric Rate Compendium" Nov. 2001 from EIA data). Since 2001, there has been no change in Tiers 1 & 2, but an exaggerated increase in Tiers 3-5. Enactment of AB413 and expiration of AB1X may alter these trends. Note: this graphic is to scale.

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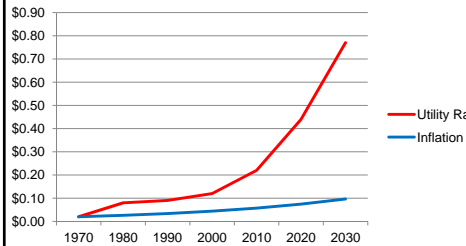
## Utility Rate Increases

- On October 11, 2009, Governor Schwarzenegger signed Senate Bill (SB) 695, the Ratepayer Protection Act, into law.
  - CPUC Authorizes limited residential rate restructuring in response to Senate Bill 695
  - CPUC authorized the utilities to increase Tier 1 and 2
  
- Southern California Edison is also in need of \$1.6 billion over the next three years to ensure pension funds and “the future reliability and security of the region’s power grid.”
  - SoCal Edison says rates will rise 9% for residential customers
  - On the other hand, some advocates say that SoCal Edison is seeking more than \$4.1 billion
  - This would create rate increases of about 19% for residential and 15.5% for small or medium commercial customers in that

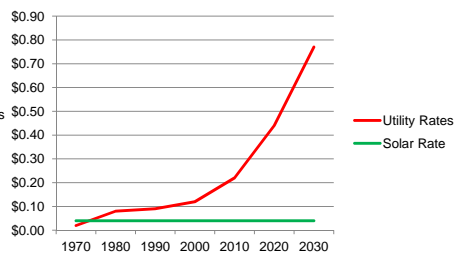
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## Utility Rate increases

**Rising Electricity Rates vs. Inflation**



**Rising Electricity Rates vs. Solar**



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## Shaded Parking Included



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## Solar Carport



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## Solar Carport & Roof Mount



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## Mobile Home Park Solar Economics

### State Incentives

- Performance Based Incentives (PBIs) provide monthly incentive payments based on actual delivered system performance over the course of 5 years
  - These rebates are in place to help the state meet their Renewable Portfolio Standards which dictate that 33% of our energy comes from renewable sources by 2020
  - Master-metered MHPs can qualify for high residential rebates while also taking advantage of commercial tax incentives.

### Federal Incentives

- The *American Recovery and Reinvestment Act of 2009* created a renewable energy grant program that is administered by the U.S. Department of Treasury.
  - This cash grant may be taken in lieu of the federal business energy investment tax credit
  - The grant is equal to 30% of the total investment and is paid out 60 days after construction of the solar system is complete

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## Mobile Home Park Solar Economics

### Selling Power

- There will be no changes in day-to-day operations or billing practices.
- You are already in the business of selling power.

### Utility Rate Increases

- Without fail, utility rates will continue to rise at alarming rates.
- As utility rates increase, the value of your power also increases.



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## Mobile Home Park Solar Economics

### Increased Property Value

- Solar electric systems increase property value by decreasing utility operating costs.
- California exempts solar systems from being included in the assessed value of a property, so installing a solar system doesn't cause the owner's property taxes to increase.

### Shaded Parking

- Residents and guests alike may benefit from cooler car temperatures.
- A car in direct sun exposure can heat up by as much as 30 degrees in the summer months.

### Reduce Operating Costs

- Increasing Profitability

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# QUESTIONS?



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