

Sustainability 201: Renewable Energy Options that Create Dollars for Developers and Owners

Tuesday, October 28

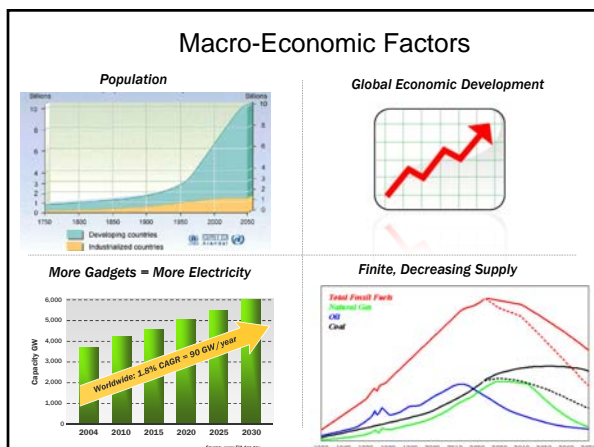
11:15 a.m. – 12:30 p.m.

Tabitha Crawford
Jim Fugitte
Rob Kelly
Jim Meacham

- President Ryan Solutions
- CEO Wind Energy Corporation
- Director National Accounts SolarCity
- Sr. Energy Engineer CTG Technologies

Average U.S. Energy Rates will increase 15% this year.

--the U.S. Department of Energy



Energy Trends

- Decentralization
 - Improved Technology Efficiencies
 - Market Valuation (Innovative Financing)
- Evolution Vs. Revolution

Financial Markets Reward Renewable Energy

- 77% of Largest 500 Market Caps Responded in 2007 to Carbon Disclosure Project
- Dow Jones Sustainability Index
- UN Global Reporting Initiative
- Securities & Exchange Commission

Understanding Renewable Energy Today

- More than “Green” Building Required
- Behavior Change
- Technology Innovations / Efficiencies
- Regulations / Commitments

WIND Energy
CORPORATION



*"There are no rules around here – we're trying to accomplish something."
--Thomas A. Edison*

Energy Crisis Heats Up Demand for Wind Power


- U.S. Wind Power increased 45% in 2007
- 30% of New Energy in U.S. from Wind
- \$77.3 billion US Renewable Energy Industry 2007



Mariah Wind Power-Windspire




Quiet Revolution-QR5

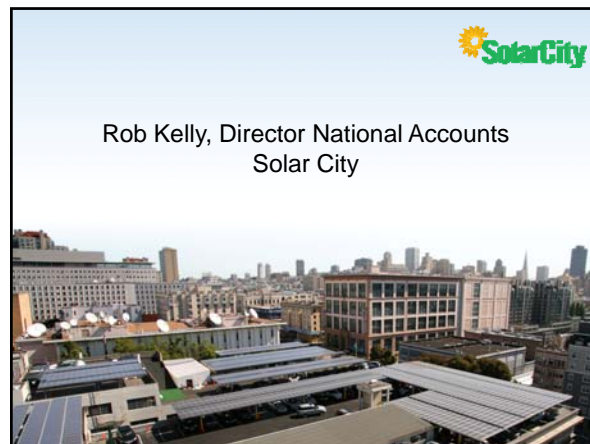


Wind Energy Corporation

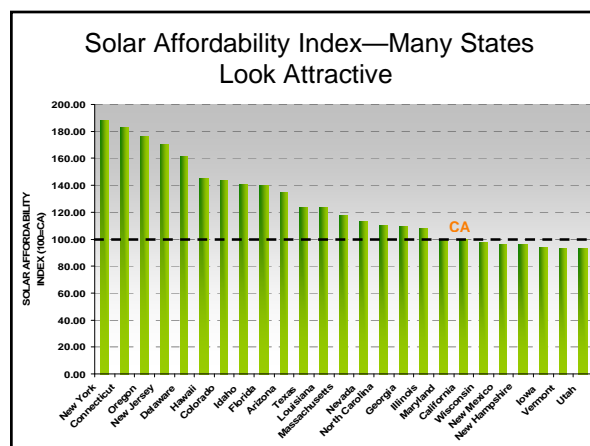
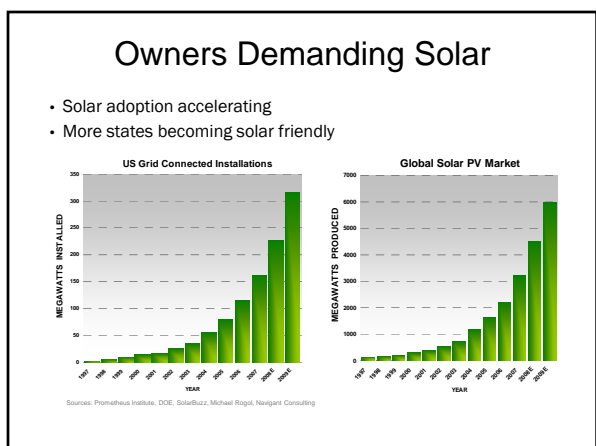
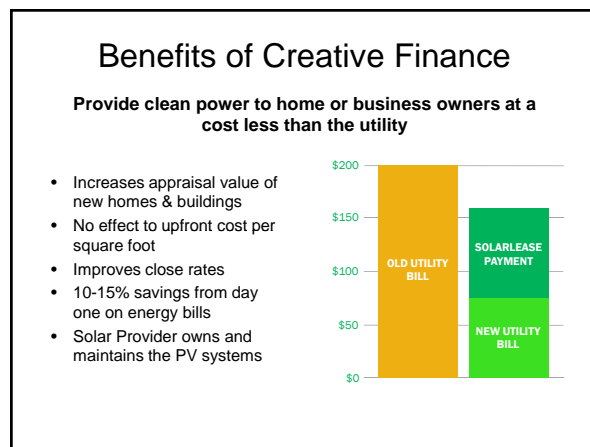
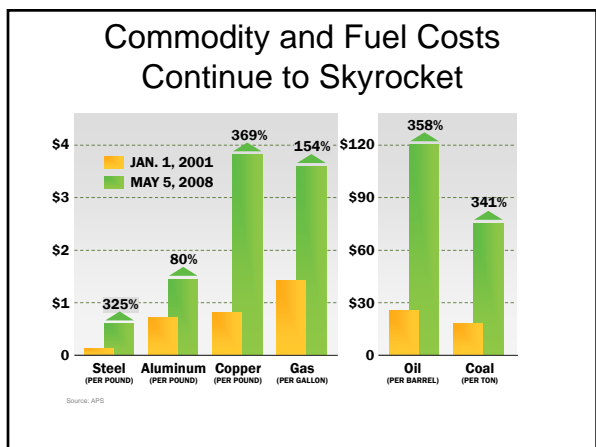


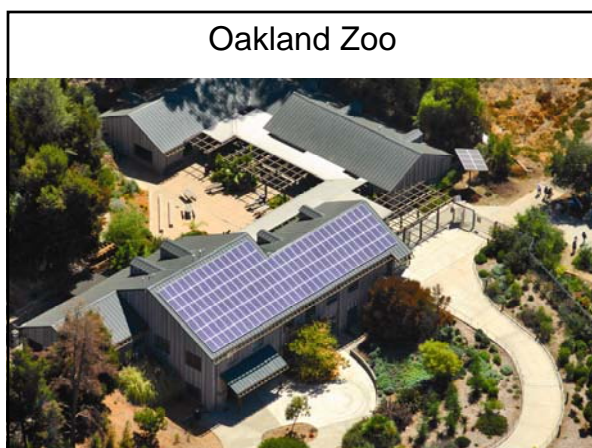
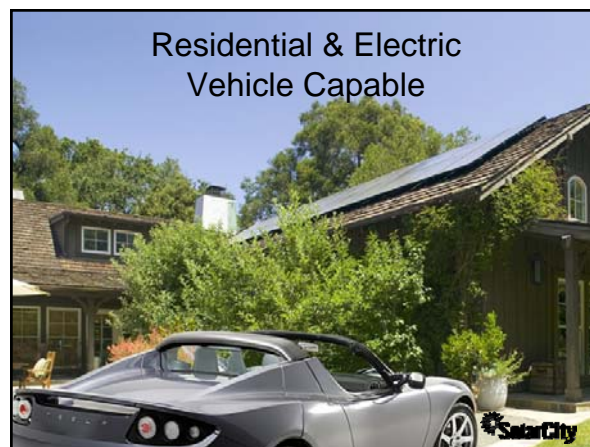
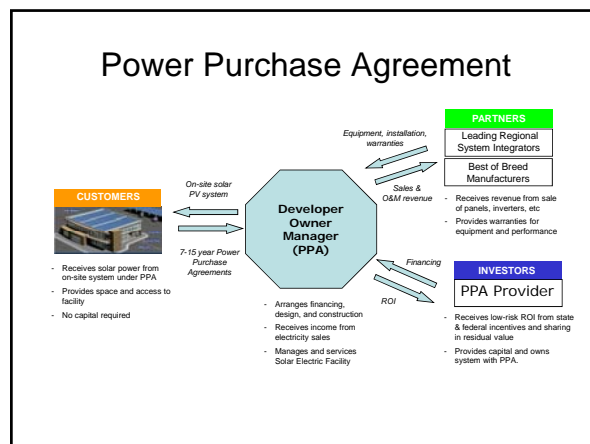
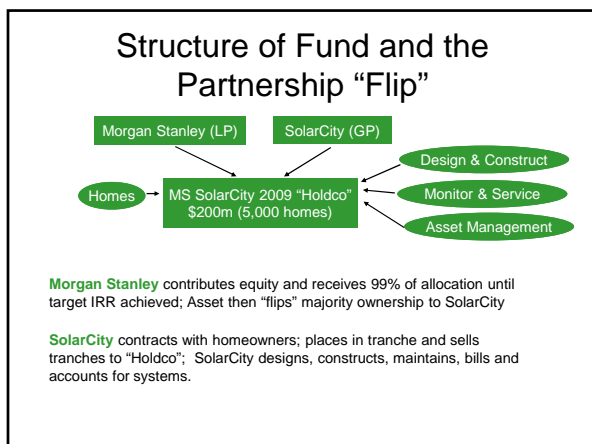
Traditional Propellers





Rob Kelly, Director National Accounts
Solar City





ULI FALL MEETING 2008

Jim Meacham

Renewable Energy Success in Your Project
October 28, 2008

Hierarchy of Energy Solutions

NO SILVER BULLET

The most effective solutions vary based on:

- Project type and scale
- Location
- On-site resources
- Climate
- Utility environment
- Branding strategy
- Risk tolerance
- Experience

Off-Site Credits
On-Site Renewable Generation
Energy Efficiency
Energy Conservation

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Keys to Success

- Start early and use an integrated design process
- Align your marketing and sales strategies with your energy solutions
- Continually improve your process (feedback and lessons learned)

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Renewable energy can add significant value to your project

SUNPOWER

- Latest sales numbers in from Ryness through Jan 1st
- 13 communities evaluated for 24 months
 - 5 Sacramento, 6 Bay Area, 2 Central Valley
 - Ryness provided comparable non-solar communities for each solar community, then tracked sales performance.
- Communities were competitive on location, development concept, home size, list price, & lot size

	Sacramento	Bay Area	Central Valley	Total
Solar	3.1	2.9	4.6	3.2
No solar	1.9	1.4	2.7	1.8
Added Absorption	1.2	1.5	1.9	1.5

Source: The Ryness Company Marketing Research Department

Successful marketing and sales alignment pays off

SUNPOWER Whitney Ranch Master Plan Sales Data

Total Home Sales

Community	Total Home Sales
Twin Oaks	21
Shady Lane	42
Rainington	39
Lariat Ridge	53
Captain Run	43
Sierra Sky	43
Carsten Crossings	80
Waterside	26
Black Oak	46

Average Home Sales per Month (Overall)

Community	Average Home Sales per Month
Twin Oaks	1.0
Shady Lane	1.8
Rainington	1.7
Lariat Ridge	2.4
Captain Run	2.0
Sierra Sky	2.1
Carsten Crossings	3.9
Waterside	1.5
Black Oak	2.2

Carsten Crossings is selling at an average of 3.9 homes per month. The other eight communities are selling at an average of 1.8 homes per month.

Source: Northern California Ryness Report (10/29/07)

Project value can increase significantly

SUNPOWER Velocity Equals Profitability

- 144 Homes at Carsten Crossings
- \$2,642,000: cost for solar and EE measures
- \$311,000 Monthly Cost of Carry for Carsten Crossings
- At current sales pace, 37 months to sell 144 homes
- Sales at competitors' rate would add 42 months to absorption period
- 42 months x \$311,000 per month = **\$13 million savings to Grube**

Homes/month

Category	Homes/month
Carsten Crossings	3.9
Break Even	2.0
Competition	1.8

GrubeGreen Break Even

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Innovative concepts provide win-win-win opportunities

Solara Zero Energy Affordable Housing, Poway, CA

Financial innovation – using tax credits to pay for solar

Technical Innovations – early energy efficiency planning combined with roof and carport solar

Triple Bottom Line Solution – everyone wins

REDUCING ENERGY USE
Increasing Renewable Energy

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