

**Jenna Goodward**  
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*World Resources Institute*

# **Making the Business Case for Renewable Energy**



# Value Drivers

- Energy bill savings
- Peak Shaving (lower demand charge)
- “Hedge” value: stable operating costs
  - Energy prices
  - Carbon price risk
- Bolster Reliability
- Reduced emissions
  - Meet internal goals or commercialize
- Enhance Stakeholder relationships
- Experience now provides future options

# Factor Total Value into Decisions



# Cost Saving & Peak Shaving

## *HP's on-site solar PV: 1.2 MW in California*



- 1.2 MW at San Diego HQ
  - \$750,000 in energy savings over 15 years
  - Long-term PPA hedge against rising peak power prices
  - Championed by PR
- 
- Companies opting for PPA model
  - Solar shaves peak and can reduce demand charges for remaining purchased power

# Hedge Value

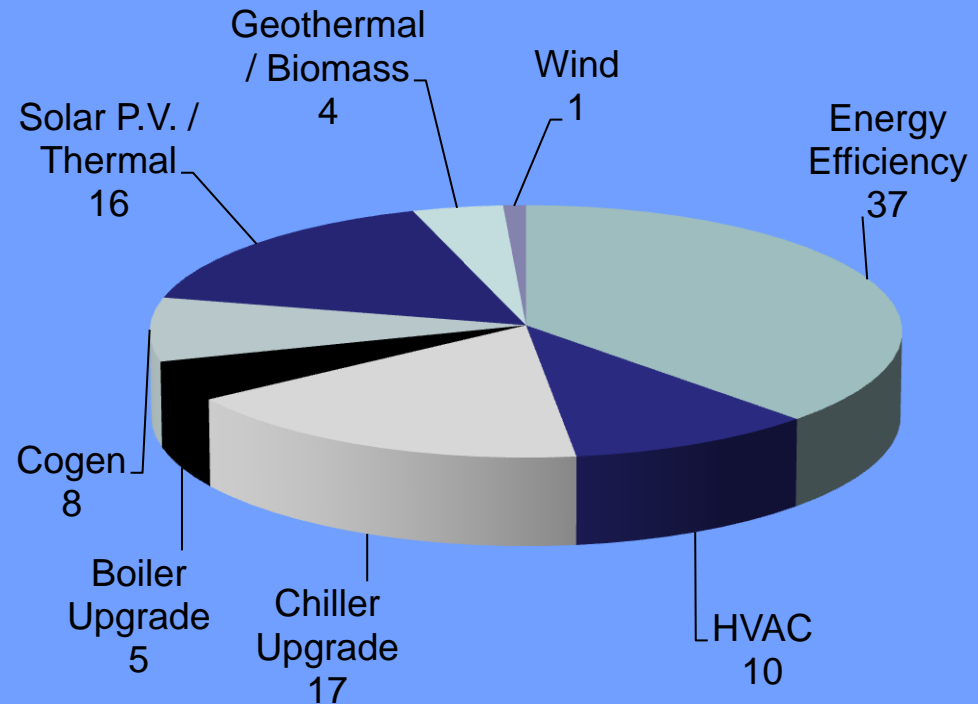
*Google locks in energy prices for 20 years with wind*



- Located near data center in Iowa
- 114 MW of wind purchased via direct PPA
- Analysis with carbon price
- Negative cost of carbon over term
- Hence they also hedged their carbon operational cost

# Attractive Returns

- Fortune 500 company
- Dedicated budget: Portfolio of RE and EE
- Contributing to company-wide target
- Average IRR: over 19%
- Additional funding from CFO this year



# Maximizing PR Benefits



- Leverage branding benefits
- Better positioned to raise capital via SRI



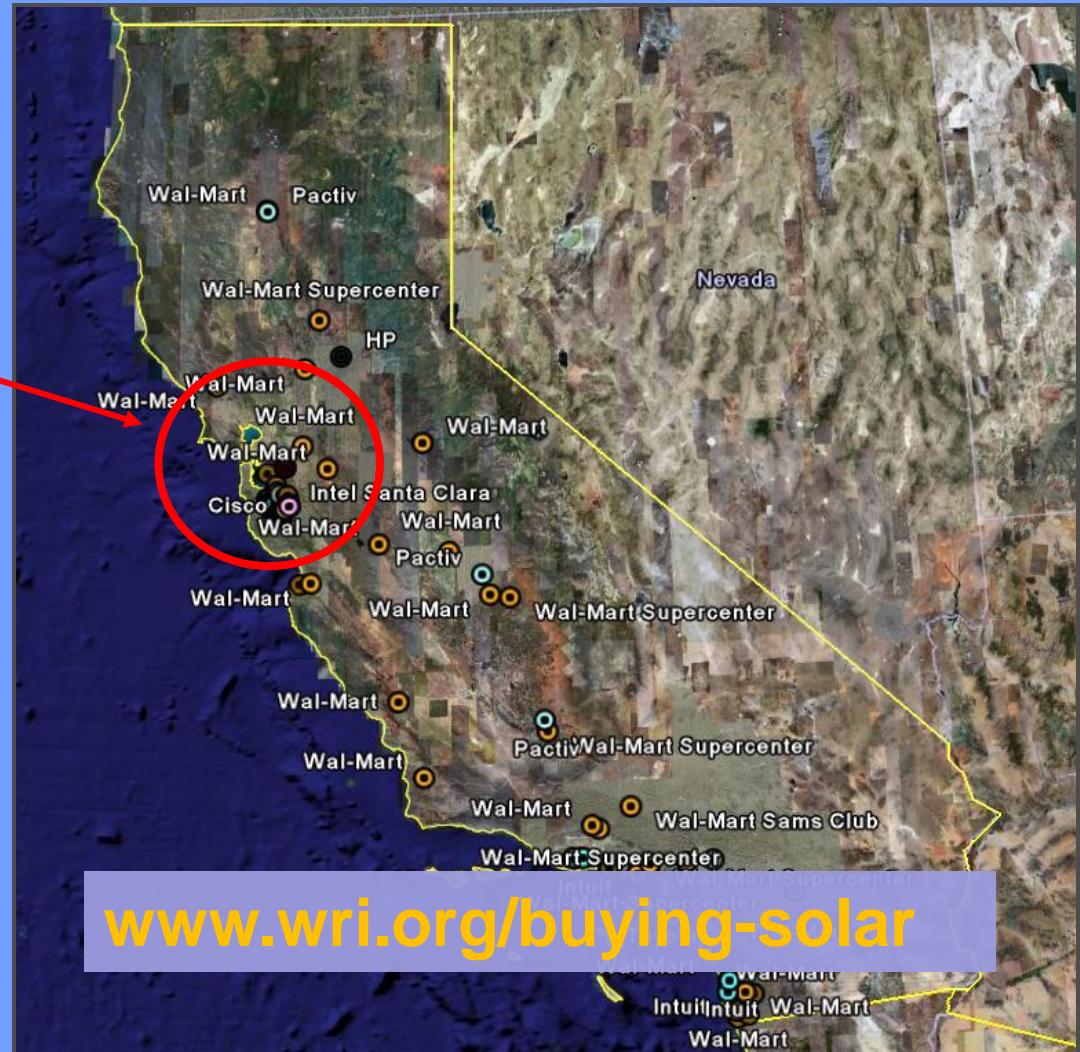
- Internal PR - Improve employee recruitment and retention

# Scaling Renewables Purchasing

## Solar Joint Pilot :

- 15 mi diameter
- 5 Companies
- 19 Facilities
- Scale > 3-5 MW
- Pricing 8-10% below market

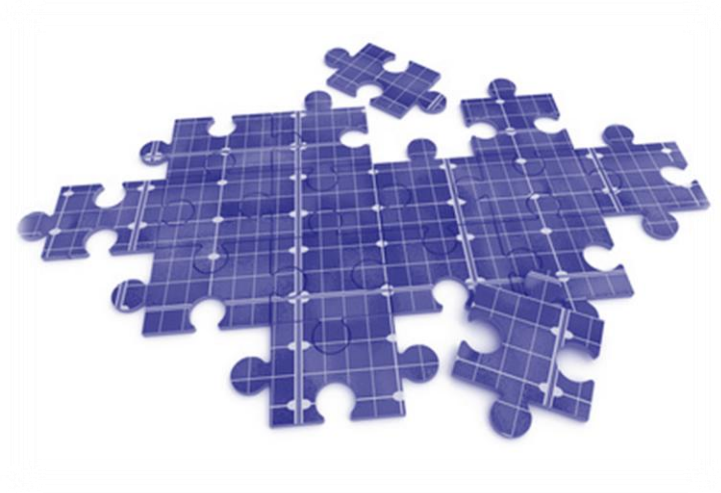
**Pilot Area**



# Building the Business Case

- ✓ Total Value Package
- ✓ Creative Models

## Questions?



**Contact:**  
[jgoodward@wri.org](mailto:jgoodward@wri.org)