

Unlocking Opportunities beyond Energy Savings with *Guaranteed Results*



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2013 Trends in the Private Sector



- **Hoteliers Will Invest in Reinvigorating Properties To Take Advantage of the Market**

After years of delaying capital expenditures, hotel companies are betting that now is the best opportunity to renovate their properties. This year, more hotels will be renovating lobbies, restaurants, bars and fitness centers, as well as replacing beds, TVs and more. Hotel sales will spur even more renovations since sale contracts always contain a provision requiring the new owner to upgrade the property. (Source SAP)

- **Successful hospitals are outsourcing services after identifying their core competencies.**

Outsourcing certain services, such as the revenue cycle, food or environmental services, is a decision that takes a lot of thought and foresight. Mr. Bohnsack of TransUnion said hospitals that outsource successfully are first looking at their core competencies to see what they do well. "Hospitals can lower costs going forward, and in turn, [they] can focus on delivering high-quality care to [their] patient population." (Source Becker's Hospital Review)

- **Demand for commercial real estate remains at reduced levels as tenants lease less space per worker while a more development-friendly environment has emerged, adding to competition.**

These trends portend a foreseeable future that is more competitive and features higher vacancy rates, lower rent growth rates and a continuing flight to quality. (Source Washington Post)

Impact of these trends



Decreased
budgets for energy
projects

New business
models to
maximize return

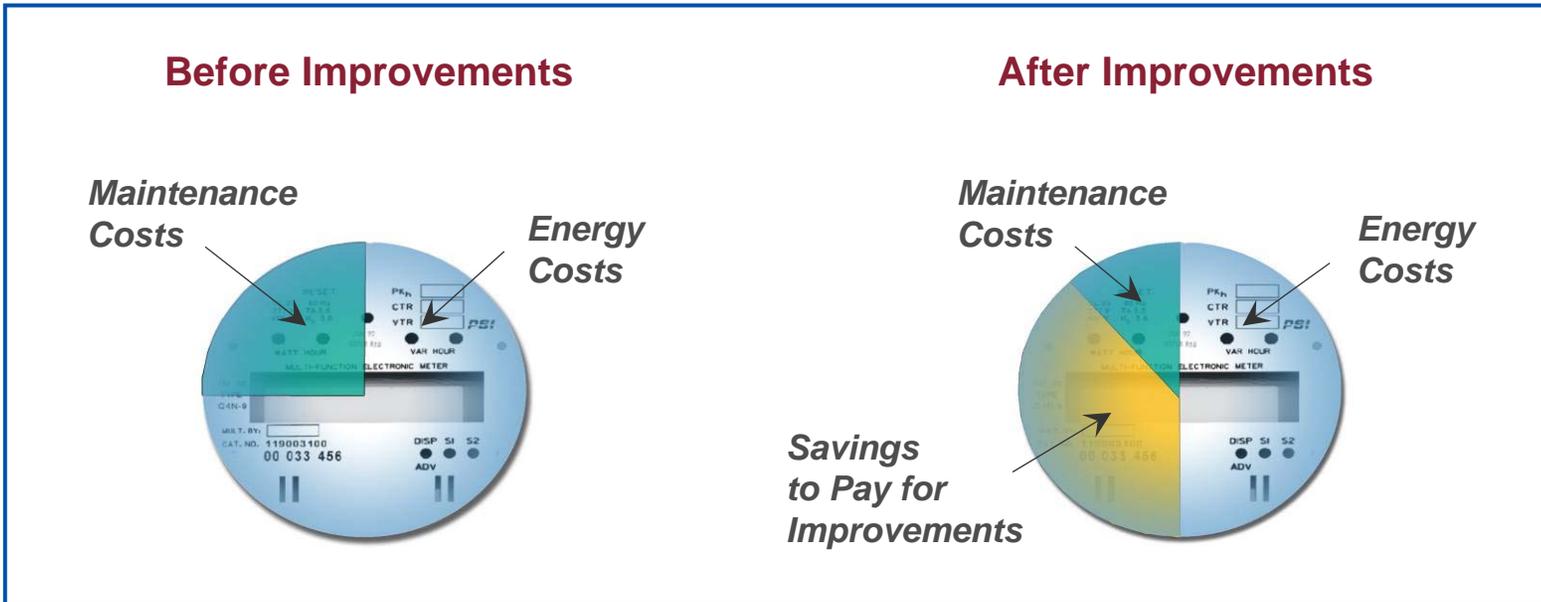
Need to
differentiate from
the competition

Sounds good in concept – what are the challenges?



- Low on capital budget priority list
- Technologies don't live up to savings estimates or rate life
- Reluctance from management to invest on missed savings estimates on past projects
- Risk of a savings shortfall not covering financing payments
- Apprehension to enter into debt on encumber a future sale of property
- Concerned about a negative impact on tenant or guest satisfaction
- Credit risk for financing

No capital? No problem!



Through Performance Contracting improvements are self-funded and guaranteed.



Third-Party Ownership

- Overview
 - Customer signs a long-term service contract to buy what is produced from the systems at an agreed-upon price while hosting systems at its sites
- Financing vehicles
 - Power Purchase Agreement
 - Commodity purchase (BTU's, cool air, hot water)

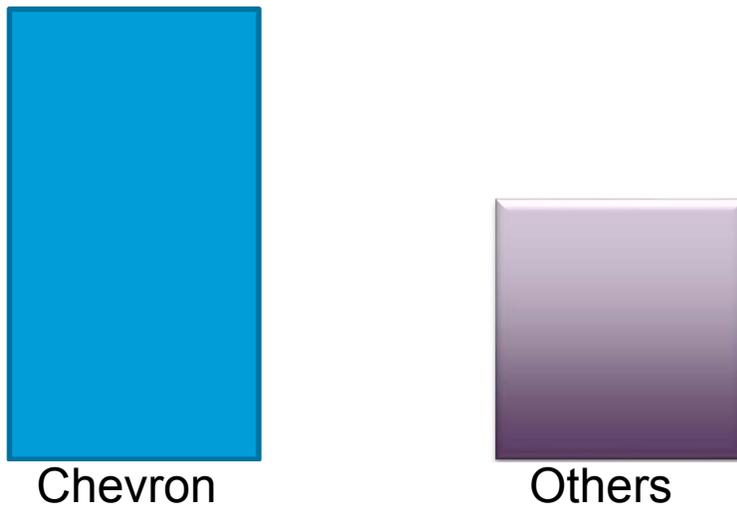
Customer Ownership

- Overview
 - Customer purchases and owns the equipment, reducing its energy payments to its local utility
- Financing vehicles
 - Customer capital funds
 - Capital lease
 - General obligation bonds (public sector)
 - On-bill financing

Achieving operational savings

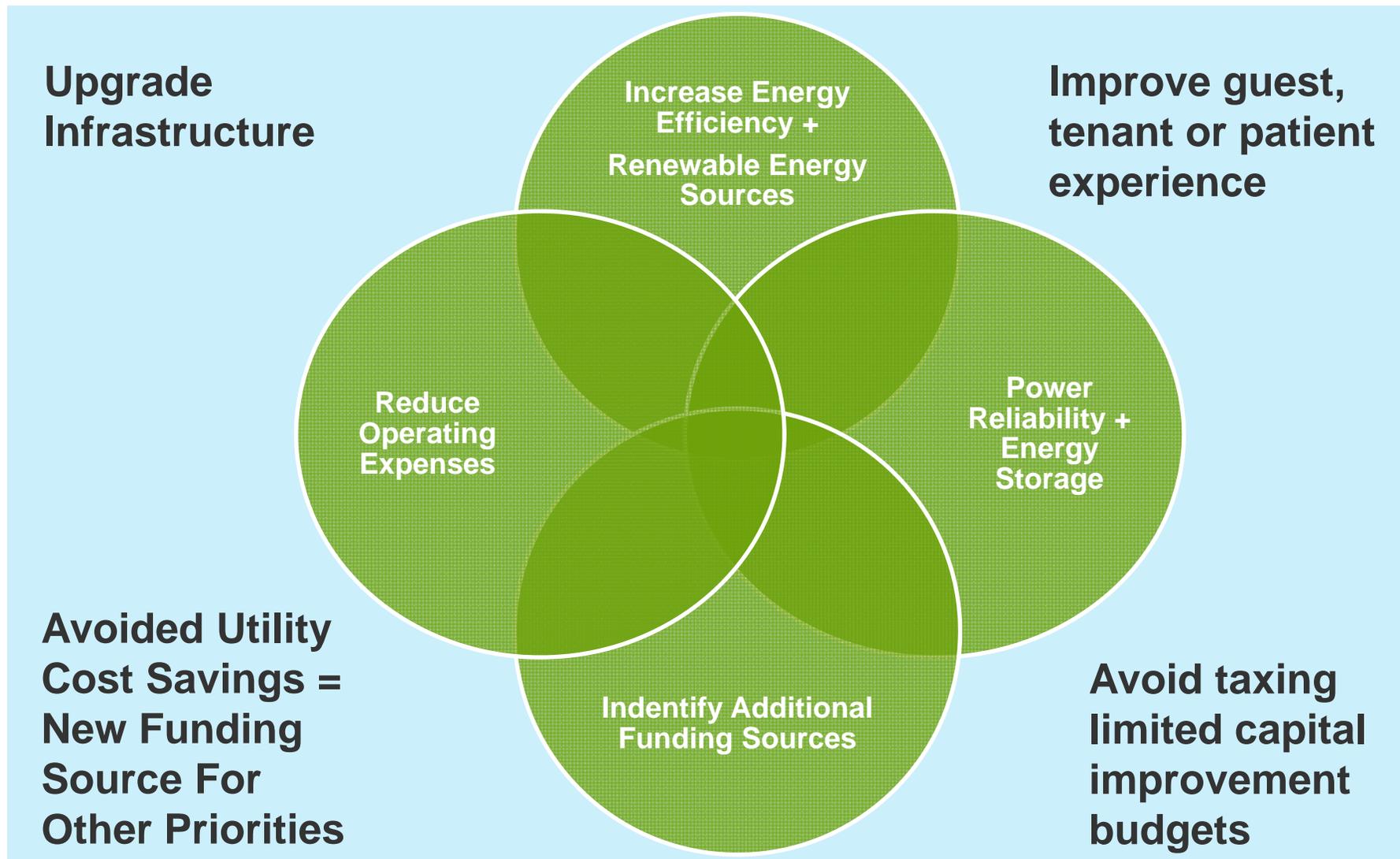


Chevron Energy Solutions achieves projected savings over 98% of the time

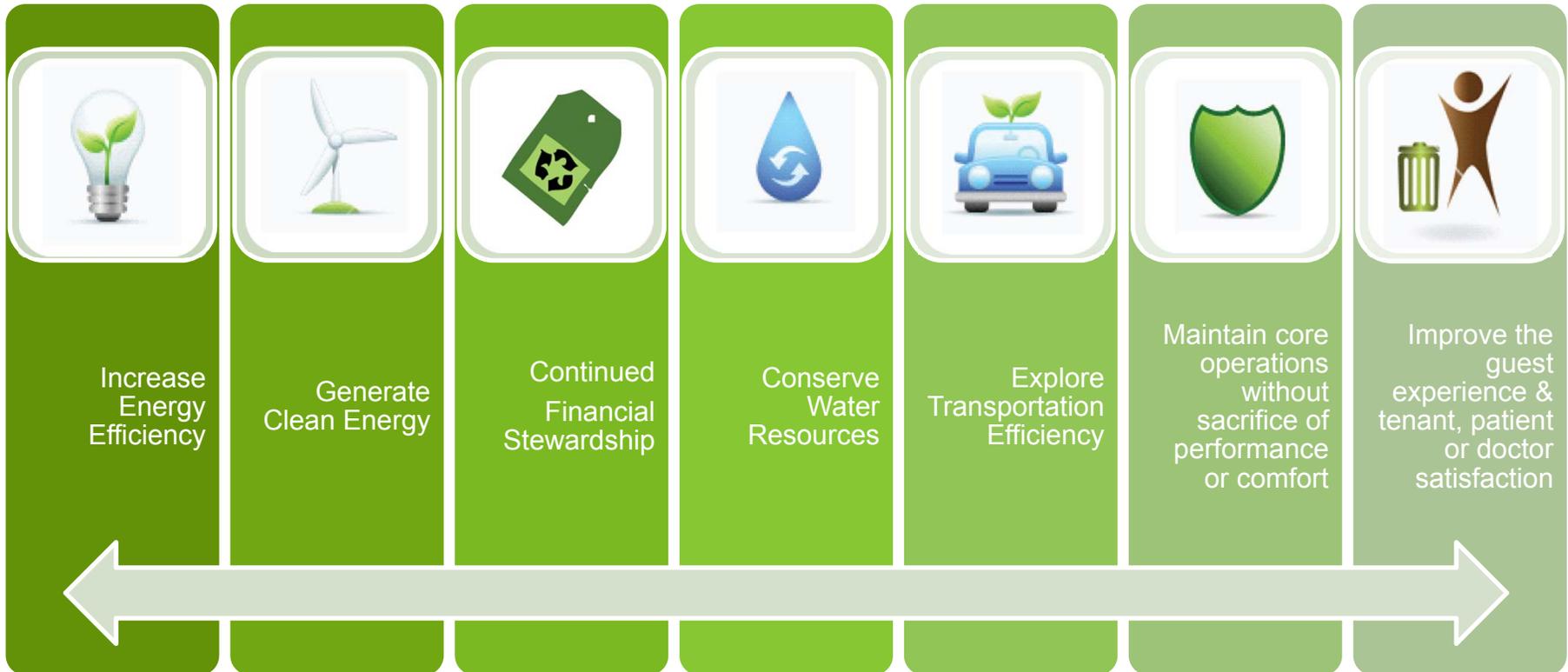


We stand behind our projects with a performance guarantee backed by a Fortune 3 company

How to achieve operational savings balanced with other trends and management priorities



Creating An Energy Action Plan “Energy Outsourcing”



Energy security and budget relief from microgrids

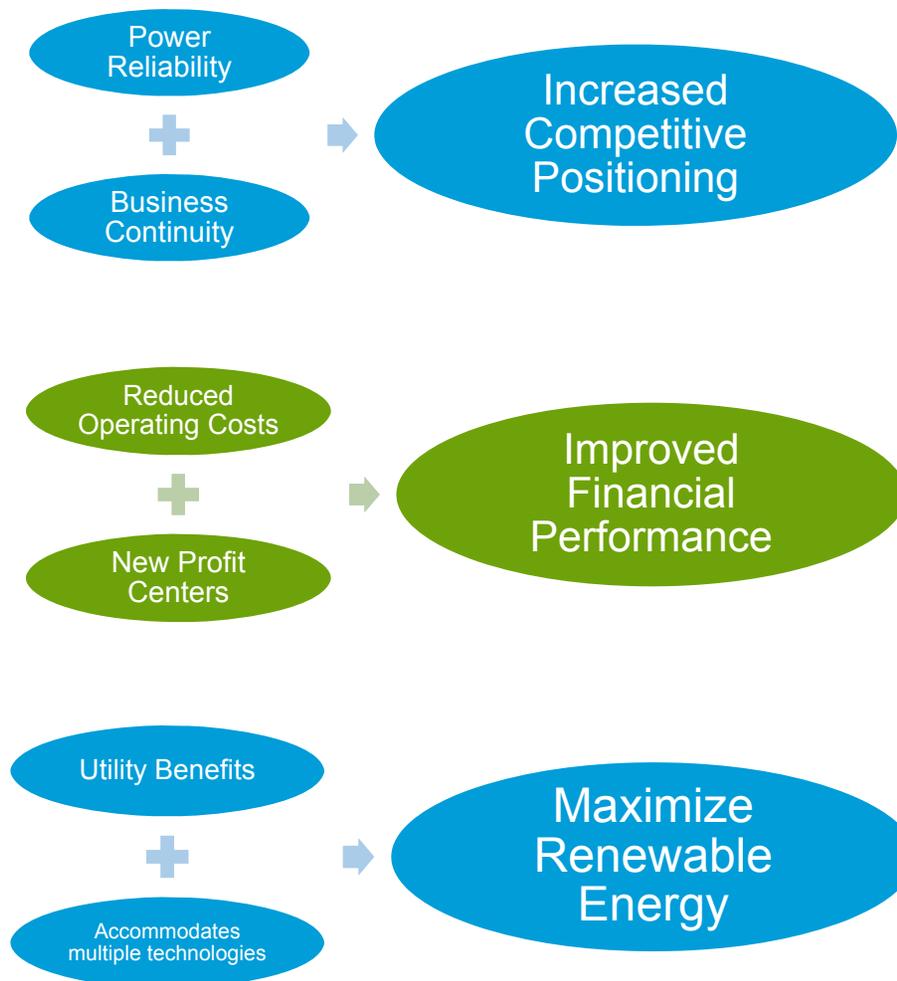


Client benefits

- Increased Competitive Positioning
- Improved Financial Performance
- Ability to interconnect to the utility

Utility benefits

- System stability
- Economic & emergency dispatch
- Distribution congestion relief
- Increased renewable penetration



Community scale microgrids



The Smart Grid Can Deliver

BENEFITS

- Enhanced energy security
- Reduced greenhouse gases
- Improved urban air quality
- Increased grid asset utilization

"Valley Filling" (Energy for PHEV)

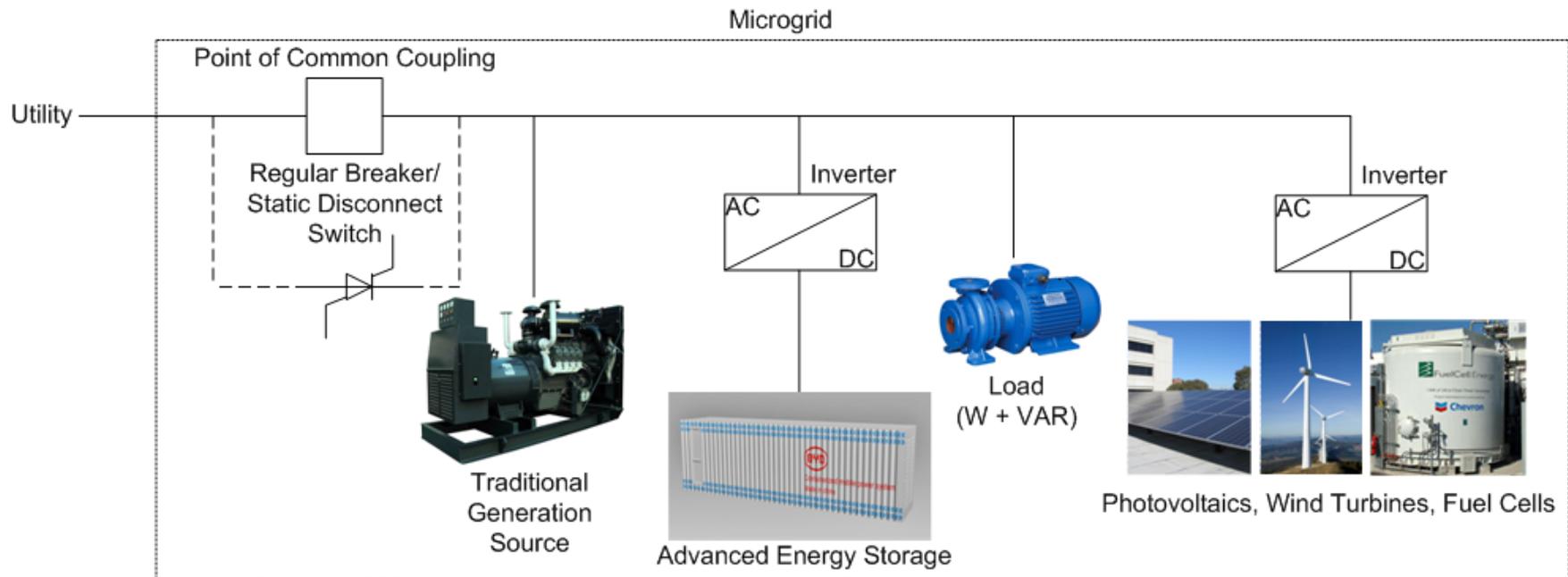
Graph showing energy usage over 24 hours for a PHEV. The x-axis is labeled "Hours of Day" with markers at 12 and 24. The y-axis is labeled "kWh". A sine wave represents energy usage, peaking at 12 kWh at 12:00 and dipping to 0 kWh at 24:00.

CO ₂ Emissions	When Emissions	Energy Sales	Infrastructure Requirements	Utility Rates	
Before	After	Before	After	Before	After

Source: U.S. Dept. of Energy, Office of Electricity Delivery and Energy Reliability

Microgrid Operation

Basic Single Line



Mitigating Technology Risk



Ensure your partner:

- Provides a guarantee of savings
- Conducts product research
- Conducts performance testing
- Provides warranty backstop

Example Project Brightfield Chevron is testing:

- 7 Next Generation Solar Panel Technologies
- 7 Different Solar Power Inverters
- 4 Solar Panel Racking Structures
- 3 Solar Mounting Designs



Innovative approaches to reduce costs Alameda County – Santa Rita Jail

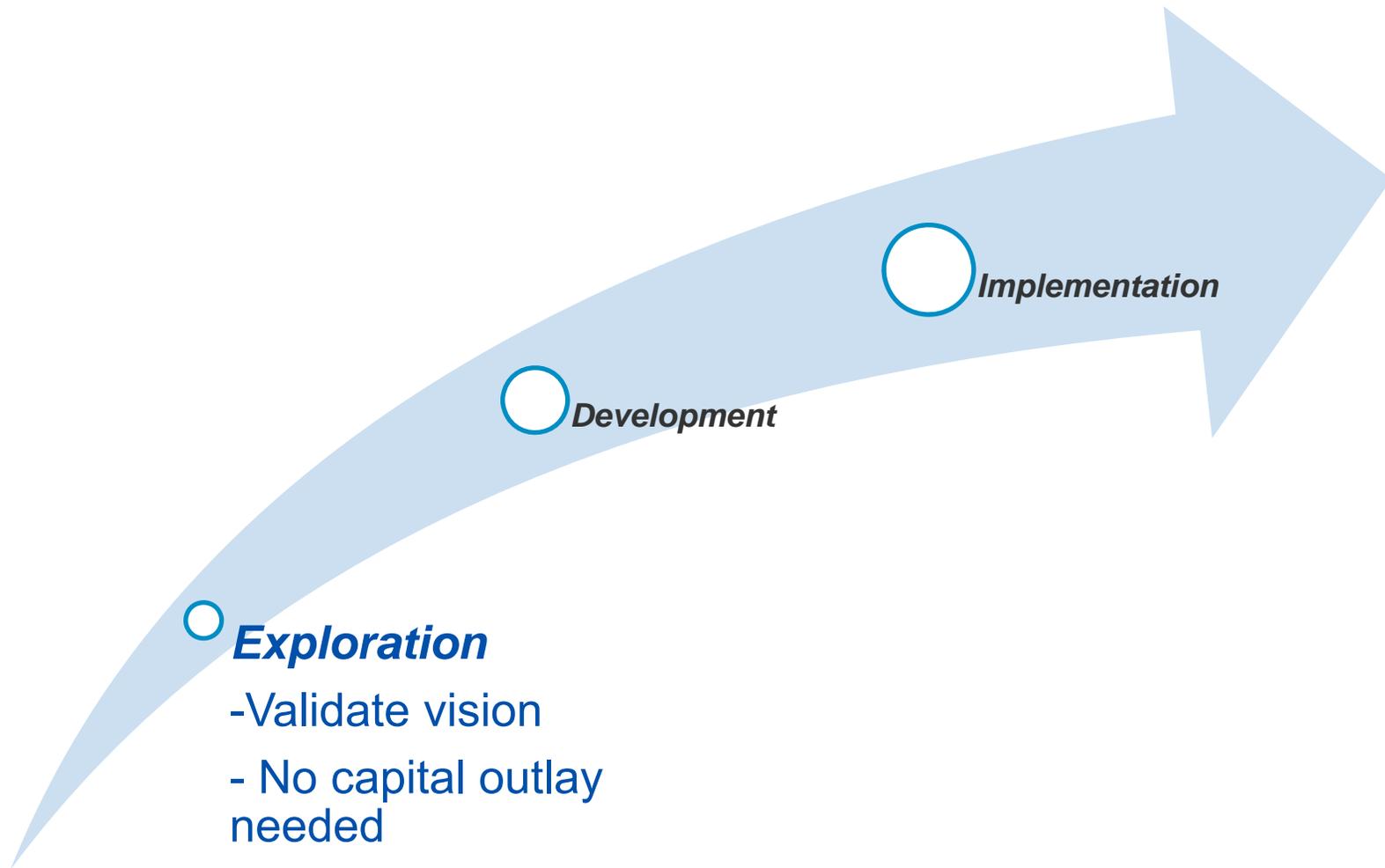


Grant Funding Secured:

- Department of Energy Grant
- California Energy Commission Grant
- RESCO
- Pacific Gas & Electric Incentives
- Department of Defense Climate Change Fuel Cell Grant

Total: \$18 Million

Pathway to Innovative Solutions





Questions



Answers