Agenda – Questions to Answer

- Benefits of Solar
- Analysis Used to Determine Financial Benefit
- How Does a District Achieve Savings from Solar?
- Is Solar Financially Viable for Ocean View School District?
Photovoltaic (PV) Array Components

Single Solar Cell  Panel or Module  Solar Array
Benefits of Solar PV

- Allows for budget predictability and a hedge against rate escalation
- Provides additional shade for parking, students, teachers, staff and parents
- Shows environmental responsibility and demonstrates leadership
- Allows District to capitalize on attractive Power Purchase Agreement rates, or low interest financing
The Whole Picture: Mapping It Out

- Start with Actionable Analysis: How are your buildings in terms of operating costs, sustainability, and effectiveness
  - Energy Effective - Usable, Efficient, Sustainable
- Facility conditions assessment (age and performance of equipment and systems)
- Utility use, sustainability practices, resiliency, carbon footprint
- Propose preliminary solutions and provide implementation roadmap
- Evaluate potential sources of funding
- Be prepared to connect facility & operating improvements to education programs and outcomes
Opportunity Assessment Review: Quantitative & Qualitative-Based Engineering Analysis

Historical Utility Billing Review

On-site energy analysis

Technical Objectives

Additional Components

Can we build a financially feasible program?
Financial Viability for Ocean View School District

- Develop detailed engineering analysis
- Identify energy efficiency needs
- “Right size” the solar PV system size by site
- Analyze the financial viability of battery storage
- Research all applicable rebates, incentives and grants
- Provide for system maintenance and warranties
- Run financial proforma
  - Account for system degradation
  - Build in financing costs
  - Account for operations and maintenance costs
- **Savings guarantee to the District for the program**
  - Monitor system and provide regular reports
  - Savings shortfalls will be compensated
Steps to an Actionable Plan

**Identify**
- Request utility data
- Energy benchmarking
- Site audits
- Utility analysis
- Detailed analysis of potential energy conservation and renewable energy savings

**Prioritize**
- Identify energy efficiency and needed infrastructure improvements
- Identify locations for solar
- Prioritize list of improvements based on best Return on Investment for District

**Quantify**
- Establish list of energy conservation measures
- Quantify energy and maintenance savings
- Quantify rebates and incentives

**Finalize**
- Evaluate options and finalize scope based on District priorities
- Research funding options
- Research rebates and incentives
- Financial RFP for Funding
Project Financing & Funding

- Energy Savings
- Utility Incentives / Rebates / On Bill Finance
- Capital Contribution / Cash
- Bond Funds
- Tax Exempt Lease Purchase (TELP)
- Certificates of Participation (COP)
- Power Purchase Agreements (PPA)
## Snapshot of Solar Savings Summary for Our District Partners

<table>
<thead>
<tr>
<th>District Partner</th>
<th>Projected Savings</th>
<th>Actual Savings</th>
<th>Projected Vs. Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fountain Valley School District</td>
<td>$1,424,673</td>
<td>$1,552,396</td>
<td>109%</td>
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<tr>
<td>Westminster School District</td>
<td>$961,410</td>
<td>$1,086,333</td>
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<tr>
<td>Huntington Beach City School District</td>
<td>$2,211,593</td>
<td>$2,787,388</td>
<td>126%</td>
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Questions?