

PATH TO ZERO NET ENERGY (ZNE) SCHOOL RETROFITS:

A Technical Deep Dive into ZNE School Retrofits

Brought to you by the Investor-Owned Utility Proposition 39 ZNE Schools Pilot

Thursday, May 25, 2017 - 8:00 a.m.-12:00 p.m.

The Environmental Innovation Center, San Jose, CA

Workshop Agenda

Learning Objectives:

1. Understand the process associated with retrofitting a school to ZNE.
2. Utilize lessons learned and approaches used by a current Prop 39 ZNE Pilot School.
3. Understand the relative savings opportunities associated with HVAC, lighting, and envelope retrofits in schools in California.
4. Gain a greater understanding of the importance of operations on a ZNE outcome.

7:30 – 8:00 am	<i>Registration, Refreshments & Networking</i>
8:00 – 8:15 am	Welcome <ul style="list-style-type: none">• <i>Workshop Goals & Expectations</i>
8:15 – 8:35 am	Introduction: Zero Net Energy & Prop 39 <ul style="list-style-type: none">• CA ZNE Big Bold Goals, National Status of ZNE in Schools & Energy Targets for ZNE• Overview & Status of Prop 39 Pilot Program
8:35 – 9:45 am	Process: ZNE Versus a Typical Project <ul style="list-style-type: none">• Benchmarking & building evaluation approaches• Setting performance targets & establishing triggers for improving performance• The RFP process and Integrating ZNE into contracts• Selecting contractors, construction, commissioning agents, engineers, etc.• Engaging in an integrated design process & early design charrettes• Connecting design, construction & operations Prop 39 Case Study: Performance Targets, Project Process & Ensuring Project Delivery <i>Alexis Karolides, Point Energy Innovations</i>
9:45 – 10:00 am	<i>Break</i>
10:00 – 11:00 am	Technologies: Opportunities in ZNE Retrofits <ul style="list-style-type: none">• Relative savings opportunities in existing schools• Common challenges to ZNE performance• Commissioning, fine tuning & on-going evaluation• Addressing the gap from hand off to operations & maintenance• Verifying energy use & recognition of success Prop 39 Case Study: Design Approaches, Technologies, Occupant Engagement & Lessons Learned <i>Alexis Karolides, Point Energy Innovations</i>
11:15 – 11:45 am	Activity: Benchmarking & Prioritization to Achieve ZNE
11:45 – 12:00 pm	Closing Discussion