

# Net Zero Energy (NZE) Building & New Energy Technology

Energy use is a major expense for public and private buildings. Energy control has major impacts on occupant comfort, productivity and attitude. **Exciting new approaches, technology and financing techniques**, make it possible to build or retrofit 25,000 sf+ buildings to **net zero energy standard** (producing annual energy need), with a highly desirable economic outcome and boost productivity boost for many types of users.

## What is Net Zero Energy Building?

### Yolo County California Story

Yolo 100%+ Solar Powered

- Overview
- Zero Net Energy Status
- Zero Capital Investment Projects Financing & Revenue Generation

## Renewable Energy Financing Options & Methods

### Zero Net Energy (ZNE) Buildings

- ZNE buildings the U. S. & No. America
- ZNE 2020/2030 Goals

### Zero Waste & Waste to Energy

- Who is doing Zero Waste?
- Who should be doing Zero waste?
- Impact of not doing Zero Waste

### Real World - How You Do It

- Renewable Energy
- Zero Net Energy
- Waste to Energy
- Public
- Private
- Public / Private Partnership

**Current & New Energy Technologies**  
**PACE possibilities**

# Whole Building Commissioning The Big Picture - *It's more than M/E/P*

Done correctly, the whole building commissioning process integrates throughout the life cycle of design, construction and building operation, involving daily activity during design and construction, creating an invaluable resource throughout occupancy. Rather than focusing on just M/E/P aspects, whole building commissioning addresses the myriad of systems that combine to make a successful facility. We Identify roles/responsibilities of all design construction and operation participants to assure project success and significant economies for a building's entire life cycle. **Even if you think you know commissioning basics, this eye opening session will enhance your ability to specify, participate in and enjoy benefits of Whole Building Commissioning.**

► **Larry Eisenberg**, Principal, Ovus Partners 360, has extensive construction, sustainability and renewable energy background, and served as Owner's Rep on 100's of projects. As Associate VP of Physical Planning/Dev. for UW-Madison in the 1980's, he worked with faculty/colleagues to develop/implement the commissioning concept, now recognized as a critical tool to assure construction quality and long-term building value.

► As Dep. Dir. of Gen. Services for 15 years, **Terry Vernon** made Yolo County the only 100%+ Solar Powered county in the U.S., with a first-of-its-kind, renewable energy, zero-capital-outlay project that eliminated a \$1.4 M electric bill, produces \$600-\$700,000 annual revenue, over and above debt service/project costs, and was recognized by EPA. Adept in all aspects of PM/CM, engineering and administration, Terry is now applying his expertise in sustainability, net zero energy, energy development, waste to energy, zero waste, and other energy solutions as a Sr. PM member of the Kitchell Energy Solutions Team.



Tuesday, Oct. 30, 2018

SAVE: Enjoy all 3 Topics &/or Send a Team!

REGISTRATION FORM

TEAM LIST

AM SESSIONS: 8:45 AM - 12:15 PM

- Net Zero Energy (ZNE) Building
• New Energy Technology

PM SESSION: 1:30 - 3:45 PM:

- Whole Building Commissioning



1707 E. Highland Avenue, Suite 100, Phoenix, AZ 85106

WCCC Member Single ONLY AM \$75 or PM \$55 Both: \$115

WCCC Member TEAM (3+) ONLY AM \$65 or PM \$45 Both: \$ 95

NON - Member Single ONLY AM \$85 or PM \$65 Both: \$135

NON - Member TEAM (3+) ONLY AM \$75 or PM \$55 Both: \$115

REGISTER NOW! Deadline 10/26/18

>> Credit Cards only after 10/20/18

E-MAIL: vann@wccc.org (you may call in CC#)

PHONE: (916) 599-8020

MAIL: Call/E-mail Reg Form, then Mail copy/team list & check by 10/20 TO: Western Council of Construction Consumers

1731 Howe Ave. #613, Sacramento, CA 95825

TEAMS: List Name, Firm, Title, Phone, E-mail for each registrant.

Name \_\_\_\_\_ Phone: \_\_\_\_\_

Firm/ Agency: \_\_\_\_\_

Title: \_\_\_\_\_

E-mail: \_\_\_\_\_

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Title: \_\_\_\_\_

E-mail: \_\_\_\_\_

REGISTRANT OR TEAM CONTACT:

NO-shows & cancellations after 10/23/18 are subject to full fee. You may send Substitutes.

Name \_\_\_\_\_ Title: \_\_\_\_\_ Cell: \_\_\_\_\_

Firm/ Agency: \_\_\_\_\_ E-mail: \_\_\_\_\_ Wk. Phone: \_\_\_\_\_

Address: \_\_\_\_\_ City/ST/ZIP: \_\_\_\_\_

Name on credit card: \_\_\_\_\_ Card #: \_\_\_\_\_ Exp: \_\_\_\_\_ Sec. Code: \_\_\_\_\_

Billing Address: \_\_\_\_\_ (Only credit card payment accepted after 10/20)

PAYMENT METHOD: [ ] VISA [ ] MC [ ] Discover [ ] AMEX [ ] Check (Check # \_\_\_\_\_)

Signature: \_\_\_\_\_ (Rev 9/28) # of Registrants: \_\_\_\_\_ X Fee \$ \_\_\_\_\_ = \$ \_\_\_\_\_ TOTAL DUE