

Workshop Agenda
Water, Energy, and Policy
The University of California, Riverside
Center for Sustainable Suburban Development
Center for Environmental Research and Technology
Southern California Research Initiative for Solar Energy
February 27th, 2019, 8:30 AM – 4:00 PM

This workshop is intended to look at the intricate relationship between water, energy, and the public policy that drives innovation, deployment, and implementation of technologies and programs intended to leverage existing resources to address existing challenges. Attendees will learn about use cases and arguments for an integrated approach around the water-energy nexus.

Bourns Technology Center
1200 Columbia Ave. Riverside, CA 92507

8:30 – 9:00 Breakfast and Registration

9:00 – 9:10 Introductory Remarks

Master of Ceremonies:

Ron Durbin, Executive Director, University of California Advanced Solar Technologies Institute (UC Solar), UC Merced

Welcoming Remarks:

Dr. Ronald Loveridge, Director, Center for Sustainable Suburban Development (CSSD), UC Riverside

9:10 – 10:10 The Energy-Water Nexus Panel

Description:

Water and energy are inextricably linked in an intricate pattern of extracting, treatment, transportation, and use. In fact, water pumping is one of the largest electrical loads in California. Learn more about the patterns of use and conservation, and how they are linked to energy.

Moderated by:

Celeste Cantú, Chair, Water Policy Center Advisory Council, Public Policy Institute of California (PPIC)

Panelists:

Mark Beuhler, P.E., MSEE, General Manager, Willow Springs Water Bank

Charley Wilson, Chair, Energy Committee, Association of California Water Agencies (ACWA)

Manal Yamout, Senior VP, Policy and Markets, Advanced Microgrid Solutions (AMS)

10:10 – 10:20 First Morning Break/Transition to Workshops

Workshop Session 1:

Track 1:

10:20 – 11:20 Public Policy in the Solar Energy Arena

Description:

So far, a combination of state, federal, and municipal policies have combined to create public policy in the solar arena. How has this gone? Where is it now, and where is it going? How has public funding impacted the evolution of public policy in the solar arena? How is our Solar Valley doing? Come listen and interact with our panel of distinguished experts.

Moderated by:

Fred Schwartz, Executive Director, International Renewable Energy Academy (IREA), York University

Presenters:

Todd Foley, Senior Vice President, Policy & Government Affairs, American Council on Renewable Energy (ACORE)

Laurie ten Hope, Deputy Director, Research & Development Division, California Energy Commission (CEC)

Ed Smeloff, Director, Grid Integration, Vote Solar

A. Bambi Tran, Regional Director, GRID Alternatives

Track 2:

10:20 – 11:20 CEC Sponsored Water & Energy Efficiency Projects - Part I

Description:

The California Energy Commission (CEC) has funded technology demonstration and deployment projects that accelerate the commercialization of electricity-related, energy-efficient industrial, agricultural, and water/wastewater processes at multiple sites. This session will discuss a project by the University of California, Riverside in collaboration with the Inland Empire Utilities Agency.

Moderated by:

Dr. Alfredo Martinez-Morales, Research Faculty, Southern California Research Initiative for Solar Energy (SC-RISE), UC Riverside

Presenters:

Pietro Cambiaso, P.E., Deputy Manager, Planning and Environmental Resources, Inland Empire Utilities Agency (IEUA)

Michael Todd, P.E., Principal Development Engineer, College of Engineering Center for Environmental Research and Technology (CE-CERT)

11:20 – 11:30 Second Morning Break/Transition to Next Workshops

Workshop Session 2:

Track 1:

11:30 – 12:30 Builders Discussion

Description:

Every few years, builders have to comply with increasingly stringent regulations under California's Title 24 Energy Code. Soon, they will have to include solar on all new residential construction projects. Learn from the builders themselves how they intend to comply and what impacts regulations might have on the industry.

Speakers:

Trelynd Bradley Bowles, Policy Analyst, Governor's Office of Planning and Research

Mike Hodgson, President, ConSol

Fred Schwartz, Executive Director, International Renewable Energy Academy (IREA), York University

Philip Small, Commercial Renewable Energy Consultant, SolarMax Technology, Inc.

Track 2:

11:30 – 12:30 CEC Sponsored Water & Energy Efficiency Projects - Part II

Description:

This session will discuss two independent site demonstrations at the Cucamonga Valley Water District and Olivenhain Municipal Water District in collaboration with the University of California, Riverside. This session will feature advanced technologies, methods, and approaches used at each respective water district, which improve the level of awareness and visibility in terms of energy use and power demand.

Moderated by:

Michael Todd, P.E., Principal Development Engineer, CE-CERT

Presenters:

Michael Maestas, Manager, Water Production, Cucamonga Valley Water District (CVWD)

Erik Harp, Supervisor, Information Technology, Olivenhain Municipal Water District (OMWD)

12:30 – 1:30 Lunch

Workshop Session 3:

Track 1:

1:30 – 2:30 Financing Solar

Description:

One of the most confusing elements of solar power can be dealing with the financing. Not only can it be, as in the case of residential solar, a complex choice between many options, but for other segments of the market, financing can represent a significant barrier, even in these times of dropping cost. Commercial solar faces barriers that are different than for residential. Come and listen to our Financing Solar panel to learn what business leaders are doing make financing for solar & storage more available to residential, commercial, non-profit and municipal customers.

Moderated by:

Lucas Nagy, Vice President, Business Development, CleanFund Commercial PACE Capital, Inc.

Presenters:

Eric Gerza, Senior Project Developer, Baker Electric Solar

Emily Padilla, Manager, Community Development, Sullivan Solar Power

Alex Smith, Senior Vice President, Business Development, PFMG Solar, LLC

Larry Turner, Business Development Officer, Pacifica Capital

Track 2:

1:30 – 2:30 Victor Valley Water Reclamation Authority Project

Description:

This session will discuss a project sponsored by the CEC as part of the Electric Program Investment Charge (EPIC) program at the Victor Valley Wastewater Reclamation Authority. The goals of the project are to: 1) help California reduce the consumption of potable water; 2) demonstrate a pre-commercial, integrated energy management and control system that will result in both energy and water savings; and 3) deploy a cost-competitive system that water treatment facilities throughout California can use when deploying their own water- and energy-saving systems.

Moderated by:

Dr. Alfredo Martinez-Morales, Research Faculty, SC-RISE

Presenters:

Logan Olds, General Manager, Victor Valley Wastewater Reclamation Authority (VWVRA)

Arnold Ramirez, P.E., Senior Project Engineer and Project Manager, Biogas Engineering

2:30 – 2:40 First Afternoon Break/Transition to Next Workshops

Workshop Session 4:

Track 1:

2:40 – 3:40 Cities Support Solar

Description:

One of the most interesting facets of the push to 100 percent renewables is the role that cities can play. From Santa Barbara to Rancho Mirage, San Diego to Chula Vista, and Rancho Cucamonga to Palm Springs, cities are increasingly committing to go solar in inland southern California.

Moderated by:

Katie Barrows, Director of Environmental Resources, Coachella Valley Association of Governments (CVAG)

Presenters:

Trevor Birtch, Mayor, City of Woodstock

Cory Downs, Conservation Specialist, Office of Sustainability, City of Chula Vista

Aaron (Yichen) Lu, Program Coordinator, Department of Sustainability, City of San Diego

Garret Wong, Senior Sustainability Analyst, City of Santa Monica

Track 2:

2:40 – 3:40 DOE and CEC Funded Water Projects

Description:

This section will discuss other water-related projects that are part of the DOE and CEC EPIC water project portfolio.

Moderated by:

Ron Durbin, Executive Director, University of California Advanced Solar Technologies Institute (UC Solar), UC Merced

Presenters:

Mark Beuhler, P.E., MSEE, General Manager, Willow Springs Water Bank

Chie Hong Yee, Energy Analyst, Energy Efficiency Research Office, CEC

Dr. Roland Winston, Director & Distinguished Professor, UC Solar, UC Merced (UCM)

3:40 – 4:00 Summation (Auditorium)

Dr. Jose Etcheverry, Director, International Renewable Energy Academy (IREA), York University

4:00 – 4:05 Closing Remarks (Auditorium)

Dr. Ronald Loveridge, Director, CSSD, UC Riverside

Dr. Alfredo Martinez-Morales, Managing Director, SC-RISE, UC Riverside

Fred Schwartz, Executive Director, IREA, York University

4:05 – 4:15 **Transition to Reception**

4:15 – 5:30 **Sponsored Reception**

Conference Agenda
Launching Solar Valley for Inland Southern California
The University of California, Riverside
Center for Sustainable Suburban Development
Center for Environmental Research and Technology
Southern California Research Initiative for Solar Energy
February 28th, 2019, 8:00 AM – 4:00 PM

This fifth annual conference is designed for city leaders, planners, council members, businesses, utility companies, and the general public. Panelists will present on the state of solar energy by discussing the latest technology, public policy, regulations, economics, and the associated environmental and sustainability benefits of renewable energy. Attendees will learn about the challenges and opportunities for incorporating solar energy and deploying microgrid systems in their communities, including new opportunities statewide like community solar, revenue opportunities, local policies, and initiatives already in place.

Bourns Technology Center
1200 Columbia Ave. Riverside, CA 92507

8:00 – 8:30 Registration and Breakfast

8:30 – 8:35 Introductory Remarks

Master of Ceremonies:

Ron Durbin, Executive Director, University of California Advanced Solar Technologies Institute (UC Solar), UC Merced

Welcoming Remarks:

Dr. Matthew Barth, Director, College of Engineering Center for Environmental Research and Technology (CE-CERT), UC Riverside

Dr. Ronald Loveridge, Director, Center for Sustainable Suburban Development (CSSD), UC Riverside

8:35 – 9:35 Morning Keynote

Steven Strong, President, Solar Design Associates

9:35 – 10:05 Morning Presentation

Courtney Smith, Chief Deputy Director, California Energy Commission

10:05 – 10:20 Morning Break (Sponsor's booths and Posters)

10:20 – 11:20 1st Panel Discussion - The State of Solar Energy

Description:

Panelists will discuss the state of the solar energy industry from a variety of perspectives, focusing on opportunities and how to effectively address the challenges facing this industry as it continues to rapidly grow and achieve higher levels of penetration in the energy generation market. The role that policy-making, economics, and technology have played in the success of solar energy will also be discussed.

Moderated by:

V. John White, Executive Director, Center for Energy Efficiency and Renewable Technologies (CEERT)

Panelists:

Russell Garwacki, Director, Pricing, Design & Research, Southern California Edison (SCE)

Scott Murtishaw, Senior Advisor, California Solar + Storage Association (CALSSA)

Dara Yung, Sr. Manager, Permit & Inspections, Sunrun

11:20 – 12:20 2nd Panel Discussion – Solar Policy for Inland Southern California

Description:

Where is solar policy for inland Southern California now? Where is it going? What does the new category of “community solar” mean for our solar valley?

Moderated by:

Rick Bishop, Executive Director, Western Riverside Council of Governments (WRCOG)

Panelists:

Todd Foley, Senior Vice President, Policy & Government Affairs, American Council on Renewable Energy (ACORE)

Ed Smeloff, Director, Grid Integration, Vote Solar

A. Bambi Tran, Regional Director, GRID Alternatives

12:20 – 12:45 Solar Leadership Council Announcement

Description:

Announcing the Solar Valley Leadership Council, a nonprofit dedicated to increasing the use of solar in Riverside and San Bernardino Counties and attracting companies involved in the solar supply chain to inland Southern California.

Special Guest:

Dr. Ronald Loveridge, Director, CSSD, UC Riverside

12:45 – 2:00 Lunch (Sponsor’s Booths and Poster Session)

2:00 – 2:50 3rd Panel – 100% Renewables by 2050

Description:

Throughout the nation and particularly in California, cities, and counties are making commitments to reach the target of using 100% renewables before 2050. This panel will discuss public policy, programs, and action being taken by cities to meet this ambitious target.

Moderated by:

Diane Moss, Founding Director, Renewables 100 Policy Institute

Panelists:

Trevor Birtch, Mayor, City of Woodstock

Dr. Jose Etcheverry, Director, International Renewable Energy Academy (IREA), York University

Sharon Tomkins, Vice President, Customer Solutions, Communications & Environmental Strategy, Southern California Gas Company (SoCalGas)

2:50 – 3:00 Afternoon Break

3:00 – 3:50 4th Panel – Microgrid and Energy Management

Description:

Microgrids are, in a sense, the future of the electrical grid. Able to isolate themselves from the grid, they can continue to provide power in the event of blackouts. Microgrids are comprised of multiple resources including renewables, energy storage, and sometimes fossil fuel backup. These microgrids have an important impact by stabilizing and making the grid more resilient, and in providing disaster relief facilities during disasters and subsequent recovery efforts.

Moderated by:

Dr. Michael Sullivan, Senior Vice President, Nexant, Inc.

Panelists:

Dr. Manuel Avendano, Senior Manager, Emerging Technologies Evaluation, Southern California Edison (SCE)

Dr. Alfredo Martinez-Morales, Managing Director, Southern California Research Initiative for Solar Energy (SC-RISE), UC Riverside

Steven Strong, President, Solar Design Associates

3:50 – 4:00 Closing Remarks

Dr. Ronald Loveridge, Director, CSSD, UC Riverside

Dr. Alfredo Martinez-Morales, Managing Director, SC-RISE, UC Riverside

Fred Schwartz, Executive Director, International Renewable Energy Academy (IREA), York University

4:00 – 4:30 CE-CERT Tour (Optional)