

PROGRAM PREVIEW 2017



WHAT WILL THE SOLAR FUTURE BE?

TOPICS AT A GLANCE

Panels

- North America Market
- The Future of PV – Executive Panel

Markets & Finance

- North America
- South & Central America
- Asset Management Summit
- Finance Symposium
- Net Metering
- Tech Giants in Frontier Markets
- Consumer Protection
- Community Solar
- Panels for Pot: Powering Greenhouses

Technologies

- PV Cells
- PV Manufacturing
- PV Power Plants
- PV Plants Design and Monitoring

Smart Renewable Energy Energy

- Buildings/Energy Management
- Renewable Cities Initiatives
- Transformation to a 100% Renewable Energy Future
- Grid Saturation – Local Capacity Analysis
- Digitalization/Energy Clouds/Big Data

The past two years the U.S. solar PV market has been climbing from record to record. In 2015, just approx. 7.3 GW were installed (66% increase YoY!), in 2016 the United States further strengthened its position in the global market ranking defined by annual deployment volume and moved up to the 2nd spot with a staggering 14.8 GW installed, thus achieving approx. 80% increase YoY. Only China, which installed 34 GW in 2016, managed to stay ahead of the U.S. market last year. By the end of 2016, the U.S. was home to approximately 42 GW of total installed capacity, sufficient to power 6 million American homes. Current estimates suggest the cumulative solar PV installations in the U.S. will reach 97 GW by 2020. Worldwide, it is expected the cumulative installations will hit the Terawatt scale well before 2030, driven by a doubled world market of 100–120 GW annual installations after 2020. So, in the next five years a doubling of the total global PV production capacity can be expected. In light of such a strong market momentum – and thanks to the extended ITC till 2021 – how will the U.S. market grow in the coming years, how about the commercial and industrial segment, will the U.S. witness more the establishment of more local module and cell manufacturing capacities, thus

creating more local jobs, and will there be new innovative, creative forms of investment vehicles dominating the financial landscape? How about the new administration in Washington, when will they recognize the great economic opportunities of this disruptive process? Will existing policies remain unchanged or even amended to the advantage of solar PV, or will possibly other sources of power generation be favoured, so that solar PV consequently may fall behind in the U.S.? Discussions of possible answers to these and more questions will be provided by 210+ internationally renowned speakers presenting at Intersolar 2017, who have their fingers on the pulse of the global solar industry today. As the first major U.S. solar event this year – the Intersolar North America Conference and Exhibition provides attendees an unprecedented head-start opportunity allowing to gain unparalleled insights into the latest trends shaping this competitive, dynamic and exciting marketplace.

Professor Dr. Eicke R. Weber
Director, BEARS Program, UC
Berkeley und National University Singapore

CONFERENCE PARTNER STATEMENTS 2017



Bernadette Del Chiaro
Executive Director
California Solar Energy
Industries Association
(CALSEIA), U.S.

California Solar Energy Industries Association (CALSEIA) Conference Sessions

CALSEIA has been advancing the interests of the California solar industry for 40 years and our efforts have been greatly supported by Intersolar North America for a quarter of that time. Solar's future is now paired with storage and there's no better place for these two sectors to come together than Intersolar North America.



Larry Sherwood
Vice President and CEO
Interstate Renewable
Energy Council (IREC), U.S.

IREC Insight Sessions: Fact-Based Perspectives on Paths to Solar's Next Success Stories

IREC's national thought leaders offer uniquely independent insight from their work in nearly every state. Hear about innovative state and local best practices and projects, a new IREC Scorecard that rates states on shared renewables initiatives, and important updates on solar codes and safety.



Tom Tansy
Chairman
SunSpec Alliance, U.S.

Finance Symposium and Asset Management Summit

The 2017 Intersolar Finance Symposium and Asset Management Summit will take a deep look at a distributed energy resource market that has become mainstream. We will discuss how information technology, data communication, and automation are defining how solar assets are financed and managed at global scale.

SPEAKER STATEMENTS 2017



Dr. Rob Andrews
Chief Executive Officer
Heliolytics Inc., Canada

PV Plants Design & Monitoring – The Impact of Drones & Robots

In order to minimize costs and DC unavailability, new approaches to PV system O&M are necessary. Aerial inspections capturing infrared and visible imagery approach fault detection from an entirely new vantage point – namely, from the air. Several advantages to using manned aircraft rather than drones to achieve a high quality, low cost, scalable solution will be discussed.



Bob Bellemare
Chief Executive Officer
Array Technologies, Inc.,
U.S.

PV Plants: System Configuration

When considering technology assets for utility-scale solar, developers and owners should choose solar trackers based on low cost of ownership and reliable performance benefits. Gain vital insights regarding tracker evaluation for PV power plants.



Christopher Case
Chief Technology Officer
Oxford PV, UK

PV Cells: Which Cell Concepts will Secure the Future?

PV generated energy remains the best hope for mitigating climate change. Despite dramatic cost reductions and impressive efficiency gains in crystalline silicon PV, the silicon perovskite tandem solar cell that Oxford PV is developing is the most realizable path to breaking the practical 27% efficiency barrier.



William Greene
Product Manager
Energy Services Company
Nest Labs, U.S.

Smart Renewable Energy Building/Energy Management

With more distributed energy resources coming onto the grid, utilities are increasingly looking to implement Time of Use plans to better reflect the cost of electricity. Greene will discuss how connected thermostats work with solar systems, help customers navigate variable electricity rates and find the sweet spot where comfort, solar generation and optimal savings overlap.



CONFERENCE COMMITTEE 2017

Conference Committee Chairman

Prof. Dr. Eicke R. Weber, Director, BEARS Program, UC Berkeley und National University Singapore

Conference Committee – Advisory Board

Bernadette Del Chiaro, Executive Director, California Solar Energy Industries Association (CALSEIA) | Angelina M. Galiteva, Board Member, California Independent System Operator (CAISO) & Founder, Renewables 100 Policy Institute | Justis Fennell, Treasurer, NorCal Solar | Sarah Kurtz, Reliability

Group Manager Principal Scientist, National Renewable Energy Laboratory (NREL) | Paula Mints, Founder, Chief Market Research Analyst, Solar PV Market Research | Dr. Paulette Middleton, Co-Chair, American Solar Energy Society | Minh Le, Senior Renewable Energy Executive | Dr. David Renné, President, International Solar Energy Society (ISES) | Larry Sherwood, Vice President and CEO, Interstate Renewable Energy Council (IREC) | Tom Tansy, Chairman, SunSpec Alliance | Dr. Jutta Trube, Director Photovoltaic Equipment, German Engineering Federation (VDMA) | Bettina Weiss, Vice President

Product Management and Business Development, SEMI | Prof. Dr. Sean White, PV Professor and Solar Entrepreneur, Interstate Renewable Energy Council Trainer of the Year 2014

Conference Committee – Industry Board

Dirk Habermann, Chief Innovation Officer, Meyer Burger | James Spano, Managing Partner, Spano Partners Holding, LLC, a founding member of the Resilient Solar Alliance | Dr. Richard Swanson, Founder, SunPower | Claudia Wentworth, CEO and Co-Founder, Quick Mount PV

Conference | Workshop Partners



Conference Sponsors



Program Advisors



CONFERENCE QUICK FACTS

Dates	July 10–12, 2017
Hours	Monday 9am–7pm Tuesday & Wednesday 9am–6pm
Venue	InterContinental Hotel 888 Howard Street, SF, CA 94103 Conference Area: Levels 3–5
Speaker	210+
Attendees	1,500+
Program	→ www.intersolar.us → Program → www.ees-northamerica.com → Program
Contact	Ms. Gesche Maass Conference Manager maass@solarpromotion.com

Organizers



Register Now!

→ www.intersolar.us → Registration



INTERSOLAR NORTH AMERICA CONFERENCE

Location: InterContinental Hotel

Monday July 10, 2017

9:00am–10:30am Coffee	Global PV Markets: The Emergence of Central American Markets	Intersolar Finance Symposium I	SRE: Transformation to a 100% Renewable Energy Future	
11:00am–12:30pm Lunch	Global PV Markets: Growth Stage Markets Across Latin America (e.g. Mexico/Chile/Brazil/Argentina)	Intersolar Finance Symposium II	SRE: Renewable Cities Initiatives	
1:30pm–3:00pm Coffee	The Next Frontier: Pioneering Local Resiliency with Solar+Storage	Intersolar Finance Symposium III		
3:30pm–5:00pm	North America Market (Winners and Losers in 2016–2017)	Intersolar Finance Symposium IV		
5:30pm–7:00pm	Official Opening Ceremony			
7:00pm	Welcome Reception (Pacific Terrace)			

Tuesday July 11, 2017

9:00am–10:45am Coffee	PV Cells: Which Cell Concepts will Secure the Future?	Intersolar Asset Management Summit I	Net Metering and the Potential Future Alternatives	Tech Giants in Frontier Markets
11:15am–1:00pm Lunch	PV Manufacturing: Pushing the Efficiency and Costs to New Levels	Intersolar Asset Management Summit II	Consumer Protection – Avoiding Backlash from our #1 Resource	The Establishment and the Disruptors
2:00pm–3:45pm Coffee	PV Plants: System Configuration	Intersolar Asset Management Summit III	Bridging the Storage Gap: Making Energy Storage Cost-Effective for Customers	Solsmart: Steps Toward Community Solar Designation
4:15pm–6:00pm	PV Plants Design & Monitoring – The Impact of Drones & Robots	Intersolar Asset Management Summit IV	The State of the States: National Shared Renewables Scorecard and Other Tools You Can Use	
5:00pm	Summerfest (AT&T Park)			

Wednesday July 12, 2017

9:00am–10:45am Coffee	Addressing the Bankability and Investability of Solar	SRE: Buildings/ Energy Management	Grid Saturation – Improving Local Capacity Analysis to Host More Solar	
11:15am–1:00pm	The Future of PV – Executive Panel	Panels for Pot: Powering Greenhouses for Marijuana and other Indoor Crops	SRE: Digitalization/ Energy Clouds/Big Data	

■ Markets
 ■ Finance
 ■ Photovoltaic Technology
 ■ Smart Renewable Energy

Subject to change

PRICING INTERSOLAR NORTH AMERICA

Conference Packages	Early Bird March 15–May 12	Regular May 13–July 7	On-site July 8–13
Full Conference Package	\$950	\$1,060	\$1,095
Conference Day Ticket	\$475	\$550	\$575
Exhibition Ticket	\$70	\$130	\$200
Summerfest	\$150	\$150	\$150

The Full Conference Pass includes all Intersolar, ees sessions and the Summerfest ticket plus catering (coffee breaks/lunches) on all 3 conference days as well as the access to the expo halls. Day Tickets include the sessions (Intersolar & ees) only on the day selected plus catering (coffee breaks/lunches). Any conference registration grants you full access to the expo halls.

FREE ADMISSION TO EXPO HALLS

Round off your conference experience with a visit to the exhibitions next door! Your conference or workshop registration grants you full access to Intersolar and ees North America (Moscone West Hall), as well as to the showfloors of co-located SEMICON West (North/West Halls). Engage with 18,000+ professionals and 550 solar and energy storage exhibitors.

Exhibition Dates: July 11–13, 2017

WORKSHOPS AT INTERCONTINENTAL HOTEL

Monday July 10, 2017

9:00am–5:00pm	National Electric Code PV	Field Applications of PV Operations and Maintenance	
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Tuesday July 11, 2017

9:00am–1:00pm		Megawatt-scale PV: Design Considerations and Installation Case Studies	
2:00pm–6:00pm	Designing PV Systems with Energy Storage		

Wednesday July 12, 2017

9:00am–1:00pm	The Post Net-Metered PV World: New Opportunities	Solar Codes and Safety Forum	Solar Heating & Cooling – Changing your Climate, not the Planet's
2:00pm–6:00pm	PV Technical Sales: The Business and Finance of Residential Solar		

Thursday July 13, 2017

9:00am–5:00pm	Spanish: Prácticas Recomendadas de Instalaciones de Sistemas FV Conectados a la Red		
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Subject to change

WORKSHOP PRICING

Workshop Tickets	Early Bird March 15–May 12	Regular May 13–July 7	On-site July 8–13
Full Day Workshop	\$475	\$550	\$575
Half Day Workshop	\$275	\$315	\$335
Solar Codes and Safety Forum	\$100	\$100	\$100
Solar Heating & Cooling – Changing your Climate, not the Planet's ¹	\$175	\$185	\$195
Combo Ticket: Solar Heating & Cooling – Changing your Climate, not the Planet's ²	\$265	\$280	\$295

Your Workshop ticket includes catering (coffee breaks/lunches) and grants your full access to the expo hall.
¹ includes Exhibition Ticket
² includes Exhibition Ticket and Summerfest

LEARN AND CONNECT WHILE HAVING FUN!

Sail, tour, network, party! Intersolar and San Francisco are totally connected – getting business done, fun, and meeting up with the best professionals in solar and energy storage. Get the exciting SF water side view from the Bay on our cat boat sailing tour hosted by our awesome friends at NorCal Solar... last year they invited whales! Tour Tesla's fascinating factory tour, or sip the best wine country has to offer, plus savor their on-site microgrid. Get eery with the Alcatraz Island cruise and facility tour! Did we mention Summerfest at AT&T Park for Solar's biggest-ever networking evening with 3,000 of your best friends? Join us in San Francisco and have fun this July!

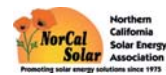
Sunday	1:00pm	SF Bay Area Sailing Tour
Monday	11:45am	Alcatraz Tour
	5:30pm	Opening Ceremony
	7:00pm	Welcome Reception
Tuesday	9:30am	Tesla Fremont Factory Tour 1
	11:30am	Tesla Fremont Factory Tour 2
	1:30pm	Tesla Fremont Factory Tour 3
	5:00pm	Summerfest (AT&T Park)
Wednesday	9:30am	Tesla Fremont Factory Tour 4
	11:30am	Tesla Fremont Factory Tour 5
	1:30pm	Tesla Fremont Factory Tour 6
Thursday	9:30am	Tesla Fremont Factory Tour 7
	11:30am	Tesla Fremont Factory Tour 8
	1:30pm	Tesla Fremont Factory Tour 9
Friday	9:00am	Solar Winery and Microgrid Tour

More information & pricing:

→ www.intersolar.us → Program → Special Events, Receptions & Tours

→ www.intersolar.us → Registration

Partners



WORKSHOPS AT MOSCONE CENTER

Tuesday July 11, 2017

Workshop Room I (9030)	Workshop Room II (3012)
10:00am–1:00pm NAATBatt Workshop I	CALSEIA's Contractor Day
2:00pm–5:00pm NAATBatt Workshop II	
5:00pm Summerfest (AT&T Park)	

Wednesday July 12, 2017

Track 1: Roof Top	Track 2: Energy Storage, Inverter & Matchmaking Software
10:15am–12:15pm Quick Mount PV	eGauge Systems
12:45pm–2:45pm Roof Tech Inc. *1 hour training*	Magnum Energy/A Product Brand of Sensata Technologies
3:00pm–5:00pm	Trojan Battery Company

Thursday July 13, 2017

Track 1: Roof Top	Track 2: Energy Storage, Inverter & Matchmaking Software
10:15am–12:15pm SolarRoofHook	APsystems
12:45pm–2:45pm	Sofdesk Inc.

Subject to change

WORKSHOP PRICING

Workshop Packages	Price
Installation Workshop Package (by NABCEP)	\$95
Installer Advantage Package	\$375
Single Workshop Tickets	Price
CALSEIA's Contractor Day	\$200
NAATBatt Workshop I	\$100
NAATBatt Workshop II	\$100

Any workshop registration grants you full access to the Expo Halls, Opening Ceremony and Welcome Reception at the InterContinental Hotel.

NABCEP INSTALLATION WORKSHOPS

NABCEP, Intersolar and ees selected 8 exhibiting companies to offer in-depth technical training workshops and hands-on product workshops. Attendees will earn 2 NABCEP CEUs for each two-hour workshop and 1 NABCEP CEU for each one-hour workshop. These workshops keep you up to speed on the latest technologies and best practices for the design, installation, and maintenance of code-compliant PV and storage systems.

Track 1: Roof Top

Quick Mount PV	Solar Roofing Best Practices & Intro to Rail-free Racking
Roof Tech Inc.	Rail-less PV Mounting with Integrated Flashing in Asphalt Pitched Roofs with Roof Tech's RT-[E] Mount
SolarRoofHook	Making Solar More Affordable Through Innovation

Track 2: Energy Storage, Inverter & Matchmaking Software

eGauge Systems	Discovering User Information from Energy Meter Data
Magnum Energy	PV + Storage, Design Options
Trojan Battery Company	Deep-Cycle Battery Technologies, Proper Maintenance and System Selection for Renewable Energy Applications
APsystems	Microinverters in the Residential Environment – APsystems YC500 Dual Modular Solution
Sofdesk Inc.	Accelerating your Residential Solar Sales

