



2023 POSIFSHOW REPORT

A Look Back at #isnaesna23

Intersolar North America and Energy Storage North America offered an unmatched opportunity for solar, storage, and EV charging infrastructure professionals to gain critical insights, make impactful connections, source quality products—and have fun.

intersolar.us

FEBRUARY 14-16, 2023 / LONG BEACH CONVENTION CENTER / LONG BEACH, CA

TABLE OF CONTIENTS

- A Look Back at #isnaesna23
- Quick Facts and Figures
- 6 Attendee Information
- Exhibitor Information
- 12 Solar Games
- 17 Education
- 23 The Extras
- 27 Media, Social, and Partners
- **30** Save the Date











It's always a privilege to spend three days with the professionals and policymakers working to accelerate the energy transition—and this year was no different. As new forward-looking policies and innovative technologies combine to drive industry growth throughout 2023, we're already looking ahead to welcoming everyone to San Diego next year to further the education, conversation, and new partnerships that will maintain the momentum."

Wes Doane Vice President, Clean Energy

A Look Back at #isnaesna23

Intersolar North America and Energy Storage North America, the industry's flagship solar + storage event, staged the 2023 edition of its combined conference and expo in Long Beach, CA from February 14-16, 2023.

The event brought together more than 400 exhibiting companies and 8,000 solar + storage professionals from around the world. From the 2023 Solar Games and the Wednesday Night Party to inspiring keynote addresses and the WRISE Networking Breakfast, #isnaesna23 delivered three days of learning, networking, business, and fun to attendees and exhibitors alike.

#isnaesna23 kicked off on February 13 with pre-conference workshops that offered technical training with actionable takeaways on topics spanning community solar, energy storage interconnection, green hydrogen, and more.

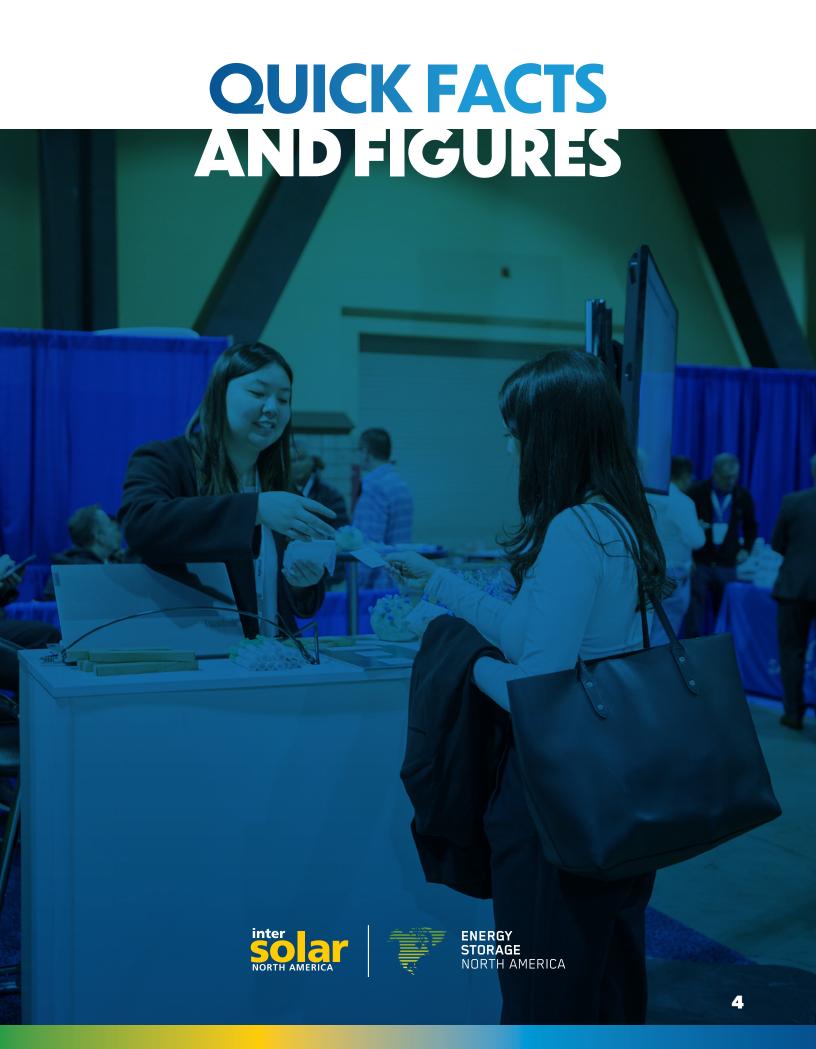
The first full day of the event began with inspiring keynotes from Honorable Shalanda H. Baker (U.S. Department of Energy) and Krishna Vanka (Fluence), followed by the opening of the exhibit hall and the start of the Solar Games competition. New for 2023, the expo hall featured presentations at The Hub from top exhibitors and partners covering real-world applications and solutions. The conference program also began, delivering a full day for attendees as they gained critical insights during educational sessions and explored the dynamic and integrated exhibit hall.

The second full day started with breakfast and a presentation by Women of Renewable Industries and Sustainable Energy (WRISE) that focused on how to ensure a just transition to a clean energy future for all. The morning's keynote addresses then featured insights from Audrey Lee (Microsoft), Marty Adams (LA Department of Water and Power), and Stephen Lacey (Post Script Media), which were followed by another packed day of education, business, and the Solar Games competition. The day closed in celebration at the Wednesday Night Party, where attendees enjoyed various casino games, sleight-of-hand magic, and more at The Cove.

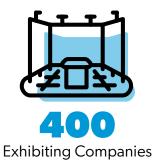
On the final day, the Solar Games concluded with its championship round—crowning Aloha Solar Power as the first-place winner in a heated competition. #isnaesna23 later came to a close on Thursday afternoon, capping three days of impactful networking, learning, and business that helped to accelerate the energy transition.

HIGHLIGHTS

- In-Person Connections: Solar and energy storage professionals from across the globe had multiple opportunities to connect—in the exhibit hall, during the Wednesday Night Party and Women's Networking Breakfast, while watching the Solar Games, and more! Exhibitors and attendees also had the opportunity to build connections before the event through the #isnaesna23 Matchmaking and Networking Platform. The energy was high as the industry came together in person to learn and connect.
- Expanded Exhibit Hall: The sold-out #isnaesna23 trade show featured more than 400 exhibiting companies—like Jinko Solar, IronRidge, and Victron Energy—and also included a start-up pavilion, EV charging infrastructure pavilion, and brand-new outdoor pavilion. Exhibiting companies represented a range of clean energy products, solutions, and services.
- Critical Education: The #isnaesna23 conference highlighted the readiness of solar + storage as available and immediate climate solutions. Expert speakers representing a diverse range of sectors provided attendees with timely industry insights and resources.
- Inspiring Keynotes: Audrey Lee,
 Honorable Shalanda H. Baker, Janice Lin,
 Krishna Vanka, Marty Adams, Paul Grana,
 and Stephen Lacy delivered engaging
 keynote addresses ranging in topics
 from corporate climate leadership
 and digital's role in solar + storage to
 community engagement and the race to
 a zero-carbon grid.
- 2023 Solar Games: The third annual Solar Games Competition put eight installer teams from across the US head-to-head over three days of tournament-style competition. Aloha Solar Power was named the 2023 Solar Games Champion, taking home the \$10,000 cash prize.



QUICK FACTS AND FIGURES





49 U. (ar re

U.S. States (and Puerto Rico) represented **68** Co

Countries represented





More than 125
Speakers



Technical Workshops



Expert-Led Conference Sessions



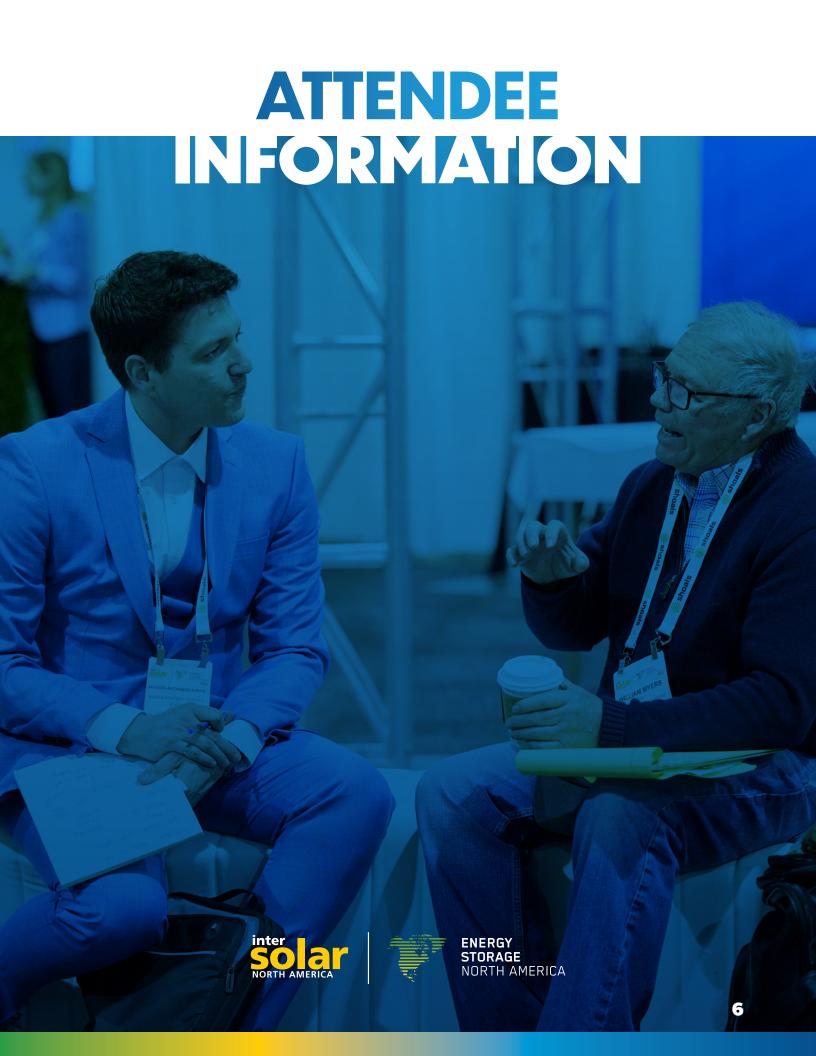
16Engaging Hub
Presentations







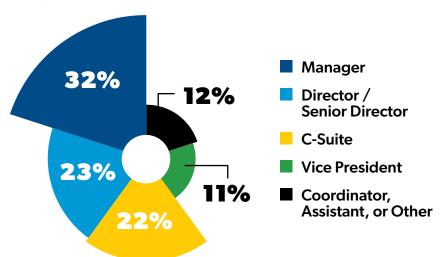




ATTENDEE TESTIMONIALS:

ATTENDEE INFORMATION

Top Job Levels Represented:



Top Objectives for #isnaesna23:



See new products & innovations



Industry networking



Keep up-to-date with market trends

Top States Represented:

- California
- Texas
- New Jersey
- Illinois
- New York
- Colorado
- Washington D.C.
- North Carolina
- Arizona
- Minnesota

Top Countries Represented:

- United States
- Canada
- India
- Mexico
- United Kingdom
- Brazil
- Israel
- Argentina
- Costa Rica
- Germany

The conference was well organized and a GREAT VENUE TO SEE AND DISCUSS THINGS THAT ARE HAPPENING IN THE RENEWABLE INDUSTRY. It is also a great event to network and meet other professionals in the business."

"Great opportunity for NETWORKING AND LEARNING about new products and industry trends."





ATTENDEE INFORMATION

Attendee Areas of Focus:

Balance of Systems \ Components, Mounting, and Tracking Systems

Energy Storage

EV Infrastructure

PV Cells and Modules

PV Manufacturing Equipment, Materials, and Components

Solar Heating and Cooling

A Quick Look at Attending Companies:

- ABB
- ABC Supply Co Inc.
- Ameresco
- Array Tecnologies
- Greentech Renewables
- Go Solar Pros
- Grid Alternatives
- LG

- Mortenson Construction
- New Energy Equity
- Nexamp
- NextEra Energy
- Siemens
- Standard Solar
- SunRun

CLICK HERE -

for the complete list of #isnaesna23 attending companies

Top 10 Business Types:

- Construction/EPC Contactor
- 2. Installer/Contractor
- 3. Consulting Services
- 4. Distributor
- Developer
- Energy Storage Technology Manufacturer
- Engineering Firm
- Solar Supplier
- Energy Storage System Integrators
- 10. Finance

'Other' not included

ATTENDEE TESTIMONIALS:

This is the ideal opportunity to **CONNECT WITH POTENTIAL SUPPLIERS AND PARTNERS**, while being able to learn about emerging technologies."

"VERY EDUCATIONAL!

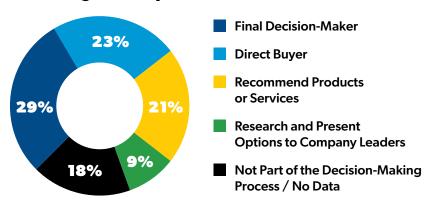
I liked to see new companies/products, socialize, and network with new people."





ATTENDEE INFORMATION

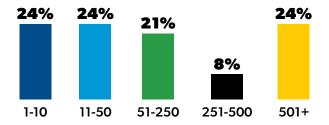
Purchasing Authority:





73% of #isnaesna23 attendees were purchasing decision-makers or part of the decision-making team.

Company Size by Employees:







ATTENDEE TESTIMONIALS:

Well organized and efficient. KEY CUSTOMERS IN ONE ROOM AND I MADE IMPORTANT CONTACTS that I need for my business to succeed."

"This conference was TOP-SHELF FROM BEGINNING TO END."





^{*}Data reported in the 2023 Post-Show Survey

EXHIBITOR



EXHIBITOR INFORMATION

A Quick Look at Exhibiting Companies:

- Baja Carports
- Chint Power Systems
- Fluence
- IronRidge
- Jinko Solar
- Nucor Steel
- Outback Power
- Power Electronics
- REC Americas
- Roof Tech, Inc.

- Sol-Ark
- SPAN
- TerraSmart
- Unirac, Inc.
- Victron Energy
- VON ARDENNE North America, Inc.
- Waaree Technologies
- We Recycle Solar
- Yotta Energy Inc.

CLICK HERE

for the complete list of #isnaesna23 exhibitors

Featured Expo Hall Pavilions:



Start-Up Pavilion



EV Charging
Infrastructure Pavilion

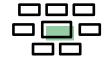


Pavilion

Top Objectives for #isnaesna23:



Generating new sales leads



Increasing brand awareness



Meeting / selling to current customers



70%

of 2023 exhibiting companies re-signed onsite during the #isnaesna23 booth renewal process

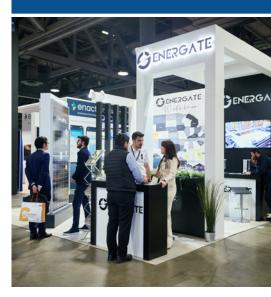
EXHIBITOR TESTIMONIALS:

There was a
GREAT MIX OF
MANUFACTURERS,
DISTRIBUTORS,
SOFTWARE
COMPANIES, AND
INSTALLERS. Hit every
corner of the space."

"ISNA/ESNA is an annual trade show that ALL SOLAR PROFESSIONALS SHOULD ATTEND."

"GOOD QUALITY TRAFFIC, GOOD NETWORKING AMONG EXHIBITORS, topically relevant, well planned, managed, and executed."

"Great networking event—CRITICAL HANDS-ON CUSTOMER INTERACTION."



11





The third annual Solar Games competition was held in the Intersolar North America and Energy Storage North America exhibit hall at the Long Beach Convention Center in Long Beach, CA.

The industry's only installer competition, the Solar Games tasked eight teams from across the US with building residential solar + storage systems—live in a stadium setting. Competing teams were judged on installation quality, safety, speed, and other criteria.



All Energy Solar

SAINT PAUL, MN

Aloha Solar

ENCINITAS, CA

Bright Planet Solar \

AUBURN, CT

Grid Alternatives

OAKLAND, CA

Northwest Electric and Solar

KENMORE, WA

Option One Solar \

APPLE VALLEY, CA

Solar Works Energy

ALBUQUERQUE, NM

Sol-Up

LAS VEGAS, NV





TUESDAY

COMPETITION SCHEDULE

There were seven matchups in the 2023 tournament, each lasting 75-90 minutes. The first round was a grid-tied installation; the winners from round one's matchups moved on to the semi-finals. The semi-final matchups were an off-grid installation. The winners from those rounds competed in the championship round, which was a grid-tied installation.

AFTER BATTLING IT OUT IN THE CHAMPIONSHIP ROUND

against Bright Planet Solar, the installer team from Aloha Solar walked away with the first-place prize—\$10,000! Runner-ups Bright Planet Solar took home \$3,500, while third place competitors All Energy Solar received \$2,500.

ROUND 1:

SOL-UP VS.
OPTION ONE SOLAR

ROUND 2:

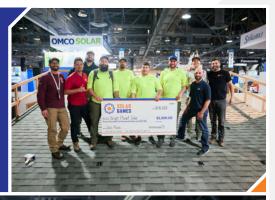
SOLAR WORKS ENERGY VS.
BRIGHT PLANET SOLAR

ROUND 3:

GRID ALTERNATIVES VS.
ALL ENERGY SOLAR

Equipment used in the 2023 Solar Games was donated to non-profit partner

Twende Solar for use in impactful solar + storage projects around the globe.





WEDNESDAY

ROUND 4:

ALOHA SOLAR VS. NORTHWEST ELECTRIC AND SOLAR

SEMI-FINAL 1:

SOL-UP VS.
BRIGHT PLANET SOLAR

SEMI-FINAL 2:

ALL ENERGY SOLAR VS.
ALOHA SOLAR

THURSDAY

CHAMPIONSHIP ROUND: BRIGHT PLANET SOLAR VS. ALOHA SOLAR

ADVISORY BOARD

Meet the clean energy leaders that helped guide the 2023 competition.



Johan Alfsen Senior Director of Training K2 Systems



Mike Dunlap General Manager Roof Tech, Inc.



Travis GenatossioOperations / Commercial
Project Manager
ReVision Energy



Jeff MylesMarketing Manager
Rolls Battery Engineering



Rudy Saporite
Program Director of
Energy & Sustainability
Institute for Building
Technology and Safety



Robin Swanhuyser Executive Director Twende Solar



Sam Vanderhoof President *Solar Cowboyz*







THANK YOU TO THE 2023 SOLAR GAMES EQUIPMENT SPONSORS

























THANK YOU TO THE 2023 SOLAR GAMES' **EXCLUSIVE MEDIA PARTNER**



GET INVOLVED IN THE 2024 SOLAR GAMES

WHETHER YOU'RE INTERESTED IN **COMPETING OR WANT TO LEARN MORE ABOUT SPONSORSHIP** OPPORTUNITIES, TO GET STARTED.





Workshops

#isnaesna23 workshops provided technical training and deep-dive conversations from industry-leading experts and organizations before the conference and exhibit hall opened.

2023 offered six workshops in total:

2023 NEC: PV, Energy Storage and Interconnections

Presented by Sean White (HeatSpring / White House Energy) and Bill Brooks (Brooks Engineering)

Community Solar Design Fundamentals: Achieving Successful Programs Through Optimal Program Design

Presented by Derek Chernow (Coalition for Community Solar Access), Liz Glivinski (EnergySage), Kari Smith (Nexamp), Joseph Wiedman (Law Office of Joseph F. Wiedman), Rick Umoff (Solar Energy Industries Association), Matt McDonnell (Strategen), Susannah Churchill (Solar Landscape), Jonathan Roberts (Soltage LLC), and Daniela Pangallo (Nautilus Solar)

Energy Storage Interconnection Basics & Best Practices

Presented by Sergio Duenas (California Energy Storage Alliance), Zach Woogen (Vehicle-Grid Integration Council), and Radina Valova (Interstate Renewable Energy Council)

Evolving Markets for Standalone and Hybrid Grid-Scale Storage

Presented by John Fernandes (Customized Energy Solutions) and Nehal Divekar (Customized Energy Solutions)

NABCEP Technical Training

Presented by North American Board of Certified Energy Practitioners (NABCEP), featuring Chris Fox (SPAN), Jeff Myles (Rolls Battery Engineering), Jeff Nicholson (LUMIN SMART), and John Cromer (FORTRESS POWER)

The Green Hydrogen Value Proposition: Fundamental Policy Needs to Drive Market Development and Re-Imagine the Energy Ecosystem

Presented by Nick Connell (Green Hydrogen Coalition), Abraham Mooney, P.E. (Obsidian Renewables, LLC), Clark Crawford (GKN), Serg Berelson (Mainspring), Dr. Justin W. Raade (Electric Power Research Institute), Jason Goodhand (DNV), Dhruv Bhatnagar (Strategen), Janice Lin (Green Hydrogen Coalition), Melanie L. Davidson (San Diego G&E), and Qing Tian (California Energy Commission)







Forward-looking Insights

The Intersolar North America and Energy Storage North America 2023 Conference Program featured sessions highlighting the readiness of solar and storage as available and immediate climate solutions. The program also emphasized how grid electrification is a pillar of climate response strategies, in addition to the integral role solar + storage play in that transformation.

The 2023 conference program was developed in partnership with **Strategen**.

Conference Sessions

Industry professionals gained the information they needed to advance their company and careers during conference sessions. Here's a look at the sessions featured in the #isnaesna23 educational program:

- A Utility's Approach to Energy Storage Fire Safety
- Are Utility-Tech Partnerships the Answer to the Energy Burden?
- Behind the Curtain of Behind-the-Meter Energy Storage Programs
- California Energy Storage Market State of the Union
- California is In the Lead and Accelerating Decarbonization: Building the Solar + Storage Future
- Clean Energy Workforce Development
- Community As The Cornerstone to Scaling The Clean Energy Transition
- Crafting Community Solar Program: What Makes it Effective
- Energy Storage as Grid Assets: Expanding Transmission Capacity to Accelerate Renewable Growth
- EVs as Grid Storage Resource / V2X Interconnection
- How Solar Installers Can Benefit by Integrating their Business Management Software to SolarAPP+
- How to Successfully Transition from Start-up to Commercialization in the Rapidly Accelerating Transition Market
- Impact of Solar-Ready Mandates on New Building Design & Construction in 2023
- Innovation in Project Structuring to Support Project Finance
- IRA Domestic Content
- Maximizing Tax Benefits
- Residential Solar Adoption Timelines and Permitting
- Rural Renewables
- Surviving Supply Chains
- The Journey to Net-Zero Starts at the Local Level: Enabling Rapid Deployment of LDES through Small Scale Installations
- The Virtual Power Plant Business Model
- The Women Driving the Energy Transition
- Unlocking Community Solar Financing
- Unlocking Transmission Capacity

CLICK HERE —

for session descriptions

KEYNOTES

The #isnaesna23 keynote addresses provided key insights on themes of climate leadership, innovation, environmental justice, and more.



Corporate Climate Leadership: Getting to Carbon-negative by 2030 Presented by Audrey Lee (Microsoft)



Digital's Role in Transforming Solar and Storage Presented by Krishna Vanka (Fluence)



How Solar and Storage Lead the Way to Tackling Climate Change Presented by Janice Lin (Strategen) and Paul Grana (Aurora Solar)



Innovation on the Front Line: Solar and Storage Leadership on Community Engagement Presented by Honorable Shalanda H. Baker (U.S. Department of Energy)



Leading the Charge on a Zero-Carbon Grid Presented by Marty Adams (LA Department of Water and Power) and Stephen Lacey (Post Script Media)

The Race To Zero:

Speakers

#isnaesna23 featured speakers from around the globe representing the clean energy industry in a range of forms. Experts from organizations including Center for Sustainable Energy, Google, National Renewable Energy Laboratory (NREL), and more offered critical insights and perspectives during thoughtful educational sessions.

Here's a list of all #isnaesna23 speakers:

- Abraham Mooney, P.E.
 Obsidian Renewables, LLC
- Adam Gerza
 Energy Toolbase
- Alexander Schoenfeldt
 CellCube Inc. & Enerox GmbH
- Allison Auld-Hill
 Southern California Edison
- Andrew Gilligan
- Fluence
- **Ann Yu**Customized Energy Solutions
- Anne Weisberg
 Women of Renewable Industries and
 Sustainable Energy (WRISE)
- Ariel Debin
 Sheppard Mullin
- Astrid Atkinson
 Camus Energy
- Audrey Lee
 Microsoft
- Bernice Diaz
 Sheppard, Mullin,
 Richter & Hampton LLP
- Bhaskar Ray
 Qcells USA Corp.
- Bill Brooks
- Brooks Engineering

 Bronte Payne
- Sunpower

 Chris Fox
- SPAN.IOChristina Lampe-OnnerudCadenza Innovation, Inc.
- Clark Crawford
 GKN
- Dan Clark
 - Arizona Public Service
- Daniela Pangallo
 Nautilus Solar
- Derek Chernow
 Coalition for Community Solar Access
- Dhruv BhatnagarStrategen
- Dr. Justin W. Raade
 Electric Power Research Institute
- **Duncan Cleminshaw**GAF Energy

- Ed Burgess
 - Vehicle-Grid Integration Council (VGIC)
- Eric Dresselhuys
- Gabe Murtaugh CAISO
- Gary Dorris
 Ascend Analytics
- Gary Morrissett C.E.M.
 Marine Corps Air Ground Combat Center
- Gia Vacin
 Governor's Office of Business and
 Economic Development
- Gigio Sakota
 Avantus
- Grant Davis
- Southern California Edison
- Gregory Poilanse
 Nuvve Holding Corp.
- Hamza Zaidan
 Morgan Stanley
- Hans Mikael Svanbom Azelio AB
- Honorable Shalanda H. Baker
 U.S. Department of Energy
- Jackson SalovaaraSB Energy
- Jan Rippingale
 Blu Banyan
- Janice Lin
 - Green Hydrogen Coalition
- Jason Goodhand
 DNV
- Jatin Khanna
 DOE Loans Program Office
- Jay SadlerDuke Energy Corporation
- Jeff Cook
 National Renewable Energy Laboratory
 (NREL)
- Jeff Gleeson Google
- Jeff Myles Rolls Battery Engineering
- Jeff Nicholson
 Lumin Smart
- Joe Goodenbery
 Strategen







Speakers

John Cromer
 Fortress Power

- John Fernandes

Customized Energy Solutions **John Wheeler**

Fermata Energy

Jonathan Roberts

Soltage, LLC

Joseph Santo

Arevon Energy

- loseph Wiedman

Law Office of Joseph F. Wiedman

Josh Kunkel
 New Energy Equity LLC

Julia Souder
Long Duration Energy Storage Council

Justin Boose
 Holland & Knight

Karen Glitman
 Center for Sustainable Energy

- Kari Smith Nexamp

Keith Martin
 Norton Rose Fulbright US LLP

Kim Getgen
 Innovationforce

- Krishna Vanka

Fluence

- Lindsay Cherry
Qcells

Liz GlivinskiEnergySage

Louis Ting, P.E.

Los Angeles Department of Water & Power

- Marco Terruzzin Energy Vault

 Marius Mordal Bakke RystadEnergy

- Mark Gies

S-5!

- Marty Adams

LA Department of Water and Power

Matt Harper
 Invinity Energy Systems

- Matt McDonnell

Strategen
- **Matt Walz**

Invinity Energy Systems

Melanie L. Davidson
 San Diego G&E

- Melina Acevedo

D.E. Shaw Renewable Investments (DESRI)

Nehal Divekar
 Customized Energy Solutions

Nick Chaset
 East Bay Community Energy

- **Nick Connell**Green Hydrogen Coalition

Nishant Sharma
 CellCube INC

Paul Grana
 Aurora Solar

- **Paul Hayes** Hiller Co

Paul ZacherPZSE

Qing Tian
California Energy Commission (Sacramento,

R. Steven Jones
 UL Solutions

- Rachel McMahon

 Radina Valova Interstate Renewable Energy Council

Rashida Caraway
 Texas RE

Rick Umoff
Solar Energy Industries Association (SEIA)

Rod Eckhardt
 Seminole Financial Services

Ryan Roberts
 Sheppard Mullin LLP

Salvatore MinopoliOn.EnergySean Burke

Enteligent

Sean White

HeatSpring / White House Energy

- Serg Berelson Mainspring

Sergio Carrillo
 Connecticut Green Bank

Sergio Duenas
 California Energy Storage Alliance (CESA)

Stella UrsuaGrid AlternativesStephen Lacey

Post Script Media
- Steve Pullins

Alphastruxure
- Susannah Churchill

Solar Landscape
- Tim Aldinger

Foundation for California Community
Colleges

Vann Gupta
 Brookfield Renewables

Wendy Prabhu
 Mercom Capital Group

William P. Acker New York Battery and Energy Storage Technology Consortium (NY-BEST)

Zach WoogenVehicle-Grid Integration Council









Thank You to the 2023 Advisory Board

The Advisory Board provides expertise and thought leadership to help develop the most engaging, thoughtful, and educational event program in the clean energy industry.



Dr. William P. Acker Executive Director New York Battery and Energy Storage Technology Consortium (NY-BEST)



Astrid Atkinson CEO and Co-Founder *Camus Energy*



Ed Burgess Senior Director Strategen



Erin ChildsDirector
Strategen



Nick ConnellPolicy Director *Green Hydrogen Coalition*



Deborah Knuckey Cofounder and CMO *Enzinc*



Alex Morris Executive Director CESA California Energy Storage Alliance



Gabe Murtaugh Storage Sector Manager *California ISO*



Meghan Nutting Executive Vice President of Government and Regulatory Affairs Sunnova Energy Corporation



Eric PaulExecutive Director, Origination
Nautilus Solar Energy, LLC



Supria Ranade Head of Power Markets SB Energy









MEDIA, SOCIAL, ANDRARINERS

NORTH AMERICA

MEDIA, SOCIAL, AND PARTNERS

Attending media included:

- AGreen1
- Bloomberg
- BloombergNEF
- EnerG
- EnergyTech
- Industry Dive
- MergerMarket
- North American Clean Energy
- POWER Magazine
- PV Magazine

- Renu News
- SolarAcademy
- Solar Builder Magazine
- Solar Power World
- Solar Surge
- Suncast Media
- The Hollywood Times
- The New York Times
- Utility Dive
- Voltility

Read the full 2023 close-of-show press release here.



Social:













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PLATINUM PARTNERS















GOLD PARTNERS





BRONZE PARTNERS







CONFERENCE PROGRAM PARTNER



SILVER PARTNERS













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SAVETHE DATE: **#ISNAESNA24**

JANUARY 17-19, 2024

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