THE 2019 HAWAII ENERGY CONFERENCE - INNOVATION IN PRACTICE

Hawaii has experienced enormous growth in distributed energy resources, primarily photovoltaic systems. This year's conference will take an in-depth look at the innovative policies and technologies that continue to allow rapid growth in PV, and will compare Hawaii solutions with those in Colorado, California and other states. We will also ask what the right blend of fossil fuel and renewable energy sources is for the portion of our economy not covered by the Renewable Portfolio Standard. Come join the discussion at one of the nation's leading energy conferences.

WEDNESDAY, MARCH 27

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CONTINENTAL BREAKFAST | SPONSORED BY PXISE ENERGY SOLUTIONS, LLC

FOUNDERS COURTYARD

8:00 CULTURAL OPENING | CASTLE THEATER

Clifford Nae'ole, Cultural Advisor, The Ritz-Carlton, Kapalua

E KOMO MAI (WELCOME)

Deidre Tegarden, Chief of Staff, Office of the Mayor, County of Maui **Leslie Wilkins**, President and CEO, Maui Economic Development Board, Inc.

REMARKS

Michael Victorino, Mayor, County of Maui

8:30 KEYNOTE ADDRESS

Edward Fenster, Co-Founder and Executive Chairman, Sunrun

9:00 KEYNOTE Q&A DISCUSSION

Facilitated by Marco Mangelsdorf, President, Provision Solar

9:15 COFFEE BREAK AND EXHIBIT SESSION | HAWAII NATURAL ENERGY INSTITUTE (HNED EXHIBIT HALL

RELAX & RECHARGE AT THE ULUPONO INITIATIVE CHARGING LOUNGE | CASTLE LOBBY

9:45 SPECIAL ANNOUNCEMENT

James "Jay" Griffin, Chair, Hawaii Public Utilities Commission Michael Picker, President, California Public Utilities Commission

10:00 WHAT'S AHEAD FOR SOLAR AND STORAGE IN HAWAII? A DISCUSSION WITH

INDUSTRY LEADERS







LESSONS LEARNED POST NET ENERGY METERING (NEM)

What worked with NEM, what did we miss, what does the future look like? Join this discussion where we will ask the panel members to identify 10 things that still need to be fixed when it comes to PV in Hawaii.

Moderated by:

William Giese, Executive Director, Hawaii Solar Energy Association

Panelists:

Rich Barone, Director, Demand Response, Hawaiian Electric Company **Isaac Moriwake**, Staff Attorney, Earthjustice **Ted Peck**, Chief Executive Office, Lead Developer, Holu Energy

10:45 HAWAII DISTRIBUTED ENERGY RESOURCES (DER) — REDEFINED FOR THE 21ST CENTURY

Hawaii's energy future is clean, renewable, and in large part distributed. What exactly are DERs and what the options for continued integration? We will describe the current state of consumer aggregation in Hawaii and explore possibilities for making our future system more efficient, resilient, clean, and inclusive. Community inclusion, options to interconnect future resources, and utility-scale solar plus storage procurement efforts will all impact the DER landscape in Hawaii.

Moderated by:

Chase Livingston, Energy Justice Fellow, Richardson Law School

Panelists:

Rachel James, Project Manager, Hawaii Center for Advanced Transportation Technologies Ellyse Mazzi, Program Manager, Distributed Energy Resources, Hawaiian Electric Company Steven Rymsha, Director of Grid Solutions & Public Policy, Sunrun

11:45 CASE STUDY | CARBON LIGHTHOUSE

12:00 PM NETWORKING LUNCH | SPONSORED BY INNERGEX | FOUNDERS COURTYARD

EXHIBIT SESSION AND DESSERT | HAWAII NATURAL ENERGY INSTITUTE (HNED EXHIBIT HALL

1:30 PERFORMANCE BASED REGULATION (PBR) AND OTHER NEW DIRECTIONS IN HAWAII ENERGY POLICY

Come hear how energy challenges can be overcome with a blend of carefully targeted policy interventions that aim to improve utility performance, move away from cost-of-service rate making, incentivize innovation, and promote diversity in energy generation.

MOVING AWAY FROM CONVENTION: INNOVATIONS IN REGULATORY POLICY

What regulatory initiatives are Commissions undertaking to improve utility performance? How is PBR different than performance-based ratemaking? What incentives will work to align the interests of the utility with public policy? What incentives have been approved for fuel cost and renewables procurement? If new incentives are crafted, can they avoid increasing the ultimate cost to rate payers? What instances make sense to transform the market through incentives?







Moderated by:

Matthew McDonnell, Associate Director, Navigant Energy Practice

Panelists:

Abigail Anthony, Commissioner, Rhode Island Public Utilities Commission David Ige, Governor, State of Hawaii

Michael Picker, President, California Public Utilities Commission

Jennifer Potter, Commissioner, Hawaii Public Utilities Commission

2:30 MEGA TRENDS IN REPOWERING COLORADO'S ECONOMY

Over the past six years we have explored numerous similarities between Colorado and Hawaii. While there are striking differences in term of energy policy, both states are grappling with transitioning to a carbon-free future. These Colorado leaders will discuss the state's path to 100% renewable energy, including what stands in the way, what challenges have already been overcome, and what lies ahead

Moderated by:

Jonathan Koehn, Senior Sustainability Policy Advisor, City of Boulder

Panelists:

Paul Chinowksy, Co-Founder, Resilient Analytics; Director, Program in Environmental Design, University of Colorado Boulder

Taryn Finnessey, Senior Climate Change Specialist, State of Colorado **Anita Seitz**, Mayor Pro Tem, City of Westminster, Colorado; President, Colorado Communities for Climate Action

3:30 COFFEE BREAK | SPONSORED BY ELEMENTAL EXCELERATOR

I HAWAII NATURAL ENERGY INSTITUTE (HNEI) EXHIBIT HALL

4:00 THE REAL WORLD OPPORTUNITIES BETWEEN NOW AND 2045

We know our long term goal, but how do we get there using the right blend of resources? Most goods and passengers still travel in planes and ships powered by fossil fuels.

WHAT ARE THE INVESTMENT OPPORTUNITIES TODAY IN ENERGY?

From ValueAct's investment in Hawaiian Electric to local success story Pacific Biodiesel and startup Ampaire, there is a lot to talk about.

Moderated by:

Frank De Rego Jr, Director of Business Development Projects, Maui Economic Development Board, Inc.; Vice Chair, Conference Program Committee

Panelists:

Kyle Datta, General Partner, New Energy Partners
Brice Nzeukou, Product Manager, Ampaire
Robert King, President, Pacific Biodiesel Technologies
Jeffrey W. Ubben, Founder and Chief Executive Officer, ValueAct Capital







5:00 SUSTAINABLE AIR TOURISM

The visitor industry is where energy policy meets the real world in Hawaii, and commercial aviation is a significant enabler of Hawaii's economy and visitor industry. What are airlines serving Hawaii doing to meet the International Civil Aviation Organization's mandate for carbon reduction starting in 2020? What can Hawaii do to position itself as a destination and showcase for sustainable air tourism?

Moderated by:

Joelle Simonpietri, Simonpietri Enterprises

Panelists:

Neville Fernandes, Head of Renewable Jet Fuel Development Project North America, Neste US, Inc.

Aaron Robinson, Senior Manager, Environmental Strategy and Sustainability, United Airlines

5:45- NETWORKING RECEPTION | SPONSORED BY CARBON LIGHTHOUSE | MORGADO HALL

7:30 PM

THURSDAY, MARCH 28

7:00 AM REGISTRATION

CONTINENTAL BREAKFAST | SPONSORED BY HAWAIIAN ELECTRIC COMPANIES

FOUNDERS COURTYARD

8:00 WELCOME TO DAY TWO | CASTLE THEATER

Aki Marceau, Managing Director, Policy & Community - Hawai'i, Elemental Excelerator Doug McLeod, Chair, Conference Program Committee; Member, DKK Energy Services LLC

8:15 KEYNOTE | CONVERSATION WITH THE COMMISSIONERS

Facilitated by:

Gavin Bade, Senior Reporter, Utility Dive

Commissioners:

Abigail Anthony, Commissioner, Rhode Island Public Utilities Commission James "Jay" Griffin, Chair, Hawaii Public Utilities Commission David Hochschild, Chair, California Energy Commission

9:15 OPERATING ISOLATED GRIDS EFFICIENTLY WHILE BEING RESILIENT

Even if lava flow is not an issue where you live, hurricanes, wildfires, and extreme wind may be. In Hawaii we have to plan for all of this without an ability to import electricity from other areas.







MOLOKAI

Out of the six isolated island grids in Hawaii, Molokai poses a unique set of issues when it comes to reaching 100% renewable. What technical solutions are being used to address the high penetration of solar? How is the community being involved on this island that has one of the highest average costs of electricity and lowest average daily uses of electricity?

Moderated by:

Sharon Suzuki, President, Maui Electric and Hawaii Electric Light

Panelists:

Iolani Kuoha, STEMworks™ Facilitator and Hawaiian Immersion Teacher, Molokai Middle School

Mahina Martin, Manager, Government and Community Relations, Maui Electric Company Mathew McNeff, Director, Power Supply, Maui Electric Company

10:00 COFFEE BREAK AND EXHIBIT SESSION | HAWAII NATURAL ENERGY INSTITUTE (HNED EXHIBIT HALL

RELAX & RECHARGE AT THE ULUPONO INITIATIVE CHARGING LOUNGE | CASTLE LOBBY

10:30 OPERATING ISOLATED GRIDS EFFICIENTLY WHILE BEING RESILIENT (CONTINUED)

COMPLEX ISOLATED GRIDS

An explanation of grid planning in Hawaii. What are the objectives and how has the process changed over the last five years? Hawaiian Electric is developing a new Integrated Grid Planning approach. How is it working? How is the approach different on Kauai?

Moderated by:

Colton Ching, Senior Vice President, Planning & Technology, Hawaiian Electric Company

Panelists:

John Cox, Engineering Manager, Kauai Island Utility Cooperative
Paul De Martini, Managing Partner, Newport Consulting Group
Elijah Pack, Manager National Planning, Australian Energy Market Operator

11:15 VIDEO PRESENTATION BY ULUPONO INITIATIVE

11:20 NETWORKING LUNCH | SPONSORED BY HAWAII ENERGY | FOUNDERS COURTYARD

EXHIBIT SESSION AND DESSERT | HAWAII NATURAL ENERGY INSTITUTE (HNED EXHIBIT HALL

12.45 PM COMPARING PATHS TO 100%

We will look at the differences within the islands of Hawaii but also at other locations around the globe.

A SURVEY OF HAWAII

Each island has charted a slightly different course. Come learn which islands are looking for hydro,







wind, solar, and biomass projects over the next decade. How has this already been disrupted through RFPs? Where has innovation taken place and what are the impacts?

Moderated by:

Alex De Roode, Energy Commissioner, County of Maui

Panelists:

Lorraine Akiba, President and CEO, LHA Ventures

David Bissell, CEO, Kauai Island Utility Cooperative

Ron Whitmore, Deputy Director of the Department of Development and Research,

County of Hawaii

1:30 CLEAN ENERGY LEADERS

How are federal fossil fuel policies competing against Hawaii's 100% clean energy policies? Is Hawaii unique or can it be a model for the rest of the nation? Will energy politics or energy pricing determine which will be the future for the country? Leaders from other states discuss.

Moderated by:

Representative Chris Lee, Chair, House Judiciary Committee, State of Hawaii

Panelists:

 David Hochschild, Chair, California Energy Commission
 Jeremy Kalin, CEO, Eutectics; Senior Advisor for Clean Energy, National Caucus of Environmental Legislators
 Nat Kreamer, CEO, Advanced Energy Economy

2:15 COFFEE BREAK | SPONSORED BY POWIN ENERGY

I HAWAII NATURAL ENERGY INSTITUTE (HNED EXHIBIT HALL

2:45 UNLEASHING THE POWER OF CLEAN ENERGY IN HOUSING MARKETS

Is it really such an outrageous idea to think we could build affordable housing in smart connected communities that can limit future electricity demand while providing services to the grid?

LESSONS LEARNED FROM BUILDING IN HAWAII

How can new housing developments be a catalyst for further clean energy gains? How do we bring together government, regulators, developers, energy producers, the utility and the community in a common cause to create a clean energy-housing construction nexus? What are the complete energy needs (beyond efficiency) of residents and what are developers doing to meet these needs? Can we build housing in smart connected communities that can limit future electricity demand while providing services to the grid?

Moderated by:

Murray Clay, Managing Partner, Ulupono Initiative

Panelists:

Brent Arakaki, Project Manager, Hunt Companies







Mary Fox, National Vertical Market Director Public Housing, Johnson Controls; Solutions Design Manager and HUD Compliance, Johnson Controls

Adair Hill, Project Manager, Photonworks Engineering LLP

3:30 FIRST NATIONS CASE STUDY | INNERGEX

3:40 DOES ENERGY EFFICIENCY STILL MATTER?

With the average home in Hawaii using significantly less than homes in any other state, does energy efficiency still make sense in Hawaii? What part does the falling cost of storage play in this analysis?

Moderated by:

Caroline Carl, Deputy Director, Hawaii Energy

Panelists:

Emily Levin, Managing Consultant, Innovative Programs, VEIC

Joshua Strickler, Area General Manager - Performance Infrastructure, Johnson Controls

Jennifer Potter, Commissioner, Hawaii Public Utilities Commission

4:25 CLOSING | SPONSORED BY JOHNSON CONTROLS

4:45- WOMEN IN RENEWABLE ENERGY (WIRE) PAU HANA | MORGADO HALL

6:15 PM Enjoy the opportunity to network with women across the state.

Light appetizers provided. Cash bar for refreshments and wine. Register online.

2019 PROGRAM COMMITTEE

COLTON CHING | Senior Vice President, Planning & Technology, Hawaiian Electric

FRANK DE REGO JR. Vice Chair, Conference Program Committee; Director of Business Development Projects, Maui Economic Development Board, Inc.

WILLIAM GIESE | Executive Director, Hawaii Solar Energy Association

JONATHAN KOEHN | Senior Sustainability Policy Advisor, City of Boulder

DAWN LIPPERT | Chief Executive Officer, Elemental Excelerator

DOUG MCLEOD | Chair, Conference Program Committee; Member, DKK Energy Services LLC

JENNIFER POTTER | Commissioner, Hawaii Public Utilities Commission

FREDERICK REDELL | Co-Founder and Managing Member, BlüNebü



