

9TH HAWAII ENERGY CONFERENCE

Presented by

ELECTRIFICATION: WHERE ARE WE NOW? WHAT DOES THE FUTURE HOLD?

The 9th Annual Hawaii Energy Conference revisits the challenges of electrifying the grid and transportation – current successes, potential pitfalls, and future opportunities.

There is no doubt that the push to Electrification will affect our way of life.

A study by Princeton University predicts that by 2050 electrifying transport and buildings could double the amount of electricity consumption in the U.S. Amy Myers Jaffe, a research professor at Tuft's University, boldly declares in the Wall Street Journal, "The electrification of (almost) everything is coming, and we're just not ready for it."

Our communities will need to develop disciplined, proportional responses to the challenges Electrification poses. Strategies for energy efficiency and the equitable distribution of Electrification's benefits must balance building capacity for increased consumption.

Join us at the Hawaii Energy Conference for a two-day discussion that will review the issues surrounding electrification with the following thoughts in mind:

- How do we define "electrification" and is it the same everywhere?
- How are the community's needs and concerns being addressed as the infrastructure for electrification become more prevalent?
- How is resilience being brought into the equation of electrification?
- What has been and will be the impact of COVID-19 on customers of the utility?
- What should the climate goals of electrification be net zero carbon, net negative carbon, or zero emissions?
- What is the role of energy efficiency in electrification? ...and more.

★ <u>Register today</u>

TUESDAY 10 MAY

7:45 AM HST NETWORKING & MEET THE EXHIBITORS

8:00 CULTURAL OPENING

Reverend John A. Hau'oli Tomoso

E KOMO MAI (WELCOME) (15 MIN)

Leslie Wilkins, President and CEO, Maui Economic Development Board, Inc.

Frank R. De Rego Jr. Co-chair, Conference Program Committee; Director of Business Development Projects, Maui Economic Development Board, Inc.

Jacqui Hoover, Co-chair, Conference Program Committee; Executive Director & COO, Hawaii Island Economic Development Board

Michael P. Victorino, Mayor, County of Maui



8:15 KEYNOTE ADDRESS | WHEN TRADEWINDS BLOW: MAINTAINING COURSE DURING THE ENERGY TRANSITION (25 MIN)

Introduction by Doug McLeod, Member, DKK Energy Services, LLC

Abigail Anthony, Commissioner, Rhode Island Public Utilities Commission

8:45 THE COMMUNITY AND ELECTRIFICATION (40 MIN) | Sponsored by Hawaiian Electric

Electrification is a critical part of the solution to reduce carbon emissions from Hawaii's economy. Oftentimes such technology and economic shifts benefits some communities more than others. How do we make electrification work for <u>all</u> community members? How do we strive to achieve an equitable deployment of electrification infrastructure that meets the need of different communities and where the economic benefits of electrification, such as workforce development, jobs and careers in electrification are shared by all?

Moderated by:

Jim Kelly, Vice President, Government & Community Relations & Corporate Communications, Hawaiian Electric

Noel Morin, President, Hawaii Electric Vehicle Association Cynthia Rezentes, President, Kealahou West Oahu; President, Mohala I Ka Wai Riley Saito, Energy Specialist, County of Hawaii

9:30 SPOTLIGHT TALK: ELECTRIFICATION AND ENERGY EFFICIENCY (10 MIN)

Energy Efficiency plays a key role in the movement to electrify (almost) everything.

Caroline Carl, Interim Executive Director, Hawaii Energy

9:45 NETWORKING & REFRESHMENT BREAK (15 MIN)

10:00 ELECTRIFICATION AND BATTERY STORAGE 40 MIN

What role will battery storage play in electrification? What are the advantages/disadvantages of central storage? What are the advantages/disadvantages of distributed storage? What are the environmental risk factors? How do we insure there are adequate plans and capital for recycling?

Moderated by:

Jon Fortune, Vice President, Grid Services Market Development, Swell Energy

<u>Panelists:</u> Daniel Crotzer, CEO, Fractal Energy Storage Consultants Scott Schalich, Vice President, Kapolei Energy Storage Charlie Vartanian, Technical Advisor, Pacific Northwest Laboratories

10:45 ELECTRIFICATION AND TRANSPORTATION (40 MIN) | Sponsored by Ulupono Initiative

The Hawaii State Energy Office notes that emissions from ground transportation account for the largest share of energy sector emissions in the state – more than 51% of total energy emissions in the state. What progress has the transportation sector made in electrifying transportation? What are the challenges moving forward? What role, if any, would hydrogen play? What lessons can we learn from both within and outside of Hawaii?



<u>Moderated by:</u> Greg Gaug, Senior Vice President, Investments & Analytics, Ulupono Initiative

Panelists:

Randy Baldemor, Executive Vice President, Roberts Hawaii Edwin H. Sniffen, Deputy Director for Highways, Hawaii Department of Transportation Brett Williams, Principal Advisor for Electric Vehicle (EV) Programs, Center for Sustainable Energy

11:30 END OF DAY ONE

THURSDAY 12 MAY

7:45 AM HST NETWORKING & MEET THE EXHIBITORS

8:00 WELCOME TO DAY TWO (10 MIN)

Frank De Rego, Co-chair, Conference Program Committee; Director of Business Development Projects, Maui Economic Development Board, Inc.

Jacqui Hoover, Co-chair, Conference Program Committee; Executive Director & COO, Hawaii Island Economic Development Board

Doug McLeod, Member, DKK Energy Services, LLC

8:10 KEYNOTE ADDRESS | AMY MEYERS JAFFE (25 MIN)

Introduction by *Frank De Rego*, Co-chair, Conference Program Committee; Director of Business Development Projects, Maui Economic Development Board, Inc.

Amy Meyers Jaffe, Research Professor and Managing Director of the Climate Policy Lab, The Fletcher School, Tufts University

8:40 ELECTRIFICATION AND CARBON: IT'S A MATH PROBLEM (40 MIN)

Should the goal of electrification be a grid that is net zero carbon, net negative carbon, or zero emissions? What are the advantages or disadvantages of each approach? Do these calculations leave room for other energy sources for electricity generation (biofuels, biomass, natural gas)? How can we enrich the public understanding of this discussion that is often complicated and technical?

Moderated by:

Maria Tome, Managing Director, Energy Efficiency and Renewable Energy, Hawaii State Energy Office

<u>Panelists:</u>

Susan Asam, Vice President, Climate Planning, ICF International Scott Glenn, Chief Energy Officer, Hawaii State Energy Office Nicola Hedge, Deputy Director, Office of Climate Change, Sustainability, and Resiliency, City and County of Honolulu

9:25 COMMUNITY BASED RENEWABLE ENERGY AND THE PATH TO ELECTRIFICATION (15 MIN)

Community Based Renewable Energy (CBRE) is a program that can provide opportunities for smaller, more distributed utility scale renewable energy projects that can integrate



community needs and priorities such as equity, siting, and added resiliency. These outcomes can, at times, be more challenging to achieve with larger, more centralized large utility scale renewable energy projects. Join us for a conversation exploring how CBRE can contribute to our community goal of achieving 100% clean energy by supporting local renewable energy projects co-created in partnership with local communities.

Alex de Roode, Energy Commissioner, Office of Climate Change, Resiliency, and Sustainability, County of Maui

Ali Andrews, Co-Founder and CEO, Shake Energy Collaborative

James P. Griffin, Chair, Hawaii Public Utilities Commission

9:45 NETWORKING & REFRESHMENT BREAK (15 MIN)

10:00 THE ROLE OF ELECTRIFICATION IN A CLIMATE RESILIENT FUTURE (40 MIN)

Severe weather events driven by climate change are increasing in frequency and intensity. While electrification is a massive piece of the decarbonization puzzle, becoming more resilient to these risks is going to take a broad range of solutions. This panel will explore the intersection between electrification and resiliency, including issues such as cost and the accessibility of options.

Moderated by:

Johnathan Koehn, Chief Sustainability & Resilience Officer, City of Boulder; Interim Director, Climate Initiatives Department, City of Boulder

Panelists:

Rachel Golden, Principal, Carbon-Free Buildings, RMI Craig Lewis, Executive Director, Clean Coalition Karl R. Rábago, Consultant, Rábago Energy LLC

10:45 A CONVERSATION WITH SHELEE KIMURA (20 MIN)

Introduction by Jacqui Hoover, Co-chair, Conference Program Committee; Executive Director & COO, Hawaii Island Economic Development Board

Shelee Kimura, President & CEO, Hawaiian Electric Company

11:05 SYSTEMIC SHOCKS AND THE CHANGING PACE OF ELECTRIFICATION (40 MIN)

In the pre COVID-19 pandemic environment, the momentum around electrification was quite simply put "electrifying". As the pandemic began invading our daily lives and psyche, we began wondering if and how the virus would impact electrification programs and strategies for the transition of energy. This panel will explore the impacts, challenges, and opportunities in electrification presented by external shocks such as the pandemic, supply chain disruption and utilities having to redefine their value chain, rising costs, Russia's invasion of Ukraine, fuel supply concerns and pivoting policies.

Moderated by:

Jacqui Hoover, Co-chair, Conference Program Committee; Executive Director & COO, Hawaii Island Economic Development Board



<u>Panelists:</u> **Robert Isler**, Vice President of Power Supply, Hawaiian Electric **Brian Kealoha**, Chief Growth and Impact Officer, VEIC **Cameron Kruse**, Engineering and Technology Manager, Kauai Island Utility Cooperative **Todd Yamashita**, President, Ho'āhu Energy Cooperative Molokai

12:00 CONFERENCE CLOSING

12:15 PM END OF DAY TWO

2022 PROGRAM COMMITTEE

- COLTON CHING Senior Vice President, Planning & Technology, Hawaiian Electric
- **FRANK DE REGO JR.** Co-Chair, Conference Program Committee; Director of Business Development Projects, Maui Economic Development Board, Inc.
- ALEX DE ROODE | Energy Commissioner, Office of Economic Development County of Maui
- **JACQUI HOOVER** Co-Chair, Conference Program Committee; Executive Director & COO Hawaii Island Economic Development Board (HIEDB); and President Hawaii Leeward Planning
- **JONATHAN KOEHN** Chief Sustainability & Resilience Officer, City of Boulder; Interim Director, Climate Initiatives Department, City of Boulder
- DOUG MCLEOD | Member, DKK Energy Services, LLC
- **ROBERT "ROCKY" MOULD** | Executive Director, Hawaii Solar Energy Association
- TRICIA ROHLFING | Vice President of Finance, Hawaii Pacific Solar
- MARIA TOME | Managing Director, Energy Efficiency and Renewable Energy, Hawaii State Energy Office