

ECONOMICS OF ENERGY EQUITY, COMMUNITY SOLAR -VS- NANO-GRIDS, HOW HOME RENEWABLE ENERGY ADOPTION CAN LOWER ELECTRICITY BILL BY 39-90% FOR LOW-INCOME FAMILIES IN HAWAII, THE "HAVE NOTS"

Written By John O. Borland, J.O.B. Technologies, JohnOBorland@aol.com (engineers & architects of Hawaii)

ABSTRACT

This article is based on Borland's July 10th engineers and architects of Hawaii seminar ([YouTube/@eahawaii](https://www.youtube.com/@eahawaii)) that Renewable Energy adoption results in higher electricity rates due to reduced revenue from rooftop solar Grid-Defection and added costs for new generation and transmission infrastructure. The best way to lower monthly electricity bill for low-income families is to use battery storage Nano-Grids to eliminate the high evening peak demand charges with low daytime Time-of-Use (TOU) rates (14.9¢/kWh) sweeping across the US. At the 2025 Hawaii Energy Conference deep dive session on TOU, Dr Ahmad Faruqi, energy economist said "Flat rates are the most inequitable rate design in history...Leave the door open, don't close the door...let customers who find those rates attractive sign on to those rates. They will lower their bills." Besides lowering the rate payer monthly utility bill, a side benefit is the utility does not need to build a new gas power plant nor solar farms if HECO offers both BTM (behind the meter) and FTM (front of the meter) residential renewable energy options as reported on the Mainland and uses all available warehouse rooftops.

Global warming metrics continue to increase year after year. In 2024 the Global average temperature increase exceeded 1.50C for the first time (+1.540C) and the atmospheric CO2 level at Mauna Loa Observatory reached 432.3PPM in May 2026. Oahu daily energy load is ~19.6GWh/day with 54% during the day (10.6GWh/day) and 46% at night (9.0GWh/night). Fossil fuel electricity generation rate fluctuates based on oil price volatility (\$/barrel). On Oahu, 46% of single-family homes have rooftop Solar, the "Haves" (~118K residential customers with ~6kW/roof) leaving 292K residential customers, the "Have Nots" living without Solar in rentals, apartments and condos. Solar and Wind are the cheapest form of renewable energy generation at 4¢/kWh, add battery storage at 14¢/kWh for a combined solar + battery at 9¢/kWh. Geothermal is 7.7¢/kWh. Natural Gas is 9¢/kWh and Hydrogen is 30¢/kWh. Coal is 10¢/kWh and oil varies from 11¢/kWh at \$45/barrel to more than 30¢/kWh for +\$100/barrel. Worldwide electricity rate variation since 2009 are shown in Fig.1, note that adopting renewables leads to increased base electricity rates even though generation costs are lower, due to added delivery infrastructure, grid hardening expense

and fixed base utility plants and transmission. HECO (Oahu) rates increased 55% from 37¢/kWh in Feb 2026 to 55.5¢/kWh in July 2026 due to Iran War while daytime TOU rate remained flat at 14.9¢/kWh, a 73% lower electricity rate. Inside Climate News reported in Dec 2025 that the adoption of rooftop solar has resulted in revenue decrease for utilities due to Grid Defection, as a result, utilities have increased customer rates recovering about 63% of their lost revenues. It is estimated the 700MW rooftop solar on Oahu generates 2.8GWh/day and at 40¢/kWh that's \$1.1M/day or \$408M/year in lost revenue for HECO. Each of the rooftop solar customer's avoided expense/savings to HECO is >\$288/month or >\$3.5K/year with system breakeven payback period of 3-6 years thereafter, Free Electricity for Life. (My definition for the Economics of Energy Equity).

On 6/4/26, PG&E in CA announced 1M rooftop solar homes connected to the Grid, estimated lost customer revenue of \$3-4B/year. An article on 6/2/26 reported on San Diego Gas & Electric "the more energy generation and delivery infrastructure SDG&E builds and maintains, the more money SDG&E makes. This extends, incidentally, to hardening the grid against wildfires...". The article ends by saying "Rooftop solar reduces the need for

SDG&E to build power generation projects.". Another article on 7/1/26 titled "A Home Battery Revolution Is Reshaping The Power Grid" described in 2025, Australia installed 430K residential batteries allowing the utility to draw on these batteries to balance midday solar generation and evening peak demand thus avoiding building expensive new power plants and power lines. It also mentioned in 2025, California had 100K residential batteries deliver 539MW of energy during the 2-hour evening peak demand which was more than the output of a large gas peaker power plant. Applying this on Oahu with 250K single family home rooftops (also available warehouse rooftops), if each rooftop had 30-500W solar panels, a capacity of 15kW, daily output would be 60kWh/day x 250K rooftops for 15GWh/day, 77% of Oahu daily needs. Assuming equal output from warehouse roofs PV systems for a total of 30 GW/day, which is 150% of Oahu daily electricity needs and 61% on rainy/cloudy days when output drops by 60%. Combine this with 22kWh LFP (Lithium Iron Phosphate) battery installed at each 410K residential customer home, including the "Have Nots" renters and apartments/condos as Battery-Only, gives 9 GWh/day storage for 100% Oahu overnight energy needs.

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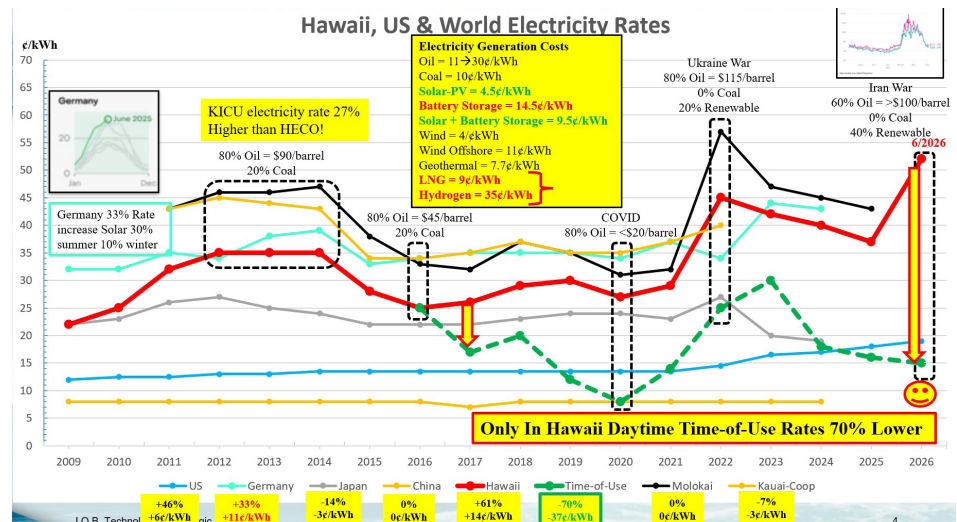


Fig.1: Electricity rate comparison around the world from 2009 to 2026. HECO daytime TOU rates currently at 14.9¢/kWh requires battery storage for 100% nighttime home loads.

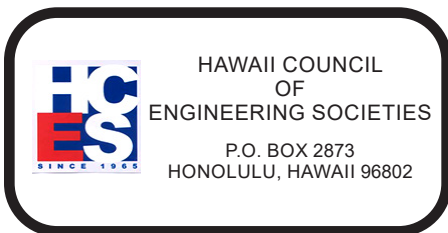


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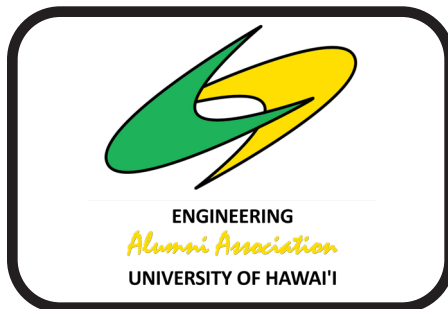
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TILECO, INC TOUR

ASME Hawaii is planning a tour of Tileco, Inc which manufactures a range of concrete masonry products on Friday August 14th, 2026 from 9:45 AM. Please contact us if interested in attending or for additional information.

ASME-HAWAII NEXT GENERAL MEMBERSHIP MEETING

Our next meeting is tentatively scheduled via Microsoft Teams on August 29th.



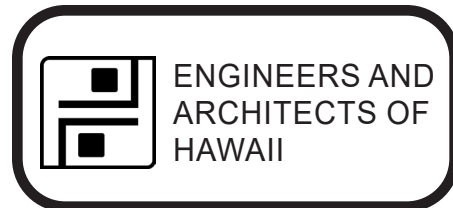
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FRIDAY AUGUST 14

Speaker: Clint Churchill – Practical Policy Institute of Hawaii

Topic: LNG – A Sensible Solution for Oahu's Energy Future

Practical Policy Institute of Hawaii has argued that LNG is right for Hawaii even as Hawaii pushes for 100% renewables by 2045. Now, Japanese firm JERA Americas has submitted a proposal to the State to build a \$2 billion Liquefied Natural Gas (LNG) 500 mega-watt power plant and offshore import terminal at Kalaeloa, Oahu by 2030. It is argued LNG can reduce CO2 emissions by 30% if we can stop burning black fuel oil at HECO power plants. Clint will present their arguments for their LNG position.

FRIDAY AUGUST 28

Speaker: John Landry – USS Midway Museum

Topic: War In the Pacific

John Landry is a Navy Historian at the USS Midway Museum in San Diego. John has previously presented to eAH on the Battle of the Coral Sea and the Cuban Missile Crisis. He will return to eAH to present another historical Naval Battle in the Pacific.

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UPCOMING EVENTS

IEEE Hawaii August ExCom

- **Date:** 04 Aug 2026
- **Time:** 05:30 PM HST to 06:30 PM HST
- **Location:** Webex link will be published the week of the event
Hawaii Pacific University, Honolulu, Hawaii, United States 96813
- **Building:** TBD
- **Room Number:** TBD
- **Event Link:** <https://events.vtools.ieee.org/m/562810>

PAST EVENTS

IEEE SSCS Young Professionals Mentoring Event at VLSI 2026 - Young Professionals Mentoring Event



The Solid-State Circuits Society (SSCS) Young Professionals hosted Micro-Mentoring / Networking and DL Preview events on Tuesday, June 16, 2026, beginning at 6:00 PM at the Lehua Suite of the Hilton Hawaiian Village in Honolulu. The event gathered approximately 25 attendees—roughly half of whom served as mentors—for an informal session pairing complimentary refreshments with friendly conversation.

The evening opened with introductions from the organizing committees. Dr. Calvin Lee from the University of Hawaii, representing SSCS Young Professionals, highlighted the opportunities available through SSCS YP membership. Dr. Zeynep Toprak Deniz from IBM then introduced the SSCS Women in Circuits and its initiatives to foster an inclusive community within the Society.

Following the presentations, the event transitioned into open networking. Mentors and mentees were seated together across tables, and mentees moved freely to connect



Immediately following the Micro-Mentoring and Networking event, a new event co-hosted between SSCS Young Professionals and the IEEE Hawaii Joint SSCS/EDS chapter brought exposure to the SSCS Distinguished Lecturer program.

with multiple mentors throughout the evening. Conversations spanned academic and industry career paths, research directions, journal authorship, and work-life balance. With a high mentor-to-mentee ratio, every mentee had ample opportunity to speak one-on-one with mentors of their choice.

The relaxed atmosphere encouraged candid exchanges, with conversations continuing beyond the scheduled end time. Early-career professionals gained practical guidance from experienced mentors while building peer connections with fellow Young Professionals—relationships that often grow into lifelong support networks within the SSCS community.

Distinguished Lecturer Preview Event at VLSI 2026 - Distinguished Lecturer Preview Event

Immediately following the Micro-Mentoring and Networking event, a new event co-hosted between SSCS Young Professionals and the IEEE Hawaii Joint SSCS/EDS chapter brought exposure to the SSCS Distinguished Lecturer program.

Three current and past Distinguished Lecturers, Mike Shuo-Wei Chen of USC, Taekwang Jang of ETH Zürich, and Alvin Loke of Intel Corporation, each presented current trends and pressing problems across the industry in short ten-minute overviews. Their talks provided complementary viewpoints framing both short-term priorities and longer-term opportunities. Particular emphasis was made on the re-alignment of hardware design as a dominant force in the technology market, energy and performance barriers despite the need for innovations, technology and package scaling as a continued driver of technological advancement, and the live transformation of the industry due to emerging AI. A similar sentiment was shared among presentations: despite all challenges, analog mixed-signal design will continue to be a vital enabler for advancements in hardware.

Following the talks, the event transitioned into a fireside chat format, creating space for an open exchange. Audience engagement was strong despite the late evening. Participants ranged from long-time industry veterans to early students and researchers, resulting in questions and perspectives that spanned foundational learning, emerging research directions, and forward-looking projections of the semiconductor industry. A diverse set of perspectives and opinions were shared, creating energetic discussion. Overall, the event successfully combined expert presentations

with audience discussion, creating a valuable forum for knowledge sharing, mentorship, and community connection.

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UPCOMING CONFERENCES

- 2026 Annual Conference on Magnetism and Magnetic Materials (MMM) | 2 - 6 November 2026 | Hawaii, USA | Event Format: In-person
- 2026 65th IEEE Conference on Decision and Control (CDC). 15 - 18 December 2026 | Hawaii, USA | Event Format: In-person
- 2027 IEEE 40th International Conference on Micro Electro Mechanical Systems (MEMS) | 17 - 21 January 2027 | Waikoloa Village, Hawaii, USA | Event Format: In-person
- 2027 Pan Pacific Strategic Electronics Symposium (Pan Pacific) | 25 - 28 January 2027 | Maui, Hawaii, USA | Event Format: In-person
- IEEE INFOCOM 2027 - IEEE Conference on Computer Communications | 24 - 27 May 2027 | Honolulu, Hawaii, USA | Event Format: In-person

For more information about upcoming conferences, visit bit.ly/ieeehiconferences



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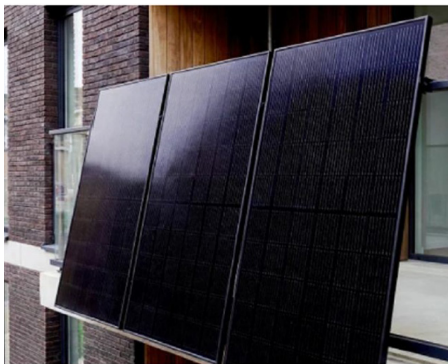
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CONT'D FROM PG 1, "ECONOMICS OF ENERGY EQUITY, COMMUNITY SOLAR -VS- NANO-GRIDS, HOW HOME RENEWABLE ENERGY ADOPTION CAN LOWER ELECTRICITY BILL BY 39-90% FOR LOW-INCOME FAMILIES IN HAWAII, THE "HAVE NOTS"

No need for any new Solar + Battery farms and Gas power plants. These can be installed as either traditional Back of the Meter (BTM) or new Front of the Meter (FTM) by renting rooftop space. Since 2020 on the Mainland, Block Energy installed FTM residential Solar + Battery systems 1st at Kirtland AFB and then at home communities near Tampa FL to be resilient to Hurricane caused blackouts. Back in Feb 2021, HECO considered a similar Rooftop Rental Front of the Meter option. Hawaii's LNG controversy can learn from these residential Battery Nano-Grid Best Practices to avoid the \$2B investment cost that will mainly penalize low-income families without solar with rate increases. The rooftop solar "Haves" are immune to rate increases, only paying the minimum HECO fee of \$32/month. The most important analysis missing from all the LNG discussions are the recent reports on the Health Hazards from Gas power generators creating NO₂ by product called SMOG/air pollution. The #1 cause of asthma in children in the US and a 5/7/25 article titled "Inside The Small Town Where Elon Musk's Supercomputers Have Left Residents Struggling To Breathe" describes the South Memphis, TN community that has become a Hot Spot with "the most emergency room visits for asthma" in the state with "multiple cases of asthma and cancer in local families are attributed to the air pollution".



At the IEEE Power & Energy Society Transmission & Distribution conference, on May 6, 2026, Borland presented his paper "Community Solar -vs- Nano-Grid (Ownership or Lease) Including Balcony-Solar and Battery-Only Options: 10 Year Electricity Avoided Expense/Savings Cost Analysis For Hawaii Low Income Families". The 5 options to lower electricity bill are:

1) Community Solar: Mainland reports only 5-10% savings, not the 20% DOE target. Honolulu Civil Beat article by Yerton on June 4, 2025 reported Molokai Community Solar results since 2023 show only 4.5% savings, "Community Solar Farms Meant To Save Money Fail To Gain Traction In Hawaii", [1]. Therefore, Community Solar does not lead to Energy Equity but widens the Energy Divide economically between the "Haves" and the "Have Nots". Larger savings of >50% can be realized through adopting energy efficient appliances and TOU rates.

a) Pros: Solar access for All (renters, apartments and condo dwellers) but only at a small 5% savings.

b) Cons: Not resilient to grid blackouts and problem for vulnerable families with home medical devices requiring power 24x7. Also, does not solve the evening demand peak loads causing the Duck Curve and stressing the Grid.

2) Grid-Tie Balcony-Solar (\$2K equipment costs): Plug-n-Play, but many articles are technically incorrect about savings. Peak Solar Hour (PSH) in Hawaii is reduced from 4 hours to 1 hour if panels are vertical 90-degree balcony panels, reducing solar output production by 75% for 6-10% savings and 9.5 years payback. Fig.2a shows balcony solar panels installed near vertical at a high tilt angle 80-90o resulting in severe shading except for a few hours/day in direct sunlight. In 2018, Borland & Singh published a paper at IEEE-PVSC conference on solar panel performance facing East and West up to 90 degrees tilt (vertical). Severe degradation in panel output due to shadowing is shown in Fig.2b & 2c for both PV-Watts simulation and measured solar irradiance [2].

a) Pros: Requires a balcony or portable ground mount solar array for Do-It-Yourself (DIY) and Plug-n-Play. Easy and quick to install at low cost of <\$2K for 1.6kW solar panel and DC to AC inverter.

b) Cons: When the sun goes down,

Balcony-Solar goes dark and does not solve the Duck Curve evening peak demand load issue. In a 2023 site visit, at the Mauna Luan condo located in Hawaii Kai, it was found to have no balconies, all glass windows. Therefore, using an indoor rated LFP "battery generator" with built-in DC to AC inverter, installed as an Off-Grid large UPS (uninterrupted power supply) is the best solution providing resilience 24x7 with no power back feed to the Grid. This depends on daytime TOU rates at 14.9¢/kWh which would reduce the monthly HECO bill by >50% today.

3) Off-Grid >3kWh LFP Battery-Only (\$2-5K equipment) or Battery + Balcony-Solar (\$3-6K equipment): Properly sized battery capacity to cover >100% of nighttime energy needs will end Duck Curve and evening peak demand loads. Nighttime Grid-Defection with daytime grid-buy at TOU rates for >50% savings and <2.5 years payback shown in Fig.3 based on a family of four using 28kWh/day.

a) Pros: No solar panels needed, Plug-n-Play resilient to power outages like the Kona-Low and brings renewable energy access to All.

i) Molokai case Study-1: In 2023, installed as an Off-Grid UPS indoor battery (3.6kWh) with 1.3kW ground mount solar array (Balcony-Solar). Reduced HECO bill by 39% for Molokai vulnerable low-income Native Hawaiian Section-8 renter with home medical dialysis machine used 4 hours/day, 5 days/week. The bill went from \$160/month (11.9kWh/day) to \$97/month (7.1kWh/day), monthly savings of \$63/month (4.8kWh/day). This was reported by Renewable Energy World in Nov 2024 [3].

ii) Molokai case Study-2: Low-income Native Hawaiian section-8 renter disconnected from HECO for 1 month in 2024. Lowered monthly utility bill from \$281/month (17kWh/day) to \$90/month (<5kWh/day), a 68% savings with an Off-Grid Plug-n-Play 3.0kWh solar-wind-battery generator connected to a 800W ground mount solar array in the backyard and 300W wind turbine. Smart IoT devices was used for home energy monitor/audit and control to eliminate energy waste as referenced in Hawaii PUC utility disconnection docket [4].

iii) Mainland case study examples: To eliminate peak demand charges and lower electricity bills, millions of smaller Battery Nano-Grid systems are being installed. Public

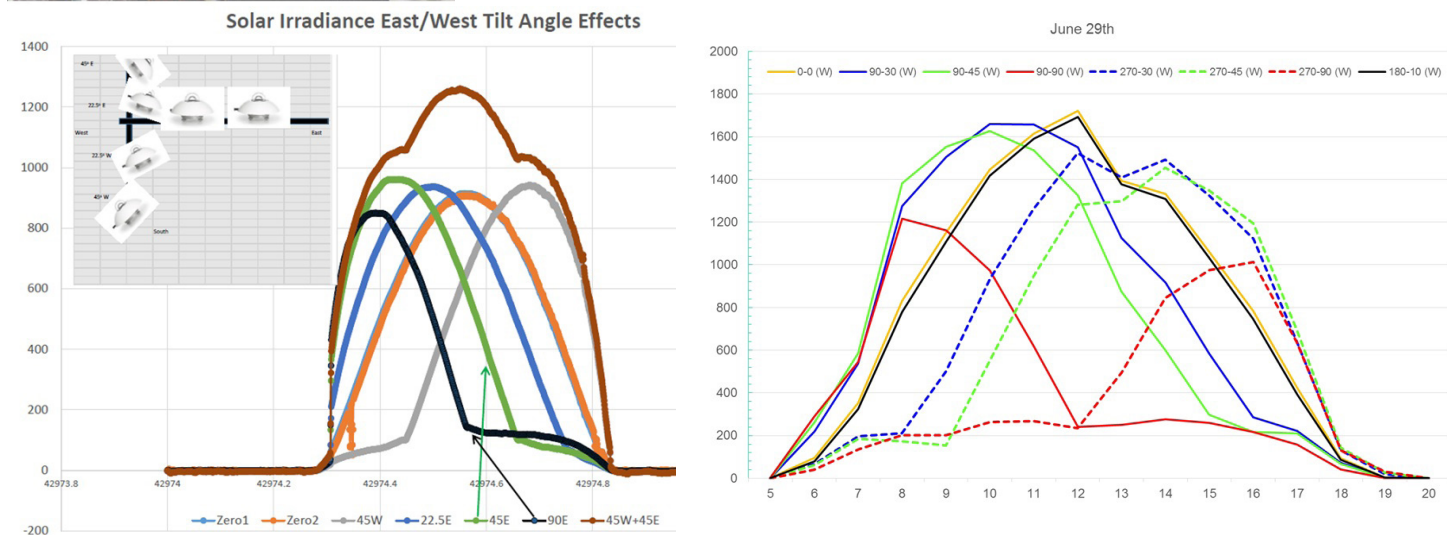


Fig.2: Reality of Balcony-Solar a) vertical panels installation at high tilt angle 80-90o, b) PV-Watt solar generation analysis and c) solar irradiance meter measurements showing 75% degradation in output for 1-hour PSH.

housing in Boston and New York City since 2020 have installed battery power stations so during heatwave the millions of air conditioners during evening peak demand do not cause a blackout. Similarly, 10K NYC public housing are being retrofitted with induction stoves that come with 4kWh batteries from Copper company to avoid peak demand charges. Carrier HVAC has a 5-10kWh battery to avoid the 3kW peak demand charges.

b) Cons: Maximum bill reduction requires daytime TOU rates for >50% savings at 14.9¢/kWh but Hawaii has a flat electricity rate with no peak demand charges. The voluntary TOU program ended in Feb 2025 and requires education of Best Practices to benefit with TOU rates. LFP battery capacity warranty decay is 20% over 10 years with a 15-year product life.

4) Rooftop Solar + Battery Lease/PPA: Mixed reports, some customers Happy while others end up suing to get out of the 25-year contract. Time Magazine (1/25/24) reports on negatives of Lease/PPA when customers see no savings, rather increased monthly payments. Case study example from Kunia, HI in 2019 with solar + battery (2-Tesla), the pre-solar monthly electricity bill was \$357/month (43kWh/day) and dropped to \$225/month (23.8kWh/day) plus the lease contract of \$185/month for a total new monthly electricity expense of \$410/month up 15% or \$53/month.

a) Pro: No upfront costs/payments for equipment. Resilient to blackouts and flattens the Duck Curve for nighttime Grid Defection with properly sized battery for 100% nighttime loads.

b) Con: Contract payment with a 3% yearly escalator in rate can erode the savings as shown in Fig.3 over 25 years. All tax incentives goes to 3rd party Lease company so never reach Free Electricity for Life.

5) Solar + Battery ownership (cash or rent-to-own). Cash ownership with 35% HI state incentive payback 4-5 years or no incentive 6-7 years (Fig.3). Rent-To-Own payback 8.5 years thereafter Free Electricity for Life.

a) Pros: Resilient to blackouts, flattens the Duck Curve and leads to daytime and nighttime Grid Defection as reported by Sadat and Pearce in their article "The Threat of Economic Grid Defection in the US with Solar Photovoltaic, Battery and Generator Hybrid Systems" when electricity rates are higher than 35¢/kWh [5]. When electricity rates are low, never reach breakeven payback even after 25 years.

i) Case study results showing Borland's actual 10-year results shown in Fig.3 for a final system cost of \$13.5K (55% net tax incentives). The 10-year savings was \$27.3K including \$5.3K in total payments to HECO averaging \$44/month (\$528/year). Pre-solar electricity bill (2012-2016) was \$396/month (\$4752/year), lowering the electricity bill by 88.8% and 3.5-years payback for Free Electricity for Life.

b) Cons: Higher total equipment and installation costs before incentives based on tax liability compared to lower costs DIY Balcony-Solar + Battery.

Economic sustainability of low electricity bills requires energy efficient homes and elimination of home energy waste. Step-1 requires Digitization of home energy ecosystem using smart IoT devices for energy monitor/audit and control because "Out of Sight Means Out of Mind". Step-2 is taking corrective action based on Pareto Analysis of the top home energy loads to eliminate energy waste and add energy efficient appliances. Switching from

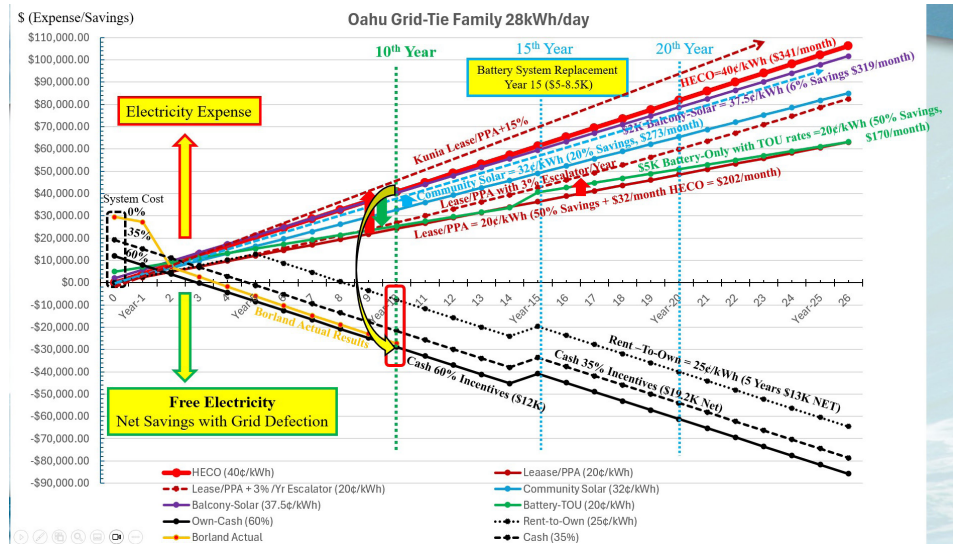


Fig.3: 10-year electricity expenses or avoidance/savings for various Solar for All options.

standard 240-volt clothes dryer with peak power of 5.9kW to a 120-volt Heat Pump washer/dryer combo with peak power of 900W reduces clothes drying electricity consumption by 60% from 6.3kWh/cycle to 2.5kWh/cycle. Switching to 120-volt electrical Heat Pump water heater reduced daily hot water heating electricity consumption from 12kWh/day to 5kWh/day (58% savings) for a household that takes 4 showers and 2 baths daily. Another case study result for a family taking only 4 showers daily, the peak power demand drops from 4.5kW to 450W for 1-year daily consumption between 0.3-1.2kWh and average of 767Wh/day. Other home energy efficiency improvements include replacing resistive heating electric stoves with induction heating and using microwave oven and air fryer/toaster oven combo using <1.2kW peak power. Replacing all incandescent (>60W) or CFL (25W) light bulbs with LED (8W each) further reduces home energy demand at night. In all, these energy efficient improvements can reduce monthly home electricity usage by up to 56% [3,4].

In Summary, utility scale renewables around the world always usually results in electricity rate increases due to the reduced Utility Base Load kWh generation being applied over the Utilities fixed generation and transmission infrastructure. The best option for low-income families, the "Have Nots" to lower their monthly utility bill by 39-90% as demonstrated with Molokai and Oahu case study examples is with the Economics of Energy Equity and adopting low cost 1) Off-Grid Plug-n-Play Battery-Only or Battery + Balcony-Solar or 2) larger more expensive Grid-Tie Solar + Battery with creative financial options such as Rent-to-Own with breakeven payback periods varying between 2.5-8 years, thereafter, Free Electricity for Life as shown in Fig. 3. This requires bringing back daytime Time-of-Use rates of 14.9¢/kWh and educating families on best practices for home energy ecosystem conservation using digitization with Smart Internet of Things devices for home energy monitor/control to maximize and sustain monthly Utility bill savings.

REFERENCES

Ref 1: S. Yerton, "Community Solar Farms Meant To Save Money Fail To Gain Traction In Hawaii", Civil Beat article, Jun 4, 2025, <https://www.civilbeat.org/2025/06/>

[community-solar-farms-to-save-money-fail-to-gain-traction-in-hawaii/](#).

Ref 2: J. Borland & A. Singh, "Reducing Morning & Late Afternoon Grid-Buy Demand By Engineering BOX-Like Rooftop Solar-PV Generation Profiles Without The High Cost Of Trackers Or Bifacial Panels", IEEE-PVSC-45, paper # 737, June 2018.

Ref 3: J. Borland, T. Tanaka, T. Yamashita, L. Napoleon and B. Yamashita, "Case study: IEEE improves energy equity for Molokai native Hawaiian homesteaders with nano-grids", Renewable Energy World, Nov 7, 2024. <https://www.renewableenergyworld.com/solar/case-study-ieee-improves-energy-equity-for-molokai-native-hawaiian-homesteaders-with-nano-grids/>.

Ref 4: Hawaii PUC Docket No. 2025-0284, "Instituting a Proceeding to Analyze Current Electric Utility Disconnection Practices to Consider Whether Disconnection Policy Revisions Are Appropriate", June 20, 2025, page 7 ref. 21, J.O. Borland, "Energy Equity or Energy Divide When Fighting Climate Change: IEEE Brings Energy Equity & Safety to Native Hawaiian Communities on Molokai (Homesteaders and Section-8 Low-Income Renters)", 2024 IEEE Power & Energy Society General Meeting (PESGM), Seattle, WA, USA, July 2024.

Ref 5: S. Sadat and J. Pearce, "The Threat of Economic Grid Defection in the US with Solar Photovoltaic, Battery and Generator Hybrid Systems", Elsevier Ltd Publishing Solar Energy, 282 (2024), 112910. <https://doi.org/10.1016/j.solener.2024.112910>.

**WATCH JOHN
BORLAND'S FULL
PRESENTATION
[HERE](#)**



WEBSITE: [HTTP://WWW.ASCEHAWAII.ORG/YMF.HTML](http://www.ascehawaii.org/YMF.html)

2025-2026 YMF Officers

John Kim, President
 president.ascehawaiiymf@gmail.com
 Christine Mau, Vice President
 vicepresident.ascehawaiiymf@gmail.com
 Jaren Iwasa, Treasurer
 treasurer.ascehawaiiymf@gmail.com
 Patricia Paulino, Secretary
 secretary.ascehawaiiymf@gmail.com
 Rebecca Pitts, Past-President
 pastpresident.ascehawaiiymf@gmail.com

YMF GENERAL MEETING

The next YMF general meeting will be in-person on Wednesday, August 5, 2026, at 6:00PM and Wednesday, September 2, 2026, at 6:00PM. Please check our website, social media channels, or weekly eblast for the latest information on our upcoming general meetings and events. If you are interested in attending and learning more about the various professional, social, and service opportunities available through YMF, please contact YMF at ymf.hawaii@gmail.com.

OHANA DISTRIBUTION DAY BY MEAGAN NAKAMOTO AND KAY HASHIMOTO, COMMUNITY SERVICE CHAIRS

On June 20, 2026, eight YMF members came together to support the Kalihi community at the Susannah Wesley Community Center. Food was packaged and distributed to families through both a drive-thru and walk-up setup. Mahalo to those who came out and stay tuned for our next community service event!



2025-2026 ASCE Hawaii Section Officers

President: Steven Doo, P.E.
 email: president.ascehawaii@gmail.com
 Pres.-Elect: Amanda Waki, P.E.
 email: presidentelect.ascehawaii@gmail.com
 Vice Pres.: Norman Leong, P.E.
 email: vicepresident.ascehawaii@gmail.com
 Treasurer: Jason Sugibayashi, P.E.
 email: treasurer.ascehawaii@gmail.com
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 email: secretary.ascehawaii@gmail.com
 Past Pres.: Sheila Uyeoka, P.E.
 email: pastpresident.ascehawaii@gmail.com
 YMF Pres.: John Kim P.E.
 email: president.ascehawaiiymf@gmail.com

EXECUTIVE COMMITTEE MEETING

Last held: July 9, 2026

Next meeting: August 10, 2026

COMMITTEE POSITIONS

ASCE Hawaii is looking for volunteers for various committee positions, including Local Legislative Affairs Committee Members, Advocacy Captain, Infrastructure Report Card



ASCE Hawaii YMF members volunteered their time packaging and distributing food to families at the Susannah Wesley Community Center in Kalihi on June 20th.

Committee Members, and Water Resources Chairperson. If you are interested or have questions on any of these positions, please contact President Steven Doo, president.ascehawaii@gmail.com.

MEMBERSHIP

If you haven't already done so, please renew your ASCE membership, which includes 10 free PDHs. You can renew your membership at www.asce.org.

ASCE HAWAII SECTION STUDENT SCHOLARSHIPS

Please help us increase our scholarship endowment so that we can recognize deserving students. We continue to accept tax-deductible donations with the goal of increasing the annual scholarships. Make your check payable to 'ASCE Hawaii Section' and include the note 'Walter Lum Scholarship Fund' and mail to: ASCE Hawaii Section, P.O. Box 917, Honolulu, HI 96808-0917. If you have any questions, please contact Amanda Waki at presidentelect.ascehawaii@gmail.com.

HELP HONOR A LEGACY AND INSPIRE FUTURE ENGINEERS: INTRODUCING THE LESTER FUKUDA ENGINEERING SCHOLARSHIP

Lester Fukuda, a Professional Civil Engineer, proud product of Hawai'i's public school system, and graduate of the University of Hawai'i, was perhaps best known for his generosity. He consistently found ways to help others—whether by lending his expertise to a work challenge, championing a worthy cause, or quietly providing financial support to those in need.

The engineering community is coming together to honor the legacy of Lester Fukuda by establishing the Lester Fukuda Engineering Scholarship, a one-time scholarship that will support aspiring engineers from Hawai'i as they pursue higher education and careers in the engineering profession.

This scholarship will provide financial assistance to students enrolled in the University of Hawai'i system who are pursuing an engineering degree. Preference will be given to students demonstrating financial need.



Lester Fukuda, principal of Kaula AE LLC and ASCE Hawaii Past President (1987)

Who Can Apply?

Eligible applicants must:

- Be a Hawai'i high school graduate.
- Be enrolled in the University of Hawai'i system as an engineering student or working toward an engineering major.
- Be a freshman or continuing undergraduate student.

Complete an application that includes an essay component.

How You Can Help

The ASCE Hawaii Section is facilitating donation collection and administration of the scholarship. Contributions made through the scholarship fund will directly support the award provided to a deserving engineering student. Donations are tax-deductible, as ASCE Hawaii Section is a 501(c)(3) nonprofit organization.

Whether you knew Lester Fukuda personally, worked alongside him, or simply believe in supporting Hawai'i's future engineers, your contribution can make a meaningful difference in a student's educational journey.

Donate Today

Please consider making a contribution to the Lester Fukuda Engineering Scholarship and help invest in the next generation of engineering leaders who will serve Hawai'i's communities for years to come. Donations can be made at: <https://www.zeffy.com/en-US/donation-form/lester-fukuda-engineering-scholarship>

ASCE GOLF TOURNAMENT

The American Society of Civil Engineers (ASCE) Hawaii Section cordially invites you to participate in the 23rd Annual Scholarship Golf Tournament in Honor of Steve Fong which will be held on Friday, August 7, 2026 at Pearl at Kalauao (formally Pearl Country Club). Similar to what we've done in the past, this year's tournament proceeds will be donated to the University of Hawaii ASCE Student Chapter to assist in their efforts to raise awareness and introduce more students to the engineering profession. The ASCE Hawaii Section is honored to host this fundraising tournament in support of the growth and development of future engineers.

The ASCE Hawaii Section, along with the ASCE Student Chapter, is truly grateful to our participants for the tremendous support and camaraderie experienced in previous tournaments. We kindly seek your continued support and assistance in ensuring this year's tournament is just as successful!

ASCE JOB LISTINGS

The following job listings are currently posted on the ASCE Hawaii Section website:

- **City and County of Honolulu** (Civil Engineers)
- **Board of Water Supply** (Chief of Water System Operations, Water Quality Administrator [Program Administrator], Program Administrator, Assistant Program Administrator, and Assistant Field Operations Manager)
- **Schnabel Engineering** (Mid-Level Project Engineer)
- **AECOM** (Civil Engineer – Waste Water Treatment, Senior Civil Engineer – WWTP, Senior Civil Engineer, Civil Engineer – Aviation)

For further information, please visit

<http://www.ascehawaii.org/jobs/>

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<http://www.hawaiispe.org/>

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mike@femaui.com

Pres. Elect: Sara Doi-Tanaka
sdoi@bowersandkubota.com

Vice Pres: Mike Lum
mlum@bowersandkubota.com

Secretary/
Maui Director: Hannah Hermanson

Treasurer: Pac Chung
pchung@bowersandkubota.com

HOD '25-'26: Ikaika Rodenhurst
irodenhurst@bowersandkubota.com



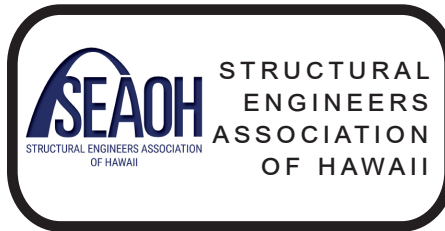
2025-2026 Officers:

President: Joel Thomas
Vice Pres.: Josh Ramelb
Sec/Treas: Jeffrey Ding

JOINT ITE INTERNATIONAL AND GREAT LAKES DISTRICT ANNUAL MEETING AND EXHIBITION

The ITE International Annual Meeting was held from July 19 to July 22 in Detroit, Michigan. The event brought together transportation professionals from around the world for several days of technical sessions, tours, and networking opportunities. Thank you to everyone who attended and represented Hawaii! We hope the meeting provided attendees with the opportunity to exchange ideas, learn from the latest innovations in our industry, connect with colleagues, and of course experience all that Detroit has to offer!

If you would like to be added to our mailing list or are interested in becoming a member, please send an email to: ite.hawaii.section@gmail.com.



PO BOX 3348, HONOLULU, HI 96801
Web Page URL <http://www.seaoh.org>

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Hilti

Director (Yr 2): Maxx Toyama
Nagamine Okawa Engineers

Director (Yr 1): Din Hong
Coffman Engineers

Director (Yr 1): Bentley Pai
HC&D

Past-President: Grant Okunaga
MKE Associates

PREVIOUS BOD MEETING

July 8, 2026

UPCOMING EVENTS

SEAHO 2026 Annual Convention –
September 25-26, 2026, Aulani

AISC Seminar – October 8, 2026, Dave &
Buster's Ala Moana

SEAHO Scholarship Golf Tournament –
October 15, 2026, Pearl at Kalauao

SEAHO SCHOLARSHIP

SEAHO will be awarding scholarships to students entering or currently attending an accredited college or technical school as full-time students. The scholarships are intended to encourage Hawaii's youth to continue studying at an accredited 2-year or 4-year college or technical school. Individual scholarship awards may be up to \$3,000.

Applications are due September 4, 2026.

Members should refer to the scholarship email from SEAHO for application details. We encourage members to share this opportunity with students who may be eligible to apply. Contact info@seaoh.org for more information.

MEMBERSHIP

The following new membership applications were accepted:

Mostafa Abdelhafeez – WSP

Christopher Lee – BB&E

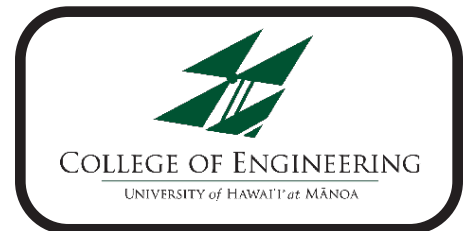
The following new membership applications were received:

Ehsan Nikbakht Jarghouyeh – KAI Hawaii

Please contact any SEAHO Board Member by August 9, 2026 to file comments regarding the new applicants.

NEXT BOD MEETING

August 12, 2026. For information, contact SEAHO President Eric Tomishima at eric@iestructural.com.



2540 Dole Street, Holmes Hall
Honolulu, Hawaii 96822

UHM College of Engineering Deans and Chairs

Dean: Brennon Morioka

Associate Dean: Steven M. Durbin

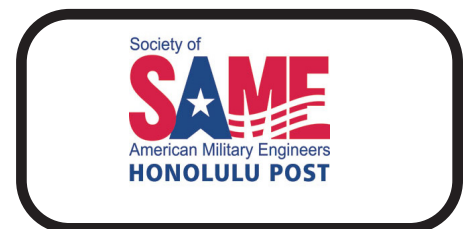
Assistant Dean: Song K. Choi

CECE Chair: Phillip Ooi

ECE Chair: Wayne Shiroma

ME Chair: Joseph J. Brown

HAWTI Dir.: Magdy Iskander



P.O. Box 31218, Honolulu, HI 96817
Web page: www.samehonolulu.org

SAME Honolulu Post Officers

President: Colonel Justin W. Morrison

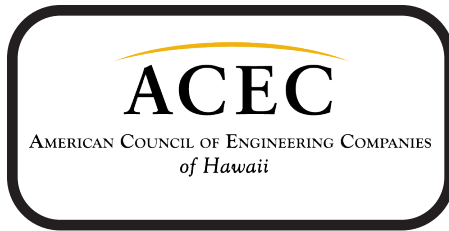
1st VP, Programs: Leighton Wong, PE

2nd VP, Sustaining Members: Will Boudra, USN (Ret)

3rd VP, Membership: Brian Weinstein

Secretary: Jeff Clark

Treasurer: Andre Lee



ACEC Hawaii

Website: www.acechawaii.org

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Director: Scott Hayashi
SSFM International
Director: Ross Kaneko, P.E.
HDR



SOLD OUT! BUSINESS OF DESIGN CONSULTING: HAWAII EDITION - AN ACECH PROFESSIONAL DEVELOPMENT SERIES FOR EARLY-CAREER ENGINEERS

Mahalo to everyone who signed up for our Business of Design Consulting: Hawaii Edition series! The program is officially sold out.

For those attending, Session 2 takes place on Friday, August 21 from 1:00 PM to 5:00 PM at the Entrepreneurs Sandbox (643 Ilalo St. Honolulu, HI 96813)



SAVE THE DATE: AIA -ACECH-GCA FERGUSON JOINT EVENT ON 9/10

Mark your calendars! Join us for the next AIA - ACECH - GCA Pau Hana, hosted by Ferguson Bath, Kitchen & Lighting Gallery, for an evening of networking with professionals from across Hawaii's AEC community.

Date: September 10, 2026

Time: 5:00pm - 8:30pm

Location: Ferguson Bath, Kitchen & Lighting Gallery

925 Kokea St, Honolulu, HI 96817

Stay tuned for registration and additional event details at <https://acechawaii.org/aia-acech-gca-ferguson-joint-event/>



Engineering students had the opportunity to network with local and national firms at our Student Engineer Mixer at Dave & Busters Ala Moana on July 29.

ENGINEERING STUDENT MIXER RECAP

We had a great outcome for our Engineering Student Mixer at Dave & Busters Ala Moana on July 29th with over 80 attendees!

Students had the amazing opportunity to network and connect with members from local and national firms. Mahalo to everyone who attended and to our sponsors: Bowers + Kubota Consulting, Certerra (Earth Engineers), Coffman Engineers, KAI Hawaii, Inc., Orion Engineers & Associates, ParEn, Inc. dba Park Engineering, SJ Construction Consulting, and The Limtiaco Consulting Group.

BUSINESS OF DESIGN CONSULTING: HAWAII EDITION SESSION 1 RECAP

Mahalo to everyone who joined us for the first session of our Business Development Series!

Attendees gained valuable insights into how engineering work is won, what clients look for when selecting engineering firms, and the role marketing, business development, and proposals play in the process.

Mahalo to Mark Tawara, Principal at Manageability LLC, for organizing the series and sharing his expertise on branding, marketing, and business development. We'd also like to thank our guest presenter, Jason Takeuchi, AIA, NCARB, NOMA, Associate/Project Architect at Ferraro Choi, for sharing his insights on how architects win work and build their personal brand.



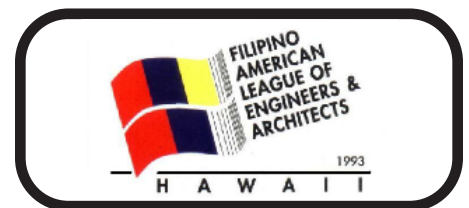
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As a member of the Board of the Council of Engineering and Scientific Specialty Boards (CESB), AACE International offers a range of certification levels from technician to professional to expertise level including CCT, CCP, CEP, EVP and PSP Certification Programs.

The local section, AACE Hawaii, was originally established in 1973. It achieved both the Platinum and Gold Award for seven consecutive years 2014-2023. Our local area continues to achieve CCP, CEP, CST and PSP certifications. For more information, please visit <http://web.aacei.org/certification> and our local website www.acechawaii.com.

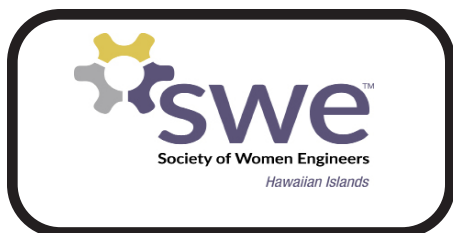


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Website: <http://www.falea.org>

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HOME PAGE: <http://hi.swe.org>

EMAIL: hawaii@swe.org

Facebook: www.facebook.com/swe.hawaiianislands

SWE Hawaiian Islands (SWE-HI) Section Officers

President: Lynette Shiroma

Vice President: Vacant

Treasurer: Mary Despe

Secretary: Erin Yamaguchi

The mission of the Society of Women Engineers is to empower women to achieve full potential in careers as engineers and leaders, expand the image of the engineering and technology as a positive force in improving the quality of life, and demonstrate the value of diversity and inclusion.



Website: hawaii.apwa.org

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Vice-President	Dawn Szewczyk
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Secretary	Maile LaFave
Past President	Tyler Sugihara
Delegate	John Lamer
Awards Director	vacant
Events Director	Jon Young
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Director	Robert Primiano
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2026-2027 OFFICERS

President: Kayson Smith-Bejgrowicz
president@hwea.org

Vice-President: Sarang Agarwal
vice-president@hwea.org

Secretary: Ryan Iwata
secretary@hwea.org

Treasurer: Carly Kaneko-Uejo
treasurer@hwea.org

Past President: Jessica Agsalda
past-president@hwea.org

PWO Representative: Pono Asano
pwo-representative@hwea.org

PWO Representative: Jeff Kafka
pwo-representative@hwea.org

National Delegate: Emily Dong
national-director@hwea.org



HAWAII CHAPTER OFFICERS

President: Chris Pruitt, PE

Coffman Engineers

Vice President: Robert Suster, PE

InSynergy Engineering

Secretary: Jordon Kilbey, PE

US Army Corps of Engineers

Treasurer: Sam Dannaway, PE

Coffman Engineers

ENGINEERING SOCIETIES' OUTREACH CALENDAR

STAY UP TO DATE WITH THE LATEST EVENTS IN THE ENGINEERING COMMUNITY!

EXPLORE UPCOMING EVENTS ON OUR CALENDAR BELOW.



SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4 IEEE Hawaii ExCom	5 ASCE YMF General Meeting	6	7 ASCE Golf Tournament	8
9	10 ASCE Executive Meeting	11	12 SEAOH Board Meeting	13	14 eaH Meeting #1 ASME HI Tileco, Inc. Tour	15
16	17	18	19	20	21 ACECH Business of Design Consulting Series Session 2	22
23	24	25	26	27	28 eaH Meeting #2	29 ASME HI General Membership Meeting
30	31					

HAWAII COUNCIL OF
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P.O. BOX 2873
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