

EEPS TECHNICAL WORKING GROUP

October 28, 2025

10:30 a.m. to 12:00 p.m. HST

Hawai'i Energy Offices with Teams Web conference option

REMINDERS

- Remote participants, please mute your lines when you aren't speaking – we'd like to keep the lines open so you can easily join the conversation
 - You may also use the “raise hand” or chat functions
- Please identify yourself and your organization when speaking
- We encourage participants to ask questions and contribute their constructive comments
 - Your silence during a discussion implies that you agree

COMMISSION WELCOME

AGENDA & INTRODUCTIONS

JENNIFER BARNES

ENERGY EFFICIENCY MANAGER TEAM

AGENDA

- 10:30: Agenda, Introductions & June Meeting Recap
- 10:40: EEPS Extension Legislation Update & Annual Reporting
- 11:05: Market Potential Study Status Update
- 11:10: City & County of Honolulu Affordable Green Housing Retrofit Program Update
- 11:40: HSEO Program Updates
- 11:40: Wrap up
- 12:00: Adjourn



INTRODUCTIONS BY ORGANIZATION

FALL 2025 TWG MEETING

JUNE MEETING RECAP

EEPS Legislation

- Will provide an update & further discussion today

Federal Funding Update

- HSEO will provide another status update today

Proposed Option for Avoided Cost/GHG

- EEM prepared & delivered a memo summarizing the proposed approach & TWG recommendation to the PUC for consideration & approval

EEPS EXTENSION LEGISLATION UPDATE

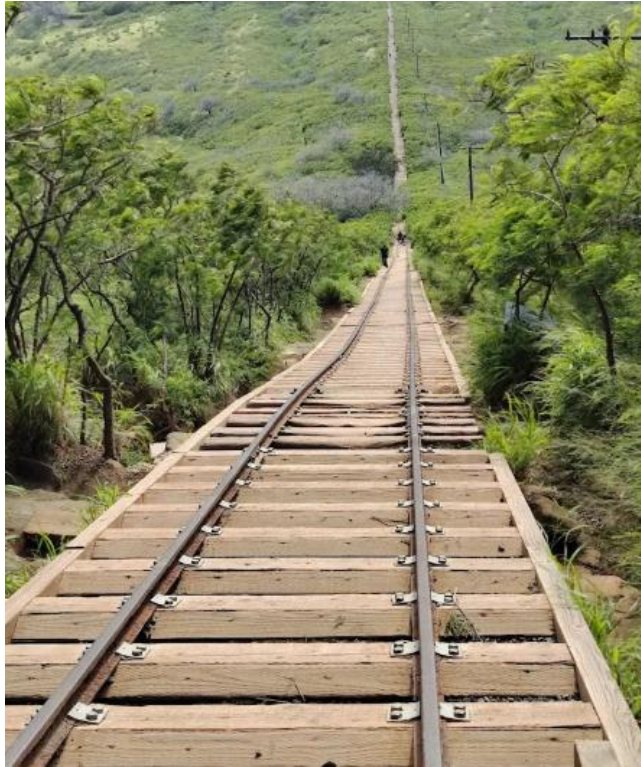
ASHLEY NORMAN
HAWAII PUBLIC UTILITIES
COMMISSION

EEPS LEGISLATION



- **EEPS Extension Bill:** Governor Green signed HB1051 into Hawaii state law – via Act 272 on July 2, 2025
- **Modified HRS 269-96**
 - New target: 6,000 GWh of energy savings by 2045
 - PUC to establish interim goals for 2035 and 2040

EEPS LEGISLATION



NEXT STEPS:

- Near-term (by end of CY 2025)
 - Updating PUC & HawaiiEEPS.org websites
 - Initiate annual statewide energy savings tracking

- Longer-term (CYs 2026-2028)
 - Launch Market Potential Study
 - ❖ Affirm 2045 goal and establish interim targets
 - ❖ EEPS Framework Update
 - EEPS Legislative Report (December 2028)

EEPS ANNUAL REPORTING

JENNIFER BARNES

ENERGY EFFICIENCY MANAGER TEAM

EEPS REFRESHER

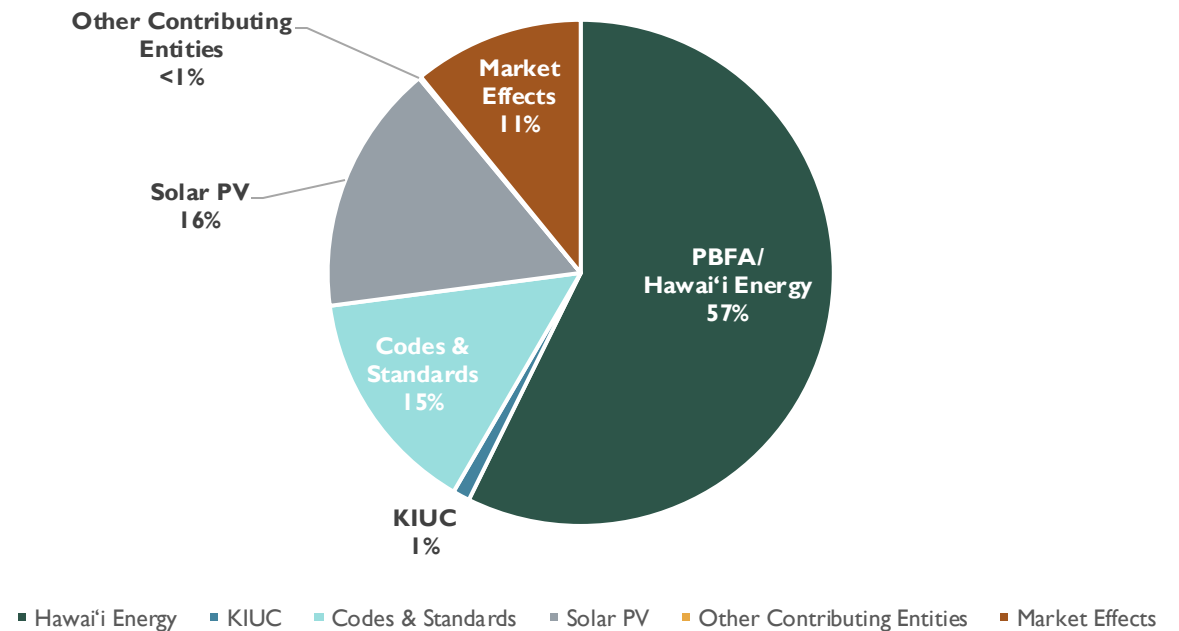
- 4,300 GWh by 2030 & 6,000 GWh by 2045
- Tracking first year & cumulative persisting kWh savings (CPS)
 - CPS requires more steps & data to calculate
 - But can be calculated by any competent analyst with the data & adequate instructions

EEPS Performance Period	Evaluation Reports	Due 20 days before Leg. Session Opening
2009-2015	First Report (start up)	2014 Leg. Session
	Second Report	2019 Leg. Session
2016-2020	Third Report	2024 Leg. Session
2021-2025	Fourth Report	2029 Leg. Session
2026-2030	Fifth Report	2034 Leg Session

BACKGROUND ON PROCESS/CONTENT OF PREVIOUS EEPS REPORTING

- Analysis for First Report to Legislature conducted by Tetra Tech; AEG conducted analysis for the Second & Third Reports
- Sources of savings are:
 - PBFA/Hawai'i Energy
 - KIUC
 - Codes & Standards
 - Other Contributing Entities: University of Hawai'i, state agencies, military
 - Lighting Market Effects
 - TWG agreed to allow lighting market effects savings in the TWG meeting on October 26, 2023
 - Solar PV (through 2014 only)
- Other Contributing Entities generally work with Hawai'i Energy on their EE projects so savings are counted in PBFA
 - From 2009 to 2020, independent projects have only been identified in years 2014-2017 totaling 4.8 GWh of first-year savings

Contribution to EEPS by Entity (2009-2020, first-year kWh)



BACKGROUND ON PROCESS/CONTENT OF PREVIOUS EEPS REPORTING

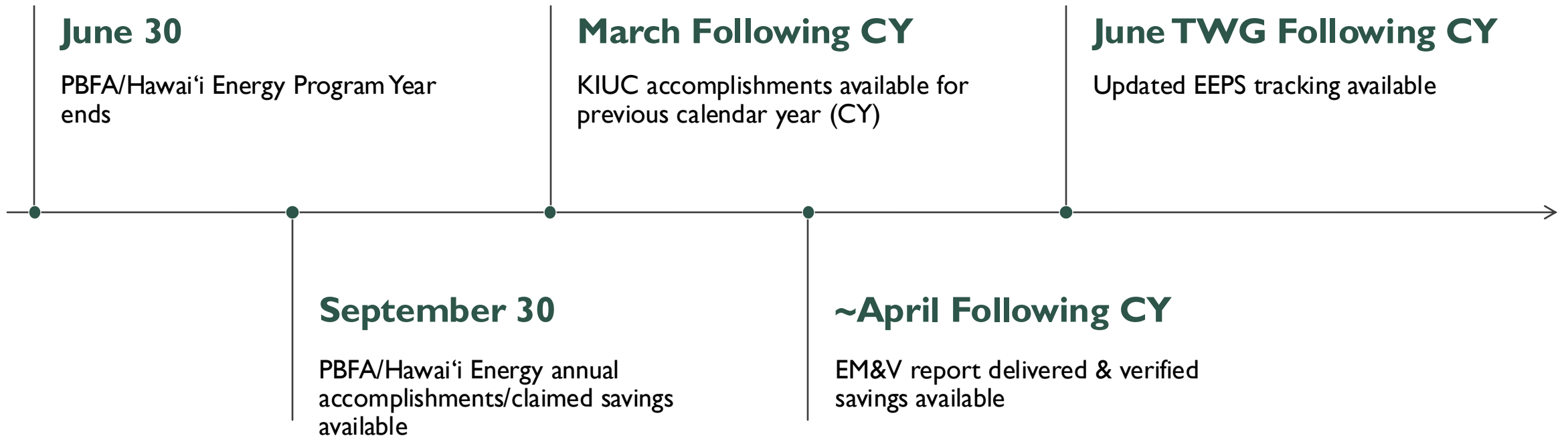
- The level of effort of the data collection varies by the entity
- Most sources are annual or 5-year reports while Other Contributing Entities requires primary data collection through direct outreach to the contributing entities
- Energy savings must then be estimated for any identified projects

Entity	Source
PBFA	Annual verification report
KIUC	Annual reports
C&S	Market Potential Study
Lighting Market Effects	Market Potential Study
Other Contributing Entities	Outreach to entities + engineering estimates of savings from project, if any

EEM RECOMMENDATION FOR ANNUAL EEPS UPDATES

- Develop an EEPS tracker with annual values provided for:
 - PBFA/Hawai'i Energy
 - KIUC
 - Codes & Standards (pulled from MPS)
 - Market Effects (pulled from MPS)
- Tracker values will be considered approximate or draft
- EEPS Report to Legislature prepared every 5 years will be the official record
- Tracker can be revised with Leg. Report values when published; clear labeling can show estimated versus confirmed values
- Tracker available on HawaiiEEPS.org website

TIMELINE



DISCUSSION

-
- What are TWG needs from EEPS progress tracking?
 - Is the current approach to tracking satisfactory or are changes needed?
 - Is it sufficient to track approximate values on an annual basis & true up (with contributing entities) in the 5-year Report to Legislature?

MARKET POTENTIAL STUDY STATUS UPDATE

JENNIFER BARNES
ENERGY EFFICIENCY MANAGER TEAM

MARKET POTENTIAL STUDY UPDATE

- The RFPs for both the Market Potential Study & EM&V for PY25-P27 Triennial will be launched soon
 - Are exploring combining them into a single RFP & whether the EM&V should cover the full triennial cycle rather than a 2-year term
- Will target a mid-2028 completion to support the development of the 4th EEPS Report to the Legislature

Month	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul											
Calendar Year	2025						2026						2027						2028						2029																							
Program Year	PY2025												PY2026												PY2027												PY2028											
Triennial Period	PY2025-PY2027 Triennial																																															
Key Evaluation, Measurement & Verification Activities																																																
Verification Report					PY25-PY27 EM&V RFP								PY2025 Verification										PY2026 Verification										PY2027 Verification															
TRM Updates																	PY26 Mid-Year				PY27						PY27 Mid-Year				PY28						PY28 Mid-Year				PY29							
Related Activities Related to or Impacted by EM&V Activities																																																
MPS	MPS Planning			MPS RFP						2027 Baseline / MPS																																						
EEPS	Third Performance Period Ends																														4th EEPS Report to Legislature																	



Affordable Green Housing Retrofit Program (AGHRP)

TWG - October 28th, 2025

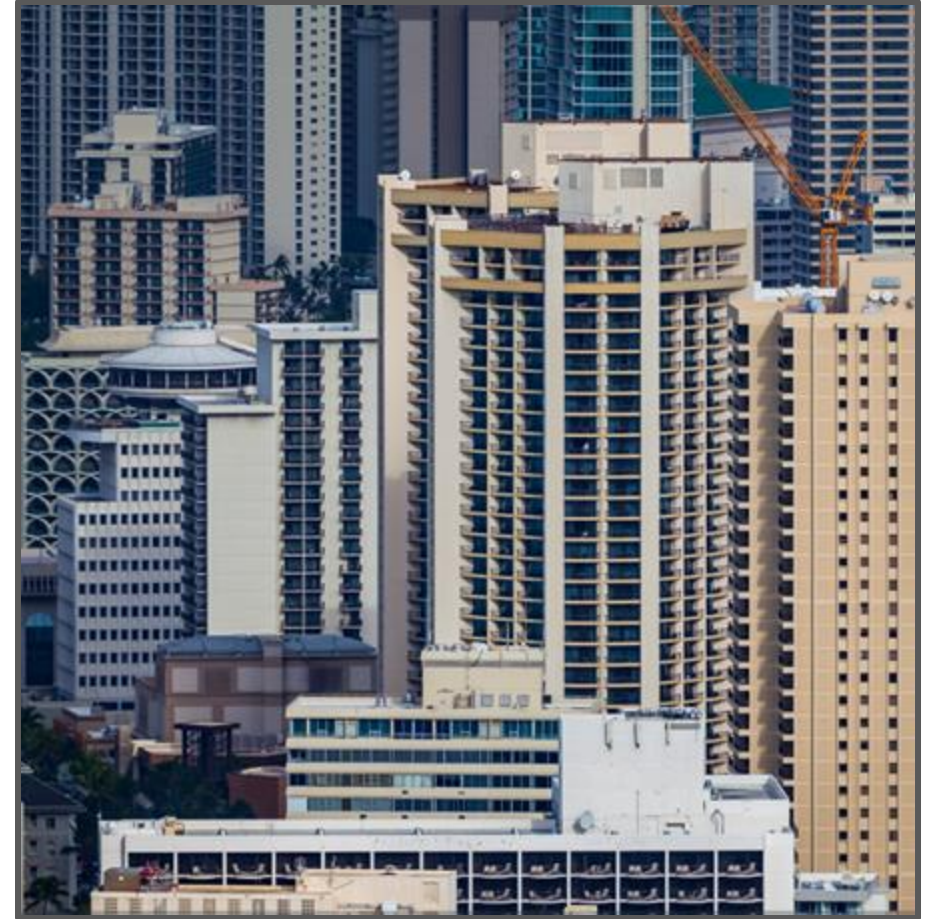
Marissa Kunsch, Energy Program Manager
Mayor's Office of Climate Change,
Sustainability and Resiliency





Agenda

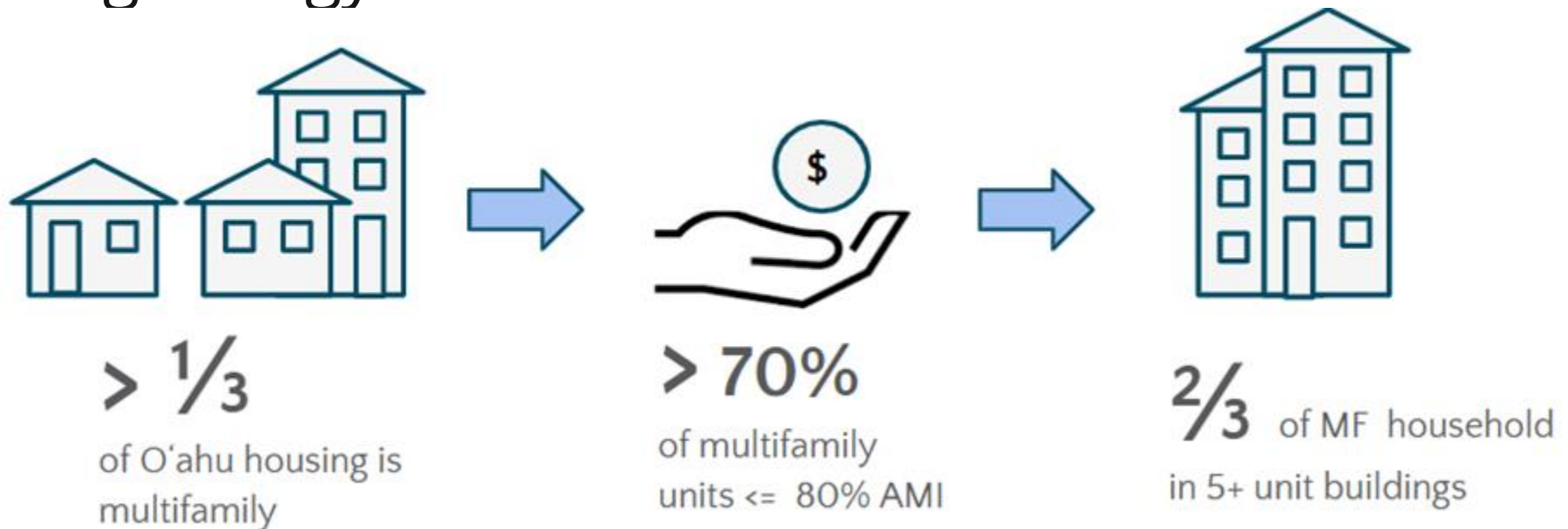
- Brief "re-intro"
- Market Potential Study
- Stakeholder Outreach
- Barriers & Challenges
- Goals & intended outcomes
- Next steps & vision for a pilot





Brief “Re-Introduction”

- Designing a “one stop shop” style energy retrofits program for market rate affordable housing on O’ahu
- Includes technical support, stacking of available funding, prioritizing energy conservation measures





Market Potential Data

- Target Market Scenario: High Energy Consumers
 - Water Heaters: 90% of households/units are served by a single water heater, and in over 4,800 units, those water heaters are over 15 years old
 - A/C units: 92% of units in 5+ unit buildings are using portable or window A/C, with 27%+ of those units over 15 years old
 - Refrigerators: 4.7% of refrigerators are over 20 years old



Market Potential Data

- Target Market Scenario: Fire Sprinkler Ordinance
 - Of a 34-building sample, assuming a 32% savings across the market
 - Estimated from a top 10 percentile savings of 4.5215 kWh / square foot

Total Estimated Annual Electricity Usage (kWh)	Total Post-Retrofit Annual Electricity Usage (kWh)	Total Annual Electricity Savings Potential (kWh)
321,727,293	220,183,440	101,543,853



Market Potential Data

MEASURE	QUANTITY	COSTS	HOMES REBATE for WHOLE BUILDING	HAWAII ENERGY PER UNIT	HEAR PER UNIT	BALANCE TO FINANCE OR PAY UP FRONT
Assessment and model costs	1	\$30,000	\$30,000			\$0
In-unit Air Conditioning unit	100	\$7,000			\$7000	\$0
Electrical Upgrades	1	\$50,000	\$50,000			\$0
Heat Pump Water Heaters (HEAR)	100	\$3,000	N/A	\$1,750	\$1,750	\$125,000
E-Star Refrigerators (over 20 yrs old)	100	\$900	N/A	\$250		\$65,000
E-Star Electric Oven/Cooktop	100	\$1000		N/A	\$840	\$16,000
		\$1,270,000				\$206,000



Stakeholder Outreach

- Key Takeaways:
 - Technical Assistance / trusted advisor
 - Supporting a “menu” of efficiency options
 - Combing through incentives and green bank support
 - “Carrot” for projects including fire-sprinkler installs and current insurance crisis
 - Ensuring energy savings are passed on to tenants, and displacement factors are considered



Potential Barriers & Challenges

- Known potential barriers & challenges for implementation:
 - Split incentives
 - Anti-displacement / tenant protections
 - Interruptions from installs
 - Outreach to vulnerable populations (ie. non-english speakers)
 - Assuring a “holistic” approach vs. one off upgrades

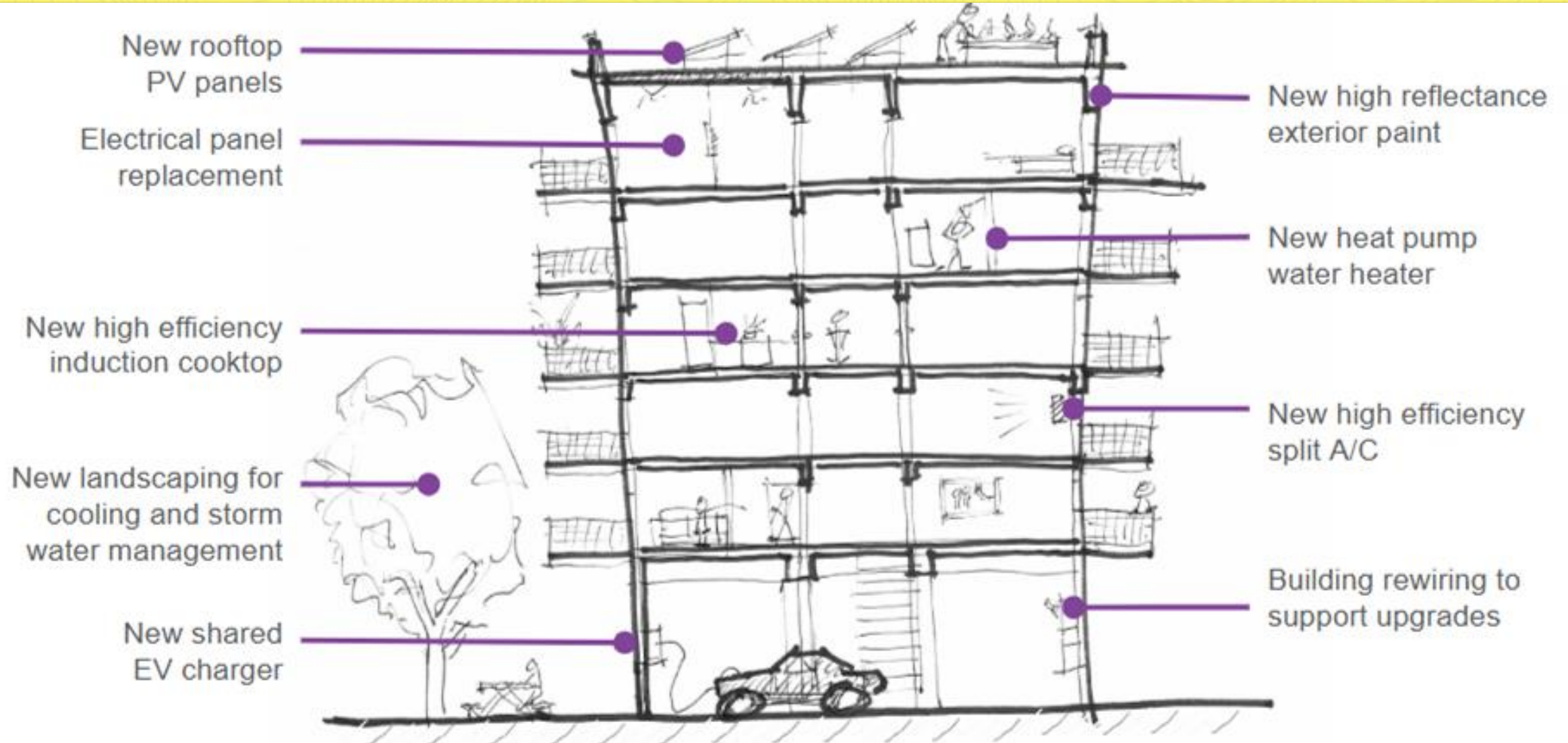


Goals & Intended Outcomes

- How can we support LMI communities, renters, and populations disproportionately impacted by high energy bills?
 - Increasing their quality of life and making it “easy” to participate in a multi-retrofit upgrade
 - Creating a pipeline or on-ramp such as high insurance premium buildings, sprinkler retrofits, & vent piping
 - Providing a trusted advisor for building owners
 - Ensuring rents do not increase and savings can be passed to the tenant



Envisioning a Pilot Program





Next Steps

- Residential Energy & Resiliency Retrofits Pilot
 - Estimated 2026-2027
 - \$1.43 million from Climate Resiliency Funds & General Funds to support a pilot for residential retrofits, includes *both* single-family and multi-family
 - Adding resiliency measures such as hazard proofing for hurricanes, flooding, fires, etc.

Mahalo!



Office of Climate Change, Sustainability and Resiliency

energyprogram@honolulu.gov | resilientoahu.org

Social Media: @resilientoahu



Newsletter: resilientoahu.org/subscribe

HSEO Updates: HOMES/HEAR, BPS, and Codes

EEPS WORKING GROUP
OCTOBER 28, 2025

Hawai'i Home Rebates Program

Jayla Thomas, Energy Efficiency Rebates Specialist

Jayla.m.thomas@hawaii.gov

Hawai'i Home Rebates Program

HOME ELECTRIFICATION AND APPLIANCE REBATE PROGRAM (HEAR)

APPROX. \$34 MILLION

Entirely income qualified

May cover up to 100% of total qualified project cost for households with a total annual income less than 80% Average Median Income (AMI)

Projected launch date ~~September 2025~~ end of year 2025

Qualified Project	Proposed Limit for AMI 81-50	Proposed Limit for AMI 80 or lower
Electric Heat Pump Water Heater (HPWH)	\$1,750* for ENERGY STAR Connected Products \$1,000 for other ENERGY STAR certified HPWH	100% of qualified project cost up to the statutory maximum for ENERGY STAR Connected Products 90% of qualified project cost for other ENERGY STAR certified HPWH
Electric Heat Pump for Space Cooling/Heating	\$8,000* for ENERGY STAR Most Efficient \$4,000 for ENERGY STAR certified with SEER 2 rating over 22	100% of qualified project cost to the statutory maximum for ENERGY STAR Most Efficient 50% of qualified project cost for ENERGY STAR certified SEER2 rating over 22
Electric Stove, Cooktop, Range, Oven	\$840 for ENERGY STAR recognized induction ranges and cooktops	100% of qualified project cost to the statutory maximum for ENERGY STAR certified induction ranges and cooktops
Electric Load Service Center	\$4,000*	100% of qualified project cost up to the statutory maximum
Insulation, Air Sealing, and Ventilation	\$1,600*	100% of qualified project cost up to the statutory maximum
Electric Wiring	\$2,500*	100% of qualified project cost up to the statutory maximum
Maximum Rebate	50% of qualified project cost up to a maximum of \$14,000	100% of qualified project cost up to the statutory maximum

* = statutory limit

Hawai'i Home Rebates Program

HOME EFFICIENCY REBATE PROGRAM (HOMES)
APPROX \$34 MILLION

CONDITIONALLY AWARED – AWAITING DECISION FROM DOE to resolve conditional status

Home assessments and retrofits

Existing single-family and multifamily buildings are eligible

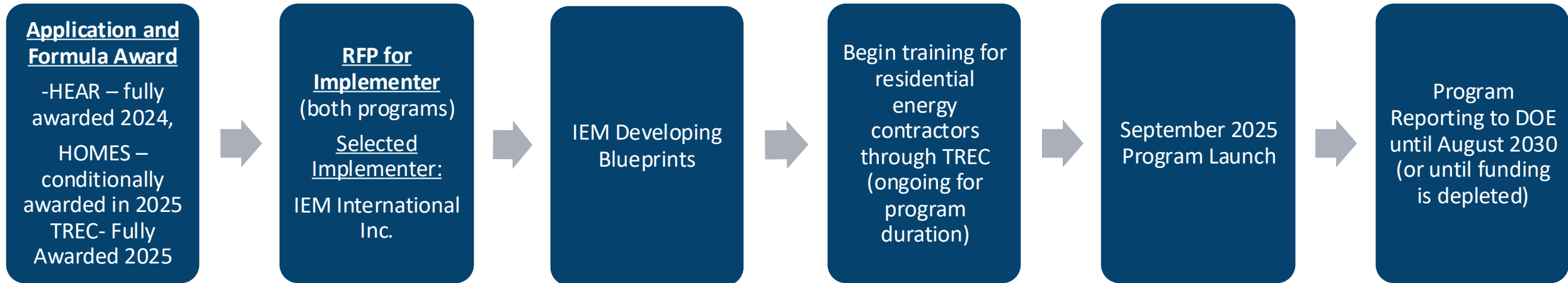
Retrofits to achieve significant energy savings

Rebates available to individuals/aggregators that perform upgrades

Awaiting updated program guidance and requirements

TWG June 10: Program Timeline

- Blueprints sent to DOE and awaiting approval
 - Round 1 Submitted: July 2nd, 2025
- Program launch date late September 2025
- Leveraging partnerships with local programs
- Awaiting updated program requirements for the HOMES application



As of Today

- Blueprints sent to DOE and awaiting approval
 - Round 1: July 2nd, Round 2: August 28th, Round 3: Sept. 29th
- Program launch date: **Dependent on DOE guidance on implementation blueprints**
- Leveraging partnerships with local programs
 - Targeted initial audience: Hawai'i Public Housing Authority, CCSR, Hawaiian Electric, KIUC, Office of Community Services, Office of Economic Development
- Awaiting updated program requirements for the HOMES application



Questions?

Jayla Thomas

Energy Efficiency Rebates Specialist

Hawai'i State Energy Office

Jayla.m.thomas@hawaii.gov

(808) 570-4885



**HAWAI'I
STATE
ENERGY
OFFICE**



Hawai'i BPS & CODES Programs

Ron Chatterjee, Energy Efficiency Specialist

rounak.chatterjee@hawaii.gov

UPDATES: Building Performance Standards



SCEP
STATE & COMMUNITY ENERGY PROGRAMS



Hawai'i was
awarded **\$18.1M**

~ *Conditional Award*
~ *9-year program*

U.S. Department of Energy (DOE)
Office of State and Community Energy Programs (SCEP)



ON HOLD – WAITING ON USDOE

Inflation Reduction Act of 2022 (IRA)
Assistance for the Adoption of the Latest and Zero Building
Energy Codes

Funding Opportunity Announcement (FOA) Number: DE-FOA-0003056

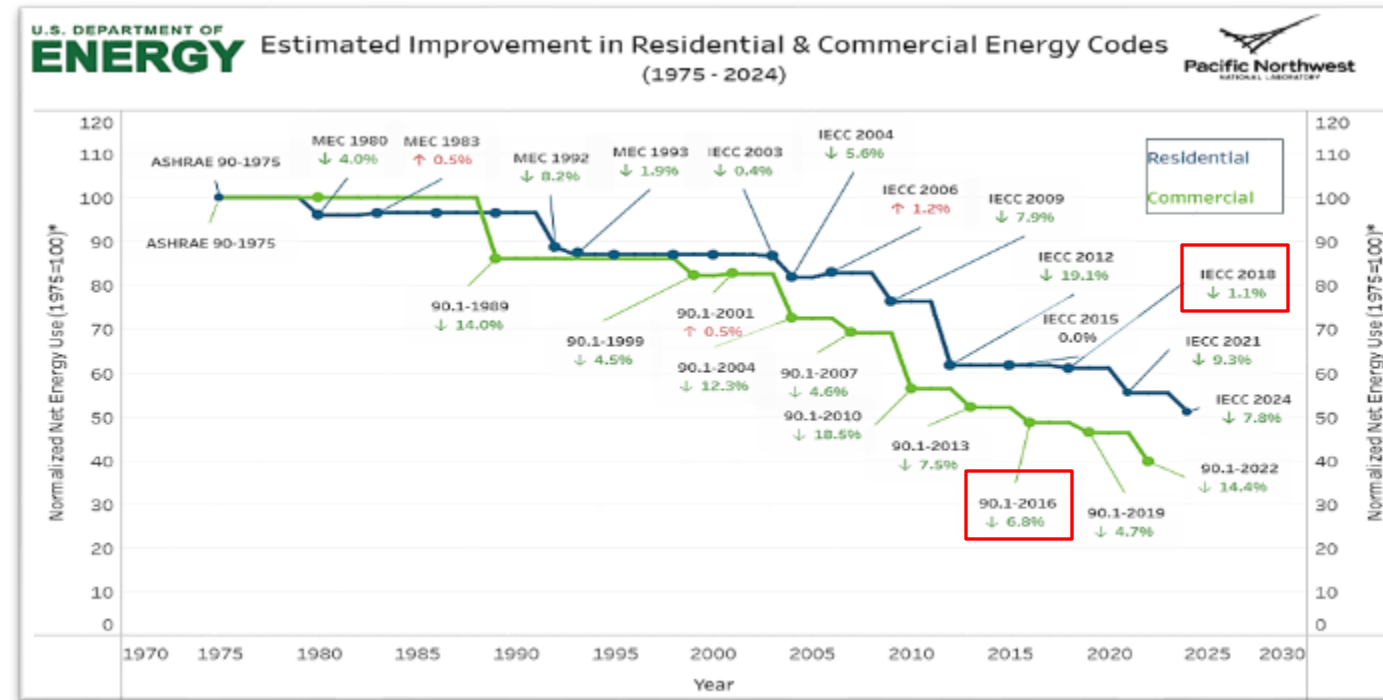
FOA Type: Initial

Goal is to attempt 90-day no-cost extensions

UPDATES: Building Energy Codes

- State Building Code updates remain **PAUSED**
- Secured **\$7.3M** (**CONDITIONAL – ON HOLD BY USDOE**) from USDOE to advance energy codes
- HSEO is working with counties to explore future energy code adoption
 - Technical Assistance Program for counties
 - Recruiting Energy Code Technical Assistance Group (TAG) to assist with county adoption
 - Code trainings are also planned

Goal is to attempt 90-day no-cost extensions



UPDATES: Building Energy Codes (contd.)

- **\$2.8M** to develop Grid-Interactive Codes for Climate Zone 1A (Hawai'i, PR, CNMI)
- Pilot projects being planned in Honolulu County focused on residential buildings
- Team includes: NBI, HSEO, CCSR, etc.

CONTRACT TERMINATED BY USDOE ON 10/02



LEED BD+C: New Construction • v4.1 - LEED v4.1

GridOptimal Building ACP

Pilot credits

EAp152 | Possible 3 Points

Questions?

Ron Chatterjee

Energy Efficiency Specialist

Hawai'i State Energy Office

rounak.chatterjee@hawaii.gov

[\(808\) 470-9522](tel:(808)470-9522)



**HAWAI'I
STATE
ENERGY
OFFICE**



NEXT STEPS & WRAP UP

JENNIFER BARNES

ENERGY EFFICIENCY MANAGER TEAM

QUESTIONS?

- Please contact Jennifer Barnes at 510-756-1501 or jenniferbarnes@2050partners.com.
- Meeting materials will be posted on www.HawaiiEEPS.org