



**Energy Efficiency in Hawaii: Exploring Improvements through a
Community Charrette
May 8-9, 2017
Participant Comments**

ENGAGING THE ENERGY EFFICIENCY COMMUNITY

To close the first day, an exercise was conducted with session participants designed to stimulate dialogue and generate contributions from everyone. The remarks below are paraphrased from participants' comments shared with the group.

WHY ARE WE HERE?

- Who are the entities/groups that make up the efficiency community?
- Support effort to put efficiency front and center to reach clean energy goals.
- What actions are most important to cost effectively implement solutions?
- Convey where we have been in order to drive the path to success.
- How/where opportunities for collaboration and integration are.
- Catalyze voluntary adoption of the 2015 International Energy Conservation Code.

WHAT WOULD YOU LIKE TO SEE THAT IS NEW AND DIFFERENT ABOUT ENERGY EFFICIENCY IN HAWAII?

- New models.
- Market based programs are possible with new length of contract period.
- Clearly defined shared goal, define roles and responsibilities (i.e. Demand Response, transmission); sufficient long term funding.
- Focus on bringing in customer perspective into conversations, academia, innovation/entrepreneurial.
- Market based location of value; before generation do energy efficiency; target low income areas.
- Scaled programs; integration of energy efficiency and renewable energy; sea water air conditioning – how do you eliminate chillers period?

WHAT IS IMPORTANT TO STAY THE SAME?

- Rate of growth; including number of stakeholders and cooperation.
- Keep focus on building codes.
- Strategic (long term goals, engage market actors) customer programs.
- Implicit commitment in policy focusing on low income.
- Keep 100% by 2045 as Hawaii's North Star.
- Continue to respectfully challenge (and collaborate with) each other to understand key points.
- Find, extend and include other stakeholders.

RECAP OF DAY 1 AND RESULTS OF CONTRIBUTIONS FROM PARTICIPANTS

All contributions were reviewed and interpreted overnight to help form the direction for the second day. Based on all the comments, participants were given 2 votes to select their top priorities. The numbers in **red** represent the amount of votes each item received.

WHAT SHOULD STAY THE SAME?

1. Energy Efficiency Programs (**15**)
 - a. Diverse
 - b. Strategic
 - c. Use rebates
 - d. Low income
 - e. Cost-effective

2. Determination to Integrate Energy Efficiency and Utility Planning (**12**)

3. Good Institutions and Funding (**9**)
 - a. Hawaii Energy/Hawaiian Electric Company/State Energy Office/Public Utilities Commission/Consumer Advocate/Counties/Building Code
 - b. 3+ year cycle
 - c. Energy Efficiency everywhere
 - d. Public Benefits Fee
 - e. Economic development
 - f. 2045 goals
 - g. Be proud

4. Engaged Diverse Stakeholders (**6**)
 - a. Via Charrette
 - b. Collaborate

5. Innovation (**5**)
 - a. Forms of Energy Efficiency
 - b. Public/private partnerships
 - c. Minimize regulatory process

6. Updated Code (**2**)

7. High Prices (**0**)

8. Metrics (**0**)
 - a. Include Hard to Reach population
 - b. Include Market Transformation

WHAT SHOULD CHANGE?

1. Data (**12**)
 - a. Dashboard
 - b. Customer class

2. Valuation (**12**)
 - a. Utility planning
 - b. Loading order
 - c. Long run
 - d. Time
 - e. Location
 - f. Flexibility

3. Motivate Private Sector Innovation and Investment (**6**)

4. Regulation and Policy (**6**)
 - a. On-Bill repayment/financing
 - b. Public Benefits Fee design
 - c. Incentives
 - d. Hawaiian Electric Company Request for Proposal for Energy Efficiency

5. Public Engagement (**6**)
 - a. Bigger community
 - b. Energy educated
 - c. Decision-makers

6. Roles (**5**)
 - a. Collaboration
 - b. Alignment

7. Buildings and District Systems (**3**)
 - a. Benchmarking
 - b. Air Conditioning
 - c. Combined Heat and Power
 - d. District cooling

8. Goals (**2**)
 - a. Societal
 - b. Programmatic
 - c. Restating
 - d. Increasing
 - e. Supporting

9. Energy Efficiency Programs (0)
 - a. Lessons
 - b. Integration
 - c. Behavior
 - d. Targeted
 - e. Low income Hard to Reach
 - f. Transport

10. Technology (0)
 - a. Smart grid
 - b. Demand Energy Response as grid asset

11. Evaluation, Measurement and Verification (0)
 - a. Metrics

LOOKING TO THE FUTURE OF ENERGY EFFICIENCY IN HAWAII: DISCUSSION OF KEY IDEAS

WHAT SHOULD CHANGE?

1. Valuation:
 - Locational.
 - Portfolio view/pricing signals:
 - Customer choice
 - To aid in Demand Response implementation/bridge budget constraints.
 - Price and timing of resource differences.
 - Aggregation of data to build clusters to bring greater value to match state of technology.
2. Data:
 - Open data set, line between privacy and system improvement, should conversation be broadened to provide a better data set?
 - Define purpose of data collection.
 - Define relationships for success and management.
 - Assist consumer in better understanding total energy use.
 - State (government) energy data should be open source and should be early adopters to model practices.
 - Role of trade allies depends on customer and data needs to be turned into information in valuable context/framework, assumptions are critical.
 - How do we give customers confidence?, more useful/understandable information on usage.
 - Who owns the data? How do you separate those that refuse?
3. Break down silos/increase collaboration/educate market movers:
 - Does regulatory process impact this?
 - How do we engage those on the “sidelines”?
 - Where is the appropriate venue for this?

4. Efficiency First:

- Valuation is fundamental to decide where to invest.
- Private market transaction costs transparency, incentivize from systems perspective.
- Better policy to prioritize efficiency and allow improvements.
- Inequities and myths between Energy Efficiency and Renewable Energy.
- We need more mature models in this realm.
- Don't lose opportunities for long term benefits due to short term investments.

NEXT STEPS

DATA

- Get state data and put in format that we can help visualize and understand:
 - Ability to filter to user application.
 - Department of Health model for data warehousing is a good example.
- Could Aloha+ challenge work be leveraged?
- Identify spatial units and usage data we are talking about:
 - Correct metrics to tell an accurate story (i.e. Meter level, Monthly)
- Are any other states doing this? How do they manage privacy and technical challenges?

ENGAGEMENT

- Working group in parallel with expectations of signals expected by year end and aligning institutions.
- Public engagement to align and validate community values and wants:
 - More inclusion and sector specific conversations.
- Larger visionary infrastructure projects:
 - State role is to champion.
- Need integrated price signals to move the market.
- Conduct customer focus groups (resource intensive) to drill down what they need to make decisions.
- Public Utilities Commission needs:
 - Participation (i.e. Demand Response docket) and engagement
 - Stakeholders voiced appreciation of the commission directing needs in order to focus conversations.
- Roles of various organizations that drive action and not repetition of same conversations.
- Develop low income approach
 - Cross functionally: Energy Efficiency, Demand Response, Rooftop solar, etc.
 - How do we drive value?
 - What is our approach?

FINAL THOUGHTS

- Build urgency.