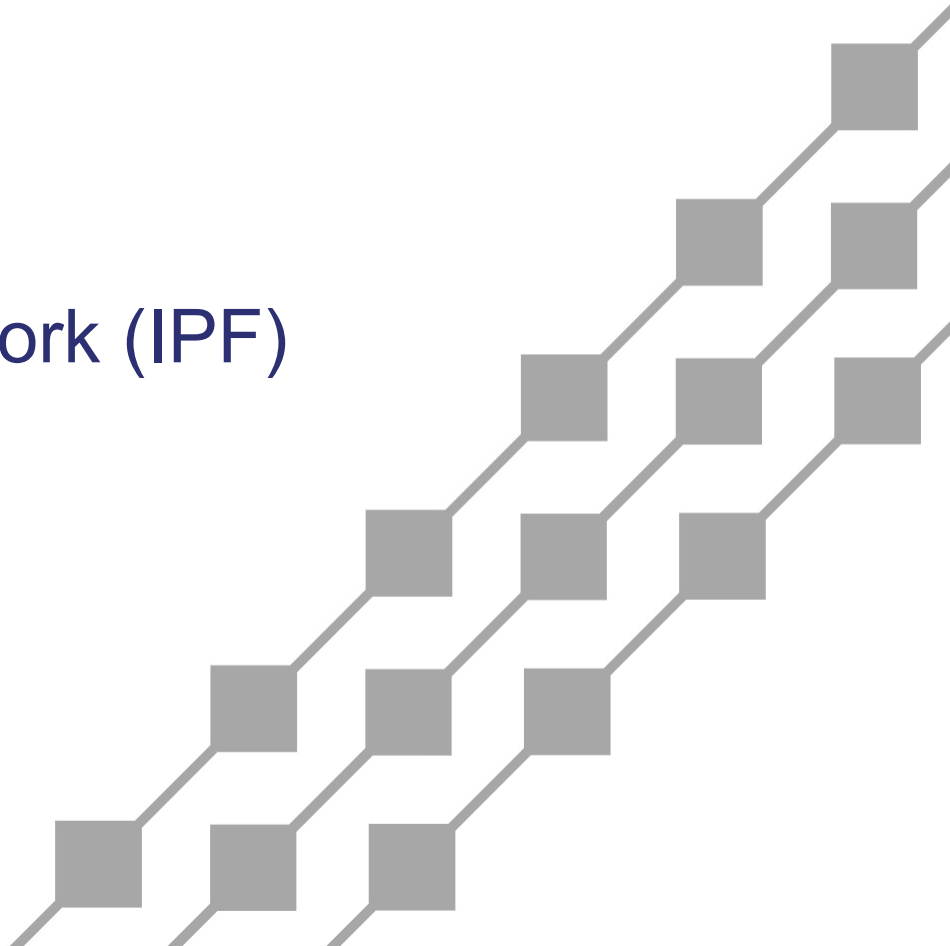




**Hawaiian
Electric**

Innovation Pilot Framework (IPF) Portfolio Update

December 7, 2022



Agenda – 1:00-2:30pm HST

- ◆ Welcome
- ◆ Status of pilot portfolio
- ◆ Update on pilot concept pipeline
- ◆ General discussion



What these meetings are trying to accomplish

- ◆ Updates on active projects
- ◆ Discussion of “pilot concepts in the pipeline”
- ◆ Collect feedback on what we are doing and how we are presenting the information



IPF website: hawaiianelectric.com/IPF

Innovation

- Innovation
- Our Process
- Submit Ideas & Proposals
- Innovation Pilot
- Frequently Asked Questions
- Contact Us

Submit Project Proposal

We are looking for creative and innovative pilot projects for consideration under our IPF. Submit your ideas & proposals.

Innovation Pilot Framework (IPF)

On December 23, 2020, the Hawaii Public Utilities Commission ("HPUC") issued Decision and Order No. 37507 which among other things, included a Pilot Process to "foster innovation by establishing an expedited implementation process for pilots that test new technologies, programs, business models, and other arrangements."

This page provides links to the relevant orders establishing the Innovation Pilot Framework (IPF), a description of the Areas of Collaboration, as well as links and information related to approved and upcoming pilot projects.

Goals and Guiding Principles

This Framework will be guided, in part, by the Commission's overall Performance-Based Regulation ("PBR") guiding principles of (1) a customer-centric approach, (2) administrative efficiency, and (3) utility financial integrity. More specifically, the Framework is designed to achieve the following guiding principles: Innovation, Flexibility, Iteration, Collaboration, Prioritize Learning, Customer-focused, Speed and Ownership. Learn more about our Goals and Guiding Principles in the Certificate of Service document (Exhibit 1).

Areas of Collaboration (AOC)

Hawaiian Electric, in collaboration with the Commission, the Consumer Advocate, and other interested stakeholders in the PBR Docket, identified the following Areas of Collaboration (AOC) that will guide development of potential pilot projects under the IPF. In selecting projects under the IPF, we will give strong consideration to those that may directly or indirectly benefit Low-to-Moderate income (LMI) customers from across the State.

Click below for a description of each AOC. To learn more about the problem statements and goals for each area, view the IPF Workplan.

- 1. Decarbonization
- 2. Customer Resources and Services

Approved and Upcoming Pilot Projects

To maximize flexibility and foster innovation, we intend to utilize a variety of mechanisms to select pilot projects. These include, but are not limited to, discussions and inquiries initiated by us or third-party stakeholders, sole-sourced vendor collaborations, and formal requests for proposals.

[VIEW PILOT PROJECTS](#)

Public Meetings Related to Pilot Projects

As part of our ongoing commitment to transparency and sharing lessons learned about pilot projects, we will be hosting quarterly meetings. If you would like to be added to the mailing list and meeting invitations, please send a email to innovation@hawaiianelectric.com.

Date	Meeting Slides
9/6/23 at 1-2:30 p.m. HST	Pilot portfolio status update (Sept. 2023)
6/7/23 at 1-2:30 p.m. HST	Pilot portfolio status update (June 2023)
3/8/23 at 1-2:30 p.m. HST	Pilot portfolio status update (March 2023)
12/7/22 at 1-2:30 p.m. HST	Pilot portfolio status update (Dec. 2022)
8/31/22	Public stakeholder meeting to discuss Data & Analytics Clearinghouse pilot concept (Aug. 2022) (PDF)
6/1/22	Public stakeholder meeting to discuss Data & Analytics Clearinghouse pilot concept (June 2022) (PDF)
10/19/21	Stakeholder engagement meeting to develop the IPF #4 (Oct. 2021) (PDF)
9/23/21	Stakeholder engagement meeting to develop the IPF #3 (Sept. 2021) (PDF)
9/7/21	Stakeholder engagement meeting to develop the IPF #2 (Sept. 2021) (PDF)
8/24/21	Stakeholder engagement meeting to develop the IPF #1 (Aug. 2021) (PDF)

Docket Filings and Workplan

- Innovation Pilot Framework Workplan (PDF)
- October 20, 2022 – PUC Order 38663 opening IPF repository docket (Docket No. 2022-0212) (PDF)
- October 20, 2022 – PUC Order 38665 establishing a protective order (PDF)

Pilot Projects Listings

The IPF process is described in the Pilot Process filed with the Commission on July 28, 2021. The Implementation Phase will include pilot proposals filed as Notice of Intent (NOIs). Not all pilot concepts will be cost effective or show positive business cases, as assessing cost effectiveness of a scaled-up solution may be a pilot project's primary objective. The Implementation Phase will also include the execution of approved pilot projects, and the review of those approved projects for the purpose of shared learning and possible expansion.

This status board tracks the progress of new and upcoming innovation pilot projects.

Pilot Projects

Pilot Title	Status	Start Date - Target End Date	Actual/Total (thousands)	NOI/Order/Slides
Charge Up eBus Make-Ready	Active	5/7/21 - 3/31/25	\$87/\$4,232	D&O No. 37769 (PDF)
EV-J and EV-P Tariff	Active	12/30/21 - 12/31/27	\$0k/\$0	D&O No. 38157 (PDF)
Charge Up Commercial Make-Ready	Active	1/24/22 - 4/30/24	\$0k/\$4,984	D&O No. 38194 (PDF)
Data & Analytics Clearinghouse	Vetting with stakeholders/NOI submitted for review	TBD	\$0k/\$2,758	NOI (PDF) Slides (PDF)
EV Telematics	Vetting with stakeholders	TBD	TBD	Slides (PDF)

Annual Reports

- 2022 IPF Annual Report (PDF)
- 2021 IPF Annual Report (PDF)



Key Takeaways

Status:

- Annual Spring Revenue Report was filed on 2/28/22
Requested \$86,678 for two pilots active in CY2021
- PUC issued D&O 38654 approving the IPF Workplan on 10/19/22
- PUC opened new Docket No. 2022-0212 to receive pilot filings and issued protective order on 10/20/22
- Public website with meeting schedule and pilot status board is live at hawaiianelectric.com/IPF

Recoverable Pilot Project Costs Net Of Revenue	Hawaiian Electric	Hawai'i Electric Light	Maui Electric
eBus Make Ready Infrastructure Pilot Schedule EV-J and EV-P Tariff	\$43,339	\$26,003	\$17,336
Pilot Process Cost Recovery – Annual Net Costs	\$43,339	\$26,003	\$17,336
Pilot Process Cost Recovery – Annual Net Costs including revenue taxes	\$47,565	\$28,539	\$19,027

Active pilots:

- **Charge Up eBus:** minor changes to scope, schedule, and budget in response to customer feedback. Lessons learned on customer behavior from the eBus pilot are already helping to shape the Commercial pilot. Yellow status due to fewer than expected applicants.
- **Charge Up Commercial:** PUC provided feedback on the Company's Final Program Design Report on 10/24/22. Received 21 applications to date.

Pilot pipeline:

- **Data & Analytics Clearinghouse:** NOI filed with PUC on 10/26/22
- **EV Telematics:** Public stakeholder mtgs in Aug. 2022; drafting NOI for filing Jan. 2023
- Working on detailed scope, budget, objectives for multiple pilot concepts. Continued stakeholder mtgs TBA.

Pilot progress/health	1Q22	2Q22	3Q22	4Q22
Charge Up eBus	Green	Green	Yellow	White
EV Tariff	Green	Green	Green	White
Charge Up Commercial	White	Green	Green	White

*Yellow: some issues in scope, schedule, or budget.
Red: major issues that will take time to resolve and/or result in pilot termination



