



EoT EV Roadmap 2.0

Final Draft

Presentation Webinar

Question & Answer

1. What is the EoT's prediction of EV adoption and total energy load demand for 2030 and for 2045?

The [Integrated Grid Planning](#) (IGP) process engages with the community and various stakeholders to create a resilient clean energy grid. Part of the process involves developing forecast assumptions to be used in the planning analyses. Here is a link to the EoT forecast assumptions (out to 2050) that were used in the IGP found on our IGP webpage.

[January 29, 2020 IGP EoT Forecast \(Excel\) \(https://www.hawaiianelectric.com/a/7497\)](https://www.hawaiianelectric.com/a/7497)

In addition to the IGP, Hawaiian Electric commissioned a study that describes the long-term, economywide decarbonization scenarios required to meet Hawai'i's target of achieving net-zero greenhouse gas emissions by 2045. Here is the link to learn more about this study. [Hawaii Pathways to Net Zero](#)

2. Local fleet owners should understand the benefits of installing solar when electrifying their vehicles. How does Hawaiian Electric support small business owners that are electrifying their fleets include renewable energy like solar into the process?

While Hawaiian Electric doesn't install solar, as we begin to design the pilot programs, we will be sure take this into account as being important to business owners. Here is a link to customer renewable programs currently available.

[Customer Renewable Programs \(https://www.hawaiianelectric.com/products-and-services/customer-renewable-programs\)](https://www.hawaiianelectric.com/products-and-services/customer-renewable-programs)

3. What roadmap features do you anticipate, or opportunities do you think will surface that encourages further V2G adoption?

We do want to ensure that the community and stakeholders are informing the implementation strategy for V2G. While technology for bi-directional charging is a factor in implementation, we are also exploring the business, policy, and regulatory factors that will need to be included and reflected in the final design of the pilot. Including a V2G roadmap as an action in this roadmap is our recognition that we know it's an important part of decarbonizing transportation.

4. Can you use your EV to power your home?

Yes! Hawaiian Electric allows EVs to be used as a backup home power source under Tariff Rule 14, Appendix II-B. To apply, please submit the Appendix II-B form for your county. Forms and submission details are available in the "Forms" section of our [Generate Your Own Power](#) webpage.

Note that only certain vehicles, such as some Ford F-150 Lightning models, are equipped with the technology that is required to enable vehicle-to-home integration.



5. The off-peak subscription charging rate is interesting. Can you describe further on EV charging rates when there is excess power on the grid from renewable generation?

Hawaiian Electric has developed EV-specific rate schedules to encourage charging during day-time hours when renewable energy is most abundant on our system. We currently offer [Schedules EV-J and EV-P](#) on a pilot basis, which offer reduced day-time energy charges to encourage charging between 9:00am and 5:00pm. By enrolling in these pilot rates for their EV charging facilities, eligible commercial customers can save up to 58% on their monthly electricity bills. We also offer [time-of-use rates for electric bus charging facilities](#), which encourage mid-day and off-peak charging through reduced demand and energy charges.

Eligible residential customers can enroll in a whole-home time-of-use rate through our [Shift and Save pilot program](#). These rates encourage electricity use during the daytime period of 9:00am to 5:00pm through significantly lower energy charges. Interested customers should complete [this form](#) to enroll.

Hawaiian Electric will continue to explore the development of rates that encourage charging at times when there is an abundance of renewable energy on our system, and when it is most beneficial for the safe and reliable operation of our system.

6. Critical facilities (i.e., hospitals) and critical fleets (i.e., fire trucks, ambulances) will rely on microgrids to supply charging during emergency events. Can you share more about the microgrid pilot and how it will consider this?

Resilience is a key consideration and part of the guiding principles in the IGP, as well as for EoT Roadmap 2.0. The EoT action is to seek funding to pilot a microgrid community resiliency hub. The pilot design would depend on the community needs and funding source.