

2019

Hawai'i Annual Code Challenge (HACC)

To foster community resilience while building on the foundation set forth in the Aloha+ Challenge's sustainability goals.

Challenge Title	Electric Vehicle Charging Analysis	
Department / Organization	DBEDT Energy Office and Hawaiian Electric Companies	
Contact Name		
Contact Phone & Email		
Impact on Government	Impact on Community	
This project can inform stakeholders to develop future policies, strategies, and investments driving a sustainable growth of the EV market.	The optimal mix of available and well-maintained charging infrastructure is critical in the adoption of electric vehicle market in Hawai'i.	
Challenge Information		
Background of Problem	The current technology provides limited information on the current health of a charge station as well as electric load of a DC fast charging station. Using historical and trending data, a live dashboard would provide more insight to the health of a charge station as well as power load and utilization of a charge station.	
Thoughts on what is needed (include department platform)	Platform (if any): R is preferred Thoughts: A dashboard displaying health of charging station shall be updated every 5-10 minutes using key metrics developed from charging data analysis. A utilization tracker shall include a "congestion" threshold at which a new station in the same location is needed. The impact from EV charging would better inform stakeholders the amount of power used during various times of day by EVs and the corresponding reductions in fossil fuel use and in GHG emissions.	
Project Value (Department - Government - Community - Industry)	- Provide EV charging hosts more information on the state of health of their charge stations - Provide better forecasting of charge station utilization and when more charge stations are needed - Inform stakeholders on the impact of EV charging to Hawai'i's community	
Department Data Available	Sample charge session data and charge profiles	
To be completed by the HACC Planning Committee		
Community/Industry Data Available		

Potential Community/Industry Co-Sponsors	
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