

# HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5<sup>TH</sup> Floor, Honolulu, HI 96813 | energy.hawaii.gov

DAVID Y. IGE  
GOVERNOR

SCOTT J. GLENN  
CHIEF ENERGY OFFICER

(808) 587-3807

Testimony of  
**SCOTT J. GLENN, Chief Energy Officer**

before the  
**SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM  
AND  
TRANSPORTATION**

Monday, February 3, 2020

1:16 PM

State Capitol, Conference Room 225

In SUPPORT of  
**SB 3028**  
**RELATING TO GREENHOUSE GAS EMISSIONS REDUCTION.**

Chairs Wakai and Inouye, Vice Chairs Taniguchi and Harimoto, and members of the Committees. The Hawaii State Energy Office (HSEO) supports SB 3028, which requires the HSEO to conduct a study to provide recommendations for a comprehensive approach to the development of electric vehicle infrastructure to support the State's transition to clean transportation.

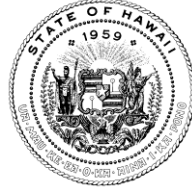
The proposed study aligns directly with the duties of the HSEO and a stated objective for the use of the Energy Security Special Fund, to support achieving the zero emissions clean economy target set forth in Hawaii Revised Statutes (HRS) §225P-5. The purpose of the HSEO is to promote energy efficiency, renewable energy, and **clean transportation** to help achieve a resilient, clean energy, **decarbonized economy**. HRS §196-71 states the office shall: Provide analysis and planning to actively develop and inform policies to clean transportation goals with the legislature, Public Utilities Commission, state agencies, and other relevant stakeholders; Lead efforts to incorporate clean transportation to reduce costs and achieve clean energy goals across all public facilities; Provide clean transportation project deployment facilitation to assist private sector project completion when aligned with state energy goals.

In 2016, emissions from transportation activities in Hawaii were 8.69 MMT CO<sub>2</sub> Eq., accounting for 51 percent of Energy sector emissions. Ground transportation accounted for the 47 percent of the transportation emissions. Eliminating emissions from the ground transportation sector will require significant adoption of both public and privately owned electric vehicles. This transition will require that adequate infrastructure is in place to support an increasing adoption of these vehicles. As noted in the bill, it is imperative that electric vehicle

infrastructure serves areas and populations that are currently underserved and that the technology is functional, reliable, accessible, and operated in a way that contributes to the functionality of the grid and its ability to accommodate more renewable energy and distributed generation.

Conducting a study to determine the most effective approaches to regulate, manage, and prepare for electric vehicle infrastructure in the State will ensure that the ongoing electrification of the ground transportation sector supports HRS §225P-5 (Zero Emissions Clean Economy Target). The HSEO looks forward to collaborating with the legislature, Public Utilities Commission, state agencies, and other relevant stakeholders on the scope of this study.

Thank you for the opportunity to testify on this bill.



DAVID Y. IGE  
GOVERNOR

JOSH GREEN  
LT. GOVERNOR

**STATE OF HAWAII  
OFFICE OF THE DIRECTOR  
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS**

335 MERCHANT STREET, ROOM 310  
P.O. BOX 541  
HONOLULU, HAWAII 96809  
Phone Number: 586-2850  
Fax Number: 586-2856  
cca.hawaii.gov

CATHERINE P. AWAKUNI COLÓN  
DIRECTOR

JO ANN M. UCHIDA TAKEUCHI  
DEPUTY DIRECTOR

**Testimony of the Department of Commerce and Consumer Affairs**

**Before the  
Senate Committee on Energy, Economic Development, and Tourism  
And  
Senate Committee on Transportation  
Monday, February 3, 2020  
1:16 p.m.  
State Capitol, Conference Room 225**

**On the following measure:  
S.B. 3028, RELATING TO GREENHOUSE GAS EMISSIONS REDUCTION**

Chairs Wakai and Inouye and Members of the Committees:

My name is Dean Nishina, and I am the Executive Director of the Department of Commerce and Consumer Affairs' (Department) Division of Consumer Advocacy. The Department supports the intent of and offers comments on this bill.

The purposes of this bill are to: (1) require the Hawaii State Energy Office (HSEO) to conduct a study to provide recommendations for a comprehensive approach to the development of electric vehicle (EV) infrastructure; and (2) appropriate moneys.

The Department recognizes the need for a comprehensive approach on how Hawaii might decarbonize its transportation sector and how the development and deployment of EV infrastructure will play an important role. Thus, the Department supports the idea of a comprehensive study to develop recommendations for consideration. The Department has concerns, however, with certain items that are currently identified to be studied. Those items relate to what incentives the electric

utilities could offer to develop EV infrastructure (section 2(b)(3)(C) of the bill) and to incent EV adoption (section 2(b)(5) of the bill).

While the Department understands that incentives may be necessary to stimulate both the development and deployment of EV charging infrastructure, as well as EV adoption, it is concerned about the presumption that the electric utility may be required to provide that incentive. Assuming the electric utility incentive may entail rebates, discounts, or any other incentive that may require the expenditure of funds, the cost of those incentives will ultimately fall upon other nonparticipating customers, unless otherwise prohibited. The Department is concerned that participants, who will receive the greatest benefit from such incentives, will not bear an equitable share of the costs that may be recovered from utility customers. Conversely, nonparticipating customers, which will likely include low-income customers, may be asked to bear more than their fair share of the cost burden associated with those incentives.

Thus, the Department respectfully suggests amending the bill to instead evaluate the incentives that might encourage EV infrastructure and EV adoption as well as whom the best party or source of those incentives might be. For instance, as it relates to the adoption of EVs, rather than assuming the electric utility should be offering incentives, it should be evaluated whether tax credits after buying an EV and/or rebates from EV dealers may be more effective in spurring more EV purchases.

Thank you for the opportunity to testify on this bill.



**STATE OF HAWAII**  
**HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION**  
**COMMISSION**  
POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

**Testimony of**  
**Anukriti Hittle**  
**Coordinator, Hawaii Climate Change Mitigation and Adaptation Commission**

**Co-Chairs:**  
Chair, DLNR  
Director, Office of Planning

**Commissioners:**  
Chair, Senate AEN  
Chair, Senate WTL  
Chair, House EEP  
Chair, House WTH  
Chairperson, HTA  
Chairperson, DOA  
CEO, OHA  
Chairperson, DHHL  
Director, DBEDT  
Director, DOT  
Director, DOH  
Chairperson, DOE  
Director, C+C DPP  
Director, Maui DP  
Director, Hawai'i DP  
Director, Kaua'i DP  
The Adjutant General  
Manager, CZM

**Before the Senate Committees on**  
**ENERGY, ECONOMIC DEVELOPMENT AND TOURISM**  
**And**  
**TRANSPORTATION**

**Monday, February 3, 2020**  
**1:16 PM**  
**State Capitol, Conference Room 225**

**In support of**  
**SENATE BILL 3028**  
**RELATING TO GREENHOUSE GAS EMISSIONS REDUCTION**

Senate Bill 3028 requires the Hawaii State Energy Office to conduct a study to provide recommendations for a comprehensive approach to the development of electric vehicle infrastructure. **On behalf of the Hawaii Climate Change Mitigation and Adaptation Commission (Commission) I offer the following comments in support of this measure.**

The Hawaii Climate Change Mitigation and Adaptation Commission “recognizes the urgency of climate threats and the need to act quickly. It promotes ambitious, climate-neutral, culturally responsible strategies for climate change adaptation and mitigation in a manner that is clean, equitable and resilient.” The Commission, established by Act 32 SLH 2017 to uphold the United States’ pledges under the Paris Agreement, is the coordinating body for policies on climate change mitigation and adaptation for the state. It is a high-level multi-jurisdictional body that guides the priorities of the state’s climate response. Co-chaired by DLNR and Office of Planning, it consists of 20 members—chairs of four legislative committees, and executive department heads at the county and state levels.

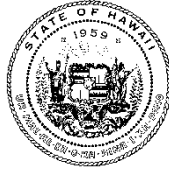
Transportation (air and ground) is the single largest source of greenhouse gas emissions in Hawaii, which mirrors the trend nationwide (according to EPA, it was the largest source of GHG emissions in 2017). One of the two focuses of the Commission is to reduce emissions from ground transportation, and SB3028 is a crucial component of this effort. The Commission’s statement on ground transportation, issued in November 2018, “supports mechanisms to reduce overall vehicle miles travelled (VMT) as well as converting all remaining vehicle-based ground transportation to

renewable, zero-emission fuels and technologies.” Such conversions would include electrification of transportation, and its supporting infrastructure.

The Commission’s mission statement (above) emphasizes that strategies be equitable, and it is noteworthy that SB3028 makes reference to ensure that currently underserved areas and populations are considered in this infrastructure development.

Thank you for the opportunity to comment in support of this measure.

DAVID Y. IGE  
GOVERNOR



SARAH ALLEN  
ADMINISTRATOR  
BONNIE KAHAKUI  
ASSISTANT ADMINISTRATOR

**STATE OF HAWAII  
STATE PROCUREMENT OFFICE**

P.O. Box 119  
Honolulu, Hawaii 96810-0119  
Tel: (808) 586-0554  
email: [state.procurement.office@hawaii.gov](mailto:state.procurement.office@hawaii.gov)  
<http://spo.hawaii.gov>  
Twitter: [@hawaiispo](https://twitter.com/hawaiispo)

TESTIMONY  
OF  
SARAH ALLEN, ADMINISTRATOR  
STATE PROCUREMENT OFFICE  
TO THE SENATE COMMITTEES  
ON  
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM  
AND  
TRANSPORTATION  
Monday February 3, 2020 at 1:16 PM

S.B. 3028  
RELATING TO GREENHOUSE GAS EMISSIONS REDUCTION

Chairs Wakai and Inouye, Vice Chairs Taniguchi and Harimoto, and members of the committees, thank you for the opportunity to submit testimony on S.B. 3028. The State Procurement Office (SPO) strongly supports the Hawaii state energy office to provide recommendations for a comprehensive approach to the development of electric vehicle infrastructure. We have found many different agencies, counties and departments are all very excited to get started in this area, and without a central guidance, are duplicating effort. It is a best practice to develop a strategic sourcing plan for the procurement and placement of electric vehicles as well as the infrastructure that serves them.

The SPO does, however, have strong concerns on the request to exempt the procurement of a consultant (Page 5, SECTION 3, lines 5-9). There are many consulting firms that would be able to compete for this work. In fact, the department does not need to procure at all for this requirement as the SPO has already awarded a nation-wide cooperative through the National Association of State Procurement Officers, called the PASS Contract (#19-19) for acquisition support services. This contract will allow the Department to hire consultants and subject matter experts to conduct an acquisition strategy (sourcing strategy) for this effort.

The Hawaii Public Procurement Code (code) is the single source of public procurement policy to be applied equally and uniformly, while providing fairness, open competition, a level playing field, government disclosure and transparency in the procurement and contracting process vital to good government.

Public procurement's primary objective is to provide everyone equal opportunity to compete for government contracts, to prevent favoritism, collusion, or fraud in awarding of contracts. To legislate that any one entity should be exempt from compliance with both HRS chapter 103D and 103F conveys a sense of disproportionate equality in the law's application.

Exemptions to the code mean that all procurements made with taxpayer monies will not have the same oversight, accountability and transparency requirements mandated by those procurements processes provided in the code. It means that there is no requirement for due diligence, proper planning or consideration of protections for the state in contract terms and conditions, nor are there any set requirements to conduct cost and price analysis and market research or post-award contract management. As such, Agencies can choose whether to compete any procurement or go directly to one contractor. As a result, leveraging economies of scale and cost savings efficiencies found in the consistent application of the procurement code are lost. It also means Agencies are not required to adhere to the code's procurement integrity laws.

The National Association of State Procurement Officials state: "Businesses suffer when there is inconsistency in procurement laws and regulations. Complex, arcane procurement rules of numerous jurisdictions discourage competition by raising the costs to businesses to understand and comply with these different rules. Higher costs are recovered through the prices offered by a smaller pool of competitors, resulting in unnecessarily inflated costs to state and local governments."

When public bodies, are removed from the state's procurement code it results in the harm described above. As these entities create their own procurement rules, businesses are forced to track their various practices. Moreover, a public body often can no longer achieve the benefits of aggregation by using another public body's contract because different state laws and regulations may apply to the various public bodies making compliance more difficult.

Each year new procurement laws are applied to state agencies causing state agency contracts to become more complex and costly, while other public bodies, such as agencies with strong legislative influence, are exempted. Relieving some public bodies from some laws by exempting or excluding them from compliance with a common set of legal requirements creates an imbalance wherein the competitive environment becomes different among the various jurisdictions and the entire procurement process becomes less efficient and costlier for the state and vendors.

Thank you.





**Hawaiian  
Electric**

**TESTIMONY BEFORE THE SENATE COMMITTEES ON  
ENERGY, ECONOMIC DEVELOPMENT & TOURISM  
AND TRANSPORTATION**

**S.B. 3028**

**Relating to Greenhouse Gas Emissions Reduction**

Monday, February 3, 2020  
1:15 PM Agenda Item #2  
State Capitol, Conference Room 225

Michael Colón  
Manager, Electrification of Transportation  
Hawaiian Electric Company, Inc.

Aloha Chairs Wakai and Inouye, Vice Chairs Taniguchi and Harimoto and Committee Members,

My name is Michael Colón and I am testifying on behalf of Hawaiian Electric Company, Inc. (Hawaiian Electric) in support of S.B. 3028, Relating to Greenhouse Gas Emissions Reduction.

The stated purpose of this bill is to enable the Hawaii State Energy Office to research and develop an overarching strategy related to the development and deployment of electric vehicle (EV) charging infrastructure. This bill places clean transportation planning at the forefront of the State Energy Office's priorities and establishes the need for proactive planning for the successful transition to clean transport.

Hawaiian Electric supports the State's efforts to develop an overarching strategy and make recommendations related to infrastructure deployment, as outlined in the bill. While the Company continues along a path identified in its *Electrification of Transportation Strategic Roadmap*, the Company welcomes the additional guidance,

insight, and support that a comprehensive study like the one contemplated in this bill would provide.<sup>1</sup> The Company suggests expanding the scope of the study to also include an examination of ways in which the State can engage with vehicle manufacturers and local dealers to develop increased support for electrification efforts, such as securing increased allocations of EVs, developing and improving the training of sales staff on EVs, and installation of charging stations at dealerships.<sup>2</sup> Including manufacturers and dealers in the light duty vehicle ecosystem acknowledges the vital role that these entities can play in the State's planning efforts.<sup>3</sup>

Hawaiian Electric supports the proliferation of zero-emission vehicles and recognize the importance and positive impact this bill can play. Hawaiian Electric has undertaken several efforts to support the adoption of electric vehicles, such as the development of a growing DC Fast Charger network, with over 17 locations across the Company's service territory, continued development of rates tailored for EV charging including for electric buses, and education and outreach.

As the largest provider of electric vehicle fast charging in the state, Hawaiian Electric remains committed to an EV strategy that is sustainable and helps create a bridge to a cleaner future. Accordingly, Hawaiian Electric supports S.B. 3028. Thank you for this opportunity to testify.

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<sup>1</sup> <https://www.hawaiianelectric.com/clean-energy-hawaii/electrification-of-transportation>

<sup>2</sup> <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/as-dramatic-disruption-comes-to-automotive-showrooms-proactive-dealers-can-benefit-greatly>

<sup>3</sup> <https://www.sierraclub.org/compass/2018/08/automakers-are-still-not-advertising-electric-cars>;  
<https://www.greentechmedia.com/articles/read/us-auto-dealerships-are-bad-at-selling-electric-vehicles-study-finds>



## TESTIMONY REGARDING SB 3028

**being heard jointly by the Senate Committee on Energy, Economic Development and Tourism and  
Senate Committee on Transportation  
on Monday, February 3, 2020 at 1:16 PM**

Aloha Chair Wakai, Chair Inouye and Members of the Committees:

Thank you for the opportunity to provide testimony on SB 3028 which directs the Hawaii State Energy Office to develop a study and provide recommendations regarding the deployment of electric vehicle infrastructure.

Tesla's mission is to accelerate the world's transition to sustainable energy through the deployment of electric vehicles and sustainable energy products, like storage and solar energy systems. Tesla is the only domestic mass market automobile manufacturer that exclusively builds and sells electric vehicles. Globally we have sold more than 900,000 electric vehicles. In support of these vehicles and our customers, Tesla is also unique in its commitment to ensuring customers have access to charging solutions regardless of where they choose to charge. This commitment is reflected in the investments we have made in our Supercharger network, which provides high speed charging along critical transportation corridors and urban centers, our network of destination charging services at hotel, restaurants and other locations that provide convenient access to charge where customers park, as well as our home charging solutions.

Fundamentally if widespread adoption of electric vehicles is going to occur, they must offer a value proposition that is not just comparable, but superior to conventional vehicles across all relevant dimensions including performance, safety, reliability, cost and convenience. Widespread access to charging is a key component of that value proposition. Absent confidence that they will be able to find a place to conveniently charge their electric vehicle, few customers will be interested in switching from conventional automobiles. For this reason, Tesla appreciates the intent of this measure which seeks to provide a comprehensive set of recommendations regarding charging infrastructure deployment to support the State's efforts to eliminate the use of fossil fuels from ground transportation.

While we support the laudable motivations of this initiative, we ask that the development of such a study, if pursued, not become a pretext for delayed action in terms of practical measures and initiatives that could be pursued today. Many of the barriers to charging infrastructure access are already well-understood, including the challenges that customers living in multi-unit dwellings face in accessing and deploying EV charging infrastructure and the high cost of retrofitting EV charging infrastructure to existing buildings and parking facilities.

In the face of these challenges, the long-term solutions while sometimes multifaceted and complex to implement, can also include relatively straightforward actions that can be taken today and do not require further study. Funding is needed help defray the costs of retrofitting charging infrastructure to



existing parking facilities serving multi-unit residential buildings and workplaces, and building/electrical code reform is desperately needed to ensure the going forward newly constructed facilities have the necessary wiring and electrical capacity to make a reasonable share of parking stalls “EV ready”. While there are plenty of interesting questions that could be addressed via a study, frankly Tesla is not convinced that additional study is needed before more tangible actions can be taken to address the fundamental and very basic issue of making charging more widely accessible.

Regardless, should the legislature move forward with this measure, Tesla asks the bill to be amended to specifically require the Hawaii Energy Office to solicit feedback from stakeholders prior to finalizing the study by creating a well-defined stakeholder engagement process. While we do not doubt the Energy Office will work in good faith on this effort, it is of paramount importance that the practical experience of entities like Tesla, other EV manufacturers, charging solutions providers, community organizations and environmental group inform the final set of recommendations. This stakeholder engagement would ideally take the form of at least one workshop to discuss the draft and an opportunity to submit comments on a draft of the study before it is finalized. These comments should also be included with the final version of the study as an appendix. Establishing such a process can ensure that the resulting recommendations are truly robust and that the legislature is fully informed of the issues and stakeholder perspectives.

Thank you for the opportunity to submit this testimony.

**LATE**



P.O. Box 37158, Honolulu, Hawai'i 96837-0158  
Phone: 927-0709 henry.lifeoftheland@gmail.com

COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

Senator Glenn Wakai, Chair

Senator Brian T. Taniguchi, Vice Chair

COMMITTEE ON TRANSPORTATION

Senator Lorraine R. Inouye, Chair

Senator Breene Harimoto, Vice Chair

DATE: Monday, February 3, 2020

TIME: 1:16pm

PLACE: Conference Room 225

SB 3028 Relating to GHG Reductions

### **Concerns**

Aloha Chairs Wakai and Inouye, Vice Chairs Taniguchi and Harimoto, and Members of the Committees

Life of the Land is Hawai'i's own energy, environmental and community action group advocating for the people and `aina for 49 years. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

**The Legislature found climate change to be an existential threat to all living things. We have a decade to drastically reduce emissions. The bill doesn't actually reduce emissions, it merely suggests that a study be done so a future Legislature can deal with the issue.**

Mahalo

Henry Curtis

Executive Director



**LATE**

Email: [communications@ulupono.com](mailto:communications@ulupono.com)

SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT, & TOURISM AND  
TRANSPORTATION

Monday, February 3, 2020 — 1:16 p.m. — Room 225

**Ulupono Initiative supports SB 3028, Relating to Greenhouse Gas Emissions Reduction.**

Dear Chair Wakai, Chair Inouye, and Members of the Committees:

My name is Amy Hennessey, and I am the Senior Vice President of Communications & External Affairs at Ulupono Initiative. We are a Hawai'i-based impact investment firm that strives to improve our community's quality of life by creating more locally produced food; increasing affordable clean renewable energy and transportation options; and better managing waste and fresh water resources.

**Ulupono supports the intent of SB 3028**, which requires the Hawai'i State Energy Office to conduct a study to provide recommendations for a comprehensive approach to the development of electric vehicle infrastructure.

Ulupono supports the intent of this bill emphasizing the importance and need for electric vehicle infrastructure. Ground transportation in Hawai'i is a greater emitter of greenhouse gases than the electric generation industry. EVs have about half the total lifecycle greenhouse gas emissions of the (sales-weighted) average internal combustion engine vehicle. As such, studying ways in increase EV charging infrastructure could significantly improve State efforts to reduce greenhouse gases. As Hawai'i's energy issues become increasingly complex and challenging, we appreciate this committee's efforts to look at policies and research that support clean ground transportation.

We would like to note that Hawaiian Electric Company has worked to research the need for EV charging stations across the State. Collaboratively, they have released the "[Electric Vehicle Critical Backbone Study: Planning Methodology](#)" on July 30, 2019. While studying ways in which the State can further the electrification of transportation, we recommend leveraging this existing resource.

Thank you for this opportunity to testify.

Respectfully,

Amy Hennessey, APR  
Senior Vice President, Communications & External Affairs

*Investing in a Sustainable Hawai'i*



**LATE**

183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: The Senate Committees on Energy, Economic Development, and Tourism;  
and Transportation  
From: Brodie Lockard, Founder, 350Hawaii.org  
Date: Monday, February 3, 2020, 1:16 pm

**In strong support of SB 3028**

Dear Chairs Wakai and Inouye, and members:

350Hawaii.org strongly supports SB 3028.

The transportation sector contributes more to the Climate Crisis than any other sector in Hawaii.

More than two-thirds of the fossil fuel imported into the State is used for transportation.

Electric vehicles (EVs) are coming to Hawaii hard and fast. We need many more public charging systems, strategically placed and sized.

Charging systems need to be reliable, available, maintainable, diverse, and easy to find. The network so far has been ad hoc, with all the resultant issues one would expect.

We need a comprehensive approach to the development of EV infrastructure.

HB 1863 will lead Hawaii into a stable EV future in a thoughtful way that considers what, where, why, when and how an infrastructure should be developed.

Brodie Lockard  
Founder, 350Hawaii.org

**LATE**



John Usakawa, President  
Dave Rolf, Executive Director

HADA Testimony in SUPPORT of SB3028  
RELATING TO GREENHOUSE GAS EMISSIONS, ELECTRIC VEHICLE INFRASTRUCTURE  
STUDY

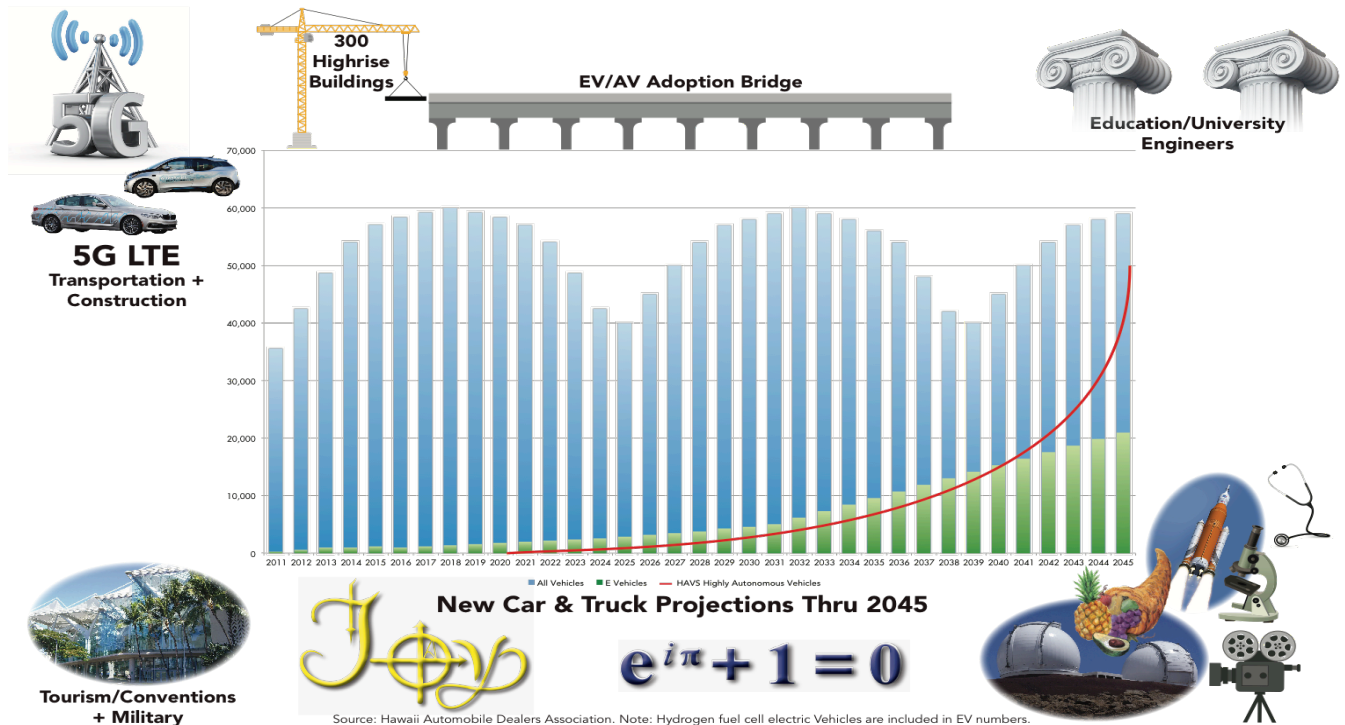
Presented to the Senate Committee On Energy Economic Development and Tourism  
and the Senate Committee on Transportation  
at the Public Hearing 1:16 p.m., Monday, February 3, 2020  
in Room 225 Hawaii State Capitol

by David H. Rolf for the members of the Hawaii Automobile Dealers Association,  
*Hawaii's franchised new car dealers, who provide sales, warranty work and other factory-certified  
maintenance service for Hawaii's privately-owned and fleet-owned cars and light trucks*

Chairs Wakai and Inouye, Vice Chairs Taniguchi and Harimoto and members of the committees:

HADA members support SB33028 which requires the Hawaii State Energy Office to conduct a study to  
provide recommendations for a comprehensive approach to the development of electric vehicle  
infrastructure. Appropriates moneys. This bill provides a comprehensive approach to looking at statewide  
electric vehicle infrastructure development.

So, where are we now in electric vehicle uptake and what is the likely uptake scenario through 2045?



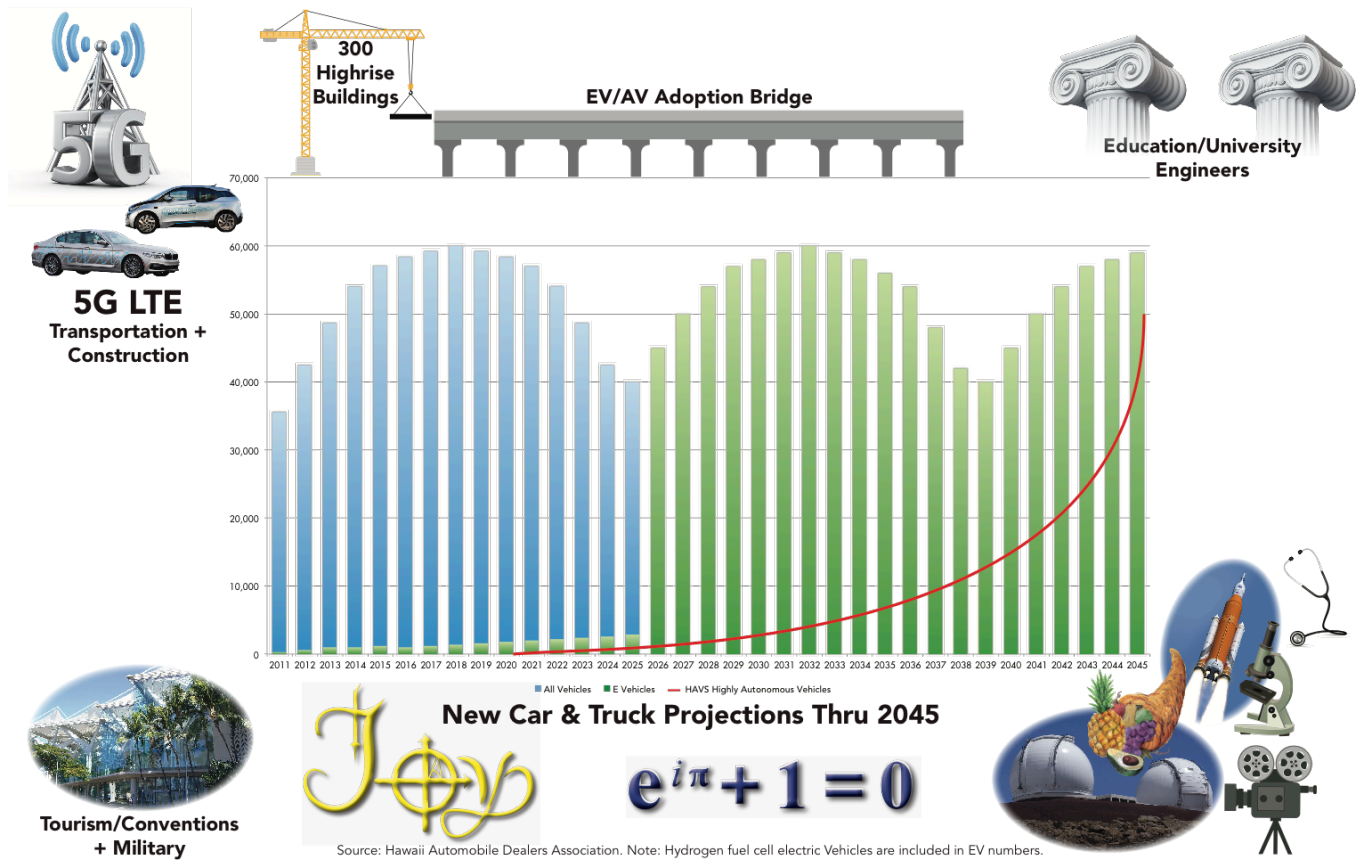


The HADA Rosetta Stone graphic shows our association’s predictions of EV / HFCEV uptake by customers through 2045 at 29%. Which corresponds to independent uptake percentage projections by major auto manufactures. (Note we use Euler’s Identity, as a mathematical proof of “JOY” because the process of transition to renewable fuels is going to be hard so we thought it might as well be joyful.)

There are 10,000 EVs on Hawaii roadways now. Less than 1%.

HADA notes, that if the (light duty cars and trucks... units in operation, UIO, remain the same at approximately 1 million units...and Hawaiian Electric Company predicts, in their “Roadmap” that, not 100%, but 55% of the vehicles on the roadways in 2045 would be electric.... that their grid by that time could handle that many electric vehicles.

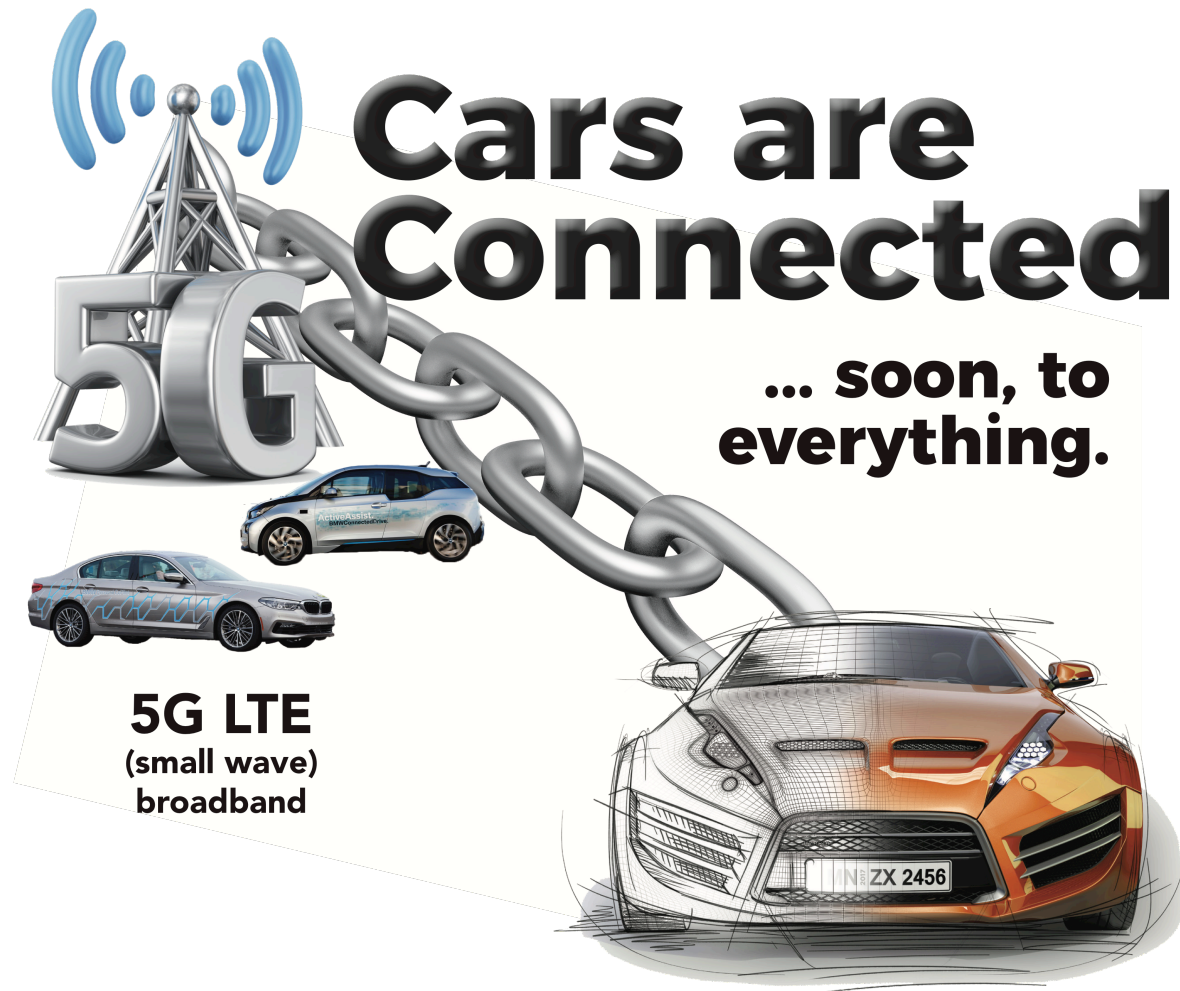
Reaching 100% EV/HFCEV vehicles by 2045 would require 100% of all new vehicles sold after 2025 to be EVs/ or HFCEVs. And the graph would look like this, if Units in Operation (UIOs) remained at current private vehicle levels.



This scenario, jumping from 8% of EV sales in 2025 to 100% overnight so to speak, remains unlikely because HECO could not likely provide the infrastructure for 100% EVs, and certainly it would be difficult to put in that much hydrogen fuel cell infrastructure almost overnight to meet this scenario, and a 100% goal.

Soon, however, with the introduction of 5G technology, “Cars will be Connected to Almost Everything.”

That’s why HADA has proposed working with so many sectors (The Energy Sector, The Broadband Sector, The Transportation Sector, The Housing Sector, The Artificial Intelligence Sector, the Higher Education Community and more)



And that’s why HADA has proposed the movement to the renewable energy goal through private enterprise and the "AV-pockets concept" around the coming rail stations. It all ties in with the Hawaii Executive Order 17-07 announcing that “Hawaii is open for business for the testing and development of autonomous vehicles.” (Many of which, will be EVs and HFCEVs in the future...helping Hawaii to reach its renewable energy goals while boosting the Hawaii economy)

HADA respectfully asks that the committees pass SB3028 on to the next committee for favorable consideration.

Respectfully submitted,  
David H. Rolf, for the members of the Hawaii Automobile Dealers Association

**HADA**  
**Making Hawaii Better Together**

