DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
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KIRK CALDWELL
MAYOR

KATHY K. SOKUGAWA
ACTING DIRECTOR

TIMOTHY F. T. HIU
DEPUTY DIRECTOR

EUGENE H. TAKAHASHI
DEPUTY DIRECTOR

March 28, 2019

The Honorable Roy M. Takumi, Chair
and Members of the Committee on Consumer
Protection and Commerce
Hawaii House of Representatives
Hawaii State Capitol
415 South Beretania Street
Honolulu, Hawaii 96813

Dear Chair Takumi and Committee Members:

Subject: Senate Bill No. 1000, SD 2, HD 1
Relating to Electric Vehicles

The Department of Planning and Permitting (DPP) **supports, with a suggested amendment**, Senate Bill No. 1000, SD 2, HD 1, which would prohibit the issuance of building permits for all new residential multi-family buildings that have 10 or more parking stalls and new commercial buildings that have 20 or more parking stalls unless at least 20 percent of the parking stalls are electric vehicle charger ready.

The City and County of Honolulu is finalizing our own requirements for electric vehicle charger-ready parking stalls. Our initiative is part of our adoption of the State Energy Code and will apply to new multi-family and commercial buildings, as proposed in this Bill.

Under the City's proposal, we will require a minimum 25 percent of the parking stalls be electric vehicle charger ready. We appreciate the current draft of this Bill, which states that counties would be exempt from the law if they adopt a state building code with electric vehicle charger ready requirements that are "as stringent" as those outlined in this measure. As stated above, the City is in the process of adopting stricter requirements.

We do offer one amendment, however. The City is proposing to require multi-family building parking stalls provide an AC Level 1 charge, as opposed to the Level 2 proposed in this Bill. We are proposing Level 2 charge level for commercial building parking stalls. We ask that the multi-family requirement be changed to Level 1.

Thank you for the opportunity testify.

Very truly yours,

Kathy K. Sokugawa
Acting Director

Email: communications@ulupono.com

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Thursday, March 28, 2019 — 2:00 p.m. — Room 329

Ulupono Initiative Supports SB 1000 SD 2 HD 1, Relating to Electric Vehicles

Dear Chair Takumi, Vice Chair Ichiyama, and Members of the Committee:

My name is Murray Clay and I am the Managing Partner of Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable clean renewable energy; and better manage waste and fresh water resources.

Ulupono supports SB 1000 SD 2 HD 1, which requires that on or after January 1, 2020, all new residential multi-family buildings that have ten or more parking stalls and new commercial buildings that have twenty or more parking stalls have at least twenty percent of available parking stalls be electric vehicle charger ready, because it will increase the use of more efficient, cleaner forms of transportation and help to reduce Hawai'i's dependence on imported fossil fuels.

Electric vehicles (EVs) are an important avenue to address Hawai'i's pressing climate issues and align with the State's energy and environmental goals. While Hawai'i's electric power sector continues to make progress toward its 100 percent renewable portfolio standard (RPS) mandate, our transportation sector has received little attention.

EVs currently offer an effective option to progress clean renewable ground transportation and immediate benefits to Hawai'i.

- EVs can alleviate Hawai'i's high cost of living
- EVs provide immediate impact to reduce our dependence on fossil fuels and decrease greenhouse gas (GHG) emissions
- EVs are prime for market acceleration
- Hawai'i should be doing more to promote EVs and EV infrastructure

EVs Can Alleviate Hawai'i's High Cost of Living

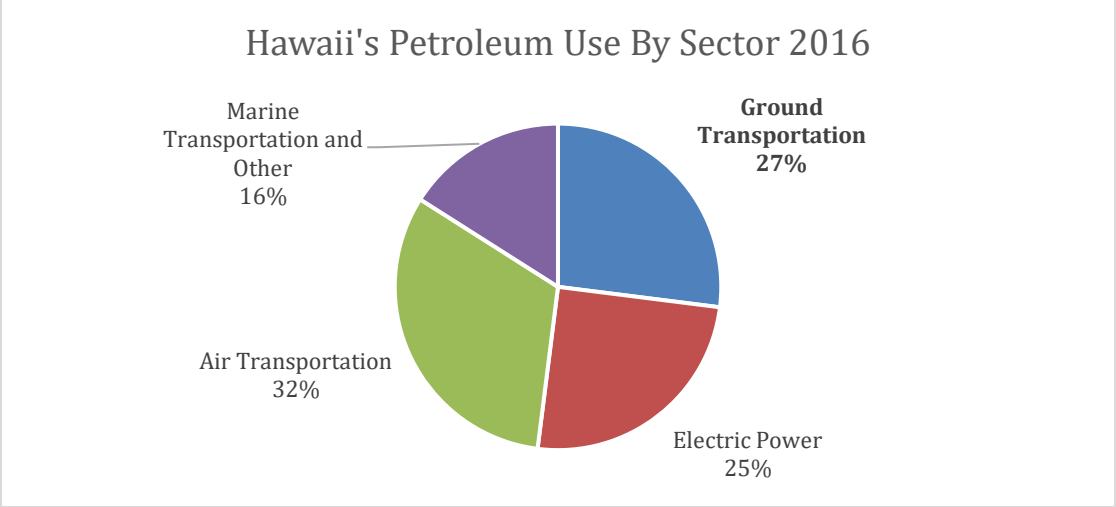
EVs are an increasingly affordable option for all. For example, the 2019 Nissan Leaf's average MSRP is $33,095. After the Federal tax credit is considered, the purchase price is

$25,595, which is less than the best selling sedan in the country, the 2019 Toyota Camry. Attachment A to our testimony compares the purchase price of non-luxury EVs with top-selling sedans and the Toyota Tacoma (the top selling vehicle in Hawai‘i).

EVs are also cheaper to operate and maintain because they have less moving parts and are more fuel efficient. According to a recent study by the Union of Concerned Scientists, Honolulu drivers could save more than $500 per year by switching to an EV.

EVs Provide Immediate Energy and Environmental Impact

Ground transportation alone utilizes more than a quarter of the state's imported petroleum. Electrifying ground transportation will reduce our demand for imported fossil fuels, keeping millions of dollars in the state and cutting harmful pollution.



Source: Hawaii State Energy Office – Hawaii Energy Facts & Figures

Converting from petroleum-based vehicles to EVs immediately reduces GHG emissions, helping combat climate change and its impacts on our islands. EVs produce zero-emissions at the tailpipe, and even when full lifecycle emissions (from manufacturing through disposal) are considered, EV emissions are approximately 50 percent lower than internal combustion engine (ICE) vehicles.

EVs can also support the integration of more renewables on the electric grid with smart charging technology and rate structures. Thus, proliferating EVs throughout Hawai‘i can help accelerate progress towards the State's 100 percent RPS goal, as well as contribute to the State's Paris Agreement commitments and carbon neutral goal.

EVs Are Prime For Market Acceleration

From a market perspective, EV adoption in Hawai‘i has shown impressive growth, with the state ranking second in the nation behind California in the number of EVs per capita. As of

November 2018, there were more than 8,000 passenger EVs registered in Hawai‘i, a 24 percent growth from the previous year. This progress is despite not having strong supporting policies as seen in other states, municipalities and countries.

Based on global and local trends, these adoption numbers are expected to increase exponentially by 2030. Major automobile manufacturers, from Volvo to Volkswagen, have revealed plans to offer electric versions of all their vehicle models. Even Ford announced it will build an all-electric F-150 pickup truck, the top selling vehicle in the country. Policies across the globe are further supporting this transition; in fact, Britain and France have committed to end sales of gas-powered vehicles by 2040.

Hawai‘i Should Be Doing More

EVs are the future, but they currently only represent less than one percent of all passenger vehicles in the state. Hawai‘i must encourage this still nascent market and be prepared with the necessary infrastructure.

Public EV charging stations are a vital component of the EV system. They provide access to charging for drivers who may not be able to charge at home, such as residents who live in multi-unit dwellings, and alleviate range anxiety for all EV drivers, a top-cited barrier to purchasing EVs. Similar to the benefits that community solar offers to renters and apartment residents, public chargers open up the opportunity and feasibility of owning an EV to more people, increasing equity and access.

Requiring qualifying facilities to be “EV ready” is smart and essential future proofing. Installing EV infrastructure post-construction costs three times more than at the time of new construction, and it represents approximately less than one percent of total new construction project cost. Given that building construction has a ~30 year life, this bill is a fiscally prudent way for the private sector to prepare for 2049 and beyond, when EVs are expected to be abundant and charging will be critical.

Other states and cities recognize the importance of EV infrastructure and already have policies that require public and private parking facilities to be built to support EV charging. Below are examples of leading state and city EV-ready requirements:

- California – 8 percent of parking stalls at nonresidential properties
- Vancouver – 100 percent of parking stalls at multi-unit residential and 10 percent of stalls at commercial properties
- New York City – 20 percent of parking stalls at parking facilities (open lots and garages)
- Atlanta – 20 percent of parking stalls at new commercial and multifamily properties
- San Francisco – 20 percent of new residential, commercial and municipal properties

If the State of Hawai‘i is serious about the sustainability and resiliency of our communities,

it should encourage EVs and EV infrastructure.

Ulupono strongly supports the intent and concept of this bill. One consideration for the committees is to also require significant reconstruction of multi-family and commercial buildings to include EV charger ready as part of any major reconstruction, as other states and cities have mandated.

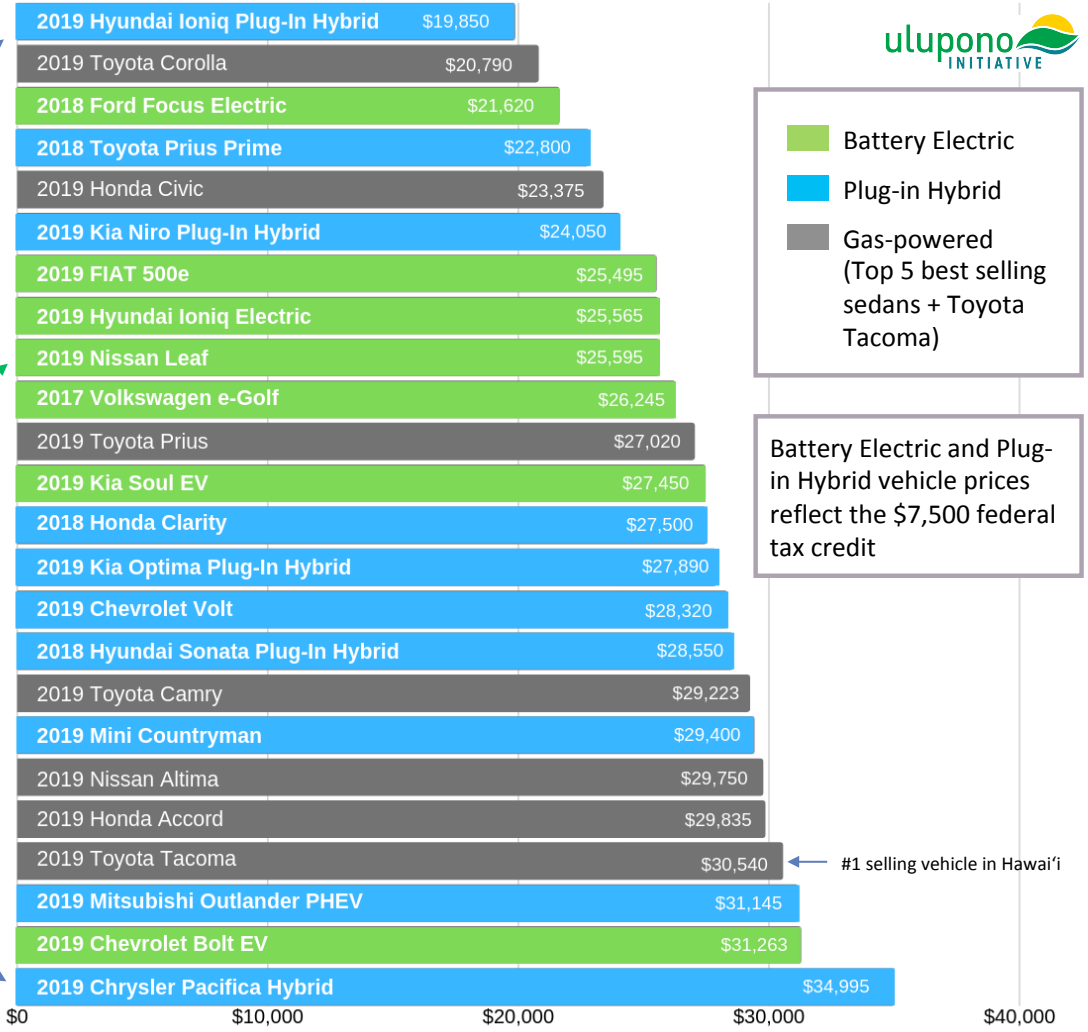
As Hawai'i's energy issues become more complex and challenging, we appreciate this committee's efforts to look at policies that support clean ground transportation. Thank you for this opportunity to testify.

Respectfully,

Murray Clay
Managing Partner

Many Affordable EV Options

Non-Luxury Vehicle Models (attachment A)



ulupono INITIATIVE

- Battery Electric
- Plug-in Hybrid
- Gas-powered (Top 5 best selling sedans + Toyota Tacoma)

Battery Electric and Plug-in Hybrid vehicle prices reflect the $7,500 federal tax credit

#1 selling vehicle in Hawai‘i

Nationwide Average MSRP Data from Edmunds – January 2019

ELEMENTAL
EXCELERATOR

Written Statement of Elemental Excelerator
before the House Committee on Consumer Protection and Commerce
Thursday, March 28, 2019

In consideration of SB 1000 SD 2 HD 1
RELATING TO ELECTRIC VEHICLES

Aloha Chair Takumi, Vice-Chair Ichiyama, and Members of the House Committee on Consumer Protection and Commerce

Elemental Excelerator respectfully **submits support for SB 1000 SD 2 HD 1**, prohibits the issuance of building permits pursuant to an application initiated on or after January 1, 2020, for all new residential multi-family buildings that have ten or more parking stalls and new commercial buildings that have twenty or more parking stalls unless at least twenty per cent of the parking stalls are electric vehicle charger ready, subject to superseding county ordinances.

Elemental Excelerator is a Honolulu-based growth accelerator program founded and operating in Hawai‘i. We have awarded over $30 million to 82 companies resulting in 56 demonstration projects in Hawai‘i & Asia Pacific. Each year, we evaluate over 500 companies and look for innovative entrepreneurs from around the world to come to Hawai‘i and find transformative solutions to help us achieve our 100% clean energy goals and solve our most pressing environmental problems. We select 15-20 companies annually that best fit our mission and fund each company up to $1 million.

Fifteen percent of Elemental Excelerator portfolio companies focus on mobility, with companies such a Proterra, eMotorWerks, and Chargetrip which specifically support solutions that advance the electrification of transportation. Bills such as SB 1000 SD 2 HD 1 that support the development of EV charging infrastructure readiness signal to the broader mobility innovation sector Hawai‘i's commitment to growing its economy through innovation.

We support SB 1000 SD 2 HD 1 for the following reasons:

1. **It will build capacity for the projected EV use:** Currently, Hawai‘i ranks second in the nation in electric vehicles per capita. *Hawaiian Electric’s Electrification of Transportation Roadmap* projects that at least 55% of cars on the road in 2045 will be electric. Achieving these goals will require extensive collaboration between State, county, and private actors to ensure adequate infrastructure, economic viability, grid optimization, and operational efficiency.[1]

[1] Electrification of Transportation (EoT) Strategic Roadmap. (n.d.). Retrieved from https://www.hawaiianelectric.com/clean-energy-hawaii/electrification-of-transportation

2. **It will align with each county's clean ground transportation goals:** In 2017, all four Hawai‘i counties committed to 100% clean ground transportation by 2045. Development of charging infrastructure affirms and support the goals of the counties.[2]

Mahalo for the opportunity to provide testimony on this legislation.

Sincerely,

Aki Marceau
Managing Director, Policy & Community - Hawai'i

[2] Hawai‘i's Mayors Commit to 100% Renewable Transportation. (2017, December 14). Retrieved from http://www.hokulea.com/hawaiis-mayors-commit-100-renewable-transportation/

ORGANIZING *for* ACTION

To: The House Committee on Consumer Protection & Commerce
From: Brodie Lockard, Hawaii State Climate Lead, Organizing for Action
Date: Thursday, March 28, 2019, 2:00 pm

In strong support of SB1000 SD2 HD1

Dear Chair Takumi, Vice Chair Ichiyama, and Committee Members—

Organizing for Action strongly supports SB1000 SD2 HD1.

In January 2018 an anemic 0.79 percent of passenger vehicles in the state were electric [1]. In February 2019 the percentage was still just 0.81. We should be doing everything we can to increase that percentage [1].

Retrofitting a building to accommodate EV charging stations can cost up to $10,300 apiece. The price to prepare for an EV charging station during new construction is about $920. We're going to need them, very soon, and planning for them during new construction will save millions of dollars.

Nearly every major automaker said in 2017 that they plan to move to all-electric vehicles (EVs), and will each introduce 10 to 50 new EV models within one to seven years. Volkswagen and General Motors have already scheduled the end of their gasoline vehicle production.

As the number of zero-emissions vehicles (ZEVs) in Hawaii inevitably grows, the number of charging stations must grow to accommodate them. Large parking areas are especially important because ZEV drivers cannot just park "next door" where there might not be a charging stations available. When gas-powered cars are no longer for sale—not long from now—will Hawaii be equipped to charge its ever-growing number of ZEVs?

The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii [2]. This bill will also help reduce Hawaii's greenhouse gas emissions by helping to make charging ZEVs a non-issue.

Please support SB1000 SD2 HD1. It will help pave the way for our clean energy goals, and the imminent end of gasoline cars.

Thank you for the opportunity to testify.

[1] http://files.hawaii.gov/dbedt/economic/data_reports/energy-trends/Energy_Trend.pdf
[2] https://www.eia.gov/state/analysis.php?sid=HI

Brodie Lockard
Hawaii State Climate Lead, Organizing for Action

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
March 28, 2019, 2:00 P.M.
Room 329
(Testimony is 3 pages long)

TESTIMONY IN STRONG SUPPORT OF SB 1000 SD2 HD1

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committees:

Blue Planet Foundation strongly supports Senate Bill (SB) 1000 SD2 HD1, which requires that on or after January 1, 2020, all new residential multi-family buildings that have ten or more parking stalls and new commercial buildings that have twenty or more parking stalls have at least 20% of available parking stalls that are electric vehicle charger ready. This measure **applies only to new construction** of these building types—an important first step.

Electric vehicles are the fastest growing segment of new cars in Hawaii. In 2018, EV registrations grew 25 percent, while registrations of gasoline-powered vehicles grew only 0.8 percent.[1] We expect over 10,000 EVs registered in Hawaii by the end of the year—a number that is expected to grow exponentially as new EV models with longer ranges and lower prices hit the market.

Electric vehicles will play an integral role in Hawaii's clean energy future. While EVs that use the existing electricity grid to charge still use mostly fossil fuel, they use that fuel more effectively than burning fuel directly in a typical gasoline engine. This is why EVs are much less expensive to "fuel" per mile than their gasoline counterparts. Further, by using stored electrical energy, EVs can take advantage of intermittent solar, wind, and other clean energy resources. Most vehicles sit idle over 22 hours of the day, so they can become *de facto* energy storage devices if their batteries are plugged into the grid when they are not in use. With smart grid infrastructure in place, EVs become an essential component to electricity load and clean energy resource balancing—in addition to providing clean mobility solutions for Hawaii residents.

Still, over one million gasoline-powered vehicles are on Hawaii's roads—and from them comes nearly five million metric tons of climate-changing carbon pollution. What's worse, while Hawaii has made good progress in reducing its carbon emissions from the electricity sector, emissions from ground transportation have been increasing in recent years.

The International Energy Agency has found that "the availability of chargers emerged as one of the key factors for contributing to the market penetration of EVs." Unlike gasoline car owners,

[1] DBEDT Monthly Energy Trends, January 2019 (http://dbedt.hawaii.gov/economic/energy-trends-2/).

info@blueplanetfoundation.org
55 Merchant Street 17th Floor • Honolulu, Hawai'i 96813 • 808-954-6161 • blueplanetfoundation.org

charging behavior for EV owners indicates that more than 80% of EV drivers charge their cars at home or at work.[2] In addition, a large share of the Hawaii population lives in high density, multi-family residential buildings. The vast majority of parking facilities currently lack EV chargers.

By ensuring that we are "future proofing" new construction projects, this measure is an important step toward increasing electric vehicle charging options for those who don't have access to charging at home or at work.

Hawaii can expect more residents to choose EVs or gasoline vehicles as prices decrease. Battery costs have fallen precipitously over the past several years so that in many cases, the total cost of ownership for EVs is lower than for conventional vehicles. Experts expect battery prices to continue to fall and as automakers increase the number of models and volume of EVs in the next few years, the upfront cost of EVs is expected to reach upfront cost parity with conventional vehicles by 2024.[3]

In part due to falling costs and increasing consumer demand, and in part due to government policies supporting EVs, nearly all of the world's leading automakers have announced aggressive strategies and investments in EVs during the past two years.

Installing EV-ready wiring is cheaper pre-construction

The most challenging aspect of EV charger installation is the common lack of electrical capacity and distributed subpanels to support broad deployment of charging infrastructure. **By choosing not to install the wiring and conduit upfront in new construction, developers are forcing tenants to pay for expensive retrofit costs to upgrade power capacity near their parking stalls**.

Studies have shown that **installing EV infrastructure at the time of construction can be 91% less expensive than post-construction retrofits** and per stall installation costs can be reduced through economies of scale.[4] While this bill would not require the installation of the actual EV charging infrastructure, it would require that the power capacity and conduit be set up during construction, which would dramatically reduce retrofit costs at the time of charger installation, creating cost savings downstream for residents and tenants.

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[2] https://www.iea.org/publications/freepublications/publication/GlobalEVOutlook2017.pdf

[3] *See* Bloomberg New Energy Finance, https://bnef.turtl.co/story/evo2018?teaser=true.

[4] *See* http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf.

Conclusion

Blue Planet Foundation strongly supports SB 1000 SD2 HD1. Electric vehicles are better for the environment and the economy and can help Hawaii reach its renewable energy and transportation goals. The time has come when Hawaii residents want to purchase electric vehicles but are in need of convenient and affordable charging options. This bill will ensure that the EV charging infrastructure network necessary to support the influx of electric vehicles can be installed more efficiently and cost-effectively in new construction projects. It will provide new EV owners—particularly those that will live in new multi-family residential buildings—with the confidence that they will be able to access charging at home, at the workplace, and in public spaces.

We respectfully request that the Committee pass SB 1000 SD2 HD1, amended to take effect upon approval.

Thank you for the opportunity to testify.

TESTIMONY BEFORE THE HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

S.B. 1000 SD1, HD1

Relating to Electric Vehicles

Thursday, March 28, 2019
2:00 p.m., Agenda # 9
State Capitol, Conference Room 329

Michael Colón
Manager, Electrification of Transportation
Regulatory and Program Development
Hawaiian Electric Company, Inc.

Aloha Chair Takumi, Vice Chair Ichiyama and Committee Members,

My name is Michael Colón and I am testifying on behalf of Hawaiian Electric Company and its subsidiary utilities Maui Electric Company and Hawai'i Electric Light Company (collectively, "Hawaiian Electric") in support of S.B. 1000 SD1, HD1, Relating to Electric Vehicle Charging Infrastructure. S.B. 1000 SD1, HD1 seeks to integrate clean transportation planning with large residential and commercial development, by requiring a portion of available parking stalls be electric vehicle ("EV") charger ready.

This bill has the potential to make a big impact on the availability of EV charging infrastructure, particularly in areas of high population density. These areas are typically ideal locations for EVs in that residents typically have shorter driving distances than those living in less dense, but more distant locations from the city center. Existing commercial locations and multi-family buildings face expensive retrofits to their parking facilities to be EV ready. However, by making a proactive requirement to plan for and incorporate EV charging into future large building projects, the costs will be lower.

Providing increased access to EV charging at workplaces, commercial locations and multi-family buildings are all key priorities identified in the Companies' *Electrification of Transportation Strategic Roadmap*. This bill will continue the tremendous progress that the state has made towards a cleaner and more sustainable transportation future.

Accordingly, the Hawaiian Electric Companies support S.B. 1000 SD1, HD1.

Thank you for this opportunity to testify.

TESTIMONY OF TINA YAMAKI
PRESIDENT
RETAIL MERCHANTS OF HAWAII
March 28, 2019

Re: SB 1000 SD2 HD1 RELATING TO ELECTRIC VEHICLES

Good afternoon Chairperson Takumi and members of the House Committee on Consumer Protection and Commerce. I am Tina Yamaki, President of the Retail Merchants of Hawaii and I appreciate this opportunity to testify.

The Retail Merchants of Hawaii (RMH) is a statewide not-for-profit trade organization committed to supporting the retail industry and business in general in Hawaii. The retail industry is one of the largest employers in the state, employing 25% of the labor force.

Retailers continue to be concerned about our aina and have supported many initiatives that preserve and protect our environment. However, the Retail Merchants of Hawaii **STRONGLY OPPOSES** SB 1000 SD2 HD1 Relating to Electric Vehicles. This bill would prohibits the issuance of building permits pursuant to an application initiated on or after January 1, 2020, for all new residential multi-family buildings that have ten or more parking stalls and new commercial buildings that have twenty or more parking stalls unless at least twenty per cent of the parking stalls are electric vehicle charger ready, subject to superseding county ordinances.

We believe that the market and customers should be the influencers in business trends and operations and not government mandates. Businesses spend a lot of money to construct new developments. **The effective date would put a huge financial burden on those who already are going through the long permitting process but have not had approval.** If their current plans are not approved by the effective date, more cost will incur for the business as they would now have to amend and reconfigure their plans to add in EV charging stations.

We also do not agree on mandating the number of EV ready stalls that businesses must have. **We would like to see an exemption for commercial buildings and have EV owners charge their cars at home like they would their cellphones.** Business responds to the customers needs. Many of our members have found EV drivers in the surrounding neighborhood and condominiums come to plug into the retailers charging stations to avoid increasing their electric bill at home. We are finding many residents are feeling entitled to be able to charge their EVs when the malls and centers are closed – in the middle of the night or early morning hours - hours before the mall and centers opens for business. Or these residents leave their cars charging when the mall/centers are open AND are NOT shopping in the stores while their batteries are being recharged. These residents are taking away the EV stall from customers coming to shop during mall hours. And the money that is spent in the stores in turn supports our family, friends and neighbors who work in the stores.

We would also like to point out that with the advancement of technology, the newer model Electric Vehicles can travel further distances. There are also other cars being developed that uses alternatives to traditional gas-powered car like that of hydrogen fuel cell. We are concerned that government will begin to mandate that businesses also provide ready “reserved parking stalls" for all of the various types alternative gas powered vehicles including the EV delivery trucks and that businesses with large parking lots would just become a reserved parking charging station for the public and not able to offer convenient parking for the customers that actually shop in the stores.

Government mandates like this does drive up the cost of doing business that in turn drives up the cost of living in Hawaii. We should be looking at encouraging new businesses to develop independent charging stations like those of gas stations. We urge you not to impose another government mandate on business and ask that you hold this measure.

Mahalo for this opportunity to testify.

3610 Waialae Ave • Honolulu, HI 96816 • (808) 592-4200 • tyamaki@rmhawaii.org

Young Democrats of Hawaii
Democratic Party of Hawaii

Testimony presented before the Committee on Consumer Protection & Commerce
Thursday, March 28, 2019 at 2:00 p.m.
Conference Room 329

Senate Bill 1000, Senate Draft 2, House Draft 1

Dear Chair Takumi, Vice Chair Ichiyama, and members of the Committees:

Senate Bill 1000, Senate Draft 2, House Draft 1 requires that on or after January 1, 2020, all new residential multi-family buildings that have ten or more parking stalls and new commercial buildings that have twenty or more parking stalls have at least twenty percent of available parking stalls be electric vehicle charger ready. In January 2019 the Young Democrats of Hawaii conducted a member survey to identify and prioritize important issues facing young people today. Taking action on climate change was identified as one of the top three issues. YDHI members recognize that the impacts of climate change are already being felt throughout the world and in the State of Hawaii, and that actions must be taken immediately to ensure a viable future for all of Hawaii residents. The Young Democrats of Hawaii **strongly supports** the passing of SB1000, SD2, HD1 for the following reasons:

1) Hawaii is second to California in the number of electric vehicles per capita. One of the barriers to owning an EV is the lack of charging infrastructure. This bill will allow for the expansion of charging stations in residential and commercial buildings, while also decreasing the cost of living by saving residents on average 35% on fuel costs.
2) Senate Bill 1000, SD2, HD1 will help Hawaii meet its goal of 100% clean energy by 2045 as well as the Paris Agreement. When the federal government decided to step away from the Paris Agreement in 2017, the State of Hawaii became the first state to enact legislation to implement the goals of the global accord. Hawaii must continue to lead by example for the rest of the nation and the world in climate change mitigation.

Thank you for the opportunity to testify.

Sincerely,

Executive Committee
Young Democrats of Hawaii

SB-1000-HD-1
Submitted on: 3/26/2019 6:45:31 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Noel Morin	Big Island EV Association	Support	No

Comments:

Dear Senators,

Electric vehicles play a critical role in our state's renewable energy goals. As you know, transportation has a very significant dependency on our petroleum imports. The electrification of transportation (coupled with a shift to renewable energy sources) will help us meet our goals. At the moment, electric vehicles represent less than 1% of the passenger vehicles in Hawaii. While adoption is slowly climbing, the challenges of our limited public charging infrastructure are becoming more apparent. This is especially problematic in multi-unit residential structures.

SB1000 will allow for better planning and building by allowing for EV charging infrastructure to be incorporated in the design process. This will help property owners from incurring more costly retrofits in the future.

Thank you for supporting legislation that will allow broad adoption of sustainable transportation in Hawaii.

Noel Morin

President - Big Island Electric Vehicle Association

PO Box 6310, Hilo, HI 96720

To: The House Committee on Consumer Protection & Commerce
From: Sherry Pollack, Co-Founder, 350Hawaii.org
Date: Thursday, 3/28/19

In strong support of SB1000 SD2 HD1

Aloha Chair Takumi, Vice Chair Ichiyama, and Committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. On behalf of our 6,000 members and supporters, 350Hawaii.org **strongly supports** SB1000 SD2 HD1.

EVs play a key role in our transition to 100% clean energy. We should be doing everything we can to create incentives for this transition. The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii. Supporting the transition to EVs will create an immediate reduction in our dependence on fossil fuels and significantly decrease greenhouse gas emissions.

Further, as the number of Zero Emission Vehicles (ZEVs) inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them. We can save millions of dollars if we plan for them during new construction, rather than retrofitting later.

This bill is about smart planning that will help us save money while supporting our clean energy goals, making parking and charging ZEVs a nonissue.

Thank you for the opportunity to testify in strong support of this very important bill.
Sherry Pollack
Co-Founder, 350Hawaii.org

chargepoint.com

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Before the House Committee on Consumer Protection and Commerce
March 26, 2019
SB 1000: Relating to Electric Vehicles

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

On behalf of ChargePoint, Inc. (ChargePoint), I would like to testify in support for SB 1000. The bill would require all new residential multi-family and commercial buildings to have a minimum number of "EV-ready" parking stalls capable of supporting the installation of electric vehicle charging equipment.

ChargePoint is the world's largest and most open electric vehicle ("EV") charging network with more than 60,000 Level 2 EV and DC fast charging spots around the country, including over 360 public and private ports in Hawaii. ChargePoint's customers include major employers, municipalities, universities, utilities, real estate developers and parking garage facility owners and operators that provide EV charging and related services to EV drivers. ChargePoint customers in Hawaii include the Aulani Disney Resort, the City and County of Honolulu, the University of Hawaii, Target, BMW of Hawaii, Kapolei Lofts, Maui Ocean Club, Maui Electric, and many more. Every 2 seconds, a driver connects to a ChargePoint station, and drivers on the ChargePoint network have driven over 1.2 billion gas-free miles.

SB 1000 takes a critical step in helping to reduce the upfront cost of installing electric vehicle charging equipment by ensuring that parking stalls at both multifamily and commercial facilities can take advantage of the significantly lower cost of deploying the electrical infrastructure necessary for EV charging at the time of construction. This can lead to as much as a 70% cost savings per project when installing EV charging equipment in parking stall that are EV-ready. ChargePoint supports this legislation and respectfully asks for your Aye vote.

Thank you for the opportunity to provide this testimony.

Alex Leumer
Director of Public Policy
ChargePoint, Inc.

TESLA'S TESTIMONY IN SUPPORT OF SB 1000 SD2 HD1

being heard by the House Committee on Consumer Protection and Commerce on Thursday, March 28, 2019 at 2:00 p.m.

Conference Room 329

Aloha Chair Takumi, Vice Chair Ichiyama and Members of the Committee:

Thank you for the opportunity to provide testimony in support of SB 1000 SD2 HD1, which would require new residential multi-unit dwellings and commercial buildings to deploy minimum levels of EV-ready infrastructure.[1] By focusing on the deployment of EV-ready infrastructure during initial construction, this measure recognizes the importance of "future proofing" the built environment to accommodate vehicle electrification.

Tesla's mission is to accelerate the world's transition to sustainable energy. The electrification of the transportation sector is a critical part of this to the degree it represents among the most significant sources of greenhouse gas emissions through the combustion of fossil fuels. Nationally, the transportation sector accounts for almost 30% of GHG emissions.[2] By supporting efforts to transition to EVs, Hawaii can leverage its 100% renewable energy goals to greatly advance efforts to address climate change, reduce pollution and improve air quality, and enhance the state's economic and energy security.

Access to charging represents one of the more fundamental challenges impairing demand for electric vehicles. Without easy and convenient access to EV charging, drivers will be less inclined to choose an EV over a conventional vehicle. EV charging currently suffers from the "last mile" problem, or more realistically, the "last fifty feet" problem. Specifically, while the electrical grid is fairly ubiquitous, in order to support EV charging it needs to be expanded to bring the power to where EVs are actually parked. This typically requires incremental investments in infrastructure on the customer side of the meter including electrical panel capacity, conduit and wiring, in addition to, in the case of Level 2 charging, the charging station itself. Studies indicate that it is far more cost-effective to deploy Level 2 EV charging infrastructure at initial construction. For example, a study by PG&E found that the per space cost of deploying EV infrastructure from the outset is roughly one-third of the cost of retrofitting this infrastructure after-the-fact.[3]

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[1] EV-Ready refers to a parking space that includes the following components: listed raceway (conduit), sufficient electrical panel service capacity, overcurrent protection devices, wire, and suitable termination points such as a junction box with a service loop or directly landed within an EVSE (i.e. full circuit).

[2] US Environmental Protection Agency; see https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions

[3] See "Plug-in Electric Vehicle Infrastructure Cost Effectiveness Report"; Energy Solutions and Pacific Gas and Electric, November 2016; p. 1 Available for download at http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf

The proposed approach in the measure, which would make issuance of a building permit contingent on deploying EV-ready infrastructure for future installation of charging stations in proposed multi-family residential buildings and commercial buildings, is a sound means of ensuring that the requirement has meaningful teeth and is not easily ignored or circumvented. Additionally, Tesla finds the level of the requirement reasonable. While certainly ambitious, it is by no means excessive relative to similar policies that have been adopted in other jurisdictions, including cities like Atlanta, San Francisco, and Vancouver.[4] Tesla also strongly supports the threshold, as measured by the number of parking stalls, used to determine whether the 20% EV ready requirement applies to a given building. This will ensure that the policy applies to a meaningful share of newly constructed buildings.[5]

Although Tesla strongly supports this measure as drafted, we do offer a number of friendly amendments:

First, in the interest of further extending the reach of the proposed policy, Tesla recommends that new multifamily buildings with less than 10 stalls and new commercial buildings with less than 20 stalls but more than 2 stalls, should have at least 1 stall that is EV charger ready. For these smaller buildings, an exemption from the requirement could be made in instances where the permit applicant can show that it imposes substantial financial hardship.

Second, to avoid confusion regarding what the bill requires of buildings/parking facilities that are subject to the EV-ready requirement, Tesla recommends adding language that clearly indicates that nothing in this measure requires the building/parking facility owner to reserve any parking stalls that are EV-ready, but do not have actual charging stations installed, for the exclusive use of EV drivers . The intent of this measure is not to reserve parking for EVs, rather it is to ensure that buildings are pre-wired to support EVs should a building owner or operator ultimately choose to deploy charging stations, recognizing that retrofitting a building with the necessary electrical capacity and conduit after it has been built is significantly more costly than including it as part of initial construction.

Tesla appreciates the opportunity to submit this testimony in support of SB 1000 SD2 HD1 and encourages the committee to pass this important measure.

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[4] In 2017 both San Francisco and Atlanta passed 20 percent EV-ready requirements. In 2018, Vancouver increased its existing EV-ready requirement from 20% to 100% for new multi-family buildings. For Atlanta see https://www.atlantaga.gov/Home/Components/News/News/10258/1338?backlist=/; For San Francisco see https://sfmayor.org/article/mayor-lee-signs-new-ordinance-make-san-francisco-electric-vehicle-ready; for Vancouver see https://pluginbc.ca/city-vancouver-goes-100-ev-new-builds/.

[5] Based on 2016 Census Data, the California Air Resources Board found that nationally, 70% of new multi-unit family buildings have fewer than 20 units. See "Electric Vehicle Charging Infrastructure: Multifamily Building Standards" California Air Resources Board, April 13, 2018; p. 14. Available for download at https://arb.ca.gov/cc/greenbuildings/pdf/tcac2018.pdf

SB-1000-HD-1
Submitted on: 3/24/2019 8:36:07 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Graham	Individual	Support	No

Comments:

I strongly support SB1000 SD2 HD1. EVs play a key role in our transition to 100% clean energy and we should be doing everything we can to create incentives for this transition. Further, as the number of Zero Emission Vehicles (ZEVs) inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them. We can save millions of dollars if we plan for them during new construction, rather than retrofitting a building later. The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii. This bill is about smart planning that will help reduce Hawaii's greenhouse gas emissions by making parking and charging ZEVs a nonissue.

SB-1000-HD-1
Submitted on: 3/24/2019 10:10:41 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
janice palma-glennie	Individual	Support	No

Comments:

mahalo for supporting this overdue legislation to help hawaii move into the future with self-sufficency and sustainable longevity.

sincerely,

janice palma-glennie

kailua-kona

SB-1000-HD-1
Submitted on: 3/24/2019 10:15:44 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Joy Silver	Individual	Support	No

Comments:

I strongly support SB1000 SD2 HD1. EVs play a key role in our transition to 100% clean energy and we should be doing everything we can to create incentives for this transition. Further, as the number of Zero Emission Vehicles (ZEVs) inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them. We can save millions of dollars if we plan for them during new construction, rather than retrofitting a building later. The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii. This bill is about smart planning that will help reduce Hawaii's greenhouse gas emissions by making parking and charging ZEVs a nonissue.

SB-1000-HD-1
Submitted on: 3/25/2019 1:37:29 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Pappas	Individual	Support	No

Comments:

Dear Representatives,

Let's get the ball rolling for electric vehicles (EVs) in Hawaii. Being an early adopter of an EV (Nissan Leaf 2011), our family has had sixty-five thousand miles of gas-free, emission-free driving on Hawaii's roadways and we are totally sold on electric. However, we cannot expect residents to adopt EVs without a sufficient infratructure available for charging their vehicles quickly and conveniently.

Bill SB2000 lists all the reasons this bill should be passed: less carbon pollution with EVs (climate change mitigation); greater fuel savings for EV drivers; lower building costs when implemented upfront rather than retrofitted; most people want to charge at home or at work, including condo dwellers. One point not mentioned in the bill, but a big selling point: maintenance costs for EVs are much less than for gas-driven vehicles (no oil, no transmission fluid).

Please pass SB2000 this session to provide the incentive for thousands more EVs in Hawaii. Hawaii can lead the nation in EV adoption!

Thank you!

Jan Pappas

Aiea, Hawaii 96701

SB-1000-HD-1
Submitted on: 3/25/2019 9:51:15 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
donald erway	Individual	Support	No

Comments:

I strongly support SB1000 SD2 HD1. EVs play a key role in our transition to 100% clean energy and we should be doing everything we can to create incentives for this transition. Further, as the number of Zero Emission Vehicles (ZEVs) inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them. We can save millions of dollars if we plan for them during new construction, rather than retrofitting a building later. The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii. This bill is about smart planning that will help reduce Hawaii's greenhouse gas emissions by making parking and charging ZEVs a nonissue.

SB-1000-HD-1
Submitted on: 3/25/2019 10:09:12 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jonathan Boyne	Individual	Support	No

Comments:

I strongly support SB1000 SD2 HD1.

EVs play a key role in our transition to 100% clean energy and we should be doing everything we can to create incentives for this transition.

Further, as the number of Zero Emission Vehicles (ZEVs) inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them.

We can save millions of dollars if we plan for them during new construction, rather than retrofitting a building later.

The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii.

This bill is about smart planning that will help reduce Hawaii's greenhouse gas emissions by making parking and charging ZEVs a nonissue.

SB-1000-HD-1
Submitted on: 3/25/2019 11:17:41 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Laura Gray	Individual	Support	No

Comments:

I have been driving a Leaf for 4 years and the charging stations are always broken or there is someone parked in it all day. We need way more stations and parking spaces and also more incentives to get people to stop spending their whole paycheck on putting gas into a polluting gas-hog. We need to make it cool to drive an EV. Even when I was a kid here in the 50's, people put their shinny new hot-rod out front of their falling down house. We need a public service campain to realign our local perception of what it looks like to be successful. We should reject a mainland, corporate view, and instead give every incentive we can come up with so people will see the logic of never paying for gas again, getting free abundant parking and easy charging. We should also all sign on to the GREEN NEW DEAL! Mahalo, Laura Gray

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

Buildings would not be required to install the actual charging equipment. Instead, they merely need to incorporate, at the construction phase, the wiring and conduit necessary for later installation of an EV charger. Installing that wiring and conduit post-construction is up to 91% more expensive for residents and tenants wishing to install an EV charger.

One of the biggest barriers standing between consumers choosing electric vehicles over fossil fuel vehicles is a lack of adequate charging options in the state. This is especially true for the many Hawaii residents that live in apartments and condos, who don't currently have the luxury of charging an EV at home or at work.

Please pass SB 1000 to expand access to EV charging options. Thank you for considering my testimony.

Aloha,

Dr. Addison Bulosan
C: (808)369-9733
addison@thespecific.com
www.thespecific.com
www.addisonbulosan.com

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

The reason is, I have been driving an EV since 2013. I have seen the number of EVs grow, and yet the electric charging infrastructure of Hawaii has not kept up pace. This bill would help make it easier for residents and tenants wishing to install an EV charger.

Hawaii has a goal to shift to clean energy vehicles, and yet my friends tell me that while they are interested in EVs, they are afraid that there are not enough charging options because they liven an apartment or condo, and they do not have EV charging at work.

Please pass SB 1000 to expand access to EV charging options. Thank you for considering my testimony.

Jayson Chun
Aiea, HI 96701

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

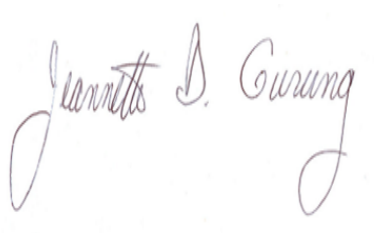
I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

Buildings would not be required to install the actual charging equipment. Instead, they merely need to incorporate, at the construction phase, the wiring and conduit necessary for later installation of an EV charger. Installing that wiring and conduit post-construction is up to 91% more expensive for residents and tenants wishing to install an EV charger.

One of the biggest barriers standing between consumers choosing electric vehicles over fossil fuel vehicles is a lack of adequate charging options in the state. This is especially true for the many Hawaii residents that live in apartments and condos, who don't currently have the luxury of charging an EV at home or at work.

Please pass SB 1000 to expand access to EV charging options. Thank you for considering my testimony.

Regards,



Jeannette Gurung
77-6412 Kepano Place
Kailua Kona, HI 96740

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

Buildings would not be required to install the actual charging equipment. Instead, they merely need to incorporate, at the construction phase, the wiring and conduit necessary for later installation of an EV charger. Installing that wiring and conduit post-construction is up to 91% more expensive for residents and tenants wishing to install an EV charger.

One of the biggest barriers standing between consumers choosing electric vehicles over fossil fuel vehicles is a lack of adequate charging options in the state. This is especially true for the many Hawaii residents that live in apartments and condos, who don't currently have the luxury of charging an EV at home or at work.

Please pass SB 1000 to expand access to EV charging options. Thank you for considering my testimony.

Mahalo,
JUNO ANN APALLA, EMBA-HCM
Lihue, HI 96766
junoapalla@gmail.com
+1.808.634.5840

"Find a purpose in life so great that it'll challenge your very best." - Unknown

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

Buildings would not be required to install the actual charging equipment. Instead, they merely need to incorporate, at the construction phase, the wiring and conduit necessary for later installation of an EV charger. Installing that wiring and conduit post-construction is up to 91% more expensive for residents and tenants wishing to install an EV charger.

One of the biggest barriers standing between consumers choosing electric vehicles over fossil fuel vehicles is a lack of adequate charging options in the state. This is especially true for the many Hawaii residents that live in apartments and condos, who don't currently have the luxury of charging an EV at home or at work.

Please pass SB 1000 to expand access to EV charging options. Thank you for considering my testimony.

Justin Carvalho Lihue, HI, 96766

Sent from my iPhone

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

Buildings would not be required to install the actual charging equipment. Instead, they merely need to incorporate, at the construction phase, the wiring and conduit necessary for later installation of an EV charger. Installing that wiring and conduit post-construction is up to 91% more expensive for residents and tenants wishing to install an EV charger.

One of the biggest barriers standing between consumers choosing electric vehicles over fossil fuel vehicles is a lack of adequate charging options in the state. This is especially true for the many Hawaii residents that live in apartments and condos, who don't currently have the luxury of charging an EV at home or at work.

Please pass SB 1000 to expand access to EV charging options. Thank you for considering my testimony.

Marian Kang
(808) 729-0989 mobile
mariankang@gmail.com

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

Buildings would not be required to install the actual charging equipment. Instead, they merely need to incorporate, at the construction phase, the wiring and conduit necessary for later installation of an EV charger. Installing that wiring and conduit post-construction is up to 91% more expensive for residents and tenants wishing to install an EV charger.

One of the biggest barriers standing between consumers choosing electric vehicles over fossil fuel vehicles is a lack of adequate charging options in the state. This is especially true for the many Hawaii residents that live in apartments and condos, who don't currently have the luxury of charging an EV at home or at work.

Please pass SB 1000 to expand access to EV charging options. Thank you for considering my testimony.

Thank you,

Matt L

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

Buildings would not be required to install the actual charging equipment. Instead, they merely need to incorporate, at the construction phase, the wiring and conduit necessary for later installation of an EV charger. Installing that wiring and conduit post-construction is up to 91% more expensive for residents and tenants wishing to install an EV charger.

One of the biggest barriers standing between consumers choosing electric vehicles over fossil fuel vehicles is a lack of adequate charging options in the state. This is especially true for the many Hawaii residents that live in apartments and condos, who don't currently have the luxury of charging an EV at home or at work.

Please pass SB 1000 to expand access to EV charging options. Thank you!

Wendy Raebeck
Kapa'a, HI 96746

SB-1000-HD-1
Submitted on: 3/25/2019 3:41:05 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Ian Tierney	Individual	Support	No

Comments:

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

This bill is practical in that it places the horse in front of the cart so to speak in that the building parking area will come prewired for EV charger installation.

Designers and builders respond well to building codes, so it makes sense to use a mandate.

I am on the board of the US Green Building Council Hawaii Chapter, and have spoken with owners and designers who regularly work with building codes enforcing sustainable design measures. They agree that codes are a good way to change design for the better. In addition, many new LEED certified buildings in the state have electric vehicle charging stations or are pre-wired for charger installation. Examples that come to mind include Anaha, a Howard Huges development, and UH West Oahu Admin & Allied Health Facility. Both buildings were designed and built prewired to be EV ready and then had a contractor come in after substantial completion of building to install a charging station.

Thank you,

Ian Tierney

Honolulu, HI 96816

SB-1000-HD-1
Submitted on: 3/25/2019 4:23:54 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Rene Umberger	Individual	Support	No

Comments:

SB-1000-HD-1
Submitted on: 3/25/2019 4:27:41 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Denise Boisvert	Individual	Support	No

Comments:

I strongly support this bill.

It is never too late to think about the future.

Thank you for your consideration of SB1000 SD2 HD1.

SB-1000-HD-1
Submitted on: 3/25/2019 4:38:07 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Kim Jorgensen	Individual	Support	No

Comments:

I strongly support this bill as an excellent incentive to purchase electric vehicles.

SB-1000-HD-1
Submitted on: 3/25/2019 11:06:54 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Bernard M Moret	Individual	Support	No

Comments:

Dear legislators,

My wife, Carol Fryer, and I, both registered voters in the County of Hawaii, would like to register our strong support for Senate Bill 1000. This bill will encourage adoption of clean vehicles by providing apartment and condominium dwellers the means to recharge these vehicles at home. Together with SB 653 (for state and county buildings) and SB 438 (another important step for clean transportation), this bill will go a long way toward reducing atmospheric and noise pollution from gasoline vehicles in the state, as well as reducing our dependency on imported fuels.

Respectfully submitted,

Bernard Moret

SB-1000-HD-1
Submitted on: 3/25/2019 9:49:15 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Caroline Kunitake	Individual	Support	No

Comments:

This bill will require most new buildings to have at least 20% of parking stalls be EV charger-ready, (for residential and commercial buildings). **Sample testimony below.**

Aloha,

Please support SB1000, SD2 HD1.

I strongly support SB1000 SD2 HD1. EVs play a key role in our transition to 100% clean energy and we should be doing everything we can to create incentives for this transition. Further, as the number of Zero Emission Vehicles (ZEVs) inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them. We can save millions of dollars if we plan for them during new construction, rather than retrofitting a building later. The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii. This bill is about smart planning that will help reduce Hawaii's greenhouse gas emissions by making parking and charging ZEVs a nonissue.

Mahalo,

Caroline Kunitake

SB-1000-HD-1
Submitted on: 3/26/2019 7:42:07 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Sonja Kass	Individual	Support	No

Comments:

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 so at least 20% of parking stalls in newly constructed buildings in Hawaii are ready for EV charging.

The Hawaii Clean Energy Initiative's target was to have 10,000 EVs on the road by 2015 and 40,000 by 2020, but actual rates of EV adoption have fallen substantially short of stated goals - a lack of charging infrastructure is a big part of this.

Please pass SB 1000.

Mahalo for considering my testimony.

Sonja Kass

SB-1000-HD-1
Submitted on: 3/26/2019 8:39:46 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrew Richard Kass	Individual	Support	No

Comments:

Aloha Senators,

When I envision a future for Hawaii, I see clean electric cars and trucks zipping around our islands, so that people can work and play as they do now, without contributing to global warming and sea level rise. Electric vehicles are powerful, quiet, and do not require any gasoline or oil imports, nor have any risk of pollution from the oil extraction, refining, and distribution industries.

But not everyone can afford new Tesla cars, therefore used electric cars with low range will become the affordable EVs of tomorrow. Having 50-60 miles of range is still adequate on our small islands, provided people can plug in at home and at work. In fact, workplace charging is a key to decarbonizing our transportation because daytime charging can use the solar energy excess from the electric utilities.

This bill lays the groundwork (quite literally) so that the necessary charging infrastructure can be anticipated as cheaply as possible, and I urge you to support it as well.

Thank you for your consideration,

Andy Kass, Wailua, Kaua'i

SB-1000-HD-1
Submitted on: 3/26/2019 8:57:11 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Lorn	Individual	Support	No

Comments:

This is in alignment with our state's vision on renewable energy. I urge your yes!

SB-1000-HD-1
Submitted on: 3/26/2019 9:58:12 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
christine trecker	Individual	Support	No

Comments:

If Hawaii is to make the critical transition to environmentally friendly EVs, we must start building the infrastructure necessary to make it happen. I urge you to support SB1000 SD2 HD1 which requires at least 20% of parking stalls in new residential and commercial buildings be EV charger-ready.

Thank you.

SB-1000-HD-1
Submitted on: 3/26/2019 10:09:35 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Randy Ching	Individual	Support	No

Comments:

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

Buildings would not be required to install the actual charging equipment. Instead, they merely need to incorporate, at the construction phase, the wiring and conduit necessary for later installation of an EV charger. Installing that wiring and conduit post-construction is up to 91% more expensive for residents and tenants wishing to install an EV charger.

One of the biggest barriers standing between consumers choosing electric vehicles over fossil fuel vehicles is a lack of adequate charging options in the state. This is especially true for the many Hawaii residents that live in apartments and condos, who don't currently have the luxury of charging an EV at home or at work.

Please pass SB 1000 to expand access to EV charging options. Thank you for considering my testimony.

Randy Ching (Honolulu)

SB-1000-HD-1
Submitted on: 3/26/2019 12:18:41 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Dyson Chee	Individual	Support	No

Comments:

SB-1000-HD-1
Submitted on: 3/26/2019 12:29:58 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Peter Forman	Individual	Support	No

Comments:

Dear House Committee on Consumer Protection and Commerce,
I support SB1000 SD2 HD1 as it solves the what comes first, the chicken or the egg quandry. Hawaii wishes to encourage clean renewable energy and transportation, but many Hawaii residents are holding off on adapting EVs until suitable charging solutions are available at their condominiums and/or workplaces. SB1000 presents a solution that is extremely efficient because installing the chargers at time of construction is so much less expensive than retrofitting.

For anyone who questions whether the chargers will see suitable use in the future, let me remind you that Europe's big auto makers plus General Motors have recently committed to a future based on electric vehicles. Many European countries have already established drop dead dates for the sale of internal combustion vehicles. The writing is on the wall and surface transportation is indeed moving to electric battery power in a big way. The only real question is how soon the 20% of stalls requirement will become too small a percentage of charging installations.
Respectfully submitted,
Peter Forman
EV owner
Kailua, Hawaii

SB-1000-HD-1
Submitted on: 3/26/2019 6:15:13 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Richard Michaels	Individual	Support	No

Comments:

It took two years for my condo association to approve an electric charging station. For new buildings, this is a no-brainer.

SB-1000-HD-1
Submitted on: 3/27/2019 10:33:53 AM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanette Vinton	Individual	Support	No

Comments:

Honorable Chair Takumi and Vice Chair Ichiyama and Commitee Members,

I am writing in support of SB1000 SD2 HD1 which would require all new residential multi-family buildings that have ten or more parking stalls and new commercial buildings that have twenty or more parking stalls have at least twenty per cent of available parking stalls be electric vehicle charger ready.

I have been an EV owner since 2013 and am happy to see the significant growth in the number of EVs over the past few years. However, it seems that the number of EV chargers/parking available has not grown at the same pace.

I have friends who don't have EV chargers in their buildings and must use public chargers instead. As more and more EV models come out over the next few years, we need to be better prepared to accomondate EV charging at home, work and public places. This bill would help prepare Hawaii for future EV growth and the State's Clean Energy goals.

Sincerely,

Nanette Vinton

SB-1000-HD-1
Submitted on: 3/27/2019 1:42:07 PM
Testimony for CPC on 3/28/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Amit Kamra	Individual	Support	No

Comments:

The convenience of having the option to charge my electric car at home allows me to adopt eco friendly vehicles thereby saving on pollution.

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the Committee,

I support SB 1000 to ensure that at least 20% of parking stalls in newly constructed commercial and multi-family residential buildings in Hawaii are ready for electric vehicle (EV) charging.

Buildings would not be required to install the actual charging equipment. Instead, they merely need to incorporate, at the construction phase, the wiring and conduit necessary for later installation of an EV charger. Installing that wiring and conduit post-construction is up to 91% more expensive for residents and tenants wishing to install an EV charger.

One of the biggest barriers standing between consumers choosing electric vehicles over fossil fuel vehicles is a lack of adequate charging options in the state. This is especially true for the many Hawaii residents that live in apartments and condos, who don't currently have the luxury of charging an EV at home or at work.

Please pass SB 1000 to expand access to EV charging options. Thank you for considering my testimony.

Aloha,
Adriann

Adriann Gin
Administrative Assistant
Direct: 808.544.8961 | Fax: 808.432.9695
999 Bishop Street, Suite 1202 | Honolulu, HI 96813

LATE

TESTIMONY TO THE HOUSE COMMITTEE ON CONSUMER PROTECT AND COMMERCE
State Capitol, Conference Room 329
415 South Beretania Street
2:00 PM

March 28, 2019

RE: SENATE BILL NO. 1000 SD 2, RELATING TO ELECTRIC VEHICLES

Chair Takumi, Vice Chair Ichiyama, and members of the committee:

My name is Gladys Quinto Marrone, CEO of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii. Our members build the communities we all call home.

BIA-Hawaii is in **opposition** to S.B. 1000 SD 2, which prohibits, on or after January 1, 2020, the issuance of building permits for all new residential multi-family buildings that have ten or more parking stalls and new commercial buildings that have twenty or more parking stalls unless at least twenty per cent of the parking stalls are electric vehicle charger-ready.

While providing twenty (20%) percent of parking stalls as "electric vehicle charger ready" may be possible in a parking structure, the requirement in a paved parking lot in a multi-family development would create problems as parking stalls are usually assigned based on proximity to the individual units. It is impossible to predict which prospective buyers would own or purchase an electiric vehicle and thus would have parking stalls "electric vehicle charger ready" adjacent to the purchased unit.

We are in opposition to S.B. 1000 SD 2 as presently drafted, and appreciate the opportunity provide comments on this matter.

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BOMA HAWAII
Building Owners and Managers Association

"Advancing the Commercial Property Management Industry through Education, Networking and Advocacy"

Testimony to the
House Committee on Consumer Protection & Commerce

March 28, 2019
2:00 p.m.
State Capitol - Conference Room 329

LATE

RE: SB 1000 SD2 HD1 Relating to Electric Vehicles

Aloha Chair Takumi, Vice Chair Ichiyama and members of the committees:

We are testifying on behalf of the Building Owners and Managers Association of Hawaii. BOMA Hawaii supports energy efficient alternatives in transportation but opposes inflexibility in regulations. This bill does not adequately address the lead time necessary for development, planning, financing and construction of new buildings. We respectfully request an implementation date of at January 1, 2021.

As electric vehicle usage increases, there has been a corresponding need for electric vehicle charging stations. This emerging need is creating a marketplace demand. Many building owners have installed EV charging stations and have successfully used them as profit centers as well as an amenity to attract new business and tenants. Others are reluctant to take on the cost (installation cost, lost revenue from lost parking spaces, etc.), ongoing maintenance and management responsibilities, and liability. Where building owners are able to balance the benefits and potential draw backs, and where it makes economic sense, property owners will move forward to meet the need, without federal, state or local mandates.

The Building Owners and Managers Association Hawaii is a primary source of information on office building development, leasing, building operating costs, energy consumption patterns, local and national building codes, legislation, occupancy statistics and technological developments.

If this bill advances, we request to be included as part of the dialogue concerning its impacts on the community and economy.

Thank you for the opportunity to testify.

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OFFICE OF CLIMATE CHANGE, SUSTAINABILITY AND RESILIENCY
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KIRK CALDWELL
MAYOR

JOSHUA W. STANBRO
EXECUTIVE DIRECTOR &
CHIEF RESILIENCE OFFICER

THURSDAY MARCH 28, 2019 2:00PM

STATE OF HAWAIʻI
COMMITTEE ON CONSUMER PROTECTION & COMMERCE

TESTIMONY ON SENATE BILL 1000 SD2 HD1
A BILL RELATING TO ELECTRIC VEHICLES

BY,

JOSHUA STANBRO
EXECUTIVE DIRECTOR AND CHIEF RESILIENCE OFFICER
OFFICE OF CLIMATE CHANGE, SUSTAINABILITY AND RESILIENCY

Dear Chair Takumi, Vice Chair Ichiyama, and Members of the Committee:

The City and County of Honolulu Office of Climate Change, Sustainability and Resiliency (Resilience Office) **supports** Senate Bill 1000 SD2 HD1, which requires that new multi-family residential buildings and new commercial buildings include an allocation of parking stalls for electric vehicle charging stations.

The City is in the process of planning for and implementing ambitious energy, transportation, and climate resilience initiatives to reduce greenhouse gas emissions and improve long-term affordability for residents. Both public and private investment in EV infrastructure will be required to support the State's mandate of carbon neutrality by 2045. As EV ownership is expected to grow exponentially with the introduction of new models with longer ranges and lower prices, it is imperative that EV charging stations are available to the public to support this transition in an efficient, accessible, and equitable manner.

Thank you for the opportunity to testify.