A BILL FOR AN ACT

RELATING TO AN ELECTRIC VEHICLE-READY HAWAII.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

- 1 SECTION 1. The legislature finds that Hawaii currently has
- 2 over one million gasoline-powered vehicles on its roads. These
- 3 vehicles emit nearly five million metric tons of climate-
- 4 changing carbon pollution annually. Hawaii residents,
- 5 businesses, and visitors spent over \$1,500,000,000 on gasoline
- 6 in 2018.
- 7 The legislature further finds that electric vehicles play
- 8 an integral role in Hawaii's clean energy future. Electric
- 9 vehicles are much less expensive to power per mile than their
- 10 gasoline counterparts. By using stored electrical energy,
- 11 electric vehicles can take advantage of intermittent solar,
- 12 wind, and other clean energy resources. With the continued
- 13 growth of an intelligent electricity grid, electric vehicles
- 14 will become an essential component to electricity load and clean
- 15 energy resource balancing. They also provide clean mobility
- 16 solutions for Hawaii residents and visitors.

1 About one per cent of all registered vehicles in Hawaii are 2 electric. This number is expected to rise exponentially as more 3 electric vehicle models come to market, vehicle ranges increase, 4 and the cost of electric vehicles decreases. Sales of electric 5 vehicles in Hawaii increased about twenty-five per cent in 2018 over 2017, while sales of gasoline-powered vehicles only 6 7 increased about one per cent. 8 While there is growing interest in electric vehicles among 9 Hawaii residents, the lack of adequate vehicle charging 10 infrastructure presents a key barrier to adoption. 11 International Energy Agency has found that "the availability of **12** chargers emerged as one of the key factors for contributing to the market penetration of electric vehicles." Data on charging 13 14 behavior for electric vehicle owners indicates that more than 15 eighty per cent of electric vehicle drivers charge their cars at 16 home or at work. In addition, a large share of the Hawaii 17 population lives in high density, multi-family dwellings. 18 vast majority of parking facilities do not accommodate electric 19 vehicle chargers. 20 The legislature further finds that the State must prepare

for the increased use of electric vehicles. Parking stalls need

21

- 1 to have sufficient wire, conduit, electrical panel service
- 2 capacity, overcurrent protection devices, and suitable
- 3 termination points to connect to a charger. Such requirements,
- 4 at varying percentages of parking stalls, are already in place
- 5 in San Francisco, Oakland, New York City, Boston, Vancouver,
- 6 Washington State, and numerous other locations.
- 7 Setting minimum requirements for charging infrastructure
- 8 will result in significant long-term savings for residents.
- 9 When electric vehicle readiness is considered in the design of a
- 10 building or parking area, decisions about the lowest cost layout
- 11 can be made, allowing building owners and operators to reduce
- 12 the financial burden of modifying or upgrading electrical
- 13 systems later and to avoid the construction costs and mess of
- 14 trenching or boring to lay conduit for charger installation.
- When facilities are not built to be electric vehicle ready,
- 16 individual owners need to engage in expensive and time-consuming
- 17 retrofitting, adding electrical capacity and running conduit to
- 18 install charging infrastructure. This can take several weeks,
- 19 cost tens of thousands of dollars, and greatly reduce interest
- 20 in driving electric.

1 Furthermore, requiring that a minimum percentage of parking 2 stalls for new multi-family dwelling and commercial parking 3 areas be electric vehicle ready will unlock the savings benefits 4 of electric vehicles for more residents while helping Hawaii 5 achieve its important clean energy and climate goals. 6 The purpose of this Act is to require that at least twenty-7 five per cent of parking stalls for new multi-family dwelling 8 and commercial parking areas be electric vehicle ready. 9 SECTION 2. Chapter 196, Hawaii Revised Statutes, is 10 amended by adding a new section to part I to be appropriately 11 designated and to read as follows: 12 "§196-Electric vehicle charging. Effective January 1, 13 2020, no building permit shall be issued for a new multi-family residential building that has twenty or more parking stalls or a 14 15 new commercial building that has forty or more parking stalls 16 unless at least twenty-five per cent of the building's parking **17** stalls are electric vehicle charger ready, as defined in this 18 chapter."

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H.B. NO. 559

- SECTION 3. Section 196-2, Hawaii Revised Statutes, is 2 amended by adding a new definition to be appropriately inserted 3 and to read as follows: ""Electric vehicle charger ready" means that sufficient
- wire, conduit, electrical panel service capacity, overcurrent 5
- 6 protection devices, and suitable termination points to connect
- 7 to an electric vehicle charger capable of providing a minimum of
- 8 nine kilowatts of electrical capacity is provided."
- 9 SECTION 4. New statutory material is underscored.
- 10 SECTION 5. This Act shall take effect upon its approval.

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JAN 1 8 2019

Report Title:

Electric Vehicle; Charging Infrastructure; Parking Facilities

Description:

Requires that, effective January 1, 2020, 25% of parking stalls for all residential multi-family buildings that have twenty or more parking stalls and commercial buildings that have forty or more parking stalls are electric vehicle charger ready.

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