**EV Developer FAQs in the State of Hawaii**

1. **Why is Hawaii an ideal location for EVs?**Hawaii’s unique combination of energy challenges and opportunities make it an ideal place to showcase the technical and economic viability of EVs. Because of its geographic isolation, Hawaii has the highest gasoline prices in the nation. And as an island state, it is especially vulnerable to the environmental impacts of carbon emissions. On the other hand, its abundance of renewable resources, mild climate, limited driving distances, constant influx of tourists, and political will to change make Hawaii an excellent location for EVs.
2. **Where can I learn about Hawaii’s EV market?**Please reference electricvehicle.hawaii.gov for resources, reports, laws and programs relating to Hawaii’s EV market.
3. **How many EVs are in Hawaii?**For a monthly update of the number of registered EVs in Hawaii please reference the DBEDT Monthly Energy Data spreadsheet at: http://dbedt.hawaii.gov/economic/data\_reports/energy-trends/
4. **What is the incentive to buy an EV if the majority of Hawaii’ fuel for electricity generation is from imported oil?**

Research shows that in Hawaii the amount of fossil fuel required per vehicle to travel one mile in an battery electric vehicle (BEV) is 1/3 less than the amount of fossil fuel required by a similar sized gasoline-fueled vehicle over the same distance. The BEV’s efficiency means that the Hawaii saves money per vehicle mile traveled in an EV. Other EV incentives drivers can benefit from include—cruising through traffic in the high-occupancy vehicle lane, parking free of charge at State and County-owned locations, and enjoying the cost savings that off-peak charging provide, such as utility Time of Use Rates. For cost saving case studies about EV owners in Hawaii, please reference http://www.nrel.gov/docs/fy13osti/53667.pdf The State of Hawaii is taking these measures because we need to find less costly alternatives to importing oil - which is still what Hawaii uses for the majority of our electricity and transportation needs. Since 2008, state policies have been focused on building a diversified energy mix and creating jobs in a new clean energy economy featuring energy efficiency measures, renewable energy, and EVs to reduce our dependency on fossil fuels.

1. **How many publicly available EV charging stations are installed on each island and where are they located?**
For an updated list of publically available charging stations and locations in Hawaii, please reference the EV Stations Hawaii, the smartphone or web-based EV charging station mobile application. The application is designed to help drivers locate publically available EV charging stations statewide. If you would like to add your charger to the list, please complete the form located on <http://energy.hawaii.gov/share-a-new-ev-charging-station>
2. **Where can I get information regarding EV laws?**Please visit the following sites for information regarding Hawaii’s EV policies.
* electricvehicle.hawaii.gov
* http://www.afdc.energy.gov/laws/state\_summary?state=HI&search\_button=Go

You can also follow the legislative process including proposed changes to laws on [www.capitol.hawaii.gov](http://www.capitol.hawaii.gov).

1. **Has the EV free parking law changed?**
Act 168, passed in the 2012 Legislative Session replaced the previous EV free parking law, Act 290 of 1997. Act 168 provides time limits on free parking for EVs. Fees will be charged if: An EV is parked at a State or County lot or street meter for more than two and one-half hours of metered parking, or the maximum amount of time the meter allows, whichever is longer; or, an EV is parked in increments longer than one twenty-four-hour day, including weekly, monthly, or annual parking permits. For further information, please refer to note: <http://www.capitol.hawaii.gov/hrscurrent/Vol05_Ch0261-0319/HRS0291/HRS_0291-0071.htm>
2. **Are all parking lots required to install EV chargers?**Places of public accommodation with at least one hundred parking spaces available for use by the general public, shall have need at least one parking space exclusively for EVs and have the parking stall equipped with an EV charging system. For more information please reference: <http://www.capitol.hawaii.gov/hrscurrent/Vol05_Ch0261-0319/HRS0291/HRS_0291-0071.htm>.
3. **By definition, what constitutes "places of public accommodation"?**For a complete definition please refer to Hawaii Revised Statue section 489-2, or the following link: <http://www.capitol.hawaii.gov/hrscurrent/Vol11_Ch0476-0490/HRS0489/HRS_0489-0002.htm>
4. **Where can I find information regarding the State's prohibition on condo associations preventing home owners from installing electric vehicle home chargers?**Chapter 196-7.5 of the Hawaii Revised Statutes addresses this. Please reference the following link for a full reference of this law: http://www.capitol.hawaii.gov/hrscurrent/Vol05\_Ch0261-0319/HRS0291/HRS\_0291-0071.htm
5. **Does the utility offer any special rates for public EV charging stations?**
Hawaiian Electric, Maui Electric and Hawaii Electric Light Company are offering EV Charging Rates to get EV-Ready and learn how we can better serve customers as Hawaii driving goes electric. Up to 1,000 customers (residential and commercial) on Oahu, 300 in Maui County and 300 on Hawaii Island can participate in this pilot offering. Hawaiian Electric wants EV owners to charge vehicles during off-peak hours (9 p.m. to 7 a.m.) as much as possible, so the EV charging offers time-of-use (TOU) rates.

The Hawaiian Electric Companies is also offering two EV pilot charging rates designed for the operation of direct current (DC) fast charging. A DC fast charging station can bring an “empty” EV battery to an 80 percent charge in about 30 minutes. The Commercial Public Electric Vehicle Charging Facility Service rate (Schedule EV-F) will make it financially attractive for business customers to provide fast charging. Businesses can take advantage of EV time-of-use rate without a “demand charge” typically assessed to commercial customers. A DC fast charging station delivers a quicker charge but at a higher demand. Demand charge represents the electric utility’s cost to maintain the capacity to meet a commercial customer’s highest demand for a fixed period.

The Commercial Public Electric Vehicle Charging Service rate (Schedule EV-U), allows the Hawaiian Electric Companies to operate up to 25 publicly accessible DC fast charging facilities across Oahu, Maui County and Hawaii Island where drivers could quickly recharge their vehicles for a per-session fee. It also allows the Hawaiian Electric utilities to work with the EV industry to manage electric vehicle EV charging more effectively and do research on load control and demand response. For more information go to: goev.heco.com

**13) Is there a directory of Hawaii EV Industry representatives?**
 Yes, the State Energy Office manages the Hawaii EV Industry Directory. The State Energy Office is offering to post contact information for parties offering EV services in Hawaii. If you wish to provide contact information to be publicly available via this website for purposes of offering potential EV/charging equipment services, please go to electricvehicle.hawaii.gov. You can also fill out the following form to be added, <http://forms.hawaiicleanenergyinitiative.org/view.php?id=15>

**15) Does the state offer rebates or tax credits for EVs?**

The State of Hawaii currently does not offer EV tax credits or EV rebates.

**16) Is funding available to purchase EVs through the Hawaii EV Ready Rebate Program?** Funding for the Hawaii EV Ready Rebate Program was provided by federal American Recovery and Reinvestment Act funds that have been fully expended. Additional funding for this program is no longer available and applications are no longer being accepted. The program is now closed.

**17) Is there plans to renew the Hawaii EV Ready Rebate Program?**

At this time, there are no plans to renew the program.

**18) What is the actual number of charge spots installed under the ARRA grants?**
 Under the ARRA Hawaii EV Ready Grant Program, 227 Level 2 EV Charger and six DC Fast Chargers were installed at 98 locations across Hawaii.

 **19) Are there federal incentives or any other incentives for EVs or chargers?**
The federal government currently offers tax credits for EVs. The minimum credit amount for EVs is $2,500, and the credit may be up to $7,500, based on each vehicle's traction battery capacity and the gross vehicle weight rating. This tax credit applies to vehicles acquired after December 31, 2009t Qualified Plug-In Electric Drive Motor Vehicle Tax Credit at: http://www.afdc.energy.gov/fuels/laws/3270/US.

**20) How much does it usually cost to “fill” or charge my EV at a public charging station?**
**How long does it take?**
The cost to charge an EV at a public charging station can vary. The owners of the public EV charging stations determine the charging fee or whether to provide complimentary charges. For a list of public charging stations and fees please reference the EV Stations Hawaii smart phone or web-based mobile application found on electricvehicle.hawaii.gov or available to download on apple and android app stores. Charging times vary based on how depleted the battery is, how much energy it holds, the type of battery, and the type of charging station. The charging time can range from 15 minutes to 20 hours or more, depending on these factors. Using a Level 2 charging station, charging times may range from 3 to 8 hours for a full charge. Charging time for a DC Fast Charging station may range from a few minutes to 30 minutes for a full charge.

**21) How far can a fully charged EV go?**
The majority of commercially available all-battery electric EVs have an average range of 70 to 100 miles on a fully charged battery. The range depends in part on driving conditions and habits. For more information, reference the Department of Energy’s Plug In Electric Vehicle Handbook for Consumers, http://www.afdc.energy.gov/pdfs/51226.pdf

**22) How much does it cost to install a charging station?**
The cost of installing publicly available EV charging equipment varies widely, depending on two main categories, cost of product and cost of installation. Product costs vary depending on brand and features. Installation costs are primarily driven by the desired location and placement of charging station, availability of electrical capacity, distance from the electrical panels to charging station and site specific installation issues such as trenching. While prices vary, a relatively simple project in Hawaii typically costs approximately $10,000-$20,000 per installed charger. For more information on the installation of EV chargers please reference the Hawaii EV Ready Guidebook for Commercial EV Charging Station Installations on electricvehicle.hawaii.gov.

**23) How do I install a charging station?**
For information on the installation of EV chargers please reference the Hawaii EV Ready Guidebook for Commercial EV Charging Station Installations on electricvehicle.hawaii.gov.