August 5, 2025
Key Talking Points for Energy Security and Waste Reduction Plan
Comments due: August 31, 2025

Relying on Fossil Fuels for Transportation is Expensive

- Decarbonizing transportation is the most affordable option compared to a transportation system reliant on fossil fuels.
- The current system that is reliant on fossil fuels imposes significant costs on Hawai‘i residents. For example, a recent analysis found that Hawai‘i residents pay a "staggering $24.7 billion annual burden from ground transportation costs," with 61% ($16.6 billion of the total) borne by the public (costs incurred regardless of vehicle ownership) and the remaining $10.8 billion borne by consumers (costs associated with vehicle ownership).[1]

Relying on Imported Fossil Fuels for Electricity is Expensive

- Hawai‘i's average electricity rate tracks fluctuations in U.S. crude oil pricing. This relationship highlights petroleum's direct impacts on Hawai‘i`s electricity pricing given the state's heavy dependence on imported petroleum for electricity generation.[2]
- The heightened volatility of Hawai‘i's electricity prices is because of the heavy reliance on petroleum.[3]
- In 2024, Hawai‘i imported 24.3 million barrels of oil, which is expensive.
- Substituting a fossil-fuel electricity system with a system powered by clean, renewable energy will reduce Hawai‘i's average end-use power demand by 61.8%, and the average energy costs would also go down about 78.7%, largely because people are using far less energy to do the same activities and the cost per unit energy declines.[4]
- As the electricity sector continues its transition to 100% renewable energy by 2045 (required by HRS § 269-92), electricity will become more efficient and cheaper, making an even stronger case for electrification of all modes of transportation.

Electric Vehicles are Getting More Affordable

- The average price paid for a new EV has fallen significantly. In September 2023, it came down by $14,300 over the prior year.[5]
- Used EVs have come down substantially in price, with low mileage (<12k/year); 2021 Teslas now available for low $20k in Honolulu.[6]

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[1] Ulupono & ICF, *The Cost of the Vehicle Economy in Hawai‘i* (April 11, 2025). https://ulupono.com/media/rddfxc20/the-cost-of-the-vehicle-economy-in-hawaii_2025-7-14-final.pdf
[2] http://large.stanford.edu/courses/2023/ph240/stafford2/
[3] http://large.stanford.edu/courses/2023/ph240/stafford2/
[4] Jacobson, M.Z. et al, *Zero Air Pollution and Zero Carbon from All Energy Without Blackouts at Low Cost in Hawai‘i*, (2022), https://web.stanford.edu/group/efmh/jacobson/Articles/I/21-USStates-PDFs/21-WWS-Hawai‘i.pdf.
[5] https://www.nrdc.org/stories/electric-vs-gas-cars-it-cheaper-drive-ev
[6] https://www.edmunds.com/inventory/srp.html?inventorytype=used%2Ccpo&make=tesla&model=tesla%7Cmodel-3&year=2021-2021&initialUrlPattern=used-year-make-model-city-state&radius=500&mileage=*-48000

- There is a coming wave of 3-year-old EVs (>1 million by 2027) to the used market due to the Inflation Reduction Act allowing leased EVs to be eligible for the IRA $7,500 credit, which resulted in many new EVs being acquired through leases.[7] These low mileage (<36k) EVs will have a 2022 Tesla 3 costing $25-$30k, with cheaper models costing even less, not even taking into account the boost in supply that will drive costs lower.
- EVs typically cost half as much to maintain and repair as gas-powered cars.[8]
- ICE vehicles emit harmful particulates that reduce air quality and increase death. With ~20% of Hawai'i's energy emissions coming from ground transportation,[9] not removing ICE vehicles from the road will have a healthcare cost of $380 million per year[10] or $262 million per Hawai'i resident.
- HDOT has committed to building out the bicycle, pedestrian and transit networks, which will improve safe access to cheaper and cleaner transportation modes.

"Clean" Fuels Should Not Be Prioritized in Hawai`i

- Many "clean" fuels, such as biodiesel, ethanol, and sustainable aviation fuel, are blends with fossil fuels.
- Studies have shown that that use of U.S. biofuels increase emissions relative to fossil fuel use and cause large shifts in crop cultivation patterns (biofuels are made from corn and soy), resulting in displaced crop production and emissions from soil tillage, vegetation loss, and increased fertilizer use.[11]
- Continuing Hawai'i's dependence on importing high-cost fuels and building out new infrastructure for fossil fuels will only increase costs and divert critical resources away from investing in electrification and pedestrian, bicycle, and transit infrastructure.
- Technology to electrify light, medium, and heavy-duty vehicles already exists.

An Equitable Transportation System Requires Electrification of Transportation AND Investments in Multimodal Options

- Electrification of all transportation modes (ground, marine, air) and access to public charging infrastructure is key to cleaner and healthier transportation, but electrification alone is not enough.
- Increased access to convenient and safe transit, bicycle, and pedestrian travel provides cheaper transportation options and decreases tying people to single occupancy vehicles as a sole means of transportation to travel for daily needs.
- Expanding transportation options is an important part of decarbonizing ground transportation and will require improvements such as, safe infrastructure, convenient access to transit, increased access to bikeshare opportunities, and a network that allows for easy transition between walking, bicycling, and transit.

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[7] https://evxl.co/2025/07/02/affordable-used-evs-market-lease-returns/
[8] https://www.nrdc.org/stories/electric-vs-gas-cars-it-cheaper-drive-ev
[9] https://health.hawaii.gov/cab/files/2024/05/2020-and-2021-Inventory_Final-Report_5-29-24.pdf
[10] https://web.stanford.edu/group/efmh/jacobson/Articles/I/21-USStates-PDFs/21-WWS-Hawaii.pdf
[11] Leslie-Bole, H. et al., *Rethinking biofuels in the US Midwest, World Resources Institute* (May. 2025), https://www.wri.org/research/rethinking-biofuels-us-midwest.