



March 23rd 2022

Re: SUPPORT SR 129

To the Honorable Members of the Hawaii Senate,

ZeroAvia is pleased to support SR 129, which proposes several resolutions for the development and deployment of zero emissions interisland transportation. Our company is developing zero-emission, hydrogen-electric engines for aircraft, initially targeting small to medium sized aircraft operating on regional and sub-regional routes, and is in active discussions with partners in Hawaii concerning the planned entry-into-service of our engine technology by 2024.

The State of Hawaii offers one of the best set of possible use cases for the operation of zero-emission flight powered by hydrogen fuel cell technology. The State has an opportunity to be an early adopter and a national and even global frontrunner in this area due to its unique geography, rich mix of renewable energy and the forward thinking policies under consideration.

With 10 commercial airports connecting millions of passengers - many on short range, interisland flights - the opportunity for adopting the very first zero emission flight routes is significant. Hilo to Honolulu is a sub 200 nautical mile journey, putting it well within the range (300 nautical miles and more) of the first zero-emission aircraft that will be entering the market within the next 2-3 years. Rapid, green transportation to better connect residents and tourists across the islands can bring economic benefit and greater State-wide cohesion.

Currently, a key barrier to airlines providing communities with more service is the economics of operating short-haul flights in small aircraft as jet fuel costs for smaller island operators are prohibitive. Low-carbon hydrogen is already cost-competitive with jet fuel today in some of these use cases, and promises substantially lower and more stable costs over time. Hawaii's rich mix of renewable energy from geothermal, wind, solar and hydro amongst other sources, provides 30% of the State's energy and creates the conditions necessary for generating green hydrogen to support aircraft propulsion and other heavy duty transportation. With support, strong business models for more interisland routes are possible.

By supporting the goals of this Senate Resolution to develop and demonstrate zero emission interisland transportation, Hawaii is likely to further improve the economies of scale for green hydrogen production, providing a mechanism for cost-effectively increasing renewable consumption by using hydrogen as an energy storage vector. With this in mind, we also urge the Senate to encourage the Department of Business, Economic Development, and Tourism, Department of Transportation, Department of Land and Natural Resources, and other relevant departments to explore hydrogen production and refuelling as part of the infrastructure required to maximize zero emission transportation, with airports as an important setting for this infrastructure.

Furthermore, if acted upon, the resolutions proposed can create high-value, green engineering jobs in support of the development, demonstration and maintenance of zero emission transportation, as well as bolstering air quality for Hawaiians.

Sincerely,

Val Miftakhov, CEO, ZeroAvia