Written Testimony Submitted to the House Committee on Energy & Environmental Protection

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HCR 155, Requesting the Department of Health's Environmental Health Administration to Form a Hawaii Climate Assessment Task Force to Assess the Effects of Climate Change and Global Warming on the State

Chair Morita, Vice Chair Carroll, and Members of the Committee:

I am Dr. Denise Eby Konan, Interim Chancellor of the University of Hawai'i at Mānoa (UHM).

UH Mānoa would like to inform the committee that on February 7, 2007, it has established the Mānoa Climate Change Commission (MCCC), demonstrating leadership and undertaking action to mitigate climate change and its consequences for Hawai'i. At this juncture, Mānoa's leadership is critical to Hawai'i and the world around us for several reasons.

First, temperature increases and consequential sea level rise will have a particular drastic impact on Hawai'i's ecosystems and standards of living.

Second, understanding the causes and potential impacts of climate change requires advanced scientific understanding of natural and human dimensions of climate across multiple disciplines. Mānoa faculty and staff expertise is internationally renowned in relevant fields of oceanography, environmental sciences, energy, engineering, law, economics, architecture, urban planning, and philosophy. UHM can undertake this multi-disciplinary challenge and succeed.

Third, Hawai'i provides a tractable framework in which to analyze and model social and natural interactions and their impact on the environment. As an island economy and contained ecosystem, the social and natural interactions are identifiable and tractable. Understanding the human dimensions of climate change and ramifications for Hawai'i's natural systems provides a model for other islands in the Pacific and beyond.

Fourth, UHM can advance education, research and public service as a premier institution of higher education. UHM's mission is to create knowledge, build human capital, and demonstrate leadership in educational partnerships. UHM most effectively engages their communities in science and engineering around consequential problems and their tangible solutions. UHM's students are the future leaders of our state and beyond.

Finally, UHM has the capacity and the responsibility to act in concert with its values. UHM must do its part by significantly reducing greenhouse gas emissions that are associated with activities of the University and by integrating sustainability into our curriculum. UHM has been heavily reliant on fossil fuels through our consumption of electricity, travel patterns, and other practices. UHM is also well equipped to explore alternative technologies and choices that promote our lifestyles through more sustainable practices. By tracking and demonstrating UHM's impact on reduction of the generation of greenhouse gases it can serve as a living educational model. Mānoa can do its part to demonstrate how to carry out its institutional functions while working to protect and care for the natural beauty and unique ecosystems of Hawai'i and the world around us.

The UHM Climate Change Commission is charged to serve as a resource to the State of Hawai'i and our international community to advance the public awareness of the consequences of climate change. The Commission will foster multidisciplinary research and advance education and public outreach on the environmental, economic, legal, engineering, and social implications of climate change. UHM has a responsibility to share its expertise and to engage collaboratively on climate issues of consequence to our local and global community. Topics of engagement include the economic, social, and environmental impacts of the consequences of climate change which include sea-level rises, ocean temperature changes, and weather patterns. Clearly the changes facing the State are significant, particularly to our coastal zones, water supply, tourism industry, construction industry and coral reefs. It is the role of the Commission to seek and provide frontier scientific and engineering knowledge relevant to the climate issues facing Hawai'i and the world, and to communicate this knowledge to scholars, students, and the general public. In so doing, the Climate Change Commission will serve as an advocate for the interests of Hawai'i and the world.

MCCC is chaired by Lorenz Magaard, Professor of Oceanography and Director of UHM's International Center for Climate and Society (ICCS).

We appreciate the Legislature's interest and concern on this important matter.