

**MARK B. GLICK**  
**Specialist, Hawaii Natural Energy Institute**  
**School of Earth Sciences and Technology**  
**University of Hawai`i**  
**Office: (808) 956-2339**

**Current Position**

**12/16/16 to Present**

***Faculty & Specialist on Energy Policy & Innovation***

**Hawaii Natural Energy Institute, University of Hawaii at Manoa**

Faculty of the University of Hawaii at Manoa and Specialist on energy policy and innovation at the Hawaii Natural Energy Institute (HNEI). Develops programs and initiatives focused on energy transitions and associated innovation-based economic growth in Hawaii and the Asia Pacific region. Key programs, research and educational initiatives include:

- Initiating and coordinating the multi-year program “Energy Independence in Island States: Deploying Resilient & Affordable Renewable Energy & Microgrid Systems” and follow-on efforts with a consortium of Korean academic and industry leaders to design, install and evaluate a replicable microgrid and renewable energy/energy storage system configuration for the research campus and farm compound at NELHA.
- Supporting energy transition efforts under the Office of Naval Research-funded Asia Pacific Regional Energy Systems Assessment (APRESA) program including development of a renewable portfolio standard for Vietnam. Helped secure funding for the APRESA program.
- Creating and teaching OCN 321/PPC 340/ SUST 323: Applied Principles of Environmental & Energy Policy, that explores how policies affect energy systems by assessing and evaluating intended impacts through qualitative research, data analysis, and life cycle analysis.
- Establishing the Islanded Grid Resource Center 2.0 effort with the Island Institute and Renewable Energy Assistance Project in Alaska to address high energy costs, reliability, and inadequate infrastructure challenges faced by island and remote communities.

**Education**

Master of Science, Public Management and Policy; Carnegie-Mellon University, May 1986

Bachelor of Arts, Mathematics; Lamar University, August 1983

**Past Professional Experience**

**10/14/11 to 12/15/16**

***Administrator, Hawai`i State Energy Office***

**Department of Business, Economic Development, and Tourism (DBEDT)**

Directed Hawaii’s executive branch agency responsible for coordinating energy policy, planning and resources for the State of Hawaii. Selected highlights of five-year tenure leading Hawaii’s internationally renowned clean energy transformation efforts include:

- Contributing to the drafting and passage of the nation’s first 100 percent renewable portfolio standard and interim goal of 30 percent RPS by 2020.
- Overseeing all energy related regulatory filings and testimony before the U.S. Congress and the Hawaii State Legislature on behalf of the Hawaii Department of Business, Economic Development and Tourism.
- Exceeding Hawaii’s 2015 interim renewable portfolio and energy efficiency portfolio standards by 8 percentage points.
- Leading the nation for five consecutive years in the per capita value of energy savings performance contracts.

**7/23/10 to 10/14/11**

***Energy Project Manager and Senior Advisor***  
**Hawai'i State Energy Office, DBEDT**

Managed \$9.59 million in Recovery Act projects to increase the number of renewable energy and energy efficiency installations in Hawai'i - created the GreenSun Hawaii low-interest loan program featuring major Hawai'i financial institutions and credit unions.

**8/16/05 to 3/15/10**

***Director of Economic Development***  
**Office of Hawaiian Affairs (OHA), Honolulu, Hawai'i**

Developed and managed business development, financial, grant, and training & technical assistance programs towards the betterment of native Hawaiians. Primary accomplishments included the innovative restructuring of the \$28 million Native Hawaiian Revolving Loan Fund program, overseeing the formation of the Hawai'i Procurement Technical Assistance Center, and managing the Consumer Micro Loan and the Consumer Based Economic Development (CBED) Grant programs.

**7/21/03 to 8/16/05**

***Director, Office of Board Services, OHA***

Managed a division of the Office of Hawaiian Affairs ensuring fulfillment of the policies and actions of the Board of Trustees. Established an Action Item Monitoring & Reporting process and Records Management Program. Managed agency facilities in O`ahu, Maui, Moloka`i, Hawai`i and Kaua`I and provided oversight of contracts for capital grants. Responsible for publishing the Native Hawaiian Data Book.

**May 1996 to July 2003**

**President, GANA INC., Austin, TX**

Co-founder and manager of a business systems integration and consulting firm dedicated to establishing alternative fuel transportation, including pioneering efforts in the marine environment. Served the U.S. Department of Energy, the Gas Research Institute, Keyspan Energy Delivery, Pacific Gas & Electric and the New York City Department of Transportation on development and deployment of clean fuel and emissions reduction projects in Boston, San Francisco and New York City.

- Formed a strategic partnership with Keyspan Energy Delivery and the Urban Harbors Institute – University of Massachusetts Boston to develop a comprehensive natural gas ferry initiative in Boston Harbor.
- Assisted in passage of California SB-428 creating the San Francisco Bay Water Transit Authority and the associated partnership with CALSTART, PG&E, and the Gas Research Institute to pursue Clean Marine Opportunities for use on the new water transit system for the San Francisco Bay area.
- Advised the Federal District of Mexico in developing a price of LNG and CNG for retail fuel vehicle sales.

### **Selected Publications**

Jenny Heeter and Bethany Speer (NREL), Mark B. Glick, "International Best Practices for Implementing and Designing Renewable Portfolio Standard (RPS) Policies," April 16, 2019, Journal: Web. @article{osti\_1507986, doi:10.2172/1507986.

<https://www.osti.gov/biblio/1507986>

[Jae-Won Chang](#)<sup>1</sup>, [Gyu-Sub Lee](#)<sup>1,\*</sup>, [Hyeon-Jin Moon](#)<sup>1</sup>, [Mark B. Glick](#)<sup>2</sup> and [Seung-Il Moon](#)<sup>1</sup>

<sup>1</sup>Department of Electrical and Computer Engineering, Seoul National University, 1 Gwanak-ro, Seoul 08826, Korea

<sup>2</sup>Hawaii Natural Energy Institute, University of Hawaii at Manoa, 1680 East-West Road, Honolulu, HI 67822, USA

“Coordinated Frequency and State-of-Charge Control with Multi-Battery Energy Storage Systems and Diesel Generators in an Isolated Microgrid,” *Energies MDPI* (This article belongs to the Special Issue [Power Electronics Applications in Renewable Energy Systems](#)), 2019, 12(9), 1614; <https://doi.org/10.3390/en12091614>

Lori Bird, Bethany Speer, and Jenny Heeter, NREL; Mark Glick, Hawaii Natural Energy Institute. “Preliminary Design of RPS for Vietnam.” USAID Vietnam Low Emission Energy Program (V-LEEP), October 2018

Jenny Heeter and Bethany Speer, NREL; Mark B. Glick, Hawaii Natural Energy Institute. “International Best Practices for RPS Policies.” USAID Vietnam Low Emission Energy Program (V-LEEP), September 2018

Kotub Uddin, Matthieu Dubarry, Mark B. Glick. “Reconciling Ostensibly Contradictory Studies on Lithium-ion Battery Degradation Due to Vehicle-to-Grid Operation.” *Energy Policy*, February 2018

Glick, Mark B. Chapter in the book, *Smart Grid Law & Policy* (Part 2, Chapter 4) published by Seoul National University, October 2017

Glick, Mark B.; “*Supporting Hawaii’s Clean Energy Transformation.*” Chapter II of *Perspectives on the Development of Energy and Mineral Resources – Hawai’i, Mongolia and Germany*; Dick Pratt, Editor Mongolia Press. 2016

Farrell, Alex; Mark B. Glick. *Natural Gas as a Transportation Fuel: Energy and Environmental Benefits in Urban Ferry Service*, presented at the Transportation Research Board 2000 Annual Meeting and published in [Transportation Research Records](#). 2000

## **Testimony**

### ***U.S. Congress***

**7/14/15** - Testified as Hawaii State Energy Administrator before the U.S. Senate Energy and Natural Resources Committee in a hearing on islanded energy systems: energy and infrastructure challenges and opportunities in Alaska, Hawaii and the U.S. Territories about Hawaii’s energy transformation policies, strategies, and programs.

**2/12/14** - Testified as Hawaii State Energy Administrator before the U.S. Senate Energy Subcommittee hearing on “Lessons from State Efficiency and Renewable Programs” about suggested actions the federal government could take to support job creation and innovation at the state and local level based on the Hawaii experience.

### ***Hawai`i Legislature***

**2003 to 2016** – Testified before the Hawai`i Legislature on more than 200 legislative proposals (list available upon request) relating to energy, economic development and the environment as Administrator of the Hawai`i State Energy Office, an officer of the Office of Hawaiian Affairs, and chair of the Sierra Club Hawai`i Chapter.