

Makena Coffman

Professor and Chair
Department of Urban & Regional Planning
University of Hawaii at Manoa
2424 Maile Way, Saunders 107F
Honolulu, HI 96822
makena.coffman@hawaii.edu
(808) 956-2890

Education

- PhD in Economics, University of Hawaii at Manoa, 2007
- MA in Economics, University of Hawaii at Manoa, 2005
- BA, International Relations, Stanford University, 2002

Academic Appointments

- Chair, Department of Urban & Regional Planning, University of Hawaii at Manoa, 2017-present
- Professor, Department of Urban & Regional Planning, University of Hawaii at Manoa, 2017-present
- Associate Professor, Department of Urban & Regional Planning, University of Hawaii at Manoa, 2012-2017
- Assistant Professor, Department of Urban & Regional Planning, University of Hawaii at Manoa, 2007-2012
- Research Fellow, University of Hawaii Economic Research Organization (UHERO), 2007-present
- Co-Director of Energy Policy and Planning Group, UHERO, 2015-present

Peer-Reviewed Publications

*Denotes a student

In preparation:

Coffman, M., Bernstein, P., *Wee, S., *Arik, A. (forthcoming). "Integrating Renewable Energy with Time Varying Pricing." *In preparation to be submitted to Renewable Energy*.

*Wee, S., Coffman, M., LaCroix, S. (forthcoming). "Do Electric Vehicle Incentives Matter? Evidence from 50 U.S. States." *R&R in Research Policy*.

*Wee, S., Coffman, M., LaCroix, S. (forthcoming). "Do Peer Effects Matter in the Adoption of Electric Vehicles: A Case Study of Hawaii." *R&R in Technological Forecasting and Social Change*.

Coffman, M., Bernstein, P., *Wee, S. (2016). "Integrating Electric Vehicles and Residential Solar PV," *Transport Policy*, DOI 10.1016/j.tranpol.2016.08.008.

Coffman, M., Bernstein, P., *Wee, S. (2016). "Electric Vehicles Revisited: A Review of Factors that Affect Adoption," *Transport Reviews*, DOI 10.1080/01441647.2016.1217282.

Coffman, M., Bernstein, P., *Wee, S., and *Schafer, C. (2016). "Economic and GHG Impacts of Natural Gas for Hawaii," *Environmental Economics and Policy Studies*, DOI 10.1007/s10018-016-0157-2.

Coffman, M., *Wee, S., Bonham, C., and *Salim, G. (2015). "A Policy Analysis of Hawaii's Solar Tax Credit Incentive," *Renewable Energy*, 85: 2036-1043.

*Mochizuki, J., Coffman, M., and Yanagida, J. (2015). "Market, Welfare and Land-Use Implications of Lignocellulosic Bioethanol in Hawaii," *Renewable Energy*, 76: 102-114.

Coffman, M., Bernstein, P. (2014). "Linking Hawaii's Islands with Wind Energy," *Annals of Regional Science*, DOI 10.1007/s00168-014-0644-y.

Coffman, M. (2014). "Energy," *The Value of Hawaii 2: Ancestral Roots, Oceanic Visions*, Eds. Yamashiro, Aiko; Goodyear-Kaopua, Noelani. University of Hawaii Press.

Coffman, M., Griffin, J., and Bernstein, P. (2012). "An Assessment of Greenhouse Gas Emissions-Weighted Clean Energy Standards," *Energy Policy*, 45: 122-132.

Coffman, M., Noy, I. (2012). "Hurricane Iniki: Measuring the Long-Term Economic Impact of a Natural Disaster Using Synthetic Control," *Environment and Development Economics*, 17(2): 187-205.

Coffman, M., Noy, I. (2010). "A Hurricane Hits Hawaii: A Tale of Vulnerability to Natural Disasters," *CESifo Forum*, 11(2): 67-72.

Coffman, M., Umemoto, K. (2010). "The Triple-Bottom-Line: Framing of Tradeoffs in Sustainability Planning Practice," *Environment, Development and Sustainability*, 10(5): 597-610.

Coffman, M. (2010). "Oil Price Shocks and Hawaii's Economy: An Analysis of the Oil-Price Macroeconomy Relationship," *Annals of Regional Science*, 44(3): 599-620.

Coffman, M. (2009). "University Leadership in Island Climate Mitigation," *International Journal of Sustainability in Higher Education*, 10(3): 239-249.

Coffman, M., Kim, K. (2009). "The Economic Impacts of Banning Commercial Bottomfish Fishing in the Northwestern Hawaiian Islands," *Ocean and Coastal Management*, 52(3-4): 166-172.

Recent Professional/Technical Reports:

Coffman, M., Bernstein, P., *Wee, S., *Arik, A. (2016). "Electric Vehicle Greenhouse Gas Emissions Assessment for Hawaii," Electric Vehicle Transportation Center, University of Central Florida. Available at: <http://evtc.fsec.ucf.edu/publications/documents/HNEI-10-16.pdf>

- Coffman, M., Bernstein, P., *Wee, S., *Arik, A. (2016). “Estimating the Opportunity for Load-Shifting in Hawaii: An Analysis of Proposed Residential Time-of-Use Rates,” UHERO Working Paper Series. Available at: http://uhero.hawaii.edu/assets/TOURates_8-2.pdf.
- Coffman, M., Bernstein, P., *Wee, S. (2015). “Electric Vehicle Lifecycle Cost Assessment for Hawaii,” Electric Vehicle Transportation Center, University of Central Florida. Available at: <http://evtc.fsec.ucf.edu/publications/documents/HNEI-07-15.pdf>
- Coffman, M., Bernstein, P., *Wee, S. (2015). “Factors affecting EV Adoption: A literature review and EV forecast for Hawaii,” Electric Vehicle Transportation Center, University of Central Florida. Available at: <http://evtc.fsec.ucf.edu/publications/documents/HNEI-04-15.pdf>.
- Coffman, M., Bernstein, P., *Wee, S., and *Schafer, C. (2014). “An Economic and GHG Analysis of LNG in Hawaii,” UHERO Working Paper Series. Available at: http://www.uhero.hawaii.edu/assets/WP_2014-10.pdf
- Coffman, M., Bernstein, P., and *Wee, S. (2014). “Cost Implications of GHG Regulation in Hawaii,” UHERO Working Paper Series. Available at: http://uhero.hawaii.edu/assets/WP_2014-5.pdf
- Coffman, M., Bernstein, P., *Wee, S., and *Frost, A. (2014). “PURPA and the Impact of Existing Avoided Cost Contracts on Hawaii’s Electricity Sector,” UHERO Working Paper Series. Available at: <http://www.uhero.hawaii.edu/assets/PURPA4.pdf>
- *Mochizuki, J., Coffman, M., Yanagida, J. (2013). “Market, Welfare and Land-Use Implications of Lignocellulosic Bioethanol in Hawaii,” UHERO Working Paper Series. Available at: http://uhero.hawaii.edu/assets/WP_2013-10.pdf.
- Coffman, M., *Wee, S., Bonham, C., and *Salim, G. (2013). “A Policy Analysis of Hawaii’s Solar Tax Credit Incentive,” UHERO Working Paper Series. Available at: http://uhero.hawaii.edu/assets/WP_2013-11.pdf.
- Coffman, M. (2012). “An Assessment of Greenhouse Gas Emissions-Weighted Clean Energy Standards: An Application of the Hawaii Electricity Model,” UHERO Policy Brief. Available at: http://www.uhero.hawaii.edu/assets/20120413_CESRPSBrief_Coffman.pdf.
- Coffman, M. (2012). “Statewide Economy and Electricity-Sector Models for Assessment of Hawaii Energy Policies,” UHERO Policy Brief. Available at: http://www.uhero.hawaii.edu/assets/20120713_ModelReportPolicyBrief_Sherilyn.pdf.
- Flachsbart, P., Coffman, M., and Miyashiro, S. (2010). “Final Report: Strategies for Energy Efficiencies in Transportation,” a Report to the U.S. Department of Transportation, Federal Highway Administration, State of Hawaii Department of Transportation, Highways Division, and O’ahu Metropolitan Planning Organization. Available at: <http://www.hawaiienergypolicy.hawaii.edu/PDF/Reports/2010/SEET2010StateFinal.pdf>

Coffman, M. (2010). “Hawaii’s Clean Energy Challenge,” *Our World 2.0*, an online publication of the United Nations University. Available at: <http://ourworld.unu.edu/en/Hawaiis-clean-energy-challenge/>.

Coffman, M., *Mann, A., and *Dietrich, J. (2010). “A Strategy for Environmental Grantmaking in Hawaii: a review of issues and opportunities.” A Report to the Hau‘oli Mau Loa Foundation. Summary report available at: <http://www.hauolimauloa.org/index.php/newsprojectsreports>.

Coffman, M. (2009). “Hawaii Bioenergy Master Plan: Economic Impacts,” written as part of the State of Hawaii Bioenergy Master Plan, Hawaii Natural Energy Institute, commissioned by the Department of Business, Economic Development and Tourism. Accessed October 18, 2010, available at: http://www.hnei.hawaii.edu/bmpp/documents/stakeholders/masterplan/20091215/Vol_II_HBMP_2.8_Economic_Impacts.pdf

Coffman, M. (2009). “Climate Change Mitigation and the Environmental Review System: an appropriate mechanism for greenhouse gas emissions reporting?” A White Paper for the Hawaii EIS Study. Available within: http://gen.doh.hawaii.gov/Shared%20Documents/Misc_Documents/Final-Report-on-Hawaii-Environmental-Review-System-2010.pdf

Coffman, M. (2008). “Concepts in Greenhouse Gas Regulation: A Primer on Meeting ACT 234,” A Publication of the *University of Hawaii Economic Research Organization* (UHERO). Available at: http://www.uhero.hawaii.edu/assets/ClimateChangePrimer_Oct6.pdf.

Coffman, M. (2008). “An Overview of U.S. Regional and National Climate Change Mitigation Strategies: Lessons for Hawaii,” A Publication of the *University of Hawaii Economic Research Organization* (UHERO). Available at: http://www.uhero.hawaii.edu/assets/Climate_Change_Overview_Oct20.pdf.

Coffman, M., Surles, T., and Konan, D. (2007). “Analysis of the Impact of Petroleum Prices on the State of Hawaii’s Economy,” prepared for the State of Hawaii Department of Business, Economic Development and Tourism. Accessed October 18, 2010, available at: https://www.eere-pmc.energy.gov/states/hawaii_Docs/Petroleum_Price_Impact_Assessment.pdf

Grants and Awards

Principal Investigator, “Distributed Energy Resources,” funded by the Division of Consumer Advocacy, State of Hawaii, \$30k (2017).

Principal Investigator, “Kauai Climate Action Plan – Baseline Assessment,” funded by the County of Kauai, \$24k (2016-2017).

Principal Investigator, “Economic Study of Hawaii’s Renewable Portfolio Standard,” funded by the Hawaii Natural Energy Institute, \$186k (2015-2017).

Co-Principal Investigator, “Electric Vehicle Transportation Study,” funded by the U.S. Department of Transportation in collaboration with the University of Central Florida Electric Vehicle Transportation Center, \$1.1 million (2014-2018).

Investigator, “BRDI, Conversion of High-Yield Tropical Biomass into Sustainable Biofuels: Task C Economic and Community Impacts,” funded by the U.S. Department of Agriculture, sub-award \$80k (2012-2016).

Principal Investigator, “Hawaii Energy Impact Analysis,” funded by the Hawaiian Electric Company, \$57k (2013).

Principal Investigator, “Policy Analysis,” funded by the U.S. Department of Energy in collaboration with the Hawaii Natural Energy Institute, \$111k (2011).

Principal Investigator, “Water Policy Analysis for Hawaii,” funded by the Hawaii Community Foundation, \$24k (2011).

Principal Investigator, “Model Refinement to Assess Hawaii’s Clean Energy Options,” funded by the U.S. Department of Energy in collaboration with the Hawaii Natural Energy Institute, \$95k (2010-2011). Research Grant to build harmonized “top-down” and “bottom-up” statewide energy models – providing both detailed insight into the electricity sector and economy-wide policy impact assessment.

Principal Investigator, “Environmental Indicators for Hawaii,” funded by the Hau‘oli Mau Loa Foundation, \$35k (2010). Research Grant to prioritize Hawaii’s environmental challenges in the areas of land conservation, marine conservation, and climate change adaptation.

Co-Principal Investigator, State of Hawai‘i Bioenergy Master Plan, Economic Impacts Study, funded by the Department of Business, Economic Development and Tourism via the Hawaii Natural Energy Institute, \$32k (2009).

Principal Investigator, “Wave Valuation Study,” funded by Save the Waves Coalition, \$18k (2009).

Senior Personnel, University of Hawaii at Manoa Research Grant Competition, “Sustainability Science, Technology and Policy,” Renewable Energy and Island Sustainability (REIS) education and research team, \$1m (2009).

Invited Academic Speaking Engagements

Panelist, Association of Pacific Rim Universities Sustainable Cities and Landscapes Conference, 2017

Plenary Discussant, Western Regional Science Association Annual Conference, 2016

Panelist, IUCN World Conservation Conference, Achieving Economic Growth and Environmental Stewardship in Hawaii, 2016

Keynote Speaker, Modeling Renewable Energy Workshop, Waseda University, 2013

Keynote Speaker, Clean Energy Seminar in Okinawa, 2013

Plenary Speaker, Western Regional Science Association Annual Conference 2012

Academic Conferences

APRU Sustainable Cities and Landscape Conference, 2017

Association for Collegiate Schools of Planning (ACSP) Annual Conference, 2008-2010, 2012-2016

Western Regional Science Association (WRSA) Annual Conference, 2009-2013, 2015-2016

ECOMOD Annual Modeling Conference, 2007, 2009, 2015
Western Economic Association International (WEAI) Annual Conference, 2015
Modeling Renewable Energy Workshop, Waseda University, 2013
Association for University Business and Economic Research (AUBER) Annual Conference, 2012
World Bank Urban Research Symposium, Cities and Climate Change, 2009
Association for Conflict Resolution, Managing Climate Change through Collaborative Governance, 2009

Journal Referee Services

Organized alphabetically

Annals of Regional Science
Applied Energy
Economic Modeling
Energy
Environment and Development Economics
Environment, Development and Sustainability
IZA Journal of Labor Economics
Journal of the American Planning Association
Journal of Disaster Research
Journal of Environmental Economics and Management
Journal of Environmental Planning and Management
Journal of Urban Economics
Natural Hazards
Papers in Regional Science
Renewable & Sustainable Energy Reviews
Resources
Routledge, book review
Springer, book review
Sustainability
Transport Policy
Utilities Policy

Professional Service, Recognition and Affiliations

Professional Organizations

- Steering Committee, Association of Pacific Rim Universities Sustainable Cities and Landscapes
- Board of Directors, Western Regional Science Association, 2016-2018
- Member, Association of Collegiate Schools of Planning (ACSP)
- Co-Track Chair for Environmental Planning, ACSP Annual Conference, 2016-2017
- Member, American Planning Association

University-Level

- University of Hawaii at Manoa Faculty Senate, Committee on Academic Policy and Planning/Committee on Research, 2015-2017
- University of Hawaii at Manoa College of Social Sciences Research Council, 2016-2017
- University of Hawaii at Manoa Research Advisory Committee, tasked to inform campus strategic plan for research, 2016

- University of Hawaii at Manoa University Research Council, Travel Application Review Committee, 2015-present
- University of Hawaii at Manoa Chancellor’s Working Group on Utility Cost, tasked to inform the Chancellor on how to manage rising utility costs and integrate campus level renewable energy, 2014
- Faculty representative to the University of Hawaii at Manoa Office of Auxiliary Services, Commuter Services Advisory Committee, 2013- present
- College of Social Sciences “Excellence in Teaching” Award, 2010
- University of Hawaii at Manoa Climate Change Commission, Vice Chair, 2007-2010

State/Community-Level

- Board of Directors, Honolulu Clean Cities Coalition, a program of the US DOE, 2015-present
- Board of Directors, Hawaii Economics Association, 2010-2011
- State of Hawaii Clean Energy Initiative Working Group on Transportation, 2009-2012
- State of Hawaii Greenhouse Gas Emissions Reduction Task Force, Chair of the Analysis Committee, 2007-2010
- Founding Board Member, Kanu Hawaii, 2007

Courses Taught (Prior 5 Years)

PLAN 603 Urban Economics	Fall 2013, Spring 2015, Spring 2016,
PLAN 601 Planning Methods	Fall 2012
PLAN 625 Climate Change, Energy and Food Security in the Asia/Pacific Region	Fall 2012, Fall 2013, Fall 2016, Fall 2017
PLAN 650 Research Methods	Spring 2015
PLAN 751 Planning Practicum	Spring 2013

PhD Student Advising

(Year) denotes year graduated or expected to graduate

Urban & Regional Planning, Dissertation Committee Chair: Barrett Ristroph (expected 2018)
 Topics in Climate Change Adaptation for Alaskan Native Villages

Urban & Regional Planning, Dissertation Committees: Adam Ayers (2016), Bryan Bushley, (2015), Noriko Kono (2010)

University Representative, Dissertation Committee: Sherilyn Wee (Economics, expected 2016), Arlan Brucal (Economics, 2016), Rusyan Mammit (Natural Resources & Environmental Management, 2016), Keekkuge Hemachandra (Economics, 2014), Junko Mochizuki (Natural Resources & Environmental Management, 2013), Iman Nasser (Economics, 2013), John Rush (Economics, 2013)