

Matthew J. Burke

Research Associate, Community Development and Applied Economics

Research Fellow, Leadership for the Ecozoic

University of Vermont

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<https://www.l4ecozoic.org/matthew-burke>

Curriculum Vitae

ACADEMIC TRAINING

Ph.D. Renewable Resources--Environment (2019)

Economics for the Anthropocene Partnership, McGill University, Québec, Canada

Thesis title: Energy democracy and the co-evolution of social and technological systems

Master of Public Administration (2014)

Graduate Certificate in Ecological Economics

University of Vermont, Burlington, Vermont, USA

Thesis topic: Sustainable renewable electricity development in Vermont, USA

Master of Arts, Parks, Recreation and Environmental Education (2000)

University of New Mexico, Albuquerque, New Mexico, USA

Bachelor of Science, Natural Resources (1995)

The Ohio State University, Columbus, Ohio, USA

Major: Environmental Communications, Education, and Interpretation Minor: Spanish

RESEARCH AND TEACHING POSITIONS

Research Associate, Community Development and Applied Economics (2022 - Present)

University of Vermont, Burlington, Vermont, USA

Project Lead, Ecozoic Alternatives (2020 - Present)

Leadership for the Ecozoic Partnership

Lecturer, Nutrition and Food Sciences (2021 - 2022)

University of Vermont, Burlington, Vermont, USA

Postdoctoral Associate, Gund Institute for Environment (2019 - 2022)

University of Vermont, Burlington, Vermont, USA

Project: Energy, ecology, and equity in multifunctional landscapes

Independent researcher, Next System Project / The Democracy Collaborative (2019)

Project: Just transition and quantitative easing for the planet

Adjunct Faculty Instructor, Environmental Studies and Policy (2013 - 2014)

Champlain College, Burlington, Vermont, USA

Research Assistant, Gund Institute for Ecological Economics (2012 – 2013)

University of Vermont, Burlington, Vermont, USA

Project: Vermont Genuine Progress Indicator

PUBLICATIONS

Peer-reviewed articles

Burke, M. J. (In review). Energies for the pluriverse: a call for radical difference in energy research and action. *Human Geography*.

Bauwens, T., Wade, R., & **Burke, M.** (2024). The energy commons: A systematic review, paradoxes, and ways forward. *Energy Research & Social Science*, 118, 103776.

<https://doi.org/10.1016/j.erss.2024.103776> (33%)

- Farley, J., Melgar, R., Ansari, D., **Burke, M. J.**, Danielsen, J., ... Vargas Roncancio, I. D. (2024). Rethinking ecosystem services from the Anthropocene to the Ecozoic: Nature's benefits to the biotic community. *Ecosystem Services*, 67, 101624. <https://doi.org/10.1016/j.ecoser.2024.101624> (10%)
- Bliska, H. M., Vidra, R. L., & **Burke, M. J.** (2023). Embracing eco-cultural restoration. *Restoration Ecology*, 32(1), e14069. <https://doi.org/10.1111/rec.14069> (33%)
- Burke, M. J.**, & Melgar, R. (2022). SDG 7 requires post-growth energy sufficiency. *Frontiers in Sustainability*, 3. <https://doi.org/10.3389/frsus.2022.940958> (60%)
- Burke, M. J.** (2022). Post-growth policies for the future of just transitions in an era of uncertainty. *Futures*, 136, 102900. <https://doi.org/10.1016/j.futures.2021.102900>
- Kish, K., Mallery, D., Yahya Haage, G., Melgar-Melgar, R., **Burke, M.**, Orr, C., Smolyar, N. L., Sanniti, S., & Larson, J. (2021). Fostering critical pluralism with systems theory, methods, and heuristics. *Ecological Economics*, 189, 107171. <https://doi.org/10.1016/j.ecolecon.2021.107171> (10%)
- Gobby, J., Temper, L., **Burke, M.**, & von Ellenrieder, N. (2021). Resistance as governance: Transformative strategies forged on the frontlines of extractivism in Canada. *Extractive Industries and Society*, 100919. <https://doi.org/10.1016/j.exis.2021.100919> (20%)
- Burke, M. J.** (2020). Energy sufficiency for a just transition: A systematic review. *Energies*, 13(10), 2444. <https://doi.org/10.3390/en13102444>
- Stephens, J. C., **Burke, M. J.**, Gibian, B., Jordi, E., & Watts, R. (2018). Operationalizing energy democracy: Challenges and opportunities in Vermont's renewable energy transformation. *Frontiers in Communication*, 3. <https://doi.org/10.3389/fcomm.2018.00043> (30%)
- Burke, M. J.** (2018). Mutually-beneficial renewable energy systems. *Relations. Beyond Anthropocentrism*, 6(1), 87–116. <https://doi.org/10.7358/rela-2018-001-burk>
- Burke, M. J.** (2018). Shared yet contested: Energy democracy counter-narratives. *Frontiers in Communication*, 3:22. <https://doi.org/10.3389/fcomm.2018.00022>
- Filbee-Dexter, K., Symons, C. C., Jones, K., Haig, H. A., Pittman, J., Alexander, S. M., & **Burke, M. J.** (2018). Quantifying ecological and social drivers of ecological surprise. *Journal of Applied Ecology*, 55(5), 2135–2146. <https://doi.org/10.1111/1365-2664.13171> (10%)
- Burke, M. J.**, & Stephens, J. C. (2018). Political power and renewable energy futures: A critical review. *Energy Research & Social Science*, 35, 78–93. <https://doi.org/10.1016/j.erss.2017.10.018> (75%)
- Burke, M. J.**, & Stephens, J. C. (2017). Energy democracy: Goals and policy instruments for sociotechnical transitions. *Energy Research & Social Science*, 33, 35–48. <https://doi.org/10.1016/j.erss.2017.09.024> (75%)
- Sovacool, B. K., **Burke, M.**, Baker, L., Kotikalapudi, C. K., & Wlokas, H. (2017). New frontiers and conceptual frameworks for energy justice. *Energy Policy*, 105, 677–691. <https://doi.org/10.1016/j.enpol.2017.03.005> (20%)
- Filbee-Dexter, K., Pittman, J., Haig, H. A., Alexander, S. M., Symons, C. C., & **Burke, M. J.** (2017). Ecological surprise: concept, synthesis, and social dimensions. *Ecosphere*, 8(12), e02005. <https://doi.org/10.1002/ecs2.2005> (10%)
- Farley, J., Schmitt, A., **Burke, M.**, & Farr, M. (2015). Extending market allocation to ecosystem services: Moral and practical implications on a full and unequal planet. *Ecological Economics*, 117, 244–252. <http://doi.org/10.1016/j.ecolecon.2014.06.021> (10%)

Farley, J., **Burke, M.**, Flomenhoft, G., Kelly, B., Murray, D.F., Posner, S., et al. (2013). Monetary and fiscal policies for a finite planet. *Sustainability*, 2013(5): 2802-2826; doi:10.3390/su5062802. (10%)

Peer-reviewed book chapters

- Burke, M.** (2024). Low-tech energy for essential, accessible, ecological transitions. In A. Carvalho & T. R. Peterson (Eds.), *Environmental Communication* (pp. 483–498). De Gruyter Mouton. <https://doi.org/10.1515/9783110789553-024>
- Bozuwa, J., **Burke, M.**, Cox, S., & Skandier, C. S. (2023). Democratic governance of fossil fuel decline. In M. Nadesan, M. J. Pasqualetti, & J. Keahey (Eds.), *Energy Democracies for Sustainable Futures* (pp. 73–82). Academic Press. <https://doi.org/10.1016/B978-0-12-822796-1.00008-5> (30%)
- Burke, M. J.**, & Smolyar, N. L. (2022). Demilitarize for a just transition. In A. Dunlap & A. Brock (Eds.), *Enforcing Ecocide: Power, Policing & Planetary Militarization* (pp. 307–329). Springer International Publishing. (60%)
- Burke, M. J.** (2021). Energy commons and alternatives to enclosures of sunshine and wind (Ch. 18). In Feldpausch-Parker, A., Endres, D., Peterson, T.R., & Gomez, S. (Eds.). *Routledge Energy Democracy Handbook*. Routledge.
- Melgar, R., & **Burke, M.** (2021). SDG 7 ‘Energy for all’: Ecological economic targets for an energy transition that centres well-being within planetary boundaries. In Kish, K. & Quilley, S. (Eds.) *Ecological Limits of Development*. Routledge. (40%)
- Burke, M. J.** (2021). Just energy systems: Five questions and countless responses for regenerative energy communities. In Ryder, S. et al. (Eds.). *Environmental Justice in the Anthropocene: From (Un)just Presents to Just Futures* (pp. 160-174). Routledge.
- Wallis, S., Barbieri, L., Damiano, A., & **Burke, M.** (2020). The role of technology in achieving the future we want. In Costanza, R., Erickson, J. D., Farley, J., & Kubiszewski, I. (Eds.). *Sustainable Wellbeing futures: A Research and Action Agenda for Ecological Economics*. Edward Elgar Publishing. (20%)
- Burke, M. J.** (2018). Energy democracy and the co-production of social and technological systems in north-eastern North America. In A. Szolucha (Ed.), *Energy, Resource Extraction and Society: Impacts and Contested Futures* (pp. 88–104). Abingdon, Oxon; New York, NY: Routledge.

Other scholarly contributions

- Ash, M., Baker, E., Tuominen, M., Venkataraman, D., **Burke, M.**, ... Johnson, T. (2023). White paper: Research Challenges at the Intersection of Energy and Equity in the Energy Transition. *ETI Reports*. UMass Amherst: Energy Transition Institute. <https://doi.org/10.7275/zzka-5107> (5%)
- Burke, M. J.** (2019). *Energy democracy and the co-evolution of social and technological systems* [McGill University]. <https://escholarship.mcgill.ca/concern/theses/4m90dx59n>
- Burke, M. J.** (2018). Energy democracy in northeastern North America [data set]. *Qualitative Data Repository*. <https://doi.org/10.5064/F6BUAX58>. QDR Main Collection. V1
- Burke, M.** (2014). Resource potential and land use tradeoffs of renewable electricity development in Vermont, USA. In *Proceedings of the 4th World Sustain. Forum, 1 - 30 Nov.; Sciforum Electronic Conference Series, Vol. 4*, e011; doi:10.3390/wsf-4-e011

Erickson, J.D., Zencey, E., **Burke, M.**, Carlson, S. and Zimmerman, Z. (2013). *Vermont Genuine Progress Indicator 1960-2011: Findings and recommendations*. Burlington, VT: Gund Institute for Ecological Economics, University of Vermont. (20%)

CONFERENCE PARTICIPATION AND PRESENTATIONS (Selected)

Liviana: Community Economies Research Network 5th Int’l Conf, online (2024)

Presenter: *Degrowth and diverse economies: A dialogue*

Center for Ecozoic Studies Ecocentric Governance Study Group, online (2024)

Invited presenter: *Toward bioregional transitions*

U.S. Society for Ecological Economics Conference, Schenectady, New York (2024)

Co-presenter: *Slowing down in the meantime: A workshop on degrowth strategy*

Association of American Geographers, Honolulu, Hawai’i (2024)

Presenter: *Science, learning, and the non-animal human*

UVM Energysched DEI Workshop, Burlington, Vermont (2024)

Co-organizer / presenter: *Centering justice in energysched design*

Next System Movement Lab, Tarrytown, New York (2024)

Invited presenter: *The polycentric crises: Ecological overshoot*

Land Care Congress, Rochester, Vermont (2024)

Invited presenter: *Energy commoning—opportunities and limits*

13th Annual Farm to Plate Gathering, Killington, Vermont (2023)

Session co-organizer: *Agroforestry unveiled*

Presenter: *Champlain Valley Livelihoods in Forest Ecosystems (CVLiFE)*

International Society for Ecological Economics Conference, Santa Marta, Colombia (2023)

Contributor: *Energysched design: Right-sizing the energy-economy relationship*

Canadian Society for Ecological Economics Conference, Toronto, Ontario (2023)

Presenter: *Low-tech energy for essential, accessible, ecological transitions*

Indigenous Peoples, Climate Justice & Action Research in the Americas, Montréal (2023)

Invited panelist: *Turtle Island Territories of Life*

RE3 Conference: From Reclaiming to Restoring and Rewilding, Québec City, Québec (2023)

Session co-organizer: *Holistic ecological restoration: Four key elements*

Presenter: *Ecological restoration as a social movement in time of overshoot*

The Great Transition: Struggle in Times of Crisis, Tiohtià:ke/Montréal, Québec (2023)

Session co-organizer / facilitator: *Regional tapestry of alternatives*

Session co-organizer: *Prefiguring post-capitalist, just, agroecological transitions*

Presenter: *Energy-ecology*

The Promise of Next System Studies Workshop, George Mason University (2023)

Invited co-presenter: *Next Systems Studies as informed by transition design*

Future Forests Reimagined Advisory Group, online (2023)

Invited presenter: *Ecocultural and bioregional restoration*

McGill STandD Speaker Series, online (2022)

Session organizer: *Introducing Next Systems Studies*

A2E Collab presentation series, online (2021)

Session organizer: *Policy for the Ecozoic*

SER 9th World Conference on Ecological Restoration, online (2021)

Presenter: *Ecological restoration, work, and a just transition*

Energy Ethics: Energy Transitions & Planetary Futures, online (2021)

Presenter: *Post-growth care work for the future of just transitions*

Canadian Society for Ecological Economics Biennial Conference, online (2021)

Presenter: *Implementing Canadian wellbeing economies at the municipal level*

NSF 2026: Priorities and Research Needs for an Equitable Energy Transition, online (2021)

Invited presenter: *The future of just transitions in an era of economic uncertainty*

Renew New England Jobs Guarantee: Dignified work to meet basic needs, online (2021)
Organizing team lead and webinar moderator

Solar Energy in Vermont's Working Landscape, half-day online workshop (2020)
Organizing team lead and workshop moderator

Extraction: Tracing the Veins, Political Ecology Research Centre, online (2020)
Presenter: *Energy commons*

Sustainable Consumption Research and Action Initiative (SCORAI), online (2020)
Presenter: *Energy sufficiency: A critical (re-)vision for a just transition*

From the Anthropocene to the Ecozoic webinar series, online (2020)
Invited presenter: *How much energy is enough? Energy for well-being not endless growth*

Landedness: Annual Graduate Interdisciplinary Conference, Concordia University (2020)
Presenter: *On and within working landscapes*

International Sustainability Transitions Conference, Ottawa, Ontario (2019)
Presenter: *Energy commons and alternatives to the enclosures of sunshine and wind*

Canadian Society for Ecological Economics Conference, Waterloo, Ontario (2019)
Presenter: *Reconsidering the work of nature* (Outstanding Student Presentation Award)

Association of American Geographers, Washington, DC (2019)
Presenter: *Diverse counter-narratives of energy democracy*

Canadian Society for Ecological Economics Conference, Montréal, Québec (2017)
Presenter: *A just and ecological whole earth energy system*

Energy Democracy Symposium, The University of Utah (2017)
Invited presenter: *Energy democracy theoretical and research foundations*

Environmental Justice in the Anthropocene, Colorado State University (2017)
Session co-organizer / chair: *Ecological economics and climate justice*
Presenter: *Decentralized democratic energy transition*

Association of American Geographers, Boston, Massachusetts (2017)
Presenter: *Energy democracy: Political power and renewable energy*

Canadian and U.S. Societies for Ecological Economics Conference, Vancouver, BC (2015)
Co-organizer and session moderator: *Multiple values of water and watersheds*
Presenter: *Strengthening watershed governance through bioregionalism*

U.S. Society for Ecological Economics Conference, University of Vermont (2013)
Co-organizer, session moderator, and presenter: *The role of state and local government in energy transition*

The New Economy Summit, University of Vermont (2013)
Presenter: *The Vermont Genuine Progress Indicator*

Biophysical Economics 4th Annual Conference, University of Vermont (2012)
Co-organizer and session moderator: *Money, debt, and energy*

International Conference on Degrowth in the Americas, Montréal, Québec (2012)
Presenter: *Monetary and fiscal policies for a finite planet*

The New Economy Summit, Burlington, VT (2012)
Co-organizer and session moderator: *Non-market goods and the commons*

GRANTS, AWARDS, AND FELLOWSHIPS (Selected)

Community Energysheds, \$1,205,832 (5/2023 – 4/2024), Co-investigator
U.S. Department of Energy Office of Energy Efficiency and Renewable Energy, USA

L4E Policy Lab, \$5,680 (2020 - 2021), Co-PI
James M. Jeffords Fund Grant Program for Policy Studies, University of Vermont

Solar Energy within Vermont's Working Landscape, \$3,100 (2020), Co-PI
Apis Fund, Gund Institute for Environment, University of Vermont

Social Sciences and Humanities Research Council (Canada), \$21,000/yr. (2014 - 2017)
Graduate student award, Economics for the Anthropocene Partnership, McGill University

Graduate Excellence Awards, \$7,000 cumulative (2014 - 2017)

Department of Natural Resource Sciences, McGill University

SESYNC Graduate Research Fellow, \$35,000 team award (2015 – 2016)

National Socio-Environmental Synthesis Center, Annapolis, MD

Research Fellow, The Next Systems Project, (2016)

A project of the Democracy Collaborative

Marshall E. Dimock Student Award (2014)

Master of Public Administration Program, University of Vermont

Graduate College Fellowship, Public Administration Program, \$24,000 (2012 - 2014)

Graduate College, University of Vermont

COURSE INSTRUCTION (Selected)

Big Bang to the Ecozoic, CDAE 6990A (Fall 2024) w/ J. Farley

Community Development and Applied Economics, University of Vermont

Bioregionalism: Principles, Practice, Planning, NR 295 (Fall 2022) w/ U. Georgeoglou

Rubenstein School of Environment & Natural Resources, University of Vermont

U.S. Food, Social Equity, and Development, CDAE 004 (Spring 2022)

Community Development and Applied Economics, University of Vermont

Food Systems Seminar I, FS 093 (Spring 2022) w/ A. Sarhanis

Agriculture & Life Sciences, University of Vermont

Food Systems & Eco Overshoot, FS / NFS 395 (Spring 2022)

Nutrition & Food Sciences, University of Vermont

Bioregionalism: Principles, Practice, Planning, NR 295 (Fall 2021) w/ J. Erickson

Rubenstein School of Environment & Natural Resources, University of Vermont

U.S. Food, Social Equity, and Development, CDAE 004 (Fall 2021)

Community Development and Applied Economics, University of Vermont

Farm to Table: Our Contemporary Food System, NFS 073 (Fall 2021)

Nutrition & Food Sciences, University of Vermont

Restoration Ecology: Principles and Practice, ENV 976 (Spring 2019) w/ R. Vidra

Nicholas School of the Environment, Duke University

Law and Governance for the Anthropocene, NRSC 685 (Fall 2015) Grad student-led seminar

Natural Resource Sciences, McGill University

Environmental Policy Assessment and Development, ENP 400 (Fall 2014)

Education & Human Studies, Champlain College

Environmental Policy Assessment and Development, ENP 400 (Fall 2013)

Education & Human Studies, Champlain College

PROFESSIONAL EXPERIENCE AND TRAINING (Selected)

CEI Summer/Winter School Researching Postcapitalist Possibilities (2024)

Community Economies Institute, Australia

National Council for Science and the Environment Science Dialogues (2020)

Science Outside the Lab North (Science-Policy Training) (2017)

Ottawa & Montréal, Canada

Interviews and Focus Groups (2016)

Workshops on Social Science Research, Concordia University

Planetary Boundaries and Human Opportunities (MOOC) (2015)

Stockholm Resilience Centre, Stockholm University

Co-Manager/Partner/Farmer, Bloomfield Farm LLC (2006 –2013)

Charlotte, Vermont, USA

Negotiated Stakeholder Facilitation Training (2013)

Consensus Building Institute, University of Vermont

Environmental Spatial Modeling Workshop using Dinamica (2013)

University of Vermont

Life Cycle Assessment Introductory Training using SimaPro 7.0 (2013)

EarthShift, Burlington, Vermont, USA

Permaculture Design Certification (2003)

The Island School, Eleuthera, Bahamas

Wilderness Emergency Medical Technician (1998)

Nantahala Outdoor Center, North Carolina, USA

UNIVERSITY AND COMMUNITY SERVICE (Selected)

Collaborator, Coordinating Committee, Institute for Agroecology (2023 - Present)

Affiliate, Gund Institute for Environment (2022 - Present)

Affiliate, UVM Food Systems (2022 - Present)

Review Editor, *Frontiers in Sustainable Energy Policy* (2022 - Present)

Member, Next System Studies Association Initiative Committee (2024 – Present)

Participant, Agroforestry Coalition Demo Farm Working Group (2024 - Present)

Advisory Group, Future Forests Reimagined (2023 – 2024)

Working Groups, UNRISD Network for a New Eco-Social Contract (2022 - Present)

Affiliate, Post Growth Institute (2022 - 2023)

Planning Team, Next Systems Studies, The Democracy Collaborative (2021 – 2023)

Contributor, Ecozoic Energy Study Group, Center for Ecozoic Studies (2021 – 2022)

Contributor / Reviewer, Wellbeing Economy Alliance (2021 - 2022)

Editorial Board Member, *Energy Research & Social Science* (2020 - Present)

International Review Board for the 4th International SCORAI conference (2020)

Community Partner, NR 206 Environmental Problem-Solving, Univ. of Vermont (2020)

Energy Committee, Town of Charlotte, Vermont (2016 - 2022)

Board Member/President, Champlain Valley Cohousing (2010 – 2016, 2021 – 2024)

NON-SCHOLARLY CONTRIBUTIONS (Selected)

Burke, M., & Neira, J. (2023). Exploring a regional tapestry for northeastern North America: initial steps and reflections. *Weaving Alternatives #11: A periodical of the Global Tapestry of Alternatives* (September).
https://globaltapestryofalternatives.org/newsletters:11:leadership_for_the_ecozoic_update (60%)

Burke, M., DePillis, A., Hagen, K., Hurley, S., Mazurowski, J. (Eds.) (2021). *A guide to solar energy in Vermont's working landscape*. Gund Institute for Environment.
<https://www.uvm.edu/extension/agriculture/pollinator-friendly-solar> (50%)

Duda, J., Hanna, T., & Burke, M. (2016). *Building community capacity for energy democracy: A deck of strategies*. Washington, DC: Democracy Collaborative. (20%)

Burke, M. (2016). The Anthropocene: What is it good for? [blog post]. Economics for the Anthropocene. <https://e4a-net.org/2016/07/22/the-anthropocene-what-is-it-good-for/>

RAD-TV Presents: Jobs, Justice and Climate, Burlington, VT (2016). Interview: *Energy democracy and renewable energy transition* (Channel 17, Feb 26)

PEER-REVIEWED JOURNAL REVIEW

Antipode (1), Energy Research & Social Science (5), Frontiers in Communication (1), Globalizations (1), Human Geography (1), International Journal of Social Economy (1), Journal of Political Ecology (1), Nature Energy (1), Renewable and Sustainable Energy Reviews (3), Science and Engineering Ethics (1), Sustainability Science (1)