

ELISABETH ANNE GILMORE

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Civil and Environmental Engineering
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Office of the Assistant Deputy Minister
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EDUCATIONAL BACKGROUND

07/2004 – 08/2009: Carnegie Mellon University, Pittsburgh, PA, US
Doctor of Philosophy (Dual Degree)
Public Policy and Chemical Engineering

09/2000 – 08/2002: University of Toronto, Toronto, Canada
Master of Applied Science
Chemical and Environmental Engineering

09/1995 – 06/2000: University of Toronto, Toronto, Canada
Bachelor of Applied Science
Chemical and Environmental Engineering

CURRENT AFFILIATIONS

01/2022 – present: **Associate Professor**
Civil and Environmental Engineering
School of Public Policy and Administration
Carleton University, Ottawa, Canada

01/2022 – present: **Special Science Advisor/Research Scientist (RES-4)**
Office of the Assistant Deputy Minister
Science and Technology Branch
Environment and Climate Change Canada, Gatineau, Canada

07/2012 – present: **Senior Researcher**
Program in Conditions of Violence and Peace
Peace Research Institute (PRIO), Oslo, Norway

01/2022 – present: **Visiting Professor**
Edward J. Bloustein School of Planning and Public Policy
Rutgers University, New Brunswick, NJ, USA

PREVIOUS AFFILIATIONS

01/2017 – 12/2021: **Associate Professor**

Head of Concentration in Climate Impacts and Adaptation (09/2019 – 12/2021)
Department of International Development, Community, and Environment
Clark University, Worcester, MA

01/2019 – 12/2021: **Senior Climate Policy Adviser (EC-07)/Visiting Scholar**

Economic Analysis Directorate
Environment and Climate Change Canada, Gatineau, Canada

01/2020 – 12/2021: **ICIMOD Fellow**

International Centre for Integrated Mountain Development, Kathmandu, Nepal

09/2011 – 12/2016: **Assistant Professor**

Public Policy & Engineering Program
School of Public Policy, University of Maryland, College Park

09/2010 – 08/2011: **AAAS Science and Policy Technology Fellow**

Climate Science and Impacts Branch, Climate Change Division
US Environmental Protection Agency, Washington DC, US

11/2009 – 08/2010: **Post-doctoral Researcher**

Climate Decision Making Center (CDMC)
Carnegie Mellon University, Pittsburgh, PA, US

RECENT KEY ACTIVITIES

- Lead-PI on “Transforming places for the precariously housed: Equitable adaptation pathways for climate mobilities” funded by the International Joint Initiative for Research in Climate Change Adaptation and Mitigation Competition
- Drafting Author of the Summary for Policy Makers (SPM) and Lead Author for the North American Chapter for Working Group II: Impacts, Adaptation, and Vulnerability, 6th Assessment Report, Intergovernmental Panel on Climate Change (IPCC)
- Member of the Expert Group on Climate and Sustainable Development Goals (SDG) Synergies, United Nations Framework Convention on Climate Change (UNFCCC) and United Nations Department of Economic and Social Affairs (UNDESA)
- Member of the Taskforce on Scenarios and Models for the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)
- Member of Scientific Committee and co-Chair of Global Goal on Adaptation (GGA) Working Group for the UN World Adaptation Science Programme (WASP)
- Member of Canadian Government Delegation to the Approval Plenaries for the Synthesis Report for the 6th Assessment Cycle and the Working Group III Contribution to the Intergovernmental Panel on Climate Change (IPCC)
- Advisory Team of Global Adaptation Mapping Initiative: A collaborative network for mapping global evidence on climate change adaptation: <https://globaladaptation.github.io>

RESEARCH ACTIVITIES

ARTICLES, BOOKS AND REPORTS

Efforts in Progress

Books (N = 1)

1. Cunningham, K., **Gilmore, E.A.**, Huang, R., Jung, D., Loyle, C. (2025). Rebel governance in a changing climate, Cambridge Elements: Cambridge University Press., *Under Contract*

Book Chapters (N = 2)

1. Vesco, P., **Gilmore, E.A.**, Buhaug, H. (2025). “SDG 13. Armed conflict as a challenge to climate action” in the Elgar Companion to Peace and the Sustainable Development Goals, *Under Contract*
2. **Gilmore, E.A.**, Schmitt, K. (2024). “Public Sector Decision Making” in Engineering Economics: Financial Decision Making for Engineers, 8th edition, Pearson Canada, *Under Contract*

Articles Under Review (N = 6)

1. Dadson, Y.A.*, Bennett-Gayle, D.M., Ramenzoni, V., **Gilmore, E.A.** (2024). Experiences of immigrants during disasters in the U.S.: A systematic literature review. Revise and Resubmit, *Journal of Immigrant and Minority Health*.
2. Kopp, R.E., **Gilmore, E.A.**, Shwom, R.L et al. (2024). 'Tipping points' confuse and can distract from urgent climate action. Revise and Resubmit *Nature Climate Change*
3. **Gilmore, E.A.**, St.Clair, T. (2024). How U.S. states use tax expenditures to advance climate policy, Under review at *Climate Policy*.
4. Pradhan, P., Weitz, N., Daioglou, V., ... **Gilmore, E.A.** et al. (2024). Three foci at the science-policy interface for systemic SDG acceleration. Under consideration at *Nature Communications*.
5. Helgeson, C., Auermuller, L., Bennett Gayle, D., Dangendorf, S., **Gilmore, E.A.**, et al. (2024). Exploratory scoping of place-based opportunities for convergence research. Under review at *Earth's Future*.
6. Geronimo, L.*, Payne, W., **Gilmore, E.A.**, Kopp, R.E., Andrews, C. (2024). “Cultural and Institutional Factors Driving Severe Repetitive Flood Losses: Insights from the Jersey Shore”, Under review at *Risk Analysis*

Reports in Progress (n = 4)

1. **Coordinating Lead Author** (2024). Chapter 4: Investment levels and interventions for renewable energy technologies. Climate Technology Progress Report, UN Environmental Programme, *In preparation*
2. **Coordinating Lead Author** (2024). Chapter 3: Feasibility assessment of renewable energy technologies. Climate Technology Progress Report, UN Environmental Programme, *In preparation*

3. **Lead Author** (2025). Chapter 15: Energy System Transformative Pathways, Global Environmental Outlook (GEO-7), UN Environmental Programme, *In preparation*
4. **Contributing Author** (2025). Chapter 8: Western Europe and Others Group (WEOG), Global Environmental Outlook (GEO-7), UN Environmental Programme, *In preparation*

Completed Efforts

Articles in Peer Reviewed Journals (N = 41)

1. Tennant, E., **Gilmore, E.A.** (2024). Dynamics of armed civil conflict in the wake of tropical cyclones. Accepted at the *Journal of Peace Research*
2. Nalau, J., **Gilmore, E.A.**, Howdon, M. (2024). Opportunities for strengthening the assessment of adaptation progress in the IPCC, Accepted at *Nature Climate Action*.
3. **Gilmore, E.A.**, Wrathall, D., Adams, H., Buhaug, H., Castellanos, E., Hilmi, N., McLeman, R., Singh, C., Adelekan, I. (2024). Severe risks to mobility in a climate change world. *Climate Risk Management*. 44: 100601. doi: 10.1016/j.crm.2024.100601
4. Simpson, N., Mach, K.J., Tebboth, M., **Gilmore, E.A.**, Siders, A.R, et al. (2024). Research Priorities for Climate Mobility, *Earth's Future*. 7 (4): 589 – 607. doi: 10.1016/j.oneear.2024.02.002
5. Snorek, J.*, **Gilmore, E.A.** (2023). Student participation at the UNFCCC Convention of the Parties supports transformational learning and engagement on climate action. *Nature Climate Action* 2, 25 (2023). <https://doi.org/10.1038/s44168-023-00052-7>
6. **Gilmore, E.A.**, Ghosh, M., Johnston, P., Siddiqui, M.S., Macaluso, N. (2023) Modeling the energy mix and economic costs of deep decarbonization scenarios in a CGE framework. *Climate Change and Energy*. 4: 100106: <https://doi.org/10.1016/j.egycc.2023.100106>
7. Petrova, K*, Olafsdottir, G.*, Hegre, H., **Gilmore, E.A.** (2023). The 'conflict trap' reduces economic growth in the Shared Socioeconomic Pathways. *Environmental Research Letters*, 18, <https://doi.org/10.1088/1748-9326/acb163>
8. Buhaug, H., Benjaminsen, T., **Gilmore, E.A.**, Hendrix, C. (2022). Climate-driven risks to peace over the 21st century. *Climate Risk Management*. 39: <https://doi.org/10.1016/j.crm.2022.100471>
9. Akin-Olcum, G., Ghosh, M., **Gilmore, E.A.**, Johnston, P., Khabbazan, M.M., Lubowski, R., Margaret McCallister, M., Macaluso, N., Peterson, S., Winkler, M., Duan, M., Li, M., Parrado, R., Rausch, S. (2022). A model inter-comparison of the welfare effects of regional cooperation for ambitious climate mitigation targets. *Climate Change Economics*. <https://doi.org/10.1142/S2010007823500094>
10. Majaharan, A., Adhikari, S., Ahmad, R., Ahmad, U., Ali, Z, Bajracharya, S.; Baniya, J., Bhattra, S., Gautam, A., **Gilmore, E.A.**, Ko Hein, M., Myat, N., Myint, T., Mahapatra, P.S, Mishra, A., Singh, C. (2022). Air pollution exposure and its impacts on everyday life and livelihoods of vulnerable urban

populations in South Asia. *Environmental Research Communications*. 4, 071002: <https://doi.org/10.1088/2515-7620/ac77e0>

11. Cui, Y.*, Waldhoff, S., Clarke, L., Hultman, N., Patwardhan, A., **Gilmore, E.A.** (2022). Evaluating the regional risks to food availability and access from land-based climate policies in an Integrated Assessment Model. *Environment, Systems and Decisions*. <https://doi.org/10.1007/s10669-022-09860-4>
12. **Gilmore, E.A.**, Kousky, C., St. Clair, T. (2022). Climate change will increase local government fiscal stress in the United States. *Nature Climate Change*. 12, 216–218: <https://doi.org/10.1038/s41558-02201311-x>
13. Morgan, K., Collier, Z., **Gilmore, E.A.**, Schmitt, K. (2022). Decision-first modeling should guide decision-making for emerging risks. *Risk Analysis*. <https://doi.org/10.1111/risa.13888>
14. Franzke, C.L.E., Ciullo, A., **Gilmore, E.A.**, Matias, D.M., Nagabhatla, N., Orlov, A., Paterson, S.K., Scheffran, J.; Sillmann, J. (2022). Perspectives on integrated human–Earth system tipping points: Cascading effects and telecoupling. *Environmental Research Letters*. <https://doi.org/10.1088/17489326/ac42fd>
15. **Gilmore, E.A.**, Buhaug, H. (2021). Climate mitigation policies and the pathways to armed conflict and violence: Outlining a research agenda. *WIREs Climate Change*. 12 (5): e722. <https://doi.org/10.1002/wcc.722>
16. McLeman, R, Wrathall, D., **Gilmore, E.A.**, Thornton, P., Adams, H., Gemenne, F. (2021). Human migration thresholds and responses in the IPCC risk framework, *Climatic Change*, 165, 24 (2021). DOI: <https://doi.org/10.1007/s10584-021-03056-6>
17. Bell, A, Wrathall, D.J., Mueller, V., Chen, J., Oppenheimer, M., Hauer, M., Adams, H., Kulp, S., Clark, P.U., Fussell, E., Magliocca, N., Xiao, T., **Gilmore, E.A.**, Abel, K., Call, M., Slangen, A. (2021). Simulated migrants move toward vulnerable coastlines in Bangladesh under all sea-level change scenarios through 2100, *Environmental Research Letters*, 16 024045: <https://iopscience.iop.org/article/10.1088/1748-9326/abcd5b/meta>
18. Berrang-Ford, Lea, A. R. Siders, Alexandra Lesnikowski, Alexandra Paige Fischer, Max Callaghan, Neal Haddaway, Katharine Mach.... **Gilmore, E.A.** ... et al. (2021). A systematic global stocktake of evidence on human adaptation to climate change. *Nature Climate Change*. 11, 989–1000: <https://doi.org/10.1038/s41558-021-01170-y>
19. Sitati, A., Joe, E., Pentz, B., Grayson, C., Jaime, C., **Gilmore, E.A.**, Joe, E.; Galappaththi, E., Nagle, G., Alverio; K. Mach; M. van Aalst; N. Simpson; P. Schwerdtle; S. Templeman; S. Pandey; S. Zakieldean; Z. Zommers; I. Ajibade; A. James; L. Safaee Chalkasra; P. Umunay; I. Togola; A. Khouam; G. Scarpa; E. Coughlan (2021). Climate change adaptation in conflict-affected countries: A systematic assessment of evidence. *Discover Sustainability*. 2(1): 1-15: <https://doi.org/10.1007/s43621021-00052-9>
20. Tennant, E.*, **Gilmore, E.A.** (2020). Government effectiveness and institutions as determinants of tropical cyclone mortality. *Proceedings of the National Academy of Sciences*. 117(46), 28692-28699: <https://doi.org/10.1073/pnas.2006213117>
21. Dawson, J., Holloway, J., Debortoli, N. and **Gilmore, E.A.**, (2020). Treatment of International Economic Trade in Intergovernmental Panel on Climate Change (IPCC) Reports. *Current Climate Change Reports*, October: 1-11: <https://doi.org/10.1007/s40641-020-00163-x>

22. Wrathall, D., Mueller, V., Clark, P.U., Oppenheimer, M., Hauer, M., Kulp, S., **Gilmore, E.A.**, Adams, H., Bell, A., Kopp, R., Abel, K., Call, M., Chen, J., deSherbinin, A., Fussell, E., Hay, C., Jones, B., Magliocca, N., Marino, E., Slangen, A., Warner, K. (2019). Meeting the challenge of future migration from global sea-level change. *Nature Climate Change*, 9: 898-901: <https://doi.org/10.1038/s41558-0190640-4>
23. Kopp, R., **Gilmore, E.A.**, Little, C., Lorenzo-Trueba, J., Ramenzoni, V., Sweet, W. (2019). AGU Centennial Grand Challenge: Usable science for managing the risks of sea-level rise. *Earth's Future*: <https://doi.org/10.1029/2018EF001145>
24. **Gilmore, E.A.**, Heo, J., Muller, N., Tessum, C.W., Hill, J.D., Marshall, J.D., Adams, P. (2019). An intercomparison of air quality social cost estimates from reduced-complexity models. *Environmental Research Letters*: <https://iopscience.iop.org/article/10.1088/1748-9326/ab1ab5/meta>
25. **Gilmore, E. A.** St. Clair, T. (2018). Budgeting for climate change: Obstacles and opportunities at the US state level. *Climate policy*, 18(6), 729-741; <http://dx.doi.org/10.1080/14693062.2017>
26. Yang, X., Xi, X., Lin, W., Guo, S., Feng, X., **Gilmore, E.A.** (2018). Evaluation of environmental health benefits of China's building energy conservation policies: an integrated assessment on national and provincial levels, *International Journal of Environmental Health Research*, <https://doi.org/10.1080/09603123.2018.1468421>
27. **Gilmore E.A.**, Risi L.H., Tennant E.*, Buhaug H. (2018). Bridging Research and Policy on Climate Change and Conflict. *Current Climate Change Reports*. 2018 Dec 1;4(4):313-9. <https://doi.org/10.1007/s40641-018-0119-9>
28. Siegel, J.*, **Gilmore, E.A.**, Gallagher, N., Fetter, S. (2018). An expert elicitation of the proliferation resistance of using small modular reactors (SMR) for the expansion of civilian nuclear systems. *Risk Analysis*. <https://doi.org/10.1111/risa.12861>
29. **Gilmore, E.A.** (2017). Introduction to the special issue: Disciplinary perspectives on climate change and violence. *Current Climate Change Reviews*, <https://doi.org/10.1007/s40641-017-0081-y>
30. Hegre, H, Buhaug, H., Calvin, K.V., Nordkvelle, J., Waldhoff, S.T., **Gilmore, E.A.** (2016) Forecasting civil conflict along the Shared Socioeconomic Pathways, *Environmental Research Letters*, 11(5). <https://doi.org/10.1088/1748-9326/11/5/054002>
31. **Gilmore, E.A.**, Patwardhan, A. (2016) Passenger vehicles that minimize the costs of ownership and environmental damages in the Indian market. *Applied Energy*, 184: 863-872: <https://doi.org/10.1016/j.apenergy.2016.09.096>
32. Fann, N, **Gilmore, E.A.**, Walker, K. (2015). Characterizing the long-term PM_{2.5} concentration response function: Comparing the strengths and weaknesses of research synthesis approaches. *Risk Analysis*, <https://doi.org/10.1111/risa.12435>
33. **Gilmore, E.A.**, Blohm, A.*, Sinsabaugh, S. (2014). An economic and environmental assessment of transporting bulk energy from a grazing ocean thermal energy conversion facility. *Renewable Energy* 71: 361-367, <https://doi.org/10.1016/j.renene.2014.05.021>

34. **Gilmore, E.A.**, Lave, L.B. (2013). Comparison of residual prices and total cost of ownership for gasoline, hybrid and diesel light duty passenger cars and trucks. *Transport Policy* 27, 200-208, <https://doi.org/10.1016/j.tranpol.2012.12.007>
35. **Gilmore, E.A.**, Lave, L.B., Adams, P.J. (2010). Using backup generators for meeting peak electricity demand: a sensitivity analysis on emission controls and human health endpoints. *Journal of the Air and Waste Management Association* 60 (5): 523-531, <https://doi.org/10.3155/1047-3289.60.5.523>
36. **Gilmore, E.A.**, Apt, J., Walawalkar, R., Adams, P.J., Lave, L.B. (2010). The costs and distribution of the air quality effects of integrating electrical energy storage into electricity grids. *Journal of Power Sources* 195(8): 2405-2413, <https://doi.org/10.1016/j.jpowsour.2009.10.072>
37. **Gilmore, E.A.**, Lave, L.B., Adams, P.J. (2006). The costs, air quality, and human health effects of meeting peak electricity demand with installed backup generators. *Environmental Science and Technology* 40 (22): 6887-6893, <https://doi.org/10.1021/es061151q>
38. **Gilmore E.A.**, Gleditsch, N.P., Lujala, P., Rød, J.K. (2005). Conflict diamonds: A new dataset. *Conflict Management and Peace Science* 22 (3): 257-272, <https://doi.org/10.1080/07388940500201003>
39. Lujala, P., Gleditsch, N.P., **Gilmore, E.A.** (2005). A diamond curse: civil war and a lootable resource. *Journal of Conflict Resolution* 49 (4): 538-562, <https://doi.org/10.1177/0022002705277548>
40. **Gilmore, E.A.** (2001). A critique of soil contamination and remediation: the dimensions of the problem and the implications for sustainable development. *Bulletin of Science, Technology & Society* 21 (5): 394-400, <https://doi.org/10.1177/027046760102100508>
41. **Gilmore, E.A.**, Evans, G.J., Ho, M.D. (2001). Radiochemical assessment of the readsorption and redistribution of lead in the SM&T sequential extraction procedure. *Analytica Chimica Acta* 439 (1): 139-151: [https://doi.org/10.1016/S0003-2670\(01\)01011-X](https://doi.org/10.1016/S0003-2670(01)01011-X)

Reports with External Review (N = 8)

1. **Core Author** (2024). Science and Knowledge Considerations to support Canada's Implementation of the Kunming-Montreal Global Biodiversity Framework. Environment and Climate Change Canada.
2. Rosenzweig, C., Krishna, P., De Mel, M., Arteaga, E., Chen, M., Desanker, P., Dookie, D., **Gilmore, E.**, Kapos, V., Magnan, A., Michael, K., Neufeldt, H., Patwardhan, A., Wei, L., West, R., Zambrano-Barragán, C. (2023). Advancing Effectiveness of Climate Adaptation - Science for Adaptation Policy Brief #7. United Nations Environment Programme. <https://wedocs.unep.org/20.500.11822/43574>
3. **Coordinating Lead Author**. (2023). Chapter 2: Feasibility Assessment for Urban System Transitions in Climate Technology Progress Report, United Nations Environment Programme Copenhagen Climate Centre (UNEP-CCC) and United Nations Framework Convention on Climate Change (UNFCCC) Technology Executive Committee (TEC). Climate Technology Progress Report. Copenhagen, Denmark.
4. **Technical Contributor** (2023) to Wasley, E., T.A. Dahl, C.F. Simpson, L.W. Fischer, J.F. Helgeson, M.A. Kenney, A. Parris, A.R. Siders, E. Tate, and N. Ulbarri, 2023: Ch. 31. Adaptation. In: Fifth National Climate Assessment. Crimmins, A.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, B.C. Stewart, and T.K.

Maycock, Eds. U.S. Global Change Research Program, Washington, DC, USA.
<https://doi.org/10.7930/NCA5.2023.CH31>

5. **Coordinating Lead Author.** (2022), Chapter 3: Feasibility Assessment for Technology Climate Progress Report, in Climate Technology Progress Report, United Nations Environment Programme Copenhagen Climate Centre (UNEP-CCC) and United Nations Framework Convention on Climate Change (UNFCCC) Technology Executive Committee (TEC). Climate Technology Progress Report. Copenhagen, Denmark: <https://unepccc.org/the-climate-technology-progress-report-2022/>
6. **Lead Author.** (2022). Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Lösche, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Lösche, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3-33, doi:10.1017/9781009325844.001.
7. **Lead Author.** (2022). Technical Summary. [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Lösche, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Lösche, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 37–118, doi:10.1017/9781009325844.002.
8. **Lead Author.** (2022). Chapter 14: North America: In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Lösche, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 1929–2042, doi:10.1017/9781009325844.016.

Policy Briefs, Book Reviews, Blogs, and Other Non-Refereed Press (N = 15)

1. **Gilmore, E.A.** Olazabal, M., Safra de Campos, R., Thorn, J., Coughlan de Perez, E., and Harper, S. (2024). Charting the future of adaptation: Five key takeaways from Adaptation Futures 2023. PLOS Blogs: <https://latitude.plos.org/2024/01/charting-the-future-of-adaptation-five-key-takeaways-from-adaptation-futures-2023/>
2. Berrang-Ford, L.; Lesnikowski, A.; Fisher, A.; Siders, A.R.; Mach, K. J.; Thomas, A.; Callaghan, M.; Haddaway, N.; Bezner Kerr, R.; Biesbroek, R.; Bowen, K.; Deryng, D.; Elliott, S.; Ford, J.; Garschagen, M.; **Gilmore, E.A.**; Harper, S.; Hassnoot, M.; Lissner, T.; Lwasa, S.; Magnan, A.K.; Minx, J.; Morecroft, M.; New, M.; Coughlan de Perez, E.; Reckien, D.; Simpson, N.; Singh, C.; Stringer, L.; Totin, E.; Trisos, C.; Van Aalst, M. (2021). The Global Adaptation Mapping Initiative (GAMI): Part 1 – Introduction and overview of methods. Global Adaptation Modeling Initiative. <https://assets.researchsquare.com/files/pex-1240/v1/70c41a6a-9ef9-4593-a9f7d8e2b5f550e7.pdf?c=1631872847>
3. Lempert, R., **Gilmore, E.A.** (2022) Climate change will transform how we live, but these tech and policy experts see reason for optimism. The Conversation: <https://theconversation.com/climate-change-will-transform-how-we-live-but-these-tech-and-policy-experts-see-reason-for-optimism-180961> [Updated and republished in March 2023]

4. **Gilmore, E.A.**, Buhaug, H., Adams, H. (2022) What Next for Climate Security? Implications From IPCC Working Group II 6th Assessment Report, <https://www.newsecuritybeat.org/2022/04/climate-security-implications-ipcc-working-group-ii-6th-assessment-report/>
5. Pacillo, G., Loboguerrero, A.M., **Gilmore, E.A.**, Läderach, P., Dutta Gupta, D. (2022) Climate may not directly drive conflict but it's critical for building peace. The Conversation: <https://theconversation.com/climate-may-not-directly-drive-conflict-but-its-critical-for-building-peace-180887>
6. **Gilmore, E.A.** (2021). Right enough numbers for air pollution policy. Society for Benefit-Cost Analysis blog post: <https://benefitcostanalysis.org/blog/on-balance/2021-03-30-on-balance-rightenough-numbers-for-air-pollution-policy>
7. Schmitt, K., **Gilmore, E.A.** (2020). Reorienting STEM education to address policy needs and societal challenges. Invited editorial to the 2020 Canadian Science Policy Conference. <https://sciencepolicy.ca/posts/reorienting-stem-education-to-address-policy-needs-and-societalchallenges/>
9. **Gilmore, E.A.** (2020). Big data and new technology can help us understand and respond to climate change and conflict risks – here's how, CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS): <https://www.cgiar.org/news-events/news/big-data-andnew-technology-can-help-us-understand-and-respond-to-climate-change-and-conflict-risks-hereshow/>
10. **Gilmore, E.A.** (2019). Book review: Why Trust Science? By Naomi Oreskes, Science, 365, 6457: 973-974: <https://blogs.sciencemag.org/books/2019/09/03/why-trust-science/>
11. **Gilmore, E.A.** (2018). Teachable Moments in Benefit-Cost Analysis: From Obama to Trump, March 7, 2018. On Balance: Society for Benefit-Cost Analysis, <https://benefitcostanalysis.org/balance-teachable-moments-benefit-cost-analysis-obama-trump>
12. **Gilmore, E.A.** (2017). #Make Our Planet Great Again: Climate Diplomacy and Cooperation at COP23. December 5, 2017 The Global Observatory, <https://theglobalobservatory.org/2017/12/making-our-planet-great-again-climate-diplomacycooperation-cop23/>
13. **Gilmore, E.A.**, Buhaug, H., Hegre, H. (2016). Maintaining Security. Climate 2020. Available at www.climate2020.org.uk, United Nations Association – UK (UNA-UK)
14. **Gilmore, E.A.** (2016). Climate, Cooperation, and Conflict after the US Election. November 15, 2016. The Global Observatory, <https://theglobalobservatory.org/2016/11/climate-paris-agreement-cop22trump-marrakesh/>
15. **Gilmore, E.A.** (2015). “What’s at Stake Here is Peace”: Climate and Conflict at Paris Talks, December 11, 2015. The Global Observatory, <https://theglobalobservatory.org/2015/12/cop21-climateparis-syria-ipcc/>

TALKS AND CONFERENCES

Recent Invited Talks (N = 9)

1. **Presenter**, “Interdisciplinary research and social science contributions”, Forum on Science Considerations to Inform the Kunming–Montreal Global Biodiversity Framework Implementation in Canada, Organized by Environment and Climate Change Canada, Government of Canada, January 2024
2. **Keynote**, “Climate change and fiscal stress”, Building a Sustainable Future: Integrating Climate Action into Fiscal Policies and Public Financial Management Systems, Organized by the Asian Development Bank, Seoul, Korea, November 2023.

3. **Presenter**, “Complex dynamics of social systems” at the Dynamics of Climate and the Macroeconomy Workshop, National Academies of Sciences, Washington, DC., November 2023
4. **Keynote**. “Climate change and increased local government fiscal stress”. North Star. Oregon Mountain Goats, July 2023 <https://www.northstarcivic.org/gatherings/mt-goats-july-meeting>
5. **Seminar Presentation**, “People and their perceptions for improving policy formulation for air quality and climate policies”, Carnegie Mellon University, Engineering and Public Policy, Seminar Series, June 8, 2023
6. **Presenter**, “Mobilizing adaptation to advance climate resilient development: perspectives from the IPCC 6th Assessment Cycle”. Presentation to the Norwegian Government as input to the National Climate Adaptation Planning Assessment, January 2023, Oslo, Norway
7. **Presenter**, “Assessing adaptation needs: findings from the contribution of IPCC Working Group II to its Sixth Assessment Report” <https://unfccc.int/event/ipcc-event-assessing-adaptation-needs-findings-from-the-ipcc-wgii-contribution-to-its-sixth>, Sharm El-Sheik, Egypt at the 27th Convention of the Parties to the UN Framework Convention on Climate Change (UNFCCC), November 2022
8. **Presenter**, “Transformational adaptation addressing complex, compound, cascading and transboundary risks and climate resilient development pathways”, Presentation at workshop on Enhancing adaptation action and support under the Glasgow-Sharm el-Sheikh work programme of the Global Goal on Adaptation, UNFCCC, August 2022
9. **Presenter**, “Key Findings of Working Group II”. Presented to the Subsidiary Body for Scientific and Technological Advice of the United Nations Framework Convention on Climate Change (UNFCCC), June 2022

Workshops (N = 7)

1. **Organizer**. (2023). Workshop on “Alternative Governance and Climate Change”. 57th North American Meeting of the Peace Science Society, Saint Louis, Missouri, November 2023
2. **Organizer**. (2023). Workshop on “Vulnerability beyond indicators: A knowledge exchange on the methods for evaluating "personal-political" climate vulnerability and adaptation”. Held at Concordia University, October 2023.
3. **Convener**. (2023). Session on “Knowledge co-production for the Global Goal on Adaptation”. Adaptation Futures. Montreal, Canada, October 2023
4. **Chair**. (2023). Session on “Human mobility and climate change” at International Workshop: The Future of Human Mobility, Toronto Metropolitan University, Canada, September 2023
5. **Chair**. (2023). Session on “Estimating the economic consequences of social processes, including migration and conflict: stability, instability, and tipping points”, New horizons for Increasing the Understanding of Economic Consequences of Climate Change hosted by the Royal Society, United Kingdom, March 2023
6. **Organizer**. (2023). Expert workshop on “State of the Science of “Political future exploring how to improve the representation and usability of sociopolitical factors in the SSPs”, at German Institute of Development and Sustainability (IDOS), Bonn, Germany, <https://www.idos-research.de/en/events/details/state-of-the-science-of-political-futures/>

7. **Convener** (2022). Workshop on “Improving the representation and usability of socio-political factors in the Shared Socioeconomic Pathways (SSPs)”, Scenarios Forum, Vienna, Austria June 20 – 22, 2022

Recent Conference Presentations (N = 19)

1. **Gilmore, E.A.** et al. (2024). One size fits all? Unpacking transformational adaptation for policy and practice, Human geographies of adaptation, Bergen, Norway, May 2024
2. Cunningham, K., **Gilmore, E.A.**, Huang, R., Jung, D., Loyle, C. (2024). Climate change and rebel governance, International Studies Association, San Francisco, US, April 2024
3. **Gilmore, E.A.** (2024). Transformational adaptation, locally-led adaptation, and the Global Goal on Adaptation (GGA), Presented at the Gobeshona Global Conference 4, Online, March 7, 2024.
4. **Gilmore, E.A.**, Ley, D., Li, J., Helgeson, J., Tall, A. (2023). Improving assessment practices to incorporate equitable climate resilience amid increasing complex events, Adaptation Futures, Montreal, Canada, October 2023.
5. Moyer, JD., Meisel, C.J., Petery, C., Irfan, M., Burgess, M., **Gilmore, E.A.**, Xiong, Y., Hughes, B. (2023). Which road are we on? Using historical model validation to forecast a most likely global development pathway through 2040. Integrated Assessment Modeling Consortium (IAMC) Annual Meeting, Venice, Italy, November 2023
6. **Gilmore, E.A.**, Buhaug, H. et al. (2023). Narratives for political development in the Shared Socioeconomic Pathways. American Political Science Association (APSA), Los Angeles, CA, September 2023.
7. **Gilmore, E.A.**, Macgillvray, W*. (2023). Experiential Learning Session 1 – Transforming how we think about Projects in Engineering Education: From Project Management to Project Leadership, NICKEL VIII Conference, August 8-9, 2023, Montreal, QC
8. Cunningham, K., **Gilmore, E.A.**, Huang, R., Jung, D., Loyle, C. (2023). Rebel governance and climate change: Outlining a research agenda, International Studies Association Annual Meeting, Montreal, March 2023
9. Beland, L-P., **Gilmore, E.A.**, Papineau, M. (2021). Socioeconomic status and air pollution exposure as determinants of COVID-19 infections and disease course: Evidence from the Greater Toronto Area. Canadian Economics Association Meeting. June 3 – 5, 2021
10. **Gilmore, E.A.** (2021). Economic growth, armed conflict, and climate change. Society for Benefit Cost Analysis. Online Meeting. March 2021.
11. Tennant, E., **Gilmore, E.A.** (2020). Natural hazards, disasters, and armed conflict. American Geophysical Union Online Meeting. December, 2020.
12. Tennant, E., **Gilmore, E.A.** (2019). Natural disasters, armed conflict, and institutions. Society for Risk Analysis, Arlington, VA, December 2019
13. **Gilmore E.A.**, Heo J, Muller N, Tessum C, Hill J, Marshall J, Adams P (2019). Developing estimates of the social costs of air pollutants and their uncertainty using reduced complexity models. Society for Risk Analysis, Arlington, VA, December 2019
14. von Uexkull, N. di Baldassarre, G., **Gilmore, E.A.**, Hegre, H., Vestby, J., Buhaug, H. (2019). Climate sensitive armed conflict projections for the 21st century, American Political Science Association. Washington, DC. August 2019

15. **Gilmore, E.A.** (2019). Using a mental models approach to synthesize climate-conflict research, International Studies Association. Toronto, Canada. March 2019
16. Bell, A., **Gilmore, E.A.** (2019). Red-yellow-green assessment of SSP use in migration modeling. Scenarios Forum 2019, Denver, CO. March 2019
17. **Gilmore, E.A.**, Hegre, H., Hoyles, F. Olafsdottir, G., Petrova, K. (2019). Economic growth, governance and the implications for climate change. Scenarios Forum 2019, Denver, CO. March 2019
18. **Gilmore, E.A.** (2018). Incorporating the economic damages from armed conflict into the social cost of carbon. American Geophysical Union Fall Meeting, Washington, DC, December 10 – 14, 2018
19. **Gilmore, E.A.** (2018) Using structured expert models to evaluate the climate-migration-conflict pathway. International Studies Association. San Francisco, CA. April 2018

Public Facing Panels (N = 12)

1. **Panelist**, Bridging the ambition gap for the future we want through climate and SDG synergies at the High-level Political Forum for Agenda 2030, United Nations, New York, July 16, 2024
2. **Panelist**, Strengthening scientific cooperation, technology and knowledge sharing and accelerating innovation for integrated climate action (SDG13) at 9th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals (STI Forum), United Nations, New York, May 9, 2024
3. **Panelist**, Adaptation-Mitigation Synergies and Tradeoffs, Intergovernmental Panel on Climate Change at the Science for Action Pavilion, UNFCCC, Dubai, UAE December 8, 2023, <https://apps.ipcc.ch/outreach/programme.php?q=135&e=9>
4. **Panelist**, A Stocktake: From climate technology needs to implementation, UN Environmental Programme, UNFCCC, Dubai, December 5, 2023.
5. **Panelist**. Climate Change and Human Rights: The IPCC Synthesis Report. A Side event at the UN Human Rights Council, 52nd session, March 2023
6. **Panelist**. Financing the transition (adaptation and mitigation), Panel at the Science Pavilion at the Sharm El-Sheik, Egypt at the 27th Convention of the Parties to the UN Framework Convention on Climate Change (UNFCCC), November 2022
7. **Panelist**. Adapting to climate change: Humanity’s progress, limits, and needs - A reflection of the latest IPCC key findings, Panel at the Science Pavilion at the Sharm El-Sheik, Egypt at the 27th Convention of the Parties to the UN Framework Convention on Climate Change (UNFCCC), November 2022
8. **Panelist**. Future climate scenarios – A dialogue with international policymakers on user needs and priorities, Panel at the Science Pavilion at the Sharm El-Sheik, Egypt at the 27th Convention of the Parties to the UN Framework Convention on Climate Change (UNFCCC), November 2022
9. **Panelist**. Migrating Climates and Climate Migration: Discussing the Climate Migration Nexus and Refugee Law in Canada. Balsillie School of International Affairs. <https://www.balsillieschool.ca/event/migrating-climates-and-climate-migration-discussing-theclimate-migration-nexus-and-refugee-law-in-canada/>
10. **Panelist**. Climate Security: The Role of Data and Disruptive Technologies for Climate Security, CGIAR Research Program on Climate Change, Agriculture and Food Security, June 2020, <https://www.cgiar.org/news-events/news/the-role-of-data-and-disruptive-technologies-forclimate-security/AFS>

11. **Panelist.** Climate Change and Sustainability in the City. Carleton University, Expert Discussion Series. January 8, 2020: <https://charlatan.ca/2020/01/climate-change-experts-offerhope-for-future/>
12. **Panelist.** The Environment – Reason for optimism, or reason to panic?. Comments on Steven Pinker’s address, Peace Research Institute of Oslo (PRIO) Seminar, June 6, 2019: <https://www.prio.org/events/event/?x=8728>

CONTRACTS AND GRANTS

Awarded

03/2024 – 03/2027: Lead-PI: Transforming places for the precariously housed: Equitable adaptation pathways for climate mobilities, International Joint Initiative for Research in Climate Change Adaptation and Mitigation Competition (held at Carleton)

04/2024 – 04/2025: Collaborator: Ontario Climate Risk Workshop, SSHRC Connection Grant (held at Carleton)

06/2023 – 06/2024: Co-PI: Vulnerability beyond indicators: A knowledge exchange on the methods for evaluating “personal-political” climate vulnerability and adaptation, SSHRC Connection Grant, Workshop in October 2023 (held at Carleton)

06/2023 – 05/2028: PI: Integrating Adaptation and Mitigation in Climate Action and Scenarios. Discovery Grant, National Science and Engineering Research Council (NSERC), Canada (held at Carleton)

10/2022 – 10/2027: Senior Personnel. POLIMPACT: Enabling Politically Sensitive Climate Change Impact Assessments for the 21st Century”, European Research Council (held at PRIO)

01/2022 – 12/2026: Co-PI: Bending the Curve with NETs: Developing a New Modeling Framework for Negative Emissions Technologies, Environment and Climate Change Canada (held at Carleton)

02/2022 – 01/2025: Co-PI: Climate Change & Alternative Governance, US Department of Defense, Minerva Initiative (held at Carleton)

09/2021 – 08/2026: Senior Personnel. Large-scale CoPe: Megalopolitan Coastal Transformation Hub (MACH): Improving the Understanding and Governance of Co-Evolving Hazards, Development, and Coastal Processes, National Science Foundation (held at Rutgers)

Completed

03/2021 – 03/2022: Adviser, Entre el Desarrollo Sostenible Deseable y el Desarrollo Posible de la Península de Yucatán, México en el Contexto del Cambio Climático, Pan American Institute of Geography and History

10/2019 – 10/2021: Lead PI, Collaborative Research: Workshop: Engaging students in science international decision-making, National Science Foundation

01/2018 – 12/2020: Team member on “A forecast of the timing, locations, sequence and likeliest destinations of populations displaced by sea level rise and coastal extremes.” Supported by the National Socio-Environmental Synthesis Center (SESYNC) under funding from the National Science Foundation

07/2017 – 07/2018: Lead on policy conference on climate and conflict at Wilson Center, March 7 – 8, 2018, Funded through Peace Research Institute, Oslo (PRIO)'s Climate Anomalies and Violent Environments, Research Council of Norway

06/2016 – 02/2018: Lead PI, Minerva Research Initiative, Department of Defense. Case studies on migration and social stress in the face of climate risk

08/2013 – 02/2018: Lead PI, Minerva Research Initiative, Department of Defense. Forecasting civil conflict under different climate change scenarios

07/2014 – 07/2016: Co-PI, Council of the Environment, University of Maryland, Seed Grant, Studying the future of the Chesapeake Bay watershed region by coupling socio-economic and earth-system models

06/2013 – 05/2014: Co-PI, Venture Grant from SESYNC, University of Maryland, Renewable energy from wastewater: A synthesis of the agricultural, energy, and transportation sectors and environmental tradeoffs

04/2013 – 12/2014: Lead PI, ADVANCE Seed Grant, University of Maryland, Quantifying human health effects from climate change in an integrated assessment model

07/2012 – 11/2012: Lead PI, Lockheed Martin, Costs and environmental attributes of bulk energy transportation options for renewable energy

FELLOWSHIPS, PRIZES AND AWARDS

- Scholar of Distinction, Achievement Rewards for College Scientists – Pittsburgh Chapter (2023)
- Future Learning Innovation Fellowship, Carleton University (2023)
- Next Generation Visiting Researcher Award, held at Bristol University, UK (2023)
- Calouste Gulbenkian Foundation Award (2022) won as part of the Intergovernmental Panel on Climate Change (IPCC)
- Clark University Nominee for the Andrew Carnegie Fellows Program (2017)
- University of Maryland Finalist for the ORAU Ralph E. Powe Junior Faculty Enhancement Award (2012)
- American Association for the Advancement of Science (AAAS), Science and Technology Policy Fellowship (2010 – 2011)
- Environmental Protection Agency, Science to Achieve Results Graduate Fellowships (2006-2009)
- Link Energy Foundation Fellowship (2006-2008)
- Canadian National Science & Engineering Research Council Scholarship – Doctoral program (2005-2007)
- Achievement Rewards for College Scientists – Pittsburgh Chapter (2004-2007)
- Canadian government Natural Science and Engineering Research Council Scholarship – Master's degree program (2000-2002)
- Faculty of Engineering Centennial Thesis Award for best 4th year thesis (2000)
- Faculty of Engineering W.S. Wilson Medal for ranking 1st in chemical engineering (2000)

TEACHING ACTIVITIES

Carleton University

Engineering Economics (ECOR3800)

Integrated Assessment Modeling (ENVE5703W)

Climate Change Collaborative Graduate Course (CLIM5000)

Clark University

The Policy and Practice of International Climate Negotiations (Online Multi-Institution Course, IDCE358)
Case Studies in Environmental Issues and Policy Analysis (IDCE30102)
Climate Science and Policy (IDCE30205)
Global Environmental Issues (IDCE351)

University of Maryland

Getting to 2 degrees: The politics and practice of climate negotiations (PUAF688Q)
Decision Analysis for Environmental and Energy Applications (PUAF689K)
Coupled Natural and Human Systems (GEOG738E)
Microeconomic and Public Policy (PUAF640)

Other teaching activities:

Invited Lecturer, Public Finance and Climate Change: Expanding the Conversation on Sustainability, Harvard University, Kennedy School. (January 2022)

RECENT MEDIA MENTIONS

- Capital Current, “Ecology Ottawa urges the city to fund a community-run air quality monitoring program”, December 2023
- University Affairs, “The race to net zero”, September 2023
- Ottawa Citizen, “Your wildfire guide — stay indoors, drink water and call your local politicians as though the air you breathe depends upon it”, July 2023
- The World, PRX, “UN says still time to fight climate change”, March 2023
- National Public Radio (NPR), “With Manchin deal, talk of Biden's climate emergency declaration may be dead”, July 28, 2022
- New Scientist, “40 per cent of people could live outside 'human climate niche' by 2100”, July 1, 2022
- Canadian Broadcast Corporation, “Europe's path away from Russian oil and toward renewable energy is paved with a dirty reality”, May 6, 2022
- USA Today, “With climate catastrophe looming, experts say world also needs carbon removal solutions”, May 2, 2022
- USA Today, “People are dying: Global warming already being seen in North America, UN report finds”. March 9, 2022
- Vancouver Sun, “Climate report a dire warning”. March 3, 2022
- APTN, “UN releases ‘stark report’ on climate crisis and how the world is dealing with these changes’, March 1, 2022

EXTERNAL AND SERVICE ACTIVITIES

Editorial responsibilities

- 04/2024 – present: Associate Editor at Current Opinion in Environmental Sustainability
- 08/2023 – 04/2024: Associate Editor at IEEE Technology and Society Magazine
- 05/2023 – present: Section Editor for Policy and Governance PLOS Climate
- 01/2016 – present: Section Editor on Economics and Public Policy at Current Climate Change Reports
- 01/2016 – present: Editorial Board of Environment Systems & Decisions

Committee and Expert activities

- 07/2024 – present: Member of the Expert Group on Climate and SDG Synergy, United Nations

- 03/2024 – present: Member of the Taskforce on Scenarios and Models for the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)
- 03/2023: Member of Canadian Government Delegation to the Approval Plenary for the Synthesis Report for the 6th Assessment Cycle
- 05/2023 – present: Ex-officio Member of My Climate Risk, World Climate Research Programme
- 01/2023 – present: Co-Chair of Global Goal on Adaptation (GGA) Working Group for WASP
- 09/2022 – present: Member of Scientific Committee, UN World Adaptation Science Programme (WASP)
- 03/2022: Member of Canadian Government Delegation to the Approval Plenary for IPCC Working Group III for the 6th Assessment Cycle
- 09/2018 – present: Advisory Team of Global Adaptation Mapping Initiative: A collaborative network for mapping global evidence on climate change adaptation: <https://globaladaptation.github.io/>

Elected Activities

- 12/2018 – 03/2020: Secretary of the Society for Risk Analysis
- 01/2016 – 12/2017: Chair of Economics and Benefits Analysis Specialty Group
- 09/2014 – 12/2017: Secretary for the Society for Benefit Cost Analysis

Reviewing activities

- **Panel Member**, Natural Sciences and Engineering Research Council (NSERC), Discovery Grant Panel for Civil, Industrial, and Systems Engineering Evaluation Group (2024 – 2026)
- **Recent Panels:** NSERC Alliance, NSF Panels, European Research Council
- **Expert Review Activities:** Invited Reviewer for “Canada’s Changing Climate Report”, Invited Reviewer for MedECC “Special Report on Environmental Changes, Conflict and Human Migration”, Invited Reviewer for New York State’s “Climate Impact Assessment, Economic Analysis Report”, Invited Reviewer for UNDP/IDOS, “How does progress on SDG 16 affect progress on SDG 13”.
- **Journal Reviewing Activity:** Earth’s Future, Climatic Change, Environmental Science and Technology, Risk Analysis, Environmental Research Letters, Journal of Peace Research, Journal of Political Geography, Environmental Systems & Decisions, International Studies Quarterly, Global Environmental Politics, Lancet Planetary Health, Journal of Conflict Resolution, Health Affairs, Climate Action, World Development, Global Environmental Change