

PROMOTION RECOMMENDATION
The University of Michigan
School for Environment and Sustainability

Joshua P. Newell, associate professor of environment and sustainability, with tenure, School for Environment and Sustainability, and associate professor of environment, without tenure, School for Environment and Sustainability and College of Literature, Science, and the Arts is recommended for promotion to professor of environment and sustainability, with tenure, School for Environment and Sustainability, and professor of environment, without tenure, School for Environment and Sustainability and College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	2008	University of Washington, Seattle, WA
M.A.	2003	University of Washington, Seattle, WA
B.A.	1991	Brown University, Providence, RI

Professional Record:

2017 – Present	Associate Professor, with tenure, School for Environment and Sustainability, University of Michigan
2018 – Present	Associate Professor, without tenure, Program in the Environment, School for Environment and Sustainability and College of Literature, Science, and the Arts
2010 – 2017	Assistant Professor, School of Natural Resources and Environment, University of Michigan
2009 – 2010	Research Assistant Professor, Center for Sustainable Cities, Price School of Public Policy, University of Southern California
2008 – 2009	Research Assistant Professor, Department of Geography, University of Southern California

Summary of Evaluation:

Teaching: Professor Newell's teaching of both graduate and undergraduate courses is outstanding, and his training and mentoring of students and post-doctoral fellows is exemplary. He regularly teaches one undergraduate course and one graduate course, in addition to leading (from 2014-2020) a year-long Rackham-funded seminar on *Sustainability and Resilience* for Ph.D. students from multiple campus units. Professor Newell's undergraduate course, *Sustainability and Society*, is listed through Program in the Environment (PitE); it serves as the foundational course for the minor in Sustainability at the university. Students in the course nominated Professor Newell for the Golden Apple award, and he was a finalist for the prestigious honor. Professor Newell's courses are not "off the shelf" courses with a standardized curricula known throughout the academy. His creativity, thoughtfulness, and commitment are evident in the courses. His teaching evaluations consistently rank in or near the top quartile at the university.

In addition to his formal teaching, Professor Newell is an energetic mentor of master's and Ph.D. students and post-doctoral researchers. He has an enviable record of placing his Ph.D. students and post-docs in tenure-track faculty positions at major universities. Professor Newell's Rackham-funded seminar for Ph.D. students, offered annually 2014-2020, reflects his deep commitment to fostering the scholarly development of Ph.D. students across the university.

Research: Professor Newell is a human-environment geographer who brings a breadth of perspectives to his scholarship, drawing on political ecology and industrial ecology in addition to geography. His scholarship is also informed by several years of professional experience in the environmental NGO sector in Japan and Russia prior to his graduate studies. Professor Newell's research is widely recognized as influential in multiple scholarly fields in which he has contributed to theoretical and empirical understanding of urban sustainability, resilience, and urban metabolism. His research has two primary thrusts: 1) green infrastructure, built form and equity, and 2) urban-rural resource and commodity flows, which extend theories of urban metabolism.

Professor Newell's scholarship is impressive in its abundance, quality, and international influence. He has published 46 articles in refereed journals (including ten as first author). Since his promotion to Associate Professor in 2017, he has published 24 refereed papers, contributed to two reference books, and written six book chapters. Almost 90% of his 7,153 citations have been since 2016. Along with widely recognized scholarship that he produced earlier in his career, his more recent work demonstrates his capacity for intellectual leadership, collaborative research, and transdisciplinarity, all of which provide a strong basis for future productivity in these areas of scholarship. Professor Newell has an outstanding record of grant funding in support of his scholarship, primarily from the National Science Foundation.

Recent and Significant Publications:

- Meerow, S., and J.P. Newell. Spatial planning for multifunctional green infrastructure: Growing resilience in Detroit. *Landscape and Urban Planning*. 2017, 159, 62-75.
- Goldstein, B., D. Gounaridis, and J.P. Newell. The carbon footprint of household energy use in the United States, *Proceedings of the National Academy of Sciences*, 2020,117(32)
- Newell, J.P., B. Goldstein, A. Foster. A 40-year review of food-energy-water nexus literature and its application to the urban scale. *Environmental Research Letters*, 2019, 14, 073003
- Newell, J.P. and Cousins, J. The boundaries of urban metabolism: Towards a political-industrial ecology. *Progress in Human Geography*, 2015, 39(6): 702–728.
- Meerow, S., Newell, J.P., and Stultz, M. Defining urban resilience: A review. *Landscape and Urban Planning*, 2016,147: 38–49. Note: Web of Science Highly Cited Paper (Top 1% of Social Sciences).
- Wolch, J.R, Byrne, J., and Newell, J.P. Urban green space, public health and environmental justice: The challenge of making cities “just green enough.” *Landscape and Urban Planning*, 2014, 125: 234–244. Note: Web of Science Highly Cited Paper (Top 1% of Social Sciences).

Service: Professor Newell's leadership is evident in how generously he has given of his time to the school, the university, and his field. His service reflects his willingness to contribute measurably to improve the organizations in which he functions. His record includes significant appointments in two professional societies, reviewer and panelist for NSF, active affiliations with several schools, centers, and institutes at UM, and leadership positions at SEAS. At SEAS, he has been instrumental in the school's transition from SNRE to SEAS in three capacities: serving on the campus-wide SEAS Faculty Transition Team, serving two consecutive two-year terms on Executive Committee during the first years of SEAS, and serving on two committees tasked with improving the SEAS Ph.D. program. At the university, Professor Newell served twice on the PitE Advisory Committee, and he drafted the original plan for UM's Sustainability minor. He has steadfastly worked to advance interdisciplinary Ph.D. studies at the university.

Professor Newell is very active in the Association of American Geographers and the International Society of Industrial Ecology. Geography is his natural home, and he has held several leadership positions among specialty groups within the AAG in addition to organizing and presenting at paper sessions. As an interdisciplinary scholar, he has worked to integrate across the two societies by organizing sessions at professional meetings that cross over substantively.

External Reviewers:

Reviewer A: "Josh [Professor Newell] has established himself as a leading scholar in urban sustainability and resilience. ...Given the number of papers published it is difficult to pick winners, but I am confident in his ability to publish intellectually original and methodologically rigorous academic papers that have an impact. ...This is one of the strongest promotion cases that I have seen, and I have no hesitance in recommending that he be promoted to professor, with tenure."

Reviewer B: "Josh Newell is a leading voice on urban sustainability and resilience. Before doing this assessment, my impression was that Josh Newell was a very active and productive scholar who engages directly with current debates in urban sustainability and urban environments. With the evidence of this CV and the submitted materials, I can confidently say that he is a world-class scholar with an impressive range of outputs and evident influence in the field. ...Josh Newell's work would meet the requirements for someone being considered for full professor, particularly while considering the impressive grant capture and the impact of some of his publications."

Reviewer C: "He [Professor Newell] has become a very well-known scholar in systems thinking and modeling of environmental networks (including food). ...I know of no one who has the kind of breadth and depth he has in this kind of systems research. He is cited in the top geography literature on economic value networks, in the urban literature on urban metabolism and systems, and in environmental studies/science literature on systems and theory. ...It takes a very special and uniquely trained individual to do the work Professor Newell does. I mean, basically, he is brilliant."

Reviewer D: "Dr. Newell is a leading scholar in urban sustainability and human-environment systems research and I would place him very clearly in the top 10% of scholars at his career stage based on other evaluations I have performed. He is far above average in terms of research productivity and external funding and his trajectory in the last couple of years is one of noted

acceleration. I am confident he would be promoted at peer research-focused universities in the United States based on his record of excellence in research. On the basis of this evaluation I recommend Dr. Newell's promotion to Full Professor."

Reviewer E: "My review reflects my knowledge of the field of industrial ecology, and not other fields to which Prof. Newell belongs and where some of his scholarship falls (e.g., human geography and urban ecology). ...Prof. Newell has carved out a unique place in the field of industrial ecology. I rank him easily among the top 10 at his career stage in the broad field of industrial ecology here in the U.S., and among those focused on social aspects of industrial ecology (or embedding social impact assessment in industrial ecology), I rank him in the very top of the field, and among the top 5 or 10 in the world. ...Based on my review of the provided materials, my familiarity with Prof. Newell's published work and contributions to the field of Industrial Ecology I strongly recommend promotion to full professor."

Reviewer F: "Dr. Newell is a leading scholar internationally in the field of urban resilience and sustainability. He has made path-breaking contributions in several topical areas including urban climate resilience, environmental and social evaluation of green urban infrastructure, and the nexus between urban energy-food-water systems. Dr. Newell's work is notable for 1) its theoretical sophistication, consistently offering fresh and new insights which advance understanding of how cities can better manage and plan for sustainability and resilience; 2) its methodological innovation and careful blending of quantitative models with qualitative data collection; and 3) its relevance to urgent societal challenges in around sustainability, equity, and efforts to plan for climate change. ...In sum, I offer my strongest support for granting Dr. Newell promotion to Professor at the University of Michigan."

Reviewer G: "I am very impressed by what I see in these materials provided for me. I am seeing here the kind of academic that we are looking for now who can easily cross disciplines and reach out to the world in his research as it is relating to the issues of the day. ...The quality is without any doubt very high as shown below. The quantity is remarkable in such a short time. ...Promote him or lose him. Professors need to be leaders. Josh Newell is a leader."

Reviewer H: "Dr. Newell has been at the forefront of bringing together the fields of industrial ecology and political ecology to shed light on the political, ecological and equity impacts of supply chains, as well as the embedded greenhouse gas emissions of such supply chains. This work is critical, as it provides insight into the consequences of high energy modernism and the disruptive Earth systems consequences of continued high levels of consumption based on treating nature and many humans as cheap inputs. The way in which he continually weaves the question of urban metabolism in his work is one of his important contributions to scholarship and advancing knowledge ...I can say that he would definitely meet the requirements for [promotion and] tenure at [the referee's home institution]."

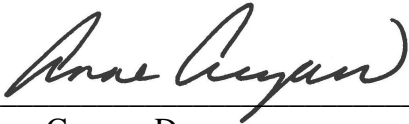
Reviewer I: "I evaluate his work to be of extremely high quality, and to be original and innovative and representing a significant contribution to the scholarly literature. His expertise in urban sustainability and resilience with a focus on industrial ecology and political ecology gives him a rare capacity to find meaningful integration and synthesis across these domains. ...He has made important theoretical contributions to our understanding of urban metabolism, green space equity, urban resilience and urban-rural linkages. ...I can easily state that Dr. Newell far exceeds

the common standards for research and scholarship, service, and teaching to be considered for promotion to full professor and that his work is excellent compared to others in this field at a similar point in their careers.”

Summary of Recommendation: Professor Newell has an exemplary record of scholarly achievement that positions him as a nationally and internationally recognized leader on the theoretical and empirical understanding of urban metabolism, sustainability, and resilience. He has an outstanding record of grant funding in support of his scholarship. Professor Newell also has a consistent record of excellence in teaching and mentoring. We enthusiastically recommend Joshua Newell for promotion to professor of environment and sustainability, with tenure, School for Environment and Sustainability, and professor of environment, without tenure, School for Environment and Sustainability and College of Literature, Science, and the Arts.



Jonathan T. Overpeck
Samuel A. Graham Dean
School for Environment and Sustainability



Anne Curzan, Dean
Geneva Smitherman Collegiate Professor of
English Language and Literature, Linguistics,
and Education
Arthur F. Thurnau Professor
College of Literature, Science, and the Arts

May 2022