## DISTINGUISHED SEMINAR SERIES

Hosted by the Department of Civil and Environmental Engineering at Northeastern University

## Consumption, Coronavirus, and the Industrial Ecosystem



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Tuesday
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12PM - 1PM
Join Zoom
Meeting

We look forward to seeing you online.

ABSTRACT: The novel coronavirus has drastically changed the way we live and work, causing major shifts in our daily activities, mobility, and patterns of consumption. From an environmental point of view, the shut-down has led to striking improvements to air and water quality, including here in Boston, but these have come at great economic cost. Other environmental effects are harder to see, as our changing consumption influences energy use and emissions throughout a complex web of regional and global supply chains. Some new behaviors may have systemic benefits... or dis-benefits. Does telecommuting save energy? Is food delivery a good way to reduce food waste? And importantly right now, what actions are hospitals taking that can improve patient care, worker safety, and environmental sustainability simultaneously? Life cycle models can provide answers to some of these questions by linking economic and environmental processes into an 'industrial ecosystem'.

**BIO:** Matthew Eckelman is an Associate Professor and Associate chair for research of civil and environmental engineering at Northeastern University, with affiliate appointments in chemical engineering, marine & environmental science, and public policy & urban affairs. His research focuses on modeling the industrial ecosystem, linking consumption to emissions, energy use, environmental impacts, and health damages. This research has been funded by industry, USDA, EPA, NEH, and NSF, including a CAREER award in environmental sustainability in 2015. For the past 10 years, he has served as CTO of Sustainability A to Z, a green engineering consulting firm based in Connecticut. Dr. Eckelman worked previously in the MA Executive Office of Environmental Affairs, with the non-profit industrial design company Design that Matters, and as a Peace Corps science education volunteer in southern Nepal. Stemming from his work on health care sustainability, he is an adjunct professor at the Yale School of Public health and a member of the *Lancet Countdown on Health and Climate Change*. He received a PhD in chemical and environmental engineering from Yale University.