You are cordially invited to a guest seminar by **Prof. Matthias Ruth**, Professor at the School of Public Policy and Urban Affairs and Department of Civil and Environmental Engineering, Northeastern University, Boston.

## Robust Strategies for Urban and Regional Energy System Resilience

Date : Monday, 24<sup>th</sup> April 2017, Time : 10:30 AM - 12 Noon Venue : ET238, Energy Building



The increasing frequency and severity of extreme climate events, combined with unprecedented demographic pressures, changes in lifestyles and technologies, pose formidable challenges to understanding the dynamics of urban centers and the regions within which they are embedded. Yet, if policy and investment decisions are to improve resilience and promote sustainability they do require such understanding as well as an ability to explore how the dynamics change in response to deliberate interventions. Traditional risk assessment and forecasting tools are of only limited use in this context, given the potential for the emergence of novelty and surprises. Drawing on a case study from northern Germany, this presentation provides insight into the interdependencies of rapidly changing environmental and socioeconomic conditions, and, using dynamic modeling and visualization, identifies robust energy transition strategies designed to reduce local and global environmental impacts while improving a region's ability to withstand, or bounce back from, adverse developments.

## **SPEAKER PROFILE**

Prof. Matthias Ruth is Professor at the School of Public Policy and Urban Affairs and at the Department of Civil and Environmental Engineering at Northeastern University. He serves as Director of the Policy School, founding director of Northeastern's Resilient Cities Laboratory as well as the Urban Informatics program, and as editor-in-chief of Urban Climate Journal by Elsevier.

Professor Ruth holds a Masters degree in Economics from the University of Heidelberg, Germany, and a PhD in Geography from the University of Illinois. After almost a decade at Boston University and more than a decade at the University of Maryland where he was the Roy F. Weston Chair in Natural Economics and Policy Advisor on Sustainability to the Chancellor, he joined Northeastern University in 2012.

Prof. Ruth's research focuses on dynamic modeling of natural resource use, industrial and infrastructure systems analysis, and environmental economics and policy. His theoretical work heavily draws on concepts from engineering, economics and ecology, while his applied research utilizes methods of non-linear dynamic modeling.

Applications of his work cover the full spectrum from local to regional, to national and global environmental challenges, as well as the investment and policy opportunities these challenges present. He collaborates with scientists and policy makers worldwide.

Please kindly register your participation to enable us to make a better logistics. Please contact Dr. Shobhakar Dhakal, shobhakar@ait.ac.th. Tel 02 524 5403.