Environmental Life Cycle Assessment for Integrated Transportation and Land Use Planning Seminar

Seminar presented by Professor Mikhail Chester, Arizona State University

Date: Thursday, 14 November 2013  
Time: 5 - 6.30pm  
Venue: New Horizons Building 82 Seminar Room G29-G30 Clayton Engineering, Monash University

Abstract:

Energy and environmental assessments of public transportation have not typically considered life cycle impacts, including upfront infrastructure effects and indirect and supply chain processes, nor interdependencies with land use systems. A transportation life-cycle assessment framework that includes infrastructure, vehicles, energy production, and supply chains is used to assess the near-term and long-term impacts of policies that introduce high-capacity transit systems to reduce environmental impacts in cities. Using Los Angeles as a case study, energy consumption and emissions of greenhouse gases and criteria pollutants are calculated, as well the potential for smog and respiratory impacts. This work becomes the foundation for the development of an integrated transportation and land use life cycle assessment (ITLU-LCA) framework that evaluates the infrastructure and behavioral outcomes of the deployment of transit lines in a city and land development around them.

Biographical Profile:

Mikhail Chester is a Professor at Arizona State University (ASU) in Civil, Environmental, and Sustainability Engineering, and an affiliate faculty in the School of Sustainability. His area of expertise is the energy and environmental assessment of large infrastructure systems. He holds a Ph.D. from the University of California, Berkeley along with a M.S. and B.S. from Carnegie Mellon University.

Bookings are essential:

Please visit the On-line Registration Site to register:


Enquiries: Professor Geoff Rose  
Telephone: 03 9905 4959  
Email: geoff.rose@monash.edu