## Daniel Kaufman, Industrial Economics (IEc)

Title: Using Network Analysis to Facilitate and Measure Behavior Change and Market Scaleup

Abstract: The California Energy Commission (CEC) is undertaking a large, multi-year project to develop more robust methodologies and tracking procedures related to benefits from the Electric Program Investment Charge (EPIC). As an administrator of the EPIC Program, CEC funds applied research and development, technology demonstration and deployment, and market facilitation projects to develop and scale up clean energy technologies and approaches that will help meet the State's ambitious climate change goals. This panel session will foster a discussion among three of the Principal Investigators (PIs) for the EPIC Benefits project. Each panelist is using variations of network analysis to facilitate and measure the benefits of increased connectivity, resulting in organizational behavior change and adoption of clean energy innovations. PI Thomas Jensen will discuss the online collaboration platform that EPIC is developing to strengthen California's cleantech entrepreneurial ecosystem. Tom will discuss methods to use network analysis to help users improve matching and engagement with others they need to reach to advance and adopt cleantech innovations.

PI Daniel Kaufman will describe the use of network analysis to measure and facilitate knowledge exchange through co-authorship of publications and knowledge exchange platforms. By identifying the flow of ideas through the innovation ecosystem, EPIC can identify effective channels for knowledge dissemination and market scaleup, as well as areas that should be strengthened to better facilitate technology transfer.

PI Matthew McHale will describe EPIC's work to develop a new standard for smart inverters, which has the potential to transform the market nationwide. EPIC is bringing together organizations, including those who are sometimes competitors, to come together and accelerate the standards development process. By supporting the testing and demonstration of new standards, EPIC is transforming a knowledge-sharing network into a foundation for new products and service platforms. The panelists will discuss the following challenges: changing organizational/institutional/individual behavior, cultural or competitive barriers to collaboration, and data and measurement challenges.