



In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy
Madeline Tyson

Will defend her prospectus

**Distributed Information:
Implications for Energy Innovation Systems**

Abstract

The Internet has catalyzed enormous changes in many areas by shifting the feedback and organizational structure of systems towards more decentralized users. Today's energy systems require colossal shifts to ensure a more sustainable future. However, energy systems face enormous socio-technical lock-in and, thus far, have been largely unaffected by this destabilizing force. Many of the innovations that must provide the foundation for this transformation face challenges based on their inability to scale due to the lack of competitive niche markets for demonstration and deployment. More distributed information offers not only the ability to craft new markets, but to accelerate learning processes that can drive down costs and demonstrate new value. The research proposed here will examine potential pathways and impacts of several aspects of distributed information on energy innovation systems by using a mixed methods approach that includes experiments, modeling, and interviews.

Wednesday, January 20, 2016

3:00pm

ASU Tempe Campus, WGHL 102

Faculty, students, and the general public are invited.

Supervisory Committee:

Marco Janssen, ASU (Chair)

Braden Allenby, ASU (Member)

Jason Potts, RMIT (Member)

John Tuttle, DOE (Member – confirmation in progress)