



In Partial Fulfillment of the Requirements for the Degree of

**Master of Art**  
**Daniel Culotta**

Will defend his thesis

**From Reactive to Proactive: Creating a Governance System for  
Negotiating Local and Regional Climate Change Mitigation  
Interventions in Sonoma County, California**

Growing concerns over climate change and the lack of a federal climate policy have prompted many sub-national organizations to undertake greenhouse gas (GHG) mitigation actions on their own. However, the interventions associated with these efforts are typically selected in a top-down and *ad hoc* manner, and have not created the desired GHG emissions reductions. Accordingly, new methods are needed to identify, select, develop, and coordinate effective climate change mitigation interventions in local and regional contexts. This thesis develops a process to create a governance system for negotiating local and regional climate change mitigation interventions. The process consists of four phases: 1) mapping the overall transition, 2) reconstructing the current intervention selection system, 3) assessing the system against principles identified in the literature, and 4) creating an improved system based on the assessment. This process gives users a detailed understanding of how the overall transition has progressed, how and why interventions are currently selected, what changes are needed to improve the selection system, and how to re-structure the system to create more desirable outcomes. The process results in an improved system that relies on participation, coordination, and accountability to proactively select evidence-based interventions that incorporate the interests of stakeholders and achieve system-level goals. The process was applied to climate change mitigation efforts underway in Sonoma County, California to explore the implications of real-world application, and demonstrate its utility for current local and regional climate change mitigation efforts.

Tuesday, April 10, 2012  
10:00 a.m.  
Wrigley Hall, Room 481

Faculty, students, and the general public are invited.

Supervisory Committee:  
Arnim Wiek, Chair  
George Basile  
Milan Shrestha