

In Partial Fulfillment of the Requirements for the Degree of

## Master of Science Lisa Dirks

Will defend her thesis

## The Past and Future of Biofuels: A Case Study of the United States Using the Institutional Analysis and Development Framework

## Abstract

In recent years, the world has debated the idea of biofuels as a solution to energy security, energy independence, and global climate change. However, crucial issues have emerged raising questions about how the USA became so invested in biofuel technology and especially corn ethanol. This thesis utilizes the Ostrom Institutional Analysis and Development (IAD) framework to better evaluate these issues and analyze interacting institutions that shape US biofuel policy. Conclusions from this analysis include: the IAD framework is ideal for analyzing the political and economic case for biofuels. The five action arenas identified in this thesis are sufficient to understand corn bioethanol policy. A compelling case for supporting bioethanol is not made. An international agreement to reduce GHG emissions could change the landscape for biofuels. Finally, there is little prospect for biofuels playing a significant role in the near term without greater alignment among the action arenas.

> November 22, 2010 3:20 pm GIOS 202

Faculty, students, and the general public are invited.

Supervisory Committee: Jingle Wu (Chair) Marty Anderies (Member) Bruce Rittmann (Member)