Project: The Future of Electricity

Client: The Indiana University Center for Research in Energy and the Environment

Term: Spring 2009

Faculty Mentors: Professor James Oster & Professor J.C. Randolph

Summary:

The SPEA Capstone group examined the state of electricity and forecasted global electricity generation and consumption over the next fifty years using the changes predicted to occur. Key findings included that global consumption and generation of electricity will increase 350 percent over the next 50 years. The relative mix of fuel sources will remain largely unchanged, though generation technologies will become less carbon-intensive due to concerns like climate change. However, for climate change mitigation to be effective, it will require the abatement of emissions, particularly in the developing world. Country-specific case studies of China, Brazil, France, and the United States followed the main body of the report to provide specific illustrations of country-specific situations and geopolitical considerations.