



Dupont Summit 2014

..... Science, Technology, and Environmental Policy Issues

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The Policy Studies Organization

Budding Scholars Conference

Joseph Cochran – *University of North Carolina Charlotte*

"The Promise and Disappointments of State-Level RPS Policies: Using Complexity to Evaluate the Efficacy of Energy Policies"

The presentation presents the findings of the impact of state-level renewable portfolio standard (RPS) policies within the US on economic efficiency and social efficiency. Using a dataset constructed from governmental data, the quantitative analysis of the presentation estimates changes in economic efficiency and changes in social efficiency through using a complexity model. The changes in economic efficiency are measured as per capita changes in electricity costs while the changes in social efficiency are measured as per capita changes in carbon dioxide emissions. These changes are used to determine the efficacy of state-level RPS policies. Path analysis models, verified by structural equation models (SEMs), are used to quantify the impacts of state-level RPS policies and to examine the complex nature of the impacts of state-level RPS policies on state electricity markets. In contradiction to the popular held belief concerning state-level RPS policies, it is found that they reduce social efficiency as well as economic efficiency, meaning that there are no discernable benefits to states that have adopted state-level RPS policies.

Biography

A native of Charlotte, NC, **Joseph Cochran** finished his undergraduate degree in Anthropology at UNC Chapel Hill in 1999. After 9/11, he went into the US Navy, where he served honorably. After receiving his honorable discharge, he enrolled in UNC Charlotte in a graduate program in Liberal Studies and, when it became available, a graduate program in Ethics and Applied Philosophy. After receiving both of his master degrees, he then joined the PhD program of Public Policy in January 2009.