

## Policy

### *Experimental Investigation of Economic Incentives of Policies, Institutions, and R&D in Environmental Conservation*

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**Description:** Policies and institutions aiming at reducing pollution and battling climate change often do not reach desirable results because actual decisions of governments and economic agents deviate from those predicted by theory. We employ methods of experimental economics to find and explore such deviations and their causes, and use the findings to modify theory and design better policies and institutions. In this project, we construct a theoretical model of decisions in a dynamic environment with costs of pollution and climate change, while testing the theory in laboratory experiments with human subjects. We studied actual behavior and explore responses to changes in the environment, production technologies, investment in clean technology and institutions.

**Budget:** \$43,168.00

**Universities:** FSU

### Executive Summary

This project is the first, to the best of our knowledge, laboratory experimental study of the effects of environmental context, technological heterogeneity, and investment in clean technologies in an environment with a dynamic public bad. It also provides interesting and at times unexpected insights that have direct implications for policy or at least require a more detailed investigation. Specifically, we find that

- Environmental context and “green” framing, even if purely symbolic, have consequences for economic decisions.
- Under relatively low cost of pollution heterogeneous countries are less likely to achieve sustainability without external enforcement than under more severe costs of pollution and climate change.
- Common access to clean technology leads to higher investment in clean technology, lower levels of pollution and dominating payoffs. The results suggest that policies promoting research and development collaboration and technology sharing in combating environmental damage and climate change are effective.

This project has been completed.