

The Comparative Politics of Climate Change Policy

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2016 Balzan Prize for International Relations: History and Theory

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The Project and Its Future

This project is funded by the second half of the 2016 Balzan Prize for International Relations: History and Theory, awarded to Robert O. Keohane in 2017. Princeton University has provided additional financial resources as well as administrative support. The project originated under the auspices of the Social Science Research Council Working Group on Climate Change (whose mandate ended in early 2020) and the Center for Advanced Study in the Behavioral Sciences, Stanford University, with administrative support from Princeton University. It continues to be guided by the principles established at the outset, in 2018, and stated in reports to the Balzan Foundation.

The project is designed to be non-hierarchical and collaborative. Keohane's role is to convene a group of scholars working on climate change and/or comparative politics;

set the agenda; offer advice and guidance to the scientific investigators; and decide which projects that emerge should be funded and at what level. The investigators have constructed their own theories and hypotheses, and are using methods that they find appropriate, as long as they are social scientific and comparative. They will publish their work under their own names and with collaborators of their own choosing. They will also commit to freely sharing their ideas and findings with other members of the research group.

Although guided by theory, the project is also deeply empirical. It is evidence-based social science, conducted according to scientific principles that require specification of theory, deriving the observable implications of theory, specifying hypotheses that embody these observable implications, and testing the hypotheses with relevant data, which may be qualitative as well as quantitative. The motivations are to a great extent normative, but the research itself is positive. It could involve any kind of social scientific method, ranging from agent-based simulations to experimental work, statistical modelling and data analysis, comparative case studies, and ethnography. This project seeks to develop systematic knowledge about the sources of variation in climate policies and outcomes, and to galvanize a neglected field of political science: the comparative politics of climate change policy.

The project's definition of "the comparative politics of climate change" still includes an analysis of contemporary political actions. As stated in the 2018 report:

Climate change is one of the most important long-term problems facing the world as a whole, but social scientists do not know as much as we should about the conditions under which governments take it seriously, and what leads them to pursue one set of policies or another. Nor do we have a satisfactory understanding of why some other organizations – provinces, cities, or corporations, for example – adopt pro-active climate change or energy policies while others do not.

During the past two years, however, a new focus has been added: *the politics of decarbonization*. It has become clear from scientific reports, from the IPCC and other scientific organizations, that to avoid disastrous outcomes, the world needs to decarbonize entirely by 2050 or shortly thereafter. Since the world's carbon emissions are still increasing, and carbon is deeply embedded in modern industrial society, achieving this goal will be extremely difficult to say the least. Achieving it would generate immense technological, economic, and political disruption.

Originally, the plan for this Balzan Climate Project was for the 2020 session to be the final one. However, that workshop generated many new ideas and demonstrated that this project has created a vibrant network of young scholars working on climate change and talking with one another in a mutually beneficial way. Several participants expressed their desire to keep this network going. Over the past three years, Princeton University has provided the bulk of funds for the workshops so that maximum Balzan funding could be devoted to research. More Princeton funds are available, so Professor Keohane proposes to hold another workshop of this group at CASBS in February 2021 – a proposal already approved by CASBS. Thus, the Balzan Foundation not only has supported excellent research; it has served as a catalyst for building an institutionalized network with staying power.

The 2020 Workshop

In line with the new attention to the politics of decarbonization, the 2020 workshop was divided between sessions that focused on the contemporary politics of climate change, featuring social science analysis of individual preferences, corporate behavior, and government activity or inactivity, on the one hand, and sessions that sought to develop analyses of future decarbonization politics on the other.

The former sessions fall more readily within the boundaries of conventional political science, and the papers generated in those sessions are more likely to be published in mainstream political science journals and contribute to the goal of vastly expanding the attention paid by political science to climate change. It is apparent that such attention is now increasing greatly – not entirely due to the activities of members of the Balzan network, but clearly aided by their efforts. To advance their careers, young political scientists need to publish work that is theoretically interesting in the discipline because it addresses key subjects of importance that reach across issues. These topics include the following: how policy varies cross-nationally; the conditions under which elites can impose costs on publics or persuade publics to accept such costs; political strategies of corporations; and how gender and societal wealth affect public policy preferences. Understanding these issues will contribute both to our understanding of climate politics and to the politics of public policy more generally. Six papers or draft chapters discussed at the 2020 meeting focus on empirical issues of contemporary climate politics.

The sessions on decarbonization directly address the central public policy question raised by climate change: *How can industrial societies – at various stages of economic*

development – achieve the rapid decarbonization that the health of our planet requires? Since they seek to look into the future, they are necessarily less empirical and more conceptual or typological than the first set of papers. Their authors include senior scholars who have more scope for more speculative work, as well as bold younger scholars who have figured out ways to study “leading edge” issues and therefore investigate problems that illuminate the future in empirically compelling ways. One report and two memos discussed at the 2020 meeting explore future-oriented issues.

The core participants at the 2020 meeting include the following Balzan scholars, who were also involved in 2019: Amanda Clayton, Vanderbilt University; Jared Finnegan, London School of Economics; Nikhar Gaikwad, Columbia University; Jennifer Hadden, University of Maryland; Thomas Hale, Oxford University; Phillip Lipsy, Stanford University; Paasha Mahdavi, UC Santa Barbara; Jonas Meckling, UC Berkeley; and Dustin Tingley, Harvard University. Four researchers participated remotely: Professor Federica Genovese, University of Essex, Sarah Bush, Yale University; Jessica Green, University of Toronto; Florence Metz, University of Enschede, Netherlands. In addition, a research team composed of Hanna Breetz, Arizona State University, Matto Mildenerger, UC Santa Barbara, and Leah Stokes, UC Santa Barbara, was added; this team was present at the 2020 workshop.

Several more senior scholars participated actively in the discussions, including Margaret Levi, Director of the Center for Advanced Study in the Behavioral Sciences; Michael Ross of UCLA, Kenneth Scheve of Stanford University, Michael Tomz of Stanford University, and David G. Victor of the University of California, San Diego. Their participation provided continuity since Professors Levi, Scheve and Victor attended workshops in both 2018 and 2019; and Professors Ross and Tomz attended the workshop in 2018. In addition, Professor Jeff Colgan from Brown University and Valerie Karplus from MIT joined in the workshop this year, participating actively. Finally, there were several observers, including four CASBS fellows and staff members and one graduate student from Stanford.

The papers presented and the discussions are described below. All have been or will be completed and submitted for publication by the end of 2020.

The Contemporary Politics of Climate Change

Four projects funded by the Balzan Foundation fall under the rubric of “the contemporary politics of climate change.”

1) Jessica Green, Thomas Hale, Jennifer Hadden, and Paasha Mahdavi. *Transition, Hedge or Resist: Understanding Political and Economic Behavior toward Transition in the Oil and Gas Industry*.

The unit of analysis for this study is the firm, in particular large oil and gas firms. Their strategy toward decarbonization varies along two dimensions: 1) their business behavior, and 2) their political behavior. On the business dimension, firms can seek to continue to develop carbonized oil and gas assets, exploring for assets that will not be productive for decades; or they can shift investments toward low-carbon sources or toward zero-carbon sources such as solar power. On the political dimension, they can seek to deny climate change or the contribution of their activities to it, or they can publicly endorse measures to limit climate change.

During the last year, Green, Hale, Hadden, and Mahdavi have gathered extensive new evidence about oil companies, using information from such sources as earnings calls and financial disclosure reports. In their metrics, company political activity varies more than their operational behavior. In general, companies headquartered in Europe and with large European markets score somewhat better than US-based companies. In their data there is still much inter-company variation in business practices, although some commentators argued that with better metrics and interviews with industry leaders and insiders, more variation may emerge than appears now. The authors are making great progress but there is more work to be done.

Ways to develop the analysis and the theory were discussed. The most promising direction for theory focuses on differential skill sets and adjustment costs: firms whose skill sets make it easier for them to adjust can be expected to follow more progressive business practices. Some firms are increasingly in the gas business, so can invest in carbon capture and storage (CCS) and biofuels. Firms involved in deep-water petroleum extraction can build offshore wind platforms at competitive costs, while those committed to enhanced oil recovery have incentives to invest in direct air capture (DAC). By contrast, major oil firms are uniformly bad at onshore renewables since they have no prior skillset in that business. Refining investment could be an important explanatory variable predicting unwillingness to move out of fossil fuels since these are huge fixed investments. The more firms emphasize business lines that are close to what one would need in a decarbonized world – CCS, biofuels, DAC – the more easily one would expect them to be able to adjust.

The authors later said they would follow a suggestion made at the workshop to divide the paper into two outputs:

- A research note – a descriptive paper, showing what political science analysis can say about oil and gas firms’ decarbonization strategies.
- A theoretical paper with a causal hypothesis, tested using the observational data described above. This may focus on an adjustment cost story centered around refining capacity.

2) Nikhar Gaikwad, Federica Genovese, and Dustin Tingley. *Vulnerability, Compensation, and Support for Climate Policies*.

This study has three main goals: 1) to understand whether and to what extent compensation of people affected by climate change, or policies to combat climate change, affects people’s willingness to support climate change policies; 2) to understand how individuals in communities that are differently vulnerable to climate change, and to policies to combat climate change, are sensitive to different designs of climate policy; and 3) to discover how individuals will prefer to allocate funds from a fee assessed on carbonized fuels.

Answers to these questions will be critical in decisions about what sorts of compensation policies will be more politically acceptable – for instance, compensation payments to affected individuals versus adaptation funding for affected communities. These issues are becoming increasingly policy-relevant, as controversy over the current German plan to close coal plants and compensate those who are affected suggests. The findings will be comparable with findings in some other areas of political science research, such as the investigation of trade adjustment assistance and welfare policies targeting individuals or communities. The unit of analysis for this study is the individual, and the methodology is that of survey experiments.

The authors have completed their US survey experiments and have made some novel and interesting discoveries. They drew three samples from the US population: 1) a national representative sample; 2) a sample of people from coastal areas that produce fossil fuel; and 3) a sample of people from coal country. Each sample was asked how they would allocate funds from a fossil fuel tax at one of three levels: \$16, \$64, and \$256 per household. At the \$64 level, the general population and the coastal sample favored investments in green energy, closely followed by equal rebates to all households. Not surprisingly, people in coal country preferred compensation to coal

and oil workers for losses of jobs and income. It is interesting, perhaps not surprising, that if the price of carbon is very high (\$256), people in all samples want refunds.

Two points stand out. First, coal is distinctive; one does not find the same results among people in oil-producing coastal areas. People in coal country are highly community-oriented; people in the oil-coastal areas are not. The reasons are not entirely clear. It might be that coal is fundamentally different from oil, either because it is clearly disappearing or because coal workers work together so closely and have always been organized. Second, there is a major policy lesson. *If policy requires a high carbon price to drive adjustment to a carbon-free economy, refunds are essential for democratic assent.*

For further research, the most interesting group is the group in oil-producing coastal areas, who may be cross-pressured. The researchers may need a sample of people who are vulnerable to climate change (sea level rise) but not involved in oil production in order to understand perceptions (or lack thereof) of vulnerability among these people.

The India work is proceeding, although the coronavirus pandemic has slowed it down. The inclination of the researchers is first to publish the US paper – there are complexities that will take a while to explain and US-focused referees can understand them. The group would write a second paper comparing the India findings with the previously published US paper's findings.

3) Sarah Bush and Amanda Clayton. *Facing Change: Identity and Cross-National Responses to Climate Change.*

In exploring issues of gender and climate change on standard surveys, Professors Bush and Clayton discovered what appears to be a puzzling fact. In developing countries, the degree of concern about climate change expressed by men and women is similar; but as countries become richer, a gap appears, with women expressing more concern. This phenomenon relates to average incomes within countries, rather than to differential incomes: in rich countries, women express more concern than men about climate change irrespective of their levels of personal income.

Bush and Clayton have now fielded surveys in six Latin American countries and the United States, and have conducted extensive focus groups in Peru and the United States. This finding from the published genera turns out to be robust. More novel is

the fact that as countries become richer, men become strikingly less and less concerned about CC, producing the advanced country gender gap. It is men's shift in attitudes that needs to be explained.

There were detailed discussions about reasons for the gap. The authors hypothesize that the costs of action are higher in rich countries, since more lifestyle changes are required. However, the survey question asks how "concerned" people are, which does not point necessarily toward costs.

In an innovative move that enriched their data, the authors fielded several focus groups in Peru and the United States, restricting US participants to Republicans in order to hold party affiliation (which is so polarizing in the United States) constant. In the focus groups, the authors discovered a strong correlation between measures of masculine identity – such as opposition to feminism and a sense of "linked fate" with other men – on the one hand, and lack of concern about climate change, on the other.

The authors will now extend their survey research to high/middle income European/North American countries: Portugal, Spain, UK, Italy, France, Canada. This study is going very well and should produce a much-cited paper that not only is relevant to climate change but to the analysis of gender-based attitudes. It could easily launch a more extensive research program in which investigators employ focus groups in other countries to understand better the relationship that appears to exist between masculine identity and skepticism about the importance of climate change.

4) Jared Finnegan, Phillip Lipsy, Jonas Meckling, and Florence Metz. *The Institutional Sources of Energy Transitions: From the Oil Crises to Climate Policy*.

In this study the unit of analysis is the country. The 1970s oil price shocks generated the first major episode of policy-induced decarbonization on a large scale, although the purpose of the policies was not decarbonization but energy security. The policy shocks were exogenous and generated policy responses by all OECD member countries; however, the policies of some countries were more effective – and longer-lasting – than those of others.

The authors' thesis is twofold. First, countries with proportional representation insulate politicians better against reprisals for costly, vigorous action than countries with majoritarian electoral systems. Second, countries with corporatist institutions

provide more effective compensation for losers from rapid adjustment, thereby reducing political resistance.

The authors had extended their analysis from the 1970s oil shocks to contemporary climate policy, which in the view of commentators, led to a loss of focus. In asking why some governments are more effective than others, it was argued that the authors moved too quickly to an institutional account. Other factors could be involved. Politicians' preferences could be different across systems. Other resources available to governments may vary. For instance, France moved quickly to nuclear power in the 1970s not because of its government bureaucracy but because it already had a major nuclear program.

The insulation argument is questionable. Ruling parties may be more vulnerable to defeat in a PR system, except in cases of knife-edged majorities, since marginal shifts make more difference in coalitions than in a majoritarian system where the majority party has a comfortable majority.

The authors have a bold and potentially important argument, but they may have run somewhat ahead of their evidence. In response to the criticisms, they indicated that they would scale the paper back to focus more tightly on the oil crisis. Commentators suggested also that they should focus more in the paper on their strong findings that PR and corporatism affect policy, rather than the weaker evidence that they have major impacts on policy. No doubt, this valuable and important paper will be improved as a result of the frank discussion.

The Politics of Decarbonization

One project supported by the Balzan Foundation falls under the rubric “the politics of decarbonization.”

Leah Stokes, Matto Mildenerger, and Hannah Breetz. *The Politics of Deep Decarbonization: Comparative Studies of Electricity Sector Transformation*. (memo)

This project was added after the 2019 meeting, so it is therefore at an early stage of research. It is a very exciting research project because it explores an issue not explored in the literature: political conflict late in the cycle, after a new technology becomes economically competitive. The argument is that even here, success is not automatic,

since incumbents may resist and set up barriers. If we are to understand the politics of decarbonization, we have to understand this process of *reconfiguration*. The authors build on an excellent 2018 paper of theirs to push this agenda forward.¹ They propose two innovations from an earlier paper: more intense focus on the late stages in decarbonization, and an emphasis on compensation – the role of buying off distributive losers. The emphasis on compensation intersects with the Gaikwad et al. paper.

After discussions on a number of matters, the authors argued that at this stage they have three tasks: 1) *Conceptual*. What are the key issues with respect to stranded assets, compensation, moral hazard, first mover advantages? 2) *Typological*. What types of conflict arise and how do they sequence? Some game theory analysis might be helpful. 3) *Descriptive*. What patterns of change do they observe? How much variation is there among their US state or comparative country cases? Does commonality overwhelm variation or vice versa? There will eventually be a fourth stage of causal inference and rigorous comparison.

In addition to discussing this project, the workshop discussed papers by David G. Victor, et al. *Accelerating the Carbon Transition*, and by Robert O. Keohane, *The Political Economy of Climate Change: Suggestions for a Research Program*.

The extensive and detailed report by Victor, et al., makes a sustained argument about integration of industrial sectors as essential for effective action on decarbonization. The premise of Keohane's memo is that major efforts at decarbonization will create major disruption in any major capitalist economy. It also asks how climate change will change modern capitalism. Neither document constitutes part of the Balzan project, strictly speaking, but the discussion of these papers was designed to enrich our collective understanding of climate change policy issues.

This project ran into logistical issues due to Covid, and has been redesigned.

¹ Hanna Breetz, Matto Mildenerger, and Leah Stokes, "The political logics of clean energy transitions." *Business and Politics* 2018:1-31.