Climate Pipeline Project Conference

October 29th 9am EST

Virtual via links to be provided to registrants

Register at this link. (https://harvard.az1.qualtrics.com/jfe/form/SV_a4wLPW7ipV8W3xY)

Please send any questions to Dustin Tingley (dtingley@g.harvard.edu) and Chelsea Green (cgreen@g.harvard.edu)

Schedule (all times in Eastern Standard Time).

Welcoming Remarks from Organizers 9am-915am

Panel 1: Energy Strategies of Firms and States 915am -10:30am

Panel 2:  Individual Beliefs, Social Movements, and Climate Change Politics 10:45am - 12pm

Chit chat: Visit virtual rooms and chat with colleagues 12:15pm-1pm

Panel 3: Conceptual and Normative Issues 115pm-230pm

Panel 4: Comparative Politics at Different Scales 245pm-4pm

Closing remarks

Each panel will feature 10 minute presentations of 4 papers, followed by a discussion opener led by a senior faculty member, followed by open QandA.

**Panel 1: Energy Strategies of Firms and States**

Discussion Openers: Jeff Colgan (Brown) and Michael Ross (UCLA)

"Rebalancing the Established Institutional Order: The Rise of Global South in Driving Clean Energy Development"

Kathryn Chelminski (University of Toronto)

Over the last decade, clean energy investments in non-OECD countries represented over 79% of global clean energy investments, with a growing share of South-South investment over this period, according to BNEF. Global South development institutions like the China Development Bank, AIIB and New Development Bank are investing in clean energy projects at levels that rival development finance from Western bilateral and multilateral institutions like KfW and the World Bank. This South-South development cooperation (SSDC) for clean energy is surprising since it turns the climate politics discourse on mitigation responsibilities around and raises questions as to the role and interests of emerging economies in driving clean energy development and technology transfer.  This project explores the role of SSDC in climate politics and clean energy governance and the implications of the growing multipolarity. The main

research questions guiding this research are: How does SSDC for clean energy differ from the development cooperation for clean energy in North-South lending? What motivates the clean energy lending and clean energy policies of Global South countries and their institutions? What are the broader implications for clean energy and climate governance?  To answer these questions, this paper uses comparative qualitative analysis of the role of Global South institutions and actors, the discourses surrounding SSDC for clean energy, and examines broader investment South-South trends and lending patterns. This research will make important contributions to the energy governance and climate politics literature by expanding on the role of the Global South and analyzing what South-South investments trends mean for broader clean energy and climate governance objectives.

## "Lost in Oil. Renewables investment and business power in the oil industry"

Elena Pierard  (University of Oxford)

For 35 years now, oil multinationals as large energy players have both acquired and abandoned renewable energy companies. These investments in renewable energy are often mentioned as a path for these companies to transition towards a low-carbon economy. However, more than advancing their business into new segments, oil multinationals have been exerting their financial capability as a form of power and negotiation in the context of climate politics. This research project traces back the investments in renewables by oil multinationals to moments of policy change in climate change and energy policy and finds a relation between oil multinationals' entry to renewables and moments of industrial negotiation. This research argument is that renewable energy investment becomes a component of business power in negotiations. The empirical evidence will probe how oil multinationals use their investments in renewables more as negotiation cards than as new producing units. Whereas it is known that renewables have served their advertising in climate change and their recent renaming as global energy companies away from oil, the study of their financial and business power uncover important aspects of the behaviour of high carbon incumbents in the context of climate change. The study uses an original database of 211 renewable energy deals from 1985 to 2019 for 7 oil multinational companies in Europe, the most active in renewables and self-identified as climate 'aligned', and considers the location of investment which further enhanced the possibility of comparison of behaviour in home country and in other regions.

## "Ownership Structure and Fossil Fuel Infrastructure Retirement: Evidence from Coal's Decline in the U.S."

Samuel Trachtman (UC Berkeley)

In advanced industrial economies, meeting greenhouse gas emissions reductions in accordance with the Paris Agreement targets requires rapidly retiring fossil fuel infrastructure. I argue that the ownership structure of these assets—namely whether they are publicly or privately owned—can condition the degree to which economic, technological, and regulatory pressures lead to infrastructure retirement. Empirically, I examine the retirement of coal electricity generation facilities in the U.S. With the rise of natural gas and renewables and new regulations under the Obama administration, U.S. coal consumption declined by more than half between 2007 and 2020. I show, though, that whether (and how fast) generators retire depends on who owns them. More specifically, the evidence suggests that publicly-owned and cooperatively-owned plants are slower to retire than privately-owned plants. This finding has theoretical implications for our understanding of the political economy of energy transition, and implications for advocacy efforts promoting greater public ownership of energy assets.

[“Understanding the Politics of China’s Coal Transition:Domestic Factors and Global Implications"](#)
Weila Gong (Georgetown University) and Joanna Lewis (co-author, not presenting)

As the world largest carbon emitter, as well as the largest coal consumer and producer, China’s use of coal directly impacts global climate change efforts. China has pledged a goal of carbon neutrality by 2060 and has signaled plans to limit coal consumption. Yet the country faces numerous domestic challenges in moving away from coal. This paper presents a framework for evaluating China’s coal transitions in order to identify key challenges in its pledges for carbon neutrality. Through a systematic review and process-tracing, we analyze China’s policy strategies to phase-out coal use., alongside bureaucratic politics and energy security concerns. We find that the enforcement of coal phase-outs depends not just on high-level leadership but on how the issue is politicized internally, and whether the country is able to move towards a more fully institutionalized system to promote the phasing out of coal. Finally, we recommend opportunities for international cooperation, and discuss how this could influence the broader global low carbon energy transition.

**Panel 2:  Individual Beliefs, Social Movements, and Climate Change Politics**

Discussion Openers: Ken Scheve and Lucas Stanczyk

"[Measuring global concern about climate change with a dynamic, group-level item response theory model](#)"
Parrish Bergquist (Georgetown University) and Clara Vandeweerdt (University of Copenhagen)

Climate change threatens to displace millions of people, upset geopolitical relationships, and fundamentally alter ways of life around the world. National governments and global institutions have struggled to devise and implement solutions that appropriately meet the scale of this existential challenge. While much has been written about the divergent interests of state actors, relatively little is known about the diversity of public views of climate change around the world. A few global surveys have asked about climate change, but much of this data was collected over a decade ago and scientific knowledge about climate impacts and the urgency of climate action have both increased substantially in the intervening decade. More recently, regional surveys have gauged public knowledge and concern about climate change, but these data do not provide a comprehensive, global picture of public climate concern. In this paper, we compile a massive dataset of over two million individuals' views of climate change from multinational surveys fielded between 2000 and 2020. The dataset contains 129 surveys which asked 69 questions of the populations of 163 countries across 20 years. We use a Bayesian multilevel model to combine these responses into a single latent-variable measure of climate concern. The model combines elements of multilevel regression and poststratification, item response theory, and random-walk time-series modeling. The estimates allow us to compare climate concern in almost every country on the planet, an effort which can inform and motivate the 26th Conference of the Parties to be held in Glasgow in November 2021. The dataset also highlights conspicuous gaps in polling about climate change, and opens opportunities for future research into the drivers of public concern about climate change around the world.

## The Climate Justice Movement's Impact on Technocratic Policymaking

Devin Judge-Lord (Harvard University)

Social movements play a critical role in advancing landmark statutes that recognize new rights and social values. Likewise, lack of movement pressure is a leading explanation for the failure of policy efforts. Yet, we have little systematic evidence about the impact of social movements on policy. To what extent do movements shape the thousands of policies that governments make every year? I examine how social movements affect policymaking by assessing the environmental justice movement's impact on 25 thousand policy documents from 40 U.S. federal agencies. Leveraging a new dataset of 42 million public comments on these policies, I find that when public comments raise environmental justice concerns, these concerns are more likely to be addressed in the final rule. Effect sizes vary across agencies, possibly due to the alignment of environmental justice aims with agency missions. The magnitude of public pressure also matters. When more groups and individuals raise environmental justice concerns, policy texts are more likely to change, even when controlling for overall levels of public attention. These findings suggest that distributive justice claims, levels of public attention, and levels of public pressure all systematically affect policymaking. Finally, public comments offer a

new lens to assess the rise and impact of the climate justice movement within the broader environmental justice movement.

## Politics on Fire: The Effect of Forest Fires on Political Behavior in Brazil

Silvia Pianta (European University Institute & RFF-CMCC European Institute on Economics and the Environment) and Paula Rettl (Bocconi University)

Forest preservation can play a key role in global climate mitigation efforts. As 60 percent of the Amazon and 12 percent of the total world's forest area are located in Brazil, Brazilian voters are in a unique position to influence policies that can preserve the Amazon and to substantially contribute to the global fight against climate change. This paper investigates the impact of forest fires on political behavior in Brazil. Fires are often intentionally set for land grabbing and to expand land available for pasture and crops. However, fires can get out of control and spread much beyond what fire setters initially expected, affecting broad segments of the population that do not benefit economically from them. Fires can therefore be also expected to increase environmental concern and to shift political attitudes of the population by increasing the salience of the risks produced by environmental degradation. By exploiting exogenous variation in fires caused by weather conditions, we investigate whether fires increase support for green party candidates. We further examine how the impact of fires on political behavior is shaped by the local population's reliance on the agriculture and livestock sector.

## Implications of Climate Change for Political (In)Stability

Felipe Balcazar (NYU) Amanda Kennard (Stanford University)

What are the effects of climate extremes on the relation between the citizen and their government? We argue that climatic pressures reveal information to citizens about governments' preparedness for safeguarding citizen's well-being. When citizens' needs are unmet, climate shocks i) Increase grievances against political leaders, ii) Erode fears of retaliation or suppression by domestic security forces, and iii) Increase cooperation through the strengthening of social ties. We provide causal evidence for our claims using panel data at the household level for India (2005-2012). We find that an increase in temperature of 3 degrees Celsius reduces trust in political leadership by around 2 percentage points (PP) and increases cooperation by 3 percentage points. These effects are driven predominantly by rural areas, wherein climate shocks impact some of the most vulnerable populations.

**Panel 3: Conceptual and Normative Issues**

Discussion Openers: Jessica Green and Melissa Lane

[The Existential Anthropocene: Taking Total Risk as a Chronic Condition](#)

Daniel Zimmer (Cornell University)

This essay explores the existential implications surrounding the conceptual origin of the 'Anthropocene.' The last decade has seen many scholars in the humanities take issue with this term, arguing that the inclusion of the 'Anthropos' in the title falsely implicates humankind as a whole for an ecological crisis that was caused by one relatively small subset of people and whose burdens fall disproportionately on another. While many scholars have dismissed the 'Anthropocene' in favor of others that better capture their preferred culprit (e.g. 'Capitalocene,' 'Plantationocene,' 'Manthropocene,' etc.), this essay instead attempts to recover the initial existential implications of the phrase as it was initially deployed by atmospheric chemist Paul Crutzen. It finds that what at first seems like an extemporaneous outburst at a meeting of the International Geosphere-Biosphere Program in Cuernavaca, Mexico in 2000 actually represents a tidy rhetorical distillation of several taken for granted premises of Earth systems science that had developed during the 1970s and 1980s. It argues that the chief political challenge of the Anthropocene is to be found primarily in two developments: one, the discovery by scientists in the 1970s that they could not accurately model the functioning of most Earth systems without including the collective effect that human beings were exerting on planetary processes; two, the formative encounter with ozone depletion (1970-1987), nuclear winter (1981-1982), and global warming (1988-1997) as evidence that human beings had not only collectively become a 'planetary force,' but one capable of placing the whole of complex life in jeopardy. The essay argues that to dismiss the 'Anthropocene' on the grounds that the title falsely implicates humanity is to precisely miss the far more disturbing point long since realized by Earth systems scientists: that although not all people are by any means equally culpable, the collective survival of humankind as a whole has long since passed directly into human hands.

[Enforcing cooperation using issue linkage: Theory from the intersection of climate change and trade](#)

Sam Rowan (Concordia University)

Many observers advocate linking international climate policy to international trade to improve climate cooperation. Since climate mitigation is non-excludable, reciprocity in mitigation is unenforceable, but linking mitigation with trade penalties on non- participants could incorporate reciprocity into an enforceable linked climate and trade club. In this paper, I investigate the conditions when linking climate to trade can increase mitigation. I argue that broader–deeper tradeoffs arise along each climate and trade dimension because establishing a climate-trade club requires bargaining over the club's common internal climate policy depth and its external trade penalty depth. Satisfying the policy constraints of club members along each dimension limits the ability to productively link issues. A climate–trade club will work best if it can uphold high climate standards and trade penalties, but these goals may undermine each other based on the relationship between climate preferences and trade flows into and out of the club. States with the strongest support for climate action may have the least trade leverage over climate laggards, and vice versa. These results arise due to preference heterogeneity in climate and trade that have not previously been considered in analyses of climate mitigation clubs. Future work on issue linkage should carefully consider the distribution of preferences along both issues and how these covary with membership in a linked agreement.

"Integrating Political Science into Climate Modeling: An Example of Internalizing the Costs of Climate-Induced Violence in the Optimal Management of the Climate"

Shiran Victoria Shen (Stanford University and the University of Virginia)
View recent Op-Ed on some thoughts about how the research agenda of integrating political science into climate modeling can be carried forward.

Extant modeling of the climate has largely left out political science; that needs to change.  This paper provides an example of how a critical political concept—human security—can be accounted for in climate modeling.  Scientific evidence points to an active link between climate change and the incidence of interpersonal and inter-group violence. This paper puts forth a new method to internalize the costs of climate-induced violence in the optimal management of the climate. Using the established MERGE integrated assessment model, this paper finds that based on the median estimates of the climate-violence relationship, such internalization can roughly double the optimal carbon price—the carbon price at which the net social benefit of carbon emissions would be maximized—consistently over time in most sensitivity scenarios.  Sub-Saharan Africa is estimated to be the biggest beneficiary of such internalization in terms of avoided damages related to climate-induced violence as a percentage of the regional GDP, avoiding up to a 27 percent loss of GDP by 2200 under high-end estimates. That is significant for many African countries that have been suffering from underdevelopment and violence.  The approach of this paper is a first for the climate modeling community, indicating directions for future modeling that could further integrate relevant political science

considerations.  This paper takes empirical findings that climate change mitigation can reduce violence-related damages to the next step toward understanding required to reach optimal policy decisions.

[“Morality of a Shifting ‘Human Climate Niche’: Climate Displacement & the Right to a Livable Locality”](#)

Simona Capisani (Princeton University)
People have primarily inhabited a restricted range of temperatures on the surface of the earth for most of human history. These “livable spaces” have a variety of obviously necessary elements, such as a climate that supports food production. But due to anthropogenic climate change, many of these areas – especially along the hotter, equatorial zone – are likely to become far less habitable. Many people are being forced to move within and across national borders, and more will be forced to do so in the future, encountering restrictions in the process. This paper identifies a basic right of people at risk of displacement– the right to a livable locality-- establishing the normative grounds for assessing requirements of adaptation that the territorial state system must meet as conditions for its legitimacy. The notion of livability at the core of this normative account is not merely a claim to a set of basic resources allocated in a static environment but also involves understanding how being able to be located within the human climate niche as constitutive of human life. The livability conception for which I argue offers a normative foundation for our obligations to the displaced and suggests a framework to assess whether policies, multilateral agreements, and institutional arrangements limit or expand effective adaptation as a means of protecting the right to a livable locality.

Panel 4: Comparative Politics at Different Scales

Discussion Openers: Melani Cammett and Katrina Forrester

["Building a Bigger Team: Explaining Organized Labor's Advocacy for Climate Policy in Washington State"](#)

Geoffrey Henderson (UC Santa Barbara)
        After years of neutrality on climate policy, in 2019 the peak association representing organized labor in Washington state--the Washington State Labor Council, AFL-CIO--lobbied alongside environmental groups for a bill targeting a carbon-free electricity system by 2045. Yet

two years later, they returned to the sidelines as a coalition comprised mostly of environmental groups advocated for cap-and-trade. Why do labor federations mobilize to support some climate policies but not others? I answer this question through an in-depth case study of climate policy in Washington state since 2005. Drawing on primary and secondary sources, Washington Conservation Voters (WCV) scores of state legislators, and 31 interviews with labor and environmental leaders, I demonstrate that legislative gridlock incentivizes interest groups to cooperate with other members of their party coalition. When the environmental movement's elite allies lost unified control of government, they made a costly commitment to develop and advocate for a policy alongside labor and environmental justice groups. This commitment motivated environmentalists to make concessions to the pivotal unions within the labor federation, winning the federation's support. Absent such commitments, political opportunity incentivizes environmental groups to focus more narrowly on maximizing emissions reductions, at the expense of their alliances with labor. Having fulfilled their commitment in 2019, two years later major environmental groups advocated for a cap-and-trade bill despite a lack of support from the labor federation.

["Traditional Governance and the Stewardship of the Commons: Evidence from Mexico"](#)

Cesar B. Martinez-Alvarez (UCLA)

Deforestation and ecosystem degradation are two important sources of greenhouse gas emissions worldwide. International organizations and national governments have increasingly recognized the role of local communities, in particular indigenous peoples, to address these global environmental challenges. Although scholars have extensively analyzed the role of land tenure forms and property rights on ecosystem degradation, we know relatively little about why communal ownership of natural resources works and under what conditions. To address these gaps, in this paper I study the role that institutions of traditional governance have on the stewardship of forests in Mexico, a country where more than 32,000 rural communities own the majority of the land. I do so following three approaches. First, I analyze the relationship between having a colonial-era indigenous township within the current borders of the community and its land use trajectory, which I measure with high-resolution satellite imagery. Second, I leverage a geographic discontinuity in the assignment of traditional governance in Oaxaca state, where the local assembly granted political autonomy to indigenous municipalities in 1995. Third, I employ archival research to disentangle some of the mechanisms behind this relationship. My findings suggest that the presence of institutions of traditional governance is associated with less environmental degradation, higher levels of collective action, and a higher incidence of institutional conflict resolution. Moreover, the recognition of indigenous political autonomy by state authorities is also associated with less tree cover loss in forests ruled under traditional institutions. This paper contributes to understanding what makes communal tenure

of ecosystems work as well as the role of local communities to address global environmental challenges.

## "Futures Otherwise: Climatic Changes,  Indigenous Environmental Governance, & Tar Sands Pipelines"

Chelsea Fairbank (University of Maine)

   The scope of this research is genealogical, multi-scalar, and multi-sited as it considers the long colonial legacy of extractive capitalism across Canada and the United States as an accelerant to climatic changes. Occupied by the largest industrial project in the world, the tar sands in northern Alberta, Canada represents the zeitgeist of contemporary extractive capitalism. The basic fundamentals of climate science, and its interface with tar sands development, makes salient how three more decades of unfettered business-as-usual development of the tar sands would produce a climate system that is out of control (Hansen, 2012). The pipelines extending out from the tar sands actualize these potentials. As research site in this project, Enbridge's emergent Line 3 pipeline in Minnesota, the largest tar sands pipeline ever attempted, runs adjacent to multiple Indigenous nations while threatening numerous waterways and vital food sources across these territories.

     For Indigenous peoples the water, plant, and animals who animate and co-constitute landscapes across Canada and the United States compose integral systems of reciprocity and relationality (Simpson, 2017, Whyte, 2018). The structure of ongoing extractive capitalism interrupts the cultural continuity and sovereignties of Indigenous peoples by diminishing the ecological systems which support these reciprocal relationships, while expanding the fossil fuel industry. How can these intersecting factors be transliterated into tangible environmental policies where beyond-the-human reciprocity protects, corrects, and prevents environmental destruction? One way this research project proposes to advance these potentials is through analytically centering the more-than-human political agents, as interlocutors, which complicate pipeline permitting processes. Centering more-than-human constituents within technocratic environmental regulatory processes takes seriously the deconstruction of corporate-state strategies advancing oil development projects despite a precariously warming word. This relational approach goes beyond a comparative analysis of objects, places, and events in order to anticipate emergent contingencies of technocratic environmental governance and policy making. Through centering Indigenous theoretical traditions while drawing on other critical theory (Carroll, xiii) this research can produce novel contributions within environmental policy conversations.

     Indigenous political and environmental governance have long developed sophisticated forms of resisting emergent oil infrastructure while being deeply embedded within the climate justice movement. Intended to augment these strategies, this research critically analyzes the

legislative and regulatory mechanisms which reproduce extractive capitalist infrastructures. By placing an Indigenous rights framework within the climate justice movement critical political and social science research can generate greater equity outcomes for the societies and more-than-human communities increasingly impacted by emergent oil infrastructure projects. In a moment where the global imperative is to massively draw-down carbon emissions, how can the protection of Indigenous territories and more-than-human communities generate preemptive and anticipatory interventions (Smith, 2012) which work towards improvements in environmental policies, planning, and action?

"[Close to Home: How Local Media Shapes Climate Change Attitudes](#)"

Talbot M. Andrews (University of Connecticut), Cana Kim (Louisiana State University) and Jeong Hyun Kim (Louisiana State University)

Highlighting the local impacts of climate change has the potential to increase the public's awareness of and engagement with the issue. However, information about local impacts is only effective when delivered by trusted sources such as co-partisan political leaders. Is information about climate change conveyed by local media sources similarly beneficial? We argue that local media are well positioned to communicate the local implications of climate change, thereby enhancing the public's risk perceptions of climate change and willingness to take climate action. We further hypothesize that climate coverage by local media, the media type that is trusted across party lines, will have more profound effects on Republicans. Using the case of Louisiana, using a content analysis we first demonstrate that local and national newspapers cover climate change in substantially different ways, with local media more consistently focused on local impacts. Then, our survey experiment of Louisiana residents reveals that Republicans viewed the coverage of a hurricane in the region more positively when it came from a local newspaper rather than a national newspaper. Furthermore, local newspapers' climate coverage increased Republicans' willingness to take action to mitigate climate change. These results provide insights into the potential role of local media in mitigating partisan polarization around climate change.