

**SYMPOSIUM:**  
**China & the Environment –**  
**Taking Stock of Domestic and Global**  
**Developments in Law & Governance**

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INTRODUCTION

Over the last two decades, China has undergone an extraordinary transformation in environmental law and governance that remains insufficiently understood in the outside world. In April 2024, the UCLA Pacific Basin Law Journal and the Emmett Institute on Climate Change and the Environment at UCLA School of Law held a symposium on *China & the Environment – Taking Stock of Domestic and Global Developments in Law & Governance*. Leading Chinese environmental law scholars, Chinese civil society actors, and international scholars gathered to shed light on cutting edge developments.<sup>2</sup> As part of the symposium, UCLA Law also organized a public talk on *Chinese Environmental Civil Society* to explore the continuing role of environmental non-governmental organizations (NGOs) in Chinese environmental protection.

A better understanding of Chinese environmental law and governance is essential given the country's substantial impacts on the natural environment at home and abroad. China has, for example, been the world's largest emitter of greenhouse gases (GHGs) for almost 20 years. Today, China's annual GHG emissions exceed those of the US, EU, and India combined, although the US still exceeds China in historical and per capita emissions. In just about every category of environmental concern – be it air, water, soil, biodiversity, oceans and fisheries, and many others – China is a leading contributor to global environmental challenges and central to any environmental solution.

While China has had an environmental law and governance framework since the early days of the post-1978 Reform and Opening period,

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2. The symposium featured a morning session on domestic environmental governance and an afternoon session on global issues.

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that framework was initially quite weak.<sup>3</sup> Environmental laws tended to be vague and lacking in adequate enforcement provisions.<sup>4</sup> Environmental regulators were weak bureaucratic players with little ability to overcome the opposition of powerful economic actors.<sup>5</sup> Local protectionism and the low political priority of environmental regulation made effective environmental governance exceedingly difficult to achieve.<sup>6</sup>

Beginning around the time of China's 11<sup>th</sup> five-year plan (2006–11), China commenced a turn toward environmental law and governance that accelerated with the advent of the Xi Jinping administration in 2012 and continues to this day. Over the last decade, China has framed these efforts under the concept of *ecological civilization* (*shengtai wenming*) and signaled the rising importance of the concept through a range of institutional, policy, and legal reforms.

What are the key components of this turn toward environmental governance? How do emerging Chinese environmental norms differ from those promoted by developed countries in recent decades? How well have China's environmental reforms worked in practice and what challenges remain? What further reforms are needed?

Several participants submitted extended essays for this special issue that elaborate on aspects of domestic and global Chinese environmental governance explored during the symposium. I provide a brief overview below.

### DOMESTIC ENVIRONMENTAL GOVERNANCE

The authors of the articles concerning domestic Chinese environmental governance each grapple with the role of law in environmental protection and beyond. They offer important insights about a period in

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3. Alex Wang, *The Role of Law in Environmental Protection in China: Recent Developments*, 8 VT. J. ENV'T L. 195 (2007), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2123980](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2123980) [<https://perma.cc/C7JC-3FD8>]; see also Lester Ross, *The Politics of Environmental Policy in the People's Republic of China*, 20 POL'Y STUD. J. 628 (1992), <https://onlinelibrary.wiley.com/doi/10.1111/j.1541-0072.1992.tb00187x> [<https://perma.cc/4VQ7-4P7E>].

4. William P. Alford & Yuanyuan Shen, *Limits of the Law in Addressing China's Environmental Dilemma*, 16 STAN. ENV'T. L. J. 125 (1997), <https://heinonline.org/HOL/LandingPage?handle=hein.journals/staev16&div=12&id=&page=> [<https://perma.cc/Q9CW-ZK4W>].

5. See XIAOYING MA & LEONARD ORTOLANO, ENVIRONMENTAL REGULATION IN CHINA: INSTITUTIONS, ENFORCEMENT, AND COMPLIANCE 128 (2000); see also BENJAMIN VAN ROOIJ, REGULATING LAND AND POLLUTION IN CHINA: LAWMAKING, COMPLIANCE, AND ENFORCEMENT; THEORY AND CASES 353 (2006).

6. See, e.g., Abigail R. Jahiel, *The Organization of Environmental Protection in China*, 156 CHINA Q. 757 (1998), <https://www.jstor.org/stable/pdf/656124.pdf> [<https://perma.cc/5N8Y-JK3G>]; see also Kenneth Lieberthal, *China's Governing System and its Impact on Environmental Policy Implementation*, 1 CHINA ENV'T SERIES 3 (1997), <https://www.wilsoncenter.org/sites/default/files/media/documents/publication/CES%201%20Kenneth%20Lieberthal%20Article%20with%20Charts%20and%20Graphs.pdf> [<https://perma.cc/FY5X-5LDB>].

which China has both increased the priority of environmental issues and expanded the use of law.<sup>7</sup>

The article by Professor Tianbao Qin & Yang Liang (Wuhan University Law School) offers an overview of the formal development of the Chinese environmental law system and its philosophical underpinnings. Prof. Qin is one of China's leading environmental law scholars and has served as an advisor to the Chinese Supreme People's Court's environmental section. The article highlights the sheer volume of environmental reforms over the last decade in terms of numbers of laws and amendments, reforms to reshape the environmental bureaucracy, and reforms to the judiciary such as the proliferation of environmental courts and tribunals (2,813 as of Dec. 2023). Qin and Liang argue that this reform is governed by a "holistic perspective" inspired by Chinese philosophy (e.g., *I Ching* and "man and nature as one" *tianren heyi*). How such a philosophy interacts with international environmental norms of sustainable development or common but differentiated responsibilities will matter a great deal for the future of the global environment.

Professors Huiyu Zhao (Shanghai Jiaotong University Law School) and Yizhen Xu (Stanford) focus on China's emerging ecosystem law. Their emphasis is on the formal legal framework and a comparison to US watershed protection laws and policies. Specifically, China has recently passed laws on protecting the Yangtze River, the Yellow River, and the Qinghai-Tibet Plateau, as well as a law on black soil protection. These laws are meant to serve multiple purposes including ecological protection, water resource management, flood control, pollution prevention, rational resource utilization, sustainable economic development, and food security. As one might expect, finding a balance among these disparate goals is no easy task, and Zhao and Xu highlight the continued inadequacies in (i) interagency and cross-jurisdictional coordination, (ii) balancing of environmental and economic goals, and (iii) coordination of ecosystem and pollution control objectives. These challenges are long-standing ones, and Zhao and Xu remind us that implementation problems remain a concern even in the era of *ecological civilization*.

The article by Fan Dai and Anni Dai of the California-China Climate Institute turns to the issue of climate change legislation. The authors point out that an omnibus climate law has been under official consideration since 2009 but has yet to be passed. Without a formal climate law to consider, they examine a range of other climate-relevant laws regarding energy conservation, renewable energy, environmental impact, air pollution, and wetlands protection. They further clarify the key players in Chinese climate governance. Given that China has

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7. Taisu Zhang & Tom Ginsberg, *China's Turn Toward Law*, 57 VA. J. INT'L L. 493 (2018), <https://openyls.law.yale.edu/handle/20.500.13051/17947> [<https://perma.cc/2Q3C-NG5G>]; cf. Carl F. Minzner, *China's Turn Against Law*, 59 AM. J. COMPAR. L. 935 (2011), [https://ir.lawnet.fordham.edu/faculty\\_scholarship/4](https://ir.lawnet.fordham.edu/faculty_scholarship/4) [<https://perma.cc/97D8-XLCG>].

implemented much of its climate governance actions through government planning, bureaucratic targets, ad hoc enforcement campaigns, and bureaucratic reforms, what role does law play? Dai & Dai argue that climate legislation is nonetheless important as a process through which disparate interests can work out disagreements and determine priorities. They also highlight the role of law in concretizing and disseminating the most promising policies and enforcement measures to Chinese bureaucratic actors and society.

The article by Quan Zou, Yumeng Liu, and Michael R. Davidson (UCSD) tackles the question of coal workforce reductions that result from China's disfavoring of coal-sector industries. They look at the downsizing strategies taken by 16 coal SOEs during China's supply-side restructuring from 2016–18. Of 260,190 workers displaced, only 30% were laid off. Nearly 70% were handled through other non-layoff strategies, including internal redeployment to other parts of the firm (25%), use of outplacement services (29%), and mandatory early retirement (15%). They note that these are compromise strategies by firms "struggling to avoid mass layoffs while cutting labor expenses." However, the authors assert that these approaches fall into legal grey areas that make it more difficult for dissatisfied workers to seek any legal redress or protections. The authors provide us with an empirical basis for understanding the extent to which Chinese firms are supporting a "just transition" for work-ers disadvantaged by China's climate actions.

Kuoray Mao (Colorado State University) is a green criminologist who has explored the connection between state coercion and environmental laws and policies in China. Mao argues that "arbitrary and unpredictable patterns of environmental law enforcement exist to legitimize the hegemonic state-capitalist approach to state-society and human-nature relations." Mao's concern is consistent with a burgeoning literature on authoritarian environmentalism. In non-democratic settings, environmental crisis and emergencies can serve to legitimize excessively coercive and non-participatory approaches to governance. Mao uses examples of integrated water resources management (IWRM), control of waste from animal husbandry, and the *Wandering Earth* movies to illustrate the logic of such coercive approaches.

#### GLOBAL ENVIRONMENTAL GOVERNANCE

When I participated in the Vermont Law School symposium on China's environment in 2007,<sup>8</sup> the focus was exclusively on China's domestic environment. Over the last twenty years, China has increasingly gone global. What began as a policy of "Going Out" at the turn of the century evolved into the Xi-era Belt and Road Initiative (BRI) after 2012 and other initiatives to promote China's global economic

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8. Symposium, *China in Transition: Environmental Challenges in the Far East*, 8 VT. J. ENV'T L. 145 (2007), <https://www.jstor.org/stable/vermjenvilaw.8.issue-2> [<https://perma.cc/BB8C-NSYL>].

statecraft.<sup>9</sup> This process has raised myriad concerns about environmental impacts from Chinese trade and investment and expanding demand for resources from Chinese consumption and manufacturing. Several of the symposium articles grapple with issues in Chinese global environmental governance that have emerged in this period.

Professor Shiming Yang's (Leiden) article examines the impact of China's domestic environmental enforcement challenges in the context of the Montreal Protocol. China's implementation of the Protocol has long been seen as a success story. But the country was rocked by the disclosure in a 2018 *Nature* article of unexpected emissions of CFC-11 that were believed to emanate from Chinese sources. The discovery was a "shock to parties and stakeholders" and raised concerns about earlier Chinese abuses in the context of HFC-23 incineration and the Kyoto Protocol's Clean Development Mechanism. Yang presents a nuanced picture that explains how the violations came about, the response of the Chinese government (e.g., criticism of international civil society accusations, implementation of aggressive domestic enforcement campaigns), and the reforms to the Montreal Protocol that are needed given such violations.

Peng Ren, a former project director at the Chinese environmental group Global Environmental Institute (GEI), offers a case study of GEI's work on matters concerning Chinese impact on the global environment. GEI was one of only a few Chinese civil society actors operating on the global stage, and as of the publication of this issue has ceased operations. A GEI survey found that only fourteen Chinese NGOs were "prepared to undertake international initiatives." Of those, only eight had taken part in international environmental conferences, and three (including GEI) had done international environmental cooperation projects. Ren offers a useful overview of the kinds of work that GEI has conducted and the impact their work has had on Chinese government and firm behavior. Groups like GEI have found space to operate within the limits of Chinese politics by helping Chinese companies and agencies to mitigate environmental risks that often have broader economic, political, and reputational ramifications. Ren's article is an insightful entry in a burgeoning literature on the role of Chinese civil society actors on the global stage.<sup>10</sup>

Professor Tyler Harlan (Loyola Marymount) is an expert on Chinese green development cooperation. His submission offers two case

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9. Ching Kwan Lee, *Global China at 20: Why, How, and So What?*, 250 CHINA Q. 313 (2022), <https://www.cambridge.org/core/journals/china-quarterly/article/global-china-at-20-why-how-and-so-what/3A9A1988E36546B0CE16F374D7A308D9> [<https://perma.cc/3Y3E-JQBL>]; see also Matthew S. Erie, *Chinese Law and Development*, 62 HARV. INT'L L.J. 51 (2021), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3552044](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3552044) [<https://perma.cc/CYS7-KJLY>].

10. See, e.g., Ying Xia, *Environmental Advocacy in a Globalising China: Non-Governmental Organisation Engagement with the Green Belt and Road Initiative*, 54 J. CONTEMP. ASIA 667 (2024), <https://www.tandfonline.com/doi/full/10.1080/00472336.2023.2267062> [<https://perma.cc/UXB5-YSYC>].

studies in the energy sector, regarding (i) the Global Energy Interconnection Development and Cooperation Organization (GEIDCO), and (ii) a Chongqing regional cooperation on sustainable development. His contribution is to show us how different actors respond to broad, aspirational green development pronouncements from Beijing. GEIDCO was initiated by China State Grid Corporation, one of the largest corporations in the world, and is a high-level international cooperation effort that melds Chinese state-owned enterprise (SOE) economic interests (e.g., in selling ultra-high voltage transmission technologies) with global sustainability goals. The initiative provides strategic direction for State Grid's global transmission grid acquisitions and offers potential diplomatic benefits from Chinese assistance in Global South energy security and low-carbon transitions. The Chongqing cooperation was a lower-level cooperation where mostly small, regional firms sought to drum up business by associating with Chinese green narratives.

Finally, Professor Virginia Harper Ho (City University of Hong Kong) introduces recent developments in several areas of Chinese green finance. These include (i) bank regulations to develop green finance products, like green bonds and loans, (ii) taxonomies and standards for "green" investment, and (iii) corporate green disclosures. Her article is an entry-point into a burgeoning literature on Chinese green finance. Chinese leadership on green finance reminds us of the economic motivations that are integral to China's environmental turn. This focus on "green development" is as much about "development" as it is about "green." Hence, tensions will likely continue to emerge over definitions of what counts as "environmental," or the role of the precautionary principle in economic development. At the same time, the fact that China has seemingly embraced green finance so wholeheartedly is an indication of the degree to which China is unified on a developmental green agenda.

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China's environmental transition in the early decades of the 21<sup>st</sup> century may eventually turn out to be as consequential to the world as the emergence of modern environmental law in the US, Europe, and Japan in the 1970s. This is likely to be as true for environmental sustainability as for the *norms* of global environmental governance.

I have argued elsewhere that China is promoting a form of *developmental environmentalism* characterized by the primacy of state leadership (as opposed to market or citizen leadership), top-down planning and implementation, and greater emphasis on the economic and security implications of environmental protection.<sup>11</sup>

Indeed, a major motivation for China has been environmental governance as a means of pushing the economy toward "higher quality growth" (e.g., advanced manufacturing and services) and reducing reliance on low-end, heavily polluting industrial sectors. China's promotion

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11. ALEX WANG, CHINESE GLOBAL ENVIRONMENTALISM (forthcoming 2025).

of clean technology sectors like solar, wind, batteries, and electric vehicles (EVs) has been about building economic strength in growth areas without dominant global incumbents (such as in the traditional gas-powered auto industry) and reducing reliance on imported fossil fuel resources. The mitigation of pollution can also reduce environmental risk for development projects and temper social unrest and public dissatisfaction. China's international push for green development now supports Chinese global priorities in green diplomacy, green economic statecraft, and green development cooperation, with the political and economic benefits that these efforts may bring.

This all has important potential implications for global environmental norms. China's approach arguably has much in common with international norms of sustainable development and common but differentiated responsibilities that center the development needs of developing countries. Practically speaking, Chinese environmentalism will likely help to accelerate the global growth of green industries that are increasingly important to economic development in many countries.

At the same time, China's approach will likely exacerbate tensions with a range of prevailing global norms. These include norms of environmental democracy that emphasize transparency, public participation, and judicial review; rights-based notions of environmental justice that may come into conflict with Chinese collective notions of a "right to development;" precautionary principle norms that could slow the rate of economic development; and/or notions of slow growth or lower consumption that fundamentally question the desirability of a focus on GDP growth.

The essays in this symposium issue are a first step in exploring these broader issues. I hope you find these contributions from a stellar group of scholars and practitioners to be as insightful and educational as I did.

Finally, I want to thank Micah Sperling (UCLA Law, '24), Jacob Ottone (UCLA Law, '25), and Joshua Fujita (UCLA Law, '25), the Editors-in-Chief of the UCLA Pacific Basin Law Journal in 2023–24 and 2024–25, as well as their very capable journal leadership and staff editors, for the extraordinary work to put together this Symposium and special journal issue.

#### SYMPOSIUM SCHEDULE

Panel I – Developments in Chinese Environmental Law (WANG Jin, ZHAO Huiyu, QIN Tianbao) [Moderator: *Ma Jun*]

Panel II – Environmental Law & Governance in Practice (MA Jun, Fan DAI, Michael Davidson, Kuoray MAO) [Moderator: *Tyler Harlan*]

Panel III – China's Global Environmental Impact (Jingjing Zhang, Juliet Lu, Shiming YANG, ZHAO Zhong) [Moderator: *Michael Davidson*]

Panel IV – Global Environmental Governance Solutions (REN Peng, Tyler Harlan, Virginia Harper Ho) [Moderator: *Qin Tianbao*]

## PANELISTS (LISTED IN ALPHABETICAL ORDER BY LAST NAME)

1. Fan DAI, Executive Director, California-China Climate Institute (CCCI)
2. Michael Davidson, Assistant Professor, UC San Diego
3. Tyler Harlan, Associate Professor, Loyola Marymount University
4. Virginia Harper Ho, Professor, City University of Hong Kong School of Law
5. Juliet Lu, Assistant Professor, University of British Columbia
6. MA Jun, Founder and Executive Director, Institute for Public & Environmental Affairs
7. Kuoray MAO, Associate Professor, Colorado State University
8. QIN Tianbao, Professor, Wuhan University School of Law
9. REN Peng, Former Project Director, Overseas Investment, Trade and the Environment Program, Global Environmental Institute (GEI), and Current Program Director of the South-North Institute for Sustainable Development (SNISD)
10. Alex Wang, Professor, UCLA School of Law
11. WANG Jin, Professor, Peking University Law School
12. Shiming YANG, University Lecturer, Leiden University
13. Jingjing ZHANG, Founder and Executive Director, Center for Transnational Environmental Accountability
14. ZHAO Huiyu, Professor, Shanghai Jiao Tong University Koguan School of Law
15. ZHAO Zhong, Founder and Executive Director, Green Camel Bell