

中国走向绿色

Yifei Li and Judith Shapiro

中国走向绿色

CHINA

COERCIVES

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GREEN

Coercive Environmentalism for a Troubled Planet

中国走向绿色

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China Goes Green

Coercive Environmentalism for a Troubled Planet

Yifei Li and Judith Shapiro

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First published in 2020 by Polity Press

Polity Press

65 Bridge Street

Cambridge CB2 1UR, UK

Polity Press

101 Station Landing

Suite 300

Medford, MA 02155, USA

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ISBN-13: 978-1-5095-4311-3

ISBN-13: 978-1-5095-4312-0 (pb)

A catalogue record for this book is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Names: Li, Yifei, 1978- author. | Shapiro, Judith, author.

Title: China goes green : coercive environmentalism for a troubled planet / Yifei Li and Judith Shapiro.

Description: Cambridge, UK ; Medford, MA : Polity, 2020. | Includes bibliographical references and index. | Summary: "Can China's eco-authoritarianism save the planet?"-- Provided by publisher.

Identifiers: LCCN 2020002554 (print) | LCCN 2020002555 (ebook) | ISBN 9781509543113 (hardback) | ISBN 9781509543120 (paperback) | ISBN 9781509543137 (epub)

Subjects: LCSH: Environmental policy--China. | Environmentalism--China. | Authoritarianism--China. | China--Environmental conditions--21st century.

Classification: LCC GE190.C6 L54 2020 (print) | LCC GE190.C6 (ebook) | DDC 363.700951--dc23

LC record available at <https://lccn.loc.gov/2020002554>

LC ebook record available at <https://lccn.loc.gov/2020002555>

Typeset in 11 on 13pt Sabon

by Fakenham Prepress Solutions, Fakenham, Norfolk NR21 8NL

Printed and bound in Great Britain by CPI Group (UK) Ltd, Croydon

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Map



Acknowledgments

We are most grateful to two anonymous readers who helped us strengthen this book and to Isabella Baranyk, who provided exceptionally thoughtful and comprehensive feedback on drafts. We also acknowledge insightful comments and contributions from colleagues, friends, and relatives, including Jisho Warner, Elska Lennox, Rosa Shapiro-Thompson, Ivan Willis Rasmussen, Simon Nicholson, Jesse Ribot, Ken Conca, Craig Simons, and Bo Donners. Chen Qihang and Yuan Qianchun provided helpful research. Marcela Godoy generously shared her artwork. Tian Tian Wedgwood Young assembled the index. We are also grateful to our experienced editors at Polity, Louise Knight and Inès Boxman. Steve Leard designed an interesting cover, Neil de Cort expertly managed the production, and Ian Tuttle performed masterful copy edits. We are also immensely grateful to each other, for seamlessly building on the other's strengths to create a much better book than either of us could have written on our own.

Introduction: The Rise of Authoritarian Environmentalism

A decade or so after the start of the twenty-first century, China's policy makers appeared poised to assume global leadership on environmental protection. Where just a few years before, Chinese negotiators in global forums had argued vociferously for the primacy of international legal principles that protected developing country interests, China began to moderate its use of these arguments. Instead of focusing on the right to development, technology transfer from developed to developing countries, financing for mitigation and adaptation, absolute sovereignty over natural resources, and common but differentiated responsibilities, China's leaders began to speak about climate change and other environmental challenges as shared global threats. Where at one time the country was seen as a primary obstacle to achieving consensus on these issues, China seemed to some observers as the last best hope for efforts to save the planet.

At around the same time, environmental governance was changing dramatically within China. Once seen as having weak environmental institutions with poor enforcement capabilities, China renamed and elevated the environment ministry to become the Ministry of Ecology and Environment, expanding and centralizing its portfolio of responsibilities to cover a broad range of pollutants including carbon emissions and water contaminants. Once seen as unable to control local officials who exploited lax enforcement to profit from pollution, China's leaders changed criteria for performance evaluation to emphasize environmental protection and implemented severe punishments for local officials' failures to fulfill

environmental goals. Once seen as unable to enforce its assortment of environmental laws, China strengthened them, got rid of loopholes, created a system of dedicated environmental courts, and opened up the judicial process to environmental advocacy groups. Once seen as bent on destroying its own biodiversity, China reorganized the administration of protected areas and embarked on an ambitious program to conserve vast swaths of its West, under the authority of a new Ministry of Natural Resources. Once seen as holding open its door to some of the world's most polluting industries and waste products, China banned them. The list could go on.

In 2009, at the Conference of the Parties to the UN climate negotiations in Denmark, observers excoriated China for undermining the talks. "How Do I Know China Wrecked the Copenhagen Deal? I Was in the Room," wrote the *Guardian's* Mark Lynas (2009) in a typical account. Widely seen as the villain for snubbing heads of state, blocking transparent public negotiations, and rejecting hard targets even for developed countries, China managed to weaken the talks and make it appear that rich countries had failed developing ones. China's official position was characterized as wanting to "have it all," leveraging its developing country status for reduced responsibilities, seeking to mitigate the adverse impacts of climate change, and trying to achieve global recognition for domestic environmental efforts (Conrad 2012).

But by November 2014, everything appeared to have changed. At the Asia-Pacific Economic Cooperation (APEC) summit in Beijing, President Xi Jinping and President Barack Obama jointly announced that each country would take ambitious steps to reduce carbon emissions. In a landmark agreement, President Obama used his executive power to commit the US to stop building coal-fired power plants; he promised that by 2025 the US would emit 26-28

percent less carbon dioxide than in 2005. United States action may have allowed President Xi to claim that the developed world was going first, as required under widely accepted international principles of common but differentiated responsibilities. For his part, Xi announced that China's carbon emissions would stop growing by around 2030 and that clean energy sources would amount to 20 percent of China's energy mix by that year. Some have argued that these commitments were likely a reflection of the path China had set for itself regardless of multilateral negotiations, given that reducing coal use would also achieve the "double win" of reducing ground-level air pollution and improving public health in addition to mitigating climate change. Nevertheless, the joint declaration was greeted with fanfare (Hilton and Kerr 2017). Cooperation between the US and China, which together represented 40 percent of global emissions, brought new life to the 2015 Paris negotiations, which did indeed result in tangible, albeit voluntary, commitments from almost all parties. When, in 2017, President Donald Trump announced that the US would withdraw from the treaty, observers feared China might feel released from its own responsibilities. Instead, President Xi Jinping reasserted China's commitment to fulfill its obligations and to uphold multilateralism, signing a pact with French president Emmanuel Macron recommitting to the agreement. In so doing, China assumed the moral high ground as compared with the United States and spurred even more hope that China would become the new global leader on climate change.

This has not yet come to fruition. During the December 2019 Madrid negotiations, China joined other big carbon emitters such as India and Brazil in resisting more ambitious targets. Together with members of the bloc called the G77 plus China, it insisted that developed

countries had to uphold their 2015 Paris commitments before developing countries could commit to new ones. When the US and other wealthy countries balked, talks came to a stalemate. While there was plenty of blame to go around for the failure of the talks, especially with respect to the destructive role of the US, China was singled out for once again being unwilling to assume the kind of global leadership it had flirted with four years before.

Nonetheless, on the face of it the Chinese state appears indeed to be offering the world a green vision. After an astounding period of economic growth since the 1980s, during which the country became both the world's manufacturing hub and also one of the most intensely polluted places on the planet, the central leadership has issued hard-nosed policy changes intended to resolve China's environmental crisis. Green China boasts solid achievements, especially in the clean technology industry. China in 2012 surpassed the US to become the world's top wind energy user as measured by installed capacity (Lam et al. 2017). The growth of its solar sector helped drop world prices by 80 percent from 2008 to 2013 (Fialka 2016). The Chinese State Council has committed national support for hydrogen fuel-cell and battery-powered electric cars, with the eventual goal of totally eliminating gas-powered internal combustion engine vehicles (K. Wang 2018). China is the world's largest manufacturer and buyer of electric vehicles, including 99 percent of the world's electric buses. China has built tens of thousands of miles of new high-speed rail, using cutting-edge technology to shrink distances among cities and integrate the country into a vast, energy-efficient transit network. China has shut down the import of low-grade recyclables and hazardous e-wastes, switched heating systems from coal to natural gas, and outlawed ivory sales. Rhetoric about low-carbon lifestyles, the circular economy, sustainable development,

ecological civilization, resilient growth, and green development is inescapable. By these measures, it seems indeed that China has gone green. This book will deconstruct and challenge that assertion.

Ecological Civilization as Political Philosophy

These rhetorical and regulatory shifts toward “green” China may be traced to a rethinking of the country’s guiding political philosophy. For a struggling developing country emerging from Mao-era chaos in 1979, economic growth seemed the most important national goal. Ideological work to define and introduce “socialism with Chinese characteristics” – a formula that promoted the free market in a nominally Marxist society – was required. This formula helped make China the manufacturing hub of the world. But the explosive growth came at an unacceptable environmental cost, one that risked social upheaval and loss of legitimacy for the Communist Party. The country’s core ideological principles needed revision and updating so as to provide guidance to address deepening post-Mao social and economic contradictions like inequality, unemployment, and consumerism, all exacerbated by the befoulment of China’s air, water, soil, and food.

In China, to a degree unheard of in the West, major policy shifts must be justified through debate and agreement over underlying political philosophy. Supported by an extensive network of government think tanks, Party schools, and Marxism research centers at universities, the one-party system relies on ideological consensus for the country’s overarching direction. In 2007, under Xi Jinping’s predecessor Hu Jintao, “ecological civilization,” or *shengtai wenming* 生态文明, became an explicit goal of the Chinese

Communist Party. In 2012, the phrase was enshrined within the Party Constitution, and six years later within the Constitution of the People's Republic of China. With the successful elevation of this phrase to the level of official political philosophy, the latest iteration of the Party's ideological work came to fruition. Xi Jinping's ubiquitously quoted line encapsulates this: "Clear waters, green mountains are in fact gold mountains, silver mountains" (*lǜshuǐ qīngshān jiùshì jīnshān yínshān* 绿水青山就是金山银山).

"Ecological civilization" garners widespread support across China's broad and sprawling state apparatus because it projects the Party's rule as both historical and visionary. Ecological civilization is described first and foremost as a continuation of China's developmental path under the leadership of the Communist Party – transforming from agricultural civilization to industrial civilization under Mao Zedong, then to material civilization under Deng Xiaoping, and now to ecological civilization under Xi Jinping – a faithful reincarnation of Marx's theory of the stages of development with Chinese characteristics. At the same time, on the world stage the phrase frames the Chinese nation as a leader of a rejuvenated civilization, reviving nationalistic fervor in a nation that has emerged out of its "century of humiliation" under Western and Japanese imperialism. Thus, in light of the tremendous political appeal of ecological civilization, China's go-green efforts are inextricably linked to the political and ideological ambitions of the state.

As a political philosophy, ecological civilization builds on two schools of thought, both with Western roots. These are ecological Marxism and constructive postmodernism. The former understands the commodification of nature as lying at the heart of contradictions that may spell the eventual

demise of capitalism. The latter attempts to integrate the best characteristics of tradition and modernity, both as a philosophical thought experiment and as a practical path toward harmony between humans and non-human ecology. More than 20 Chinese government research centers are dedicated to debating and refining these concepts for the Chinese context, including, for example, the Center for Ecological Civilization at the Chinese Academy of Governance. Such centers spearhead domestic philosophical debates and provide the underpinnings for constitutional changes, legal initiatives, and broad policy directions like five-year plans and national directives. Within Chinese think tanks, analysis of China's environmental problems in the context of achieving ecological civilization often focuses on the negative influence of interest groups and capital, on the unhealthy "worship" of economic growth and development, and on the risks of an overly anthropocentric worldview (Z. Wang et al. 2014). In recent years, the discursive appeal of the phrase has enabled Chinese top leaders to institute governance reforms and reorganization and to promote technological innovations for environmental protection.

Alongside China's domestic efforts, international forums and publications laud China's newly articulated guiding philosophy. The world's environmental advocates have expressed admiration and even envy that ecological considerations have received such high levels of official endorsement. Ecological civilization is widely interpreted as China's effort to resolve tensions between environmental protection and economic development through concrete initiatives such as renewable energy promotion, carbon reduction, and reforestation. The phrase has become a focus of international optimism that China may be offering the world a visionary set of guiding principles, a sort of "sustainable development with Chinese characteristics"

that both preserves China's distinctive traditions and governance system and confronts the problem of capitalist overexploitation of global resources (Zinda et al. 2018). Some have speculated that ecological civilization embodies "the potential for a more assertive and confident China to assume a stronger leadership role in global environmental debates" (Geall and Ely 2018). Excitement around China's prominent adoption of the concept has sparked conferences sponsored by the Yale School of Forestry and the Pulitzer Center on Crisis Reporting (Sawyer 2015). Typical scholarly work includes such titles as Barbara Finamore's *Will China Save the Planet?* (2018), Arran Gare's *The Philosophical Foundations of Ecological Civilization: A Manifesto for the Future* (2016), and Joanna Lewis's *Green Innovation in China: China's Wind Power Industry and the Global Transition to a Low-Carbon Economy* (2013). Ecological civilization thus figures both as China's self-proclaimed solution for a troubled planet and as a potential beacon of hope for some international observers.

A Global Call to Action

At least some of this international scrutiny must be traced to an awakening to the crisis of the Anthropocene, the idea that the outsized human impact on global ecosystems has created an entirely new geologic epoch unlike anything in the planet's long history. From this perspective, our planet is on the brink of becoming unlivable. Atmospheric scientists from the United Nations Intergovernmental Panel on Climate Change predict that climate change will be more severe than even some pessimists anticipated; activists are calling for an immediate end to fossil fuel extraction and use in order to avert catastrophe. A similarly authoritative UN panel, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services,

sees a biodiversity emergency with more than one million species on the brink of extinction. With his “Half Earth” call to action, biologist E. O. Wilson argues that no less than 50 percent of the earth’s land and sea must be protected from development. Swedish teenager Greta Thunberg, who has become a voice for the younger generation’s rage, denounces her elders at climate change conferences and demands to know why they have failed to act on the “existential crisis” that threatens humanity. Complicated and interconnected environmental challenges comprise what philosopher Stephen Gardiner (2011) calls “a perfect moral storm” confronting humanity. At a deep ethical level, our existing political, scientific, and social institutions are ill-prepared for the current ecological crisis.

For many scholars and activists, the urgency and gravity of the planetary situation justify decisive state interventions. Authoritarian environmentalism – the use of authoritarian methods to accomplish environmental goals – has a particular appeal at this historical moment. At a time when liberal democratic states repeatedly fail to address environmental problems, it is tempting to feel that draconian measures are needed, or at least worthy of serious consideration. Authoritarian environmentalism seems like a logical alternative to messy, gridlock-prone democracies that require unacceptable compromises with special interest groups. In autocracies, by contrast, policies that in democracies are subject to drawn-out political debates have been instituted almost overnight. In 2018, for example, Filipino president Rodrigo Duterte ordered a six-month closure of the tourism-dependent island of Boracay for its failure to meet environmental standards. During the rehabilitation period, hundreds of hotels and restaurants were shut down for environmental violations and the island’s shoreline easement zone was fully restored. In stark contrast to environmental inaction in liberal

democracies, illiberal political regimes have often demonstrated impressive decisiveness in combating environmental problems, from bans on plastics to mandated increases in renewable energy use.

In that context, enter China, which has one of the world's longest-lasting authoritarian governance systems and also one of the most explicit commitments to environmental protection. This is despite its well-deserved reputation for being one of the smoggiest places on the planet. China exemplifies a model of state-led, authoritarian environmentalism which concentrates political, economic, and discursive power within the parameters of the state under the centralized leadership of the Communist Party. Rather than sharing and balancing environmental tasks with independent scientists, entrepreneurs, and citizens' groups, the state aims to monopolize the production of environmental knowledge and policies, the innovation of environmental technologies and their deployment, and the implementation and practice of environmental protection.

State-led environmentalism is accomplished through concrete mechanisms: centralized and targeted disbursement of research funding, channeling of industrial subsidies and support for state-owned enterprises, and guided media programming about the environment that is censored if it challenges state authority. Environmental NGOs and scientists are forced to cooperate with the state if they wish to survive, playing a delicate game of testing boundaries and carefully monitoring the prevailing political winds. By simultaneously expanding the regulatory scope of the state to encompass a growing range of environmental issues and co-opting non-state actors into the state's environmental agenda, the Chinese state goes green.

China seems, on the face of it, to embody hope for a radically new approach to governing the planet, and given the limited time we have left to slow the pace of climate change and protect more than a million species from extinction, we need to consider whether a “green” authoritarian China can show us the way. In *The Collapse of Western Civilization*, a semi-fictional narrative of a post-apocalypse world of climate collapse, historians Naomi Oreskes and Erik Conway describe the rise of a “Second People’s Republic of China” because of the supposedly superior model of state-led environmentalism that China practices. They conjecture that, from the perspective of an apocalypse survivor looking back, “China’s ability to weather disastrous climate change vindicated the necessity of centralized government ... inspiring similar structures in other, reformulated nations” (Oreskes and Conway 2014, p. 52).

The imagined scenario is not without basis. China’s clean energy revolution has led some observers to view China’s approach as “developmental environmentalism” – industrial development of the sustainability sector that follows national priorities dictated by the state (Kim et al. 2019). This concept draws from the extensive scholarly literature on the East Asian “miracle” of economic growth from the 1970s to the 1990s. The secret recipe, many have argued, was the East Asian “developmental state” that played a central role in shaping and implementing national industrial priorities. China’s success in green technologies is also due to favorable state policies. However, as we will see in the examples and cases presented in this book, the developmental environmentalism framework is insufficient to explain China’s environmental ambitions, which encompass many aspects of economic, political, and social life beyond clean technology.

As we look more closely, we see that China's track record of environmental success has often been accomplished through top-down, non-consultative coercive measures at the cost of citizen rights and livelihoods. China's state-led environmental action needs to be understood in a broader context: China is also the world's largest repressive state. For evidence, one need look no farther than the state's intrusions in Xinjiang and Tibet, its harassment of unauthorized Christian house churches, its internet Great Firewall that filters out whatever the state deems "unhealthy," and its introduction of facial recognition technologies that track and assign "social credit scores" to every resident.

We may also consider the state's handling of the 2020 coronavirus outbreak as evidence of the limits of the authoritarian governance model. While the state displayed apparent decisiveness in restricting travel from the hot zone, the lockdown came only after a lengthy delay that allowed five million people to leave for Spring Festival holidays. Record-time, ten-day construction of quarantine hospitals was admirable and would likely have been impossible in a non-authoritarian context, but this feat must be balanced by the fact that the state initially censored the findings of medical personnel and even detained doctors who attempted to share their concerns about an emerging SARS-like virus on a medical chat group. Other weaknesses in China's style of authoritarian governance show in the poor regulation of the wildlife markets that allowed the virus to jump the species barrier, as well as chaos in the provision of testing kits, masks, and medical care. Mistrust and anger resulted.

The admirable green policy developments under China's authoritarian system must similarly be set against the egregious pollution of water, soil, and air, unremitting environmental burden on the disadvantaged, globalizing

appetite for resources, and export of carbon-intensive production (Power et al. 2012; Simons 2013; Shapiro 2015; Lora-Wainwright 2017). As *Financial Times* journalist Leslie Hook (2019) writes, China “is both the greenest in the world, but also the most polluting.” Domestically, China is plagued by entrenched environmental challenges such as soil and water contamination, cancer villages, airpocalypses, and unabating pollution from rare-earth mining and other ecologically destructive undertakings. Even with respect to coal mining and consumption, actual trends countermand the promises made at APEC and in Paris. (China blames the US trade war for making it increase the percentage of “cheap” coal in its energy mix.) Internationally, China’s export of coal-fired power plants, construction of roads and ports in ecologically sensitive areas, and extraction of natural resources have also undermined the country’s self-proclaimed leadership in planetary ecological civilization. In this book, we seek to untangle these seemingly contradictory observations about China’s green politics and ecological conditions.

What is State-led Environmentalism?

Almost every course on environmental politics includes discussion of the “Tragedy of the Commons,” the classic 1968 *Science* magazine essay in which Garrett Hardin articulates a core metaphor describing how human beings deplete shared resources (Hardin 1968). We professors often organize students around tables with goldfish crackers and straws and instruct them to go fishing – before long, there are no fish left in the “sea.” Hardin argued that rational individuals will necessarily and inevitably over-extract resources from shared spaces because their self-interests, collectively, outweigh the good of the group. In the essay, he describes townspeople who

added so many sheep to an English common pasture that the fields could not sustain them. But the metaphor can be extended to other common “goods” – fisheries, forests, and water – as well as common “bads” – factory smokestack emissions, discharges into shared watercourses, “space junk,” and noise pollution. Hardin’s position is that “mutually agreed-upon coercion” is the only way to avoid the inevitable overexploitation of the shared resource; he lauds “the greater candor of the word coercion” and problematizes the ideal of individual freedom.

During the 1970s the essay was much discussed, and refuted, by scholars who objected to the authoritarian tenor of Hardin’s approach. They showed that “open access” resources like the fisheries of the high seas were very different from “common pool” resources like coastal fisheries where communities could agree through consultation to be bound by measures to assure sustainable use such as catch size, technology restrictions, permit issuance, and seasonal limits. Elinor Ostrom is best known for writing on this but many others have used combinations of economic game theory and sociological research to show that communities who know each other and expect to work together for the foreseeable future are more likely to create workable community-based resource management systems (Ostrom 1990; Petzelka and Bell 2000). For transnational and planet-level environmental issues, the challenge is to create a “global community” that can cooperate to manage shared resources without succumbing to self-interest.

International environmental treaties provide a form of coercion established collaboratively through the consent of the governed, and at times they have offered great promise. In 1992, with the Rio Earth Summit (United Nations Conference on Environment and Development), it appeared that such global cooperation might work. There

were high hopes that countries would overcome the barriers of sovereignty to manage transboundary environmental problems like climate change, biodiversity loss, desertification, and so on. Along with 169 other countries, China signed the Rio Declaration and ratified many of the treaties that emerged from that historic meeting. By then, socialism was on the wane with the dissolution of the Soviet Union, and the debate over the need for coercive measures to resolve environmental problems had abated. Many Western scholars took it as a given that public participation, rule of law, and guarantees of access to information were necessary for robust environmental governance (Schnaiberg 1980; Young 1994). Unfortunately, since then environmental governance has struggled to find broad consensus and legitimacy at local, regional, international, and global levels.

In recent decades, it has become increasingly clear that the promise of the Rio Earth Summit has not been realized apart from isolated successes with phasing out a short list of ozone-depleting chemicals like CFCs and controlling obvious neurotoxins like mercury. The democratic elections of Donald Trump in the US and Jair Bolsonaro in Brazil, both of whom actively undermined principles and protections for the natural world, have further challenged assumptions about liberal market systems' environmental virtues. Can the planet afford a messy liberal democratic process when the threats are so urgent?

In this context, then, eco-authoritarianism seems to some observers and scholars to offer a possible solution when other measures have failed. Among those who have revived the conversation is Mark Beeson, who writes, in "The Coming of Environmental Authoritarianism," that "good" authoritarianism, where unsustainable behaviors are outright banned, by fiat, is essential for the long-term survival of humanity (Beeson 2010). Predictably, the essay

sparked refutations. For example, Dan Coby Shahar writes that even though liberal market democracy does not seem to offer much hope for the environment, eco-authoritarianism is “not an attractive alternative” because the ruling class may not be capable of producing or implementing pro-environmental policies over the long run (Shahar 2015). During the revived debate, many environmentalists continue to argue instead for cooperative global governance of environmental problems through better multilateral treaties and institutions, on the grounds of shared interests and the findings of scientists. Others seek to reform global trade by internalizing the environmental costs of production and making them more transparent, and by changing the mindsets of consumers. Still others see hope in empowering local communities and restricting the extractive power of international corporations (Clapp and Dauvergne 2011).

Scholars of coercive state-led environmentalism have turned their focus to China to flesh out the implications of managing the environment through authoritarian means. The empirical literature has generated valuable insights into three main dimensions of Chinese environmental governance. First, research has uncovered a range of governmental tools that characterize the state’s efforts to manage the environment. Often, technocratic elites take a dominant position in defining environmental problems in purely technical terms (Gilley 2012; Kostka and Zhang 2018). With these mechanistic approaches, officials set quantitative goals and targets for the ostensible purposes of monitoring environmental conditions and enforcing environmental standards (Kostka 2016; Yifei Li 2019). However, these targets give rise to “blunt force regulations” that over-enforce environmental mandates to the detriment of the livelihoods of ordinary citizens (van der Kamp 2017). Moreover, state-led environmental

programs tend to orient toward outcomes but forgo transparency and justice (Johnson 2001; Chen and Lees 2018). On a positive note, in some cases the outcome orientation gives the local state a high level of flexibility and adaptability in enforcing environmental regulations (Ahlers and Shen 2017; Zhu and Chertow 2019). This first aspect of state-led environmentalism features a constellation of routine governmental tools used by state officials and bureaucrats in their exercise of environmental power. Some of these tools prove effective in advancing environmental goals, but others have mixed environmental, as well as political, consequences.

Second, the extensive use of state-centric governmental tools gives rise to changes in state-society relations. As the state increasingly intervenes into the environmental realm, it becomes commonplace for the state to regulate everyday citizen behaviors through coercive means (Eaton and Kostka 2014). From recycling to driving vehicles, environmental regulations are often instituted without meaningful public participation or grassroots input, giving the state sweeping power in its pursuit of environmental ends, with only limited access to feedback that might correct any missteps (Mao and Zhang 2018). With no threat that power holders will be removed from office via ballot or other electoral device, the state is unaccountable for its coercive dictates. Yet, the state has to come to terms with an increasingly diverse range of non-state environmental actors, from citizens to independent scientists, which the state needs but also fears (van Rooij et al. 2016; Guttman et al. 2018). Within its ambivalent relationship with society, the Chinese state casts a changeable shadow over the full range of environmental affairs. It narrows the space for non-state engagement in some cases (Wilson 2016), but also inadvertently creates opportunities in others (Geall 2018). In recent years, for example, domestic civil society