Social Inclusion
2024 • Volume 12 • Editorial 8050
https://doi.org/10.17645/si.8050

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EDITORIAL

Open Access Journal

China and Climate Change: Just Transition and Social Inclusion

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Submitted: 11 January 2024 **Published:** 15 February 2024

Issue: This editorial is part of the issue "China and Climate Change: Towards a Socially Inclusive and Just Transition" edited by Lichao Yang (Beijing Normal University) and Robert Walker (Beijing Normal University), fully open access at https://doi.org/10.17645/si.i371

Abstract

China aims to transition from a carbon-intensive economy to carbon neutrality before 2060. Although climate change policies commenced in 2007, this goal remains extremely challenging. Reporting on China's progress, the articles in this issue refer to three concepts. Ecological civilization is a political construct framing China's policy response to climate change and environmental degradation; its "thin" version refers to sustainable development and modernisation, but it also describes a higher form of civilization to replace industrial society. Environmental authoritarianism describes a top-down system of governance or policy implementation that engages in minimal public participation; several of the articles report China's green policies to be of this type. Just transition is a multifaceted evaluative concept employed in most of the articles to comment on the process or outcome of China's climate change policies. The policy context is explained, before reviewing results from authors' application of these concepts and offering a summary conclusion.

Keywords

China; climate change; ecological civilization; environmental authoritarianism; just transition

1. Introduction

China, with the world's second-largest economy, is the world's largest polluter (Lin & Zhang, 2023; Yuming Zhang et al., 2022). It is also the world's largest producer of renewable energy and is engaged in an ambitious pollution control and decarbonisation strategy, commenced in 2007, the scale of which overshadows all others. Moreover, the success in reducing pollution is demonstrable with the Chicago-based Energy Policy Institute concluding, in 2023, that "the Chinese government's air pollution reduction strategies have largely allowed the country to win its war against pollution" (EPIC, 2023a). The articles assembled in this issue of *Social Inclusion*

collectively consider who is bearing the costs of this economic transformation to a cleaner, greener future, and whether the distribution of costs can be considered just.

The intention here is to situate the articles by briefly describing the scale of the pollution and climate threat that China must address and outlining some of the policies that it has put in place that appear to have proved remarkably effective. Turning to the social costs of China's policies elucidated in the subsequent articles, attention is drawn to concepts and themes that unite the authors' approaches before drawing some broad conclusions.

2. China: The Great Polluter

Since China opened its economy in 1978, the government has prioritised economic growth with remarkable results. Its economy has grown 120-fold with average annual growth rates exceeding nine percent, the urban population has almost quadrupled (to 64 percent in 2022), and over 800 million individuals have been lifted out of poverty (Climate Change Knowledge Portal, 2023; see also www.macrotrends.net).

However, the environmental and social costs have been considerable. Its total carbon dioxide emissions exceed those of the US, the European Union, and India combined (Friedlingstein et al., 2023). It consumes and produces more energy than any other country, having overtaken the US in 2010 and 2006 respectively (BP. (2011). Moreover, its energy use is less efficient than that of the US with the heavy reliance on coal as a source of energy helping to explain high carbon dioxide emissions. These continued to increase in 2023 whereas those in the US and Europe declined. China is the thirteenth most polluted country in the world, with an average life expectancy reduced by 2.5 years according to WHO guidelines on particulates (EPIC, 2023b).

Coal production in China has grown year on year since 2016, its use for electricity generation compensating for the recent fall in demand for cement and steel manufacture associated with the restructuring of the construction industry. New coal power production permits granted in 2022—increasing capacity by 106 GW—were 60 percent higher than in 2021 (EIA, 2023). While China's production and consumption of oil fell in 2022, this was the first decrease since 2001 and was largely attributable to the 48 percent decline in the demand for jet fuel following the Covid-19 pandemic. Natural gas production has increased each year since 1989, and the target for gas storage set for 2025 is double that available at the beginning of 2023.

With the world faced with the existential threat of climate change, China has come under enormous international pressure to reduce emissions. Although active in the United Nations Conference of the Parties (COP) on climate change, its proposal to achieve carbon neutrality before 2060—a decade behind the norm—has been heavily criticised. Likewise, China was widely blamed (alongside India) for the failure of the COP26 meeting in Glasgow to agree to phase out coal production (Harvey & Mason, 2023). It was similarly accused of preventing agreement to phase out fossil fuels at the COP28 meeting in Dubai in 2023 where it was agreed merely to "transition away" from them (Williams et al., 2023). The US and its allies have also argued that China should contribute to meeting the costs of loss and damage suffered due to climate change (Colman & Mathiesen, 2022; Woodroofe, 2023). Indeed, some have argued that climate change has been weaponised against China in its global competition with the US (Freymann, 2022). One reason given for the increase in coal production since 2016 (after a period of decline) is fear of fuel insecurity following much talk

of the US imposing a naval oil embargo on China (Collins, 2018). Another reason is China's exposure to the negative effects of climate change—most notably, record-breaking temperatures boosting energy use for air conditioning. Separately, China has a high exposure to cyclone damage (ranked sixth in the world), flooding (ranked 13th), and drought (ranked 55th), and is investing heavily in adaptation and mitigation (Climate Change Knowledge Portal, 2023; MEE, 2022).

3. China: The Great Reformer

When account is taken of China's population size, the level of its emissions ceases to look exceptional; in 2023, China ranked 22nd—one place ahead of the United Kingdom—while the US ranked third behind the United Arab Emirates and Australia (CGDev, 2023). Furthermore, as LIU Zhe and ZHANG Ying explain in this issue, China's late industrialisation means that its historic emissions are low, not justifying inclusion in Annex II of the UN Framework Convention on Climate Change listing governments that have a special obligation to provide financial resources for developing countries (Z. Liu & Zhang, 2024).

China's solar and wind energy capacity in 2020 was greater than that of the other top six countries combined and it is ahead of schedule to more than double this capacity by 2025 (Myllyvirta & Zhang, 2023). Moreover, installed capacity for renewables (including nuclear) exceeded that of fossil fuels energy for the first time in 2023 although coal still supplied some 60 percent of China's energy consumption. This apparent discrepancy is because the maximum output of renewables used to assess capacity is conditional on optimal climatic conditions but also due to the challenges of long-distance energy transmission. Much of the production of wind and solar energy is concentrated in vast "energy bases" in the desert areas in Gansu and Inner Mongolia whereas consumption is concentrated in China's eastern provinces.

While coal production continues to increase, as ZHANG Ying, MIAO Dan, HOU Xiangding, and JIA Mingjie (Ying Zhang et al., 2024) note in this issue, direct employment in China's coal industry declined from approximately 4.3 million in 2012 to 2.6 million in 2022. More efficient coal production, combined with newly commissioned coal-fired power stations substituting for older ones, serves to enhance the average productivity of the entire system of coal-fired electricity generation. Moreover, the expectation is that coal-fired plants will primarily be used to flexibly complement—rather than compete with—green energy production and that therefore total emissions will peak in 2024 rather than in 2030 as originally envisaged. The turn to greener energy is also witnessed by the fact that China leads the global production of electric vehicles with some 300 companies producing 6.3 million units in the first nine months of 2023, an increase of 34 percent in a single year (Fastmarkets team et al., 2023; Reid, 2023). Moreover, although pollution remains high, it has reduced the volume of $PM_{2.5}$ particulates by 70 percent since 2007, when it was the world's second most polluted country. Still, particulate pollution in Beijing remains 40 percent higher than in the most polluted county in the US, and 30 percent of China's population lives in areas that fail to comply with national standards on air pollution.

China, then, is amid a major structural transition. In 2014, a few months after the publication of the National Air Quality Action Plan, Premier Li Keqiang announced a war on pollution focused on three areas, Beijing–Tianjin–Hebei, the Pearl River Delta, and the Yangtze River Delta, with quantitative targets for reducing $PM_{2.5}$ particulates by 2017. Strategies included career incentives for relevant public officials, prohibition of new coal-fired power stations, promotion of renewables, and controls on vehicle emissions.

The targets were all met with reductions equivalent to those the US achieved only three decades after the passage of the 1963 Clean Air Act (EPIC, 2023a).

As YAN Chunhua and LUO Yajuan explain in this issue, President Xi Jinping, speaking at the 75th United Nations General Assembly in 2020, surprised many commentators with the announcement that China would achieve peak emissions before 2030 and carbon neutrality before 2060. The surprise might have been less had commentators recalled that, in June 2007, China had been the first developing country to implement a national programme to combat climate change and that, in 2009, it set targets to reduce greenhouse gas emissions (PMPRCUN, 2007; B. Wang & Gopal, 2023). Whereas these emissions had increased by 230 percent in the decade to 2010, they rose by only 18 percent during the following ten years.

Later in 2007, the term "ecological civilization" (subsequently variously translated as "conservation culture," "ecological progress," and "ecological conservation") was introduced into the Chinese policy pantheon by the *Report of the 17th National Congress* of the CPC (Xue et al., 2023). By 2012, ecological civilization had been incorporated into the Constitution and President Xi Jinping's "Chinese Dream" (Harrell, 2023). The term serves as a meta-goal to plan development from the perspective of the harmonious coexistence of human beings and nature, as when discussed by the 20th National Congress of the CPC. It also functions as a policy descriptor when referring to the six batches of "demonstration zones" intended to evolve, test, and demonstrate the benefits of a circular economy and ecological protection and which now involve 468 counties, districts, and cities (Xue et al., 2023).

By 2016, China had already announced its intent to peak emissions around 2030 when it also determined to increase the share of non-fossil fuels to 20 percent by 2030 (B. Wang & Gopal, 2023). The 13th five-year plan (2016–2020) capped total energy consumption and included targets for reducing carbon intensity and for cutting the share of coal-based energy consumption, targets that were updated in the 14th five-year plan (2021–2025) that referred to reducing coal consumption during the 15th five-year plan period (2026–2030). In 2021, President Xi announced a 1+N policy framework which has subsequently spawned multiple policy documents and quantitative targets appertaining to renewable energy production, phasing down of fossil fuels, reduced consumption and more efficient energy usage, recycling and reusable resources (De Boer & Fan, 2022).

4. Approaching China's Ecological Civilization

The eight articles in this thematic issue are organised in pairs. The first two, the first by LIU Zhe and ZHANG Ying, the other by ZHOU Ronghui, are contextual—the former locating China internationally, the latter problematising the concept of ecological civilization (see Z. Liu & Zhang, 2024; Zhou, 2024). The next two articles, one by ZHANG Guanli and ZHANG Bingyi (G. Zhang & Zhang), the other by ZHANG Ying, MIAO Dan, HOU Xiangding, and JIA Mingjie (Ying Zhang et al., 2024), both address the challenge of decommissioning China's coal industry—the first reviewing progress to date, the second perusing the future. The article by LIU Yijun, CHEN Ajiang, and LIU Zhuxiang (Y. Liu et al., 2024), as well as that by JIA Wenjuan and YOU Siyu (Jia & You, 2024), focus on green electricity—its production in the former, some employment implications in the latter. The final two articles examine difficult choices arising from prioritising the environment when pursuing economic development and the consequences of not listening to local voices. YAN Chunhua and LUO Yajuan report on a carbon sequestration scheme in rural Zhejiang province (Yan &

Luo, 2024), while HU Xiaohui, TANG Wu, ZHANG Xuliang, and JIE Dongzheng (Hu et al., 2024) explore the spatial distribution of social costs associated with ensuring clean water supplies.

4.1. Ecological Civilization

Zhou (2024) approaches the concept of ecological civilization obliquely through the lens of education. The United Nations has been advocating that schools globally include education about environmental issues since 1975 and on sustainable development since the Rio Summit in 1992. With the 2015 global agreement on the sustainable development goals (SDGs), the scope of sustainable development was expanded to embrace content relevant to almost all of the 17 goals including sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and culture's contribution to sustainable development. China's primary and secondary school syllabi have included elements on sustainable development since 2003 but revisions implemented in 2017 under the banner "Enhancing Ecological Civilization Competence," though broader than before, remained exclusively environmental. Educationally the new syllabus promoted responsible consumption, politically it legitimated continued economic development albeit of a greener hue.

In their articles, Hu et al. (2024), G. Zhang and Zhang (2024), and Yan and Luo (2024) all follow Zhou's narrow interpretation of ecological civilization, namely as a policy descriptor rather than as a meta-goal. This interpretation focuses on both development and Chinese modernisation, acknowledges past mistakes in creating pollution and land degradation, and recognises that, for economic growth to continue unabated, it must be kinder to nature, even reparative. Sometimes, in Chinese academic literature and the interpretation of Xi Jinping's speeches, the concept of ecological civilization is seen as being more expansive and transformative (X. Liu, 1999; "Speech at a ceremony," 2021; Y. Wang, 2020). This perspective is one of cultural succession in which primitive, agricultural, and industrial civilizations that have become increasingly exploitative are to be replaced by a higher form of civilization. Ecological civilization will reflect socialist principles of fairness and justice and Chinese concepts of harmony between man and nature with a different ontology and ideology and, therefore, new values and practices.

In practice, the pursuit of ecological civilization has, as Ying Zhang et al. (2024) explain, evolved into both a government-led top-down initiative and a growing number of grassroots greening projects. The top-down strategy tends to take the form of national proclamations of government intent, largely consistent with China's stated intentions under the United Nations' COP system on climate change. The proclamations are then interpreted by lower levels of government and policies implemented that are intended to be consistent with the concept of ecological civilization by demanding changes in the behaviour of industries and individuals. This process is arguably deeply rooted in Chinese socialist ideology and cultural philosophy, emphasizing social justice although the results are not immune to criticism (Huang et al., 2021).

4.2. Environmental Authoritarianism

Many authors, perhaps most notably Gilley (2012) and Lo (2021), have characterised China's approach to environmental issues as "environmental authoritarianism," which Gilley (2012, p. 287) succinctly defines as "a non-participatory approach to public policymaking and implementation in the face of severe environmental challenges." Zhou (2024) recognises that a centralised, hierarchical system can, "albeit restraining social justice,"

enable "fast and rigorous responses to environmental crises compared to democratic environmentalism." In the educational sphere, this permitted a rapid change in policy priorities but left front-line educators as "receivers of change," finding interpretation exceedingly difficult since they lacked adequate training and resources.

G. Zhang and Zhang (2024), researching coalmine closures in Liupanshui, document the negative consequences of driving a top-down policy at speed. Reacting to national directives, 55 mines were to be closed within five years. Targets and timetables were set far from the metaphorical and actual coalface leaving local officials and coal producers with as little as three months to close plants down. The necessity to hit targets meant little local consultation, limited strategic planning, short time horizons, and cost minimalization with the result that the social costs of closure were carried principally by the least powerful, those without voice. Private mines rather than state-owned pits were closed, staff without redundancy rights were laid off, and the consequences for local communities were ignored, while both up- and downstream enterprises were left to their own devices.

Y. Liu et al. (2024) introduce a second example where ecological and climate priorities appeared paramount in the eyes of policymakers. Largely unregulated aquaculture on a large lake had led to ecological damage but the unilateral removal of access rights destroyed the livelihoods of over 650 net cage fishermen, all but one percent of whom received no compensation because their fishing was a part-time occupation. About a sixth of the water previously given over to aquaculture was subsequently covered by photovoltaic panels and locals received one-off compensation for loss of amenity. While aquaculture can take place under the panels, the power generation company preferred to employ their own staff rather than local fishermen who, with limited transferrable skills, found new employment difficult to obtain. Those who secured employment often did so by migrating to urban areas thereby denuding the local area of working-age residents.

Yan and Luo (2024) document two similar examples of prioritizing environmental concerns albeit, on the second occasion, with an attempt to respond to the presumed needs of local farmers. In the late 1990s, pollution from bamboo processing in the northwest of Zhejiang province was found to be polluting a lake supplying water to Hangzhou, the provincial capital. Many bamboo processing enterprises were rapidly closed, forest farmers lost their livelihoods, and bamboo forests were abandoned. Then, in 2022, following national guidance on carbon neutrality and bamboo industry innovation, the county—its officials encouraged by career incentives to act—established 119 village cooperatives. These transferred their forest land to a county-owned company that used the land as collateral to raise loans to establish the necessary infrastructure to engage in carbon sequestration trading. With the company paying a fixed dividend to the cooperatives and subcontracting the forests back to the cooperatives, villagers derive an income. This example of a benevolent form of environmental authoritarianism provided villagers employment and potentially additional income. However, they had little alternative but to participate—99 percent contributed their land to cooperatives—and there was no local consultation about the reforms. Moreover, villagers were generally unaware of the financial risks involved; although early days, none had yet to receive any income, a surprise to many villagers. Environmental authoritarianism seems inevitably to exacerbate social exclusion.

4.3. Transitional Justice

The third concept of importance, one linking all the articles, is that of just transition. Y. Zhang et al. (2024) trace the origins of the concept to the North American labour movement in the 1970s and the largely

unsuccessful attempts to protect the welfare and rights of workers in industries needing to restructure due to growing environmental concerns relating to pollution and land degradation. While finding little purchase in America, the concept has been broadened, as Zhou (2024) observes, "to encompass a more inclusive and holistic approach to societal transformation in response to climate challenges." Indeed, just transition has become a fundamental pillar of the United Nations-led climate governance process included, for example, in the landmark 2015 Paris Agreement (Johansson, 2023).

The fact that just transition is, as Hu et al. (2024) opine, "multi-dimensional, multi-scalar, multi-actor, and context-sensitive" is both a weakness and a strength. The weakness is that the term is over-identified, meaning different things to different people which often leads to confusion. The term is also grounded on Western concepts including democratic ideology and political legitimacy that, being normative and aspirational, do not necessarily resonate in the developing world or, indeed, in China with its unique political and cultural traditions. This is evident in the articles by Hu et al. (2024), Jia and You (2024), and Yan and Luo (2024).

The strength of just transition is evident from the breadth of perspectives offered by the eight articles in this issue. Taking "just" to mean fair and equitable treatment, Z. Liu and Zhang (2024) apply the concept across global and historical domains. They argue that it is fairer to calculate emissions from 1850, the beginning of the industrial age, than from when the world became conscious of their global consequences in the 1970s and 1990s. Doing so demonstrates that the responsibility for contributing to climate change, and for meeting the cost of damage and mitigation, lies with already-developed countries rather than with newly industrialised ones including China.

Y. Zhang et al. (2024) employ the concept of transitional justice at a national level and focus on the future. They move beyond G. Zhang and Zhang (2024), which suggests that the costs of Chinese coalmine closures have primarily fallen on the least powerful, to develop principles for managing future closures. They advocate early planning, transparent and inclusive decision-making and implementation addressing both employment and social impacts, and international cooperation and innovative finance mechanisms to build resilience and to reduce transition risks for vulnerable groups.

Like G. Zhang and Zhang (2024), Yan and Luo (2024) and Y. Liu et al. (2024) explore issues of transitional justice exclusively within local areas, but Hu et al. (2024) provide additional insights by viewing the local in the context of multi-level government. For over 20 years, Chun'an County in China's prosperous Zhejiang province has been designated as an ecologically sensitive site with an emphasis on maintaining the water quality of Lake Qiandao, a source of drinking water for Hangzhou, the provincial capital. The local perspective is that Chun'an made great sacrifices for the cause of a greener economy, largely missing out on Zhejiang's growing prosperity. The provincial perspective is that this was a cost necessary to "deliver wider well-being and greater social justice at a larger scale" (Hu et al., 2024).

Zhou (2024) follows Newell et al. (2021) in identifying three pathways or aspects of just transition, namely inclusivity, "deepening" (that is, the sensitivity to not worsen inequalities during policy implementation), and good governance. It is also possible to distinguish between just transition as a process and as an outcome. Yan and Luo (2024), in their study of bamboo sequestration in Zhejiang province, focus on the process and draw attention to the benefits that flow from the public being fully engaged in matters relevant to their own lives. This social inclusivity was largely lost sight of by officials in their bid to fulfil political environmental objectives.

Jia and You (2024) also focus on the process of securing justice which, in the context of workers in China's new energy industry, depends exclusively on individual participation in negotiations over employment terms and conditions. While most literature tends to address injustices when phasing out dirty industries, Jia and You draw attention to injustice occurring in replacement industries. Employers, keen to keep down costs, adopt strategies to weaken the bargaining position of software engineers who, sharing relevant information between themselves, seek to maximise promotions and pay raises (independent trade unions are illegal in China). In terms of outcomes, individual negotiations leave those in weak bargaining positions, the inexperienced and those aged over 35, disadvantaged.

The ease with which disadvantage is reproduced as an outcome of the transition to greener energy—deepening—is demonstrated in articles by G. Zhang and Zhang (2024), Yan and Luo (2024), and by Hu et al. (2024). Sometimes, as with the coalmine closures in Liupanshui, the result was a consequence of specific actions—quickly closing private mines that were least able to mount resistance and employed workers without social protection. On other occasions, it was a product of oversight—officials simply assuming that theirs was the right course of action, or the banning of aquaculture, for example, to prevent pollution, as Y. Liu et al. (2024) report. Sometimes the greater good was prioritised above individual well-being as when protecting Hangzhou's water supply.

Therefore, while good governance is likely to challenge rather than exacerbate pre-existing inequality, it is more difficult to conclude that governance that does not do so is always poor. Hu et al. (2024) explain that the deprivations experienced by Chun'an County to ensure Hangzhou's water supply were counted as "small-scale sacrifice, injustice, and compromises." This was so because, within "the Chinese-specific mindset associated with the socialist thinking and collectivist cultural norms," they were transcended by policies that were targeted to deliver greater justice at a large scale.

This Chinese mindset may also help explain why, except for software engineers who proactively sought better employment conditions, those negatively affected by the transition away from dirty industries did not protest more. Chinese tradition pays less attention to material-based inequalities, individual equality, and positive political rights than in the West (Jiang et al., 2023). Instead, Chinese political philosophy prioritises the relationship between people and society and between people. Confucian teaching saw "good governance" as "benevolent" with rulers required, like parents and children, to "nurture the people" to enable them to escape poverty and seek happiness. These ideas translate directly into the rhetoric of the CPC such as "the heart is for the people, the power is for the people, and the interests are for the people" (Jiang et al., 2023, p. 12). Confucian ideology was formally adopted as the basis of policymaking during the Han dynasty (202 BCE–9 CE and 25–220 CE) establishing the concept of justice based on *li*—the hierarchical, orderly but harmonious distribution of power and wealth—as the foundation of social virtue. People accepted their social position, recognising governance to be undertaken for the people as a whole, and adopting their role as passive and obedient recipients of benevolent government. The resident cited by Y. Zhang et al. (2024) is a descendant of this cultural tradition and typical of many of those negatively affected by green policies:

> Our green transition generates greater benefits to the whole Xin'an river basin region, whose development and growth is more important than us. I think our sacrifice is worthy and strategic for the greater good.

5. Conclusion

A late industrialiser, China has grown its economy at unprecedented speed since the 1980s in ways now considered unsustainable. It is currently rapidly implementing policies to combat resultant pollution and climate change, often by means that might be designated as environmental authoritarianism. Its policy implementation devoid of public participation is described by several authors as reflecting a lack of inclusivity in policymaking and resulting in social exclusion and the reinforcement or exacerbation of existing inequalities. In the case of software engineers, reported by Jia and You (2024), new forms of inequality—even exploitation—are emerging among greener replacement industries. Therefore, there is very little evidence of much attention being paid to either procedural or distributional justice, at least as defined at the individual level.

Some qualification of the term "environmental authoritarianism" is warranted. While strategic policymaking has taken place at the central level as illustrated by the five-year plans, much of the detailed implementation is designed at the provincial and county levels. Even when national policies are accompanied by targets, these are reinterpreted at the local level. This happens for several reasons. China is so vast and diverse that it is impossible for the central government to prescribe policies in detail. Equally important, local policymakers are evaluated and promoted on the basis of the success of policies, resulting in policy competition that can encourage the sometimes-unrealistic ambition noted by G. Zhang and Zhang (2024) and by Yan and Luo (2024). Focussed on policy outcomes, procedural justice appears quite often to be neglected.

In terms of policy achievement on climate change, China is emerging as a world leader with dramatic reductions in pollution and massive expansion of renewable energy. This is being achieved through policy exhortation, government investment, incentives for local government and commerce, and possibly the policy competition noted above. The critical rhetoric of China's reluctance to engage in global efforts to combat climate change appears to be misplaced. Liu and Zhang demonstrate, as have others done (e.g., McNamara & Jackson, 2019; Vanderheiden, 2023), that China's historic emissions do not warrant it being held liable for loss and damage payments to countries negatively affected by climate change.

This success, when interpreted in terms of Chinese political philosophy, also calls into question hasty conclusions about whether all the individual hurt arising from China's rapid transition to a greener economy demonstrates an absence of transitional justice. If the political rhetoric of China moving towards an ecological civilization in which development is in harmony with nature is taken literally, a case could be made that the benefits accruing for future generations, especially if considered globally, far exceed the loss in livelihoods currently being experienced during the transition. This is essentially the argument presented by Hu et al. (2024), as captured by the title of their article: "Small Sacrifice for the Greater Good." It is an argument which is similarly consistent with Confucian thought even if the concept of ecological civilization is reduced to the minimum formulation discussed by Zhou (2024), namely being environmental, referring merely to greener growth rather than the full complement of the 17 SDGs.

Hu et al. (2024) do not define "small sacrifice" and, to misquote Neil Armstrong setting foot on the moon, a small sacrifice for mankind could be a great loss for man. Those negatively affected by policy reform may be willing to make the sacrifice, to accept distributional injustice as their desert, or to see it as their contribution to society's future. However, the evidence from the articles assembled in this issue is that their contribution

goes unrecognised by those in power and, perhaps, by the Chinese population. Fraser (2009) and Jiang et al. (2023) have argued that recognition is a necessary complement to distributional and procedural justice. Taken seriously, it would point to the need for social inclusivity throughout the implementation of green policies. It would also call into question the justice of decisions taken by local policymakers. G. Zhang and Zhang (2024), for example, describe mines being selected for closure primarily because miners lacked the social protection afforded to miners elsewhere.

Acknowledgments

We are grateful to all contributors to this issue of *Social Inclusion* for responding to our call for articles and for generously sharing their findings. The views expressed in this editorial are not necessarily identical to those held by contributors.

Conflict of Interests

The authors declare no conflict of interests.

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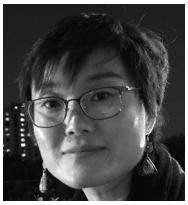

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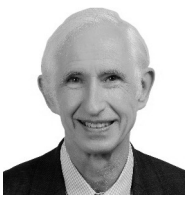

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